AO 120 (Rev. 08/10)

TO:	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court Eastern District of Texas - Marshall Division on the following

☐ Trademarks or ☑ Patents. (☐ the patent action involves 35 U.S.C. § 292.):

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
2:22-cv-00290	7/29/2022	Eastern District of Texas - Marshall Division

PLAINTIFF	DEFENDANT
SMITH INTERFACE TECHNOLOGIES, LLC.	Samsung Electronics Co., Ltd. and Samsung Electronics Amerrica, Inc.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	10,671,212	6/2/2020	Michael S. Smith
2	10,606,396	3/31/2020	Michael S. Smith
3	10,642,413	5/20/2020	Michael S. Smith
4	10,788,931	9/29/2020	Michael S. Smith
5	10, 656,754	5/19/2020	Michael S. Smith

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1		
2		
3		
4		
5		

In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE

Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director
Copy 2—Upon filing document adding patent(s), mail this copy to Director Copy 4—Case file copy

AO 120 (Rev. 08/10)

TO:	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
Mail Stop 8 **Director of the U.S. Patent and Trademark Office** **P.O. Box 1450** **Alexandria, VA 22313-1450**	

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court Eastern District of Texas - Marshall Division on the following

☐ Trademarks or ☑ Patents. (☐ the patent action involves 35 U.S.C. § 292.):

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
. 2:22-cv-00290	7/29/2022	Eastern District of Texas - Marshall Division

PLAINTIFF	DEFENDANT
SMITH INTERFACE TECHNOLOGIES, LLC.	Samsung Electronics Co., Ltd. and Samsung Electronics Amerrica, Inc.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	10,782,819	9/22/2020	Michael S. Smith
2	10,649,580	5/12/2020	Michael S. Smith
3	10,656,758	5/19/2020	Michael S. Smith
4			
5			

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1		
2		
3		
4		
5		

In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE

Copy 1—Upon initiation of action, mail this copy to Director **Copy 3—Upon termination of action, mail this copy to Director**
Copy 2—Upon filing document adding patent(s), mail this copy to Director **Copy 4—Case file copy**

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/169,961	05/05/2020	10642413	SMITH070AG	7650

92045 7590 04/15/2020

The Caldwell Firm, LLC
PO Box 59655
Dept. SVIPGP
Dallas, TX 75229

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment is 0 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site http://pair.uspto.gov for additional applicants):

P4TENTS1, LLC, Wilmington, DE;
Michael S. Smith, Palo Alto, CA;

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage and facilitate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit SelectUSA.gov.

IR103 (Rev. 10/09)

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/169,961	10/24/2018	Michael S. Smith	SMITH070AG	7650

92045 7590 04/08/2020

The Caldwell Firm, LLC
PO Box 59655
Dept. SVIPGP
Dallas, TX 75229

EXAMINER
XAVIER, ANTONIO J

ART UNIT	PAPER NUMBER
2623	

NOTIFICATION DATE	DELIVERY MODE
04/08/2020	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

eofficeaction@appcoll.com
pcaldwell@thecaldwellfirm.com

Response to Rule 312 Communication	Application No.	Applicant(s)	
	16/169,961	Smith, Michael S.	
	Examiner	Art Unit	AIA (FITF) Status
	ANTONIO J XAVIER	2623	No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

1. ☑ The amendment filed on 31 March 2020 under 37 CFR 1.312 has been considered, and has been:

a) ☐ entered.

b) ☑ entered as directed to matters of form not affecting the scope of the invention.

c) ☐ disapproved because the amendment was filed after the payment of the issue fee.

Any amendment filed after the date the issue fee is paid must be accompanied by a petition under 37 CFR 1.313(c)(1) and the required fee to withdraw the application from issue.

d) ☐ disapproved. See explanation below.

e) ☐ entered in part. See explanation below.

/Antonio Xavier/ Primary Examiner, Art Unit 2623	/AMARE MENGISTU/ Supervisory Patent Examiner, Art Unit 2623

OK TO ENTER: /AX/

04/03/2020

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	Confirmation No.: 7650
Michael S. Smith	Examiner: Antonio J XAVIER
Application No.: 16/169,961	Art Unit: 2623
File Date: 2018-10-24	Docket No.: SMITH070AG
Title: GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT	Date: March 31, 2020

AMENDMENT AFTER ALLOWANCE
UNDER 37 C.F.R. § 1.312

Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

Examiner:

Prior to issuance of the patent, applicant respectfully requests entry of this amendment under 37 C.F.R. 1.312 for the above-captioned patent application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	Confirmation No.: 7650
Michael S. Smith	Examiner: Antonio J XAVIER
Application No.: 16/169,961	Art Unit: 2623
File Date: 2018-10-24	Docket No.: SMITH070AG
Title: GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT	Date: Mar 31, 2020

COMMENTS ON STATEMENT OF REASONS FOR ALLOWANCE UNDER 37 C.F.R. § 1.104(e)

Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

Examiner:

In response to the Notice of Allowance dated 2-7-2020, please enter the following remarks.

Remarks:

The Examiner has stated the following in the Examiner's Statement of Reasons for Allowance:

However, the prior art of record fails to expressly teach or suggest "an electronic device, comprising: a display; a touch interface; one or more processors; memory; and one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for: displaying, utilizing the display, a graphical user interface; when the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward; in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items, and blurring at least a portion of the graphical user interface such that a **magnitude of the blurring of the at least portion of the graphical user interface progressively increases as a function of an increase in a magnitude** of the first gesture being detected; when the first menu is displayed including the one or more first menu items: detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items, in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation; when the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward; in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second

menu including one or more second menu items; when the second menu is displayed including the one or more second menu items: detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation; wherein the electronic device is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer" (see at least **Claim 104** – emphasis added); and

"an electronic device, comprising: a display; a touch interface; one or more processors; memory; and one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for: displaying, utilizing the display, a graphical user interface; when the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward; in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items including a particular application icon; when the first menu is displayed including the one or more first menu items: **detecting**, utilizing the touch interface, **a first duration of contact on at least one of the one or more first menu items**, in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a **first operation**, and in response to the first duration of contact on the at least one of the one or more first menu items being detected to

surpass the threshold, performing a **second operation**, where the second operation is performed in response to the first duration of contact on the particular application icon being detected to surpass the threshold, **and the first duration of contact being detected to include a slide gesture component after the first duration of contact on the particular application icon is detected to surpass the threshold**; when the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward; in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items; when the second menu is displayed including the one or more second menu items; detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation; wherein the electronic device is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer" (see at least **Claim 203** – emphasis added).

In response, applicant respectfully points out that features of at least some of the independent claims (e.g. 104, 158, 213, and 224) are not necessarily the same as those the Examiner has highlighted above. For example, Claim 158 includes "in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items, and blurring at least a portion of the graphical user interface such that a magnitude of the blurring of the at least portion of the graphical user interface increases as a function of an increase in a magnitude of the first gesture being detected," in the context claimed. Applicant also notes

that the indicated "Claim 203" within the "reasons for allowance" is believed to refer to Claim 213.

As additional, non-exhaustive examples, Claims 104, 158, 213, and 224 recite the following, respectively (as also presented within the 312 Amendment filed concurrently):

104. An electronic device, comprising:

a display;

a touch interface;

one or more processors;

memory; and

one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for:

displaying, utilizing the display, a graphical user interface;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items, and blurring at least a portion of the

graphical user interface such that a magnitude of the blurring of the at least portion of the graphical user interface progressively increases as a function of an increase in a magnitude of the first gesture being detected;

when the first menu is displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items;

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation;

wherein the electronic device is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer.

158. A method, comprising:

at an electronic device including a display, a touch interface, and memory coupled to one or more processors:

displaying, utilizing the display, a graphical user interface;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items, and blurring at least a portion of the graphical user interface such that a magnitude of the blurring of the at least portion of the graphical user interface increases as a function of an increase in a magnitude of the first gesture being detected;

with the first menu being displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items, such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer;

with the second menu being displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation.

213. An electronic device, comprising:

a display;

a touch interface;

one or more processors;

memory; and

one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for:

displaying, utilizing the display, a graphical user interface;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items including a particular application icon;

when the first menu is displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation, where the second operation is performed in response to the first duration of contact on the particular application icon being detected to surpass the threshold, and the first duration of contact being detected to include a slide gesture component after the first duration of contact on the particular application icon is detected to surpass the threshold;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items;

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation;

wherein the electronic device is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer.

224. A method, comprising:

at an electronic device including a display, a touch interface, and memory coupled to one or more processors:

displaying, utilizing the display, a graphical user interface;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items with a particular application icon;

with the first menu being displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation, where the second operation is performed in response to the first duration of contact on the particular application icon being detected to surpass the threshold, and the first duration of contact being detected to include a slide gesture component after the first duration of contact on the particular application icon is detected to surpass the threshold;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items, such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer;

with the second menu being displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation.

Clearly, at least some of the independent claims are not necessarily limited to the features that the Examiner has noted in the Examiner's Statement of Reasons for Allowance, as noted above (by way of example only). Instead, each of the claims should only be limited by the language existing therein.

Further, although Applicant agrees with the Examiner's conclusion that these claims are allowable, Applicant notes that the claims may be allowable for reasons other than those identified by the Examiner and does not concede that the Examiner's characterizations of the terms of the claims and the prior art are correct. Each of the claims stands on its own merits and is patentable because of the combination it recites and not because of the presence or absence of any one particular element.

The Examiner's Statement was not prepared by Applicant and only contains the Examiner's possible positions in one or more reasons for allowability. Thus, any interpretation with respect to the Examiner's Statement of Reasons for Allowance should not be imputed to the Applicant.

Respectfully submitted,



Dated: 31 Mar 2020

Patrick E. Caldwell, Esq.
Reg. No. 44,580

The Caldwell Firm, LLC
PO Box 59655
Dallas, Texas 75229-0655
Telephone: (214) 734-2313
pcaldwell@thecaldwellfirm.com

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	Confirmation No.: 7650
Michael S. Smith	Examiner: Antonio J XAVIER
Application No.: 16/169,961	Art Unit: 2623
File Date: 2018-10-24	Docket No.: SMITH070AG
Title: GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT	Date: Mar 30, 2020

EXAMINER INTERVIEW

Date of Interview	Jan 30, 2020; Feb 3, 2020
Type of Interview	Email
Name of Participants	Patrick Caldwell, Antonio J XAVIER
Exhibit shown?	Appendix A
Claims Discussed	Independent Claims
Prior Art Discussed	n/a
Substance of Interview	Submitted proposed amendments to Examiner
Agreement Reached?	The amendments will merit a further search and consideration

For Filing

From: Patrick E. Caldwell <pcaldwell@thecaldwellfirm.com>
Sent: Thursday, January 30, 2020 1:04 PM
To: Antonio.xavier@uspto.gov
Subject: SMITH070AG (16/169,961) Proposed Amendment
Attachments: SMITH070AG_Proposed Amendment_20200130.rtf

Examiner Xavier,
Please consider the attached proposed amendment, which may be entered in exchange for an allowance.
--

Thanks,
Patrick

Patrick E. Caldwell, Esq.
The Caldwell Firm, LLC
PO Box 59655
Dallas, Texas 75229-0655
+1.214.734.2313 (mobile)
http://www.thecaldwellfirm.com/

CONFIDENTIALITY NOTICE: This email is covered by the Electronic Communications Privacy Act, 18 U.S.C. 2510-2521 and is legally privileged. The information contained in this email is intended for use of the individual or entity named above. If the reader of this message is not the intended recipient, or the employee or agent responsible to deliver it to the intended recipient, you are hereby notified that any dissemination, distribution or duplication of this communication is strictly prohibited. If you have received this communication in error, please immediately notify us by telephone (214-734-2313), and destroy the original message. Thank you.

- - APPENDIX A - -

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	Confirmation No.: 7650
MICHAEL S. SMITH	Examiner: XAVIER, ANTONIO J
Application No.: 16/169,961	Art Unit: 2623
File Date: 10-24-2018	Docket No.: SMITH070AG
Title: GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT	Date: 1/30/2020

PROPOSED AMENDMENT

Mail Stop Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

1.-103. (Cancelled)

104. (Currently Amended) An electronic device, comprising:

a display;

a touch interface;

one or more processors;

memory; and

one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for:

displaying, utilizing the display, a graphical user interface;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items, and blurring at least a portion of the graphical user interface such that a magnitude of the blurring of the at least portion of the graphical user interface progressively increases as a function of an increase in a magnitude of the first gesture being detected;

when the first menu is displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items;

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation;

wherein the electronic device is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer.

105. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that at least a portion of the at least one other virtual display layer is at least partially translucent such that at least a portion of the at least one virtual display layer is visible through the at least one other virtual display layer.

106. (Previously Presented) The electronic device of Claim 105, wherein the electronic device is configured such that the at least portion of the at least one virtual display layer that is visible through the at least one other virtual display layer, includes at least a portion of a background image.

107. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the first menu and the second menu are displayed in separate virtual display layers.

108. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the graphical user interface includes a home screen, for choosing among a plurality of applications.

109. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include messages in a list, the first operation includes displaying a view of at least one of the messages, and the second operation includes opening the at least one message.

110. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that hardware status indicia is displayed adjacent to the first edge.

111. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that only one of the first menu or the second menu is capable of being displayed at a time.

112. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that at least one of the first menu or the second menu substantially fills the display.

113. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that indicia is displayed via the graphical user interface for prompting a user as to an accessibility of at least one of the first menu or the second menu.

114. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the first menu is accessible via the first gesture; the second menu is accessible via the second gesture; at least one of the first or second operations is performed based on at least two different contact durations, in order to increase operation accessibility via the electronic device that includes a mobile device.

115. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the first gesture and the second gesture are capable of being detected as moving inward in different directions.

116. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include a plurality of application-specific menu items for accessing different applications.

117. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more second menu items include a plurality of application-specific menu items for accessing different applications.

118. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include a plurality of application menu items for launching different applications.

119. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a deletion operation.

120. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a move operation.

121. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a menu item rearrange operation.

122. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that, the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

123. (Previously Presented) The electronic device of Claim 122, wherein the electronic device is configured such that the second operation is performed in response to the first duration of contact on the at least one application menu item being detected to surpass the threshold, and in response to the first duration of contact being detected to include a slide gesture component.

124. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that, the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display another particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

125. (Previously Presented) The electronic device of Claim 124, wherein the electronic device is configured such that the second operation is performed in response to:

the first duration of contact on the at least one application menu item being detected to surpass the threshold, and

the first duration of contact being detected to include a slide gesture component after the first duration of contact on the at least one application menu item is detected to surpass the threshold.

126. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application for, in response to a detection of a selection thereof when the first duration of contact on the at least one application menu item is detected to surpass the threshold, launching the particular application to display a particular application interface of the particular application in an overlying and scaled virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

127. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass the threshold, the first operation is performed, in response to detection of a cessation of the first duration of contact.

128. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the first menu is at least partially translucent for viewing the graphical user interface thereunder.

129. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the first menu is at least partially translucent for viewing the graphical user interface, including a home screen, thereunder.

130. (Cancelled)

131. (Cancelled)

132. (Currently Amended) The electronic device of Claim {[131]}104, wherein the electronic device is configured such that the magnitude of the blurring of the at least portion of the graphical user interface progressively decreases as a function of detecting a change in the first gesture.

133.-135. (Cancelled)

136. (Currently Amended) The electronic device of Claim [[135]]104, wherein the electronic device is configured such that the magnitude of the blurring of the at least portion of the graphical user interface progressively decreases as a function of detecting the first gesture moving outward.

137. (Currently Amended) The electronic device of Claim 104, wherein the electronic device is configured such that at least a [[portion]]part of the graphical user interface is shaded or faded

based on the detection of the second gesture that begins in connection with the second edge and moves inward.

138. (Currently Amended) The electronic device of Claim 137, wherein the electronic device is configured such that a magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively increases as a function of an increase in a magnitude of the second gesture being detected.

139. (Currently Amended) The electronic device of Claim 138, wherein the electronic device is configured such that the magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture.

140. (Currently Amended) The electronic device of Claim 137, wherein the electronic device is configured such that a magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively increases as a function of an increase in a distance magnitude of the second gesture being detected.

141. (Currently Amended) The electronic device of Claim 137, wherein the electronic device is configured such that a magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively increases while detecting the second gesture moving inward.

142. (Currently Amended) The electronic device of Claim 141, wherein the electronic device is configured such that the magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively decreases as a function of detecting the second gesture moving outward.

143. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the electronic device is configured such that the one or more first menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the first operation includes performing a particular operation associated with the at least one of the one or more first menu items; and the second operation includes opening a contextual menu with one or more options associated with the at least one of the one or more first menu items;

the one or more second menu items include at least some of the application icons including a particular application icon associated with a particular application, where the third operation includes opening the particular application to display a particular application interface of the particular application instead of the home screen; and

hardware status indicia is displayed adjacent to the first edge.

144. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the first operation includes performing a particular operation associated with the at least one of the one or more first menu items; and the second operation includes opening a contextual menu with one or more options associated with the at least one of the one or more first menu items.

145. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the electronic device is configured such that the first menu and the second menu are displayed in the at least one other virtual display layer.

146. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages

associated with an application, and the second operation includes controlling at least one aspect of the application.

147. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured for:

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a second duration of contact on the at least one of the one or more second menu items,

in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, performing the third operation, and

in response to the second duration of contact on the at least one of the one or more second menu items being detected to surpass the threshold, performing a fourth operation.

148. (Previously Presented) The electronic device of Claim 147, wherein the electronic device is configured such that in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, the third operation is performed, in response to detection of a cessation of the second duration of contact.

149. (Previously Presented) The electronic device of Claim 147, wherein the electronic device is configured such that the one or more second menu items include a network interface menu item and a volume menu item; the third operation includes selecting the at least one of the one or more second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items.

150. (Previously Presented) The electronic device of Claim 147, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

151. (Previously Presented) The electronic device of Claim 150, wherein the electronic device is configured such that the second operation is performed in response to:

the first duration of contact on the particular application icon being detected to surpass the threshold, and

the first duration of contact being detected to include a slide gesture component after the first duration of contact on the particular application icon is detected to surpass the threshold.

152. (Previously Presented) The electronic device of Claim 150, wherein the electronic device is configured such that the one or more first menu items include only a subset of the application icons including the particular application icon.

153. (Previously Presented) The electronic device of Claim 150, wherein the electronic device is configured such that the one or more first menu items include only a subset of the plurality of application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

154. (Previously Presented) The electronic device of Claim 150, wherein the electronic device is configured such that the one or more first menu items include favorites of the application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

155. (Previously Presented) The electronic device of Claim 147, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items;

the one or more second menu items further include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages, and the second operation includes controlling presentation of the at least one message; and

hardware status indicia is displayed adjacent to the second edge.

156. (Currently Amended) The electronic device of Claim 147, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the first menu is at least partially translucent for viewing the graphical user interface thereunder, ~~at least a portion of the graphical user interface is blurred based on the detection of the first gesture that begins in connection with the first edge and moves inward, a magnitude of the blurring progressively increases when detecting the first gesture moving inward,~~ and the magnitude of the blurring progressively decreases as a function of detecting a change in the first gesture;

at least a part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward, a magnitude of the shading or fading of the at least part of the graphical user interface progressively increases when detecting the second gesture moving inward, and the magnitude of the shading or fading of the at least part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular

application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

157. (Previously Presented) The electronic device of Claim 156, wherein the electronic device is configured such that at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the first edge, by beginning near the first edge;

the second gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the first edge, by beginning near the first edge;

the second gesture begins in connection with the first edge, by beginning at the first edge;

the second duration of contact is part of the selection contact;

the second duration of contact is not part of the selection contact;

the second duration of contact is separate from the selection contact;

the selection contact includes the second duration of contact;

the first gesture begins in connection with the first edge and moves inward from the first edge;

the second gesture that begins in connection with the second edge and moves inward from the second edge;

the display includes a top edge and the first gesture or the second gesture moves inward by moving, at least in part, downward from the top edge;

the display includes a top edge and the first gesture moves inward by moving, at least in part, downward from the top edge, and the second gesture moves inward by not moving, at least in part, downward from the top edge;

the first gesture and the second gesture move inward by moving, at least in part, toward a central area of the touch screen;

the second menu is displayed as sliding in;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are not displayed as sliding in via different directions;

the first menu is displayed as sliding in from the first edge;

the second menu is displayed as appearing from the second edge;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the one or more second menu items include representations of active applications;

the one or more second menu items include thumbnails of applications in a multi-tasking environment;

the first operation and the second operation are related to the same function;

the selection contact includes a press gesture;

the selection contact includes a top gesture;

the selection contact includes a static gesture;

the selection contact includes a dynamic gesture;

the selection contact is separate from the second gesture;

the first duration of contact is separate from the first gesture;

the electronic device is configured such that the first menu and the second menu are displayed in the same at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in different at least one other virtual display layers;

the electronic device is configured such that the first menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the second menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in the at least one other virtual display layer;

each instance of the when includes an entire duration;

each instance of the when includes an entire display or contact duration;

each instance of the when includes at least a portion of a duration;

each instance of the when includes only a portion of a duration;

each instance of the when includes only a portion of a display or contact duration;

each instance of the when includes at least a portion of a display or contact duration;

each instance of the in response to, includes an immediate response to;

each instance of the in response to, includes a response after an intermediate operation;

each instance of the in response to, includes a response after a delay;

the third operation and the fourth operation are related to the same function;

the blurring includes at least one of: dimming, displaying as indistinct, displaying as vague, displaying as cloudy, displaying as obscured, or displaying as smeared;

the first gesture and the second gesture move inward in different directions;

the first gesture and the second gesture do not move inward in different directions;

the first gesture and the second gesture do not move different directions;

the first gesture is detected to move inward by moving along a line that is perpendicular to the first edge;

the second gesture is detected to move inward by moving along a line that is perpendicular to the second edge;

only the first menu is displayed in the at least one other virtual display layer;

the first menu is displayed in the at least one other virtual display layer, and the second menu is not displayed in the at least one other virtual display layer;

only the second menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer, and the first menu is not displayed in the at least one other virtual display layer;

both the first menu and the second menu are displayed in the at least one other virtual display layer;

the shading includes at least one of: displaying as to suggest three-dimensionality, shadowing, or displaying as to include a varied degree of light and/or darkness;

the shading includes color shading;

the shading includes reducing a brightness;

the shading includes reducing a color brightness;

the shading includes moving towards black within a color space;

the shading includes incorporating less color;

the fading includes altering a level of disappearance;

the fading includes altering a transparency;

the fading includes altering a translucency;

the at least part is the same as the at least portion; or

the at least part is different from the at least portion.

158. (Currently Amended) A method, comprising:

at an electronic device including a display, a touch interface, and memory coupled to one or more processors:

displaying, utilizing the display, a graphical user interface;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items, and blurring at least a portion of the graphical user interface such that a magnitude of the blurring of the at least portion of the graphical user interface increases as a function of an increase in a magnitude of the first gesture being detected;

with the first menu being displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items, such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer;

with the second menu being displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation.

159. (Previously Presented) The method of Claim 158, wherein at least a portion of the at least one other virtual display layer is at least partially translucent such that at least a portion of the at least one virtual display layer is visible through the at least one other virtual display layer.

160. (Previously Presented) The method of Claim 159, wherein the at least portion of the at least one virtual display layer that is visible through the at least one other virtual display layer, includes at least a portion of a background image.

161. (Previously Presented) The method of Claim 158, wherein the first menu and the second menu are displayed in separate virtual display layers.

162. (Previously Presented) The method of Claim 158, wherein the graphical user interface includes a home screen, for choosing among a plurality of applications.

163. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include messages in a list, the first operation includes displaying a view of at least one of the messages, and the second operation includes opening the at least one message.

164. (Previously Presented) The method of Claim 158, wherein hardware status indicia is displayed adjacent to the first edge.

165. (Previously Presented) The method of Claim 158, wherein only one of the first menu or the second menu is capable of being displayed at a time.

166. (Previously Presented) The method of Claim 158, wherein at least one of the first menu or the second menu substantially fills the display.

167. (Previously Presented) The method of Claim 158, wherein indicia is displayed via the graphical user interface for prompting a user as to an accessibility of at least one of the first menu or the second menu.

168. (Previously Presented) The method of Claim 158, wherein the first menu is accessible via the first gesture; the second menu is accessible via the second gesture; at least one of the first or second operations is performed based on at least two different contact durations, in order to increase operation accessibility via the electronic device that includes a mobile device.

169. (Previously Presented) The method of Claim 158, wherein the first gesture and the second gesture are capable of being detected as moving inward in different directions.

170. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include a plurality of application-specific menu items for accessing different applications.

171. (Previously Presented) The method of Claim 158, wherein the one or more second menu items include a plurality of application-specific menu items for accessing different applications.

172. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include a plurality of application menu items for launching different applications.

173. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a deletion operation.

174. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a move operation.

175. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a menu item rearrange operation.

176. (Previously Presented) The method of Claim 158, wherein the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application.

177. (Previously Presented) The method of Claim 158, wherein the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first

menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

178. (Previously Presented) The method of Claim 177, wherein the second operation is performed in response to the first duration of contact on the at least one application menu item being detected to surpass the threshold, and in response to the first duration of contact being detected to include a slide gesture component.

179. (Previously Presented) The method of Claim 158, wherein the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display another particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

180. (Previously Presented) The method of Claim 179, wherein the second operation is performed in response to:

the first duration of contact on the at least one application menu item being detected to surpass the threshold, and

the first duration of contact being detected to include a slide gesture component subsequent to the first duration of contact on the at least one application menu item being detected to surpass the threshold.

181. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include at least one application menu item associated with a particular application for, in response to a detection of a selection thereof and the first duration of contact on the at least one application menu item being detected to surpass the threshold, launching the particular application to display a particular application interface of the particular application in an overlying and scaled virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

182. (Previously Presented) The method of Claim 158, wherein, in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass the threshold, the first operation is performed, in response to detection of a cessation of the first duration of contact.

183. (Previously Presented) The method of Claim 158, wherein the first menu is at least partially translucent for viewing the graphical user interface thereunder.

184. (Previously Presented) The method of Claim 158, wherein the first menu is at least partially translucent for viewing the graphical user interface, including a home screen, thereunder.

185.-186. (Cancelled)

187. (Currently Amended) The method of Claim [[186]]158, wherein the magnitude of the blurring of the at least portion of the graphical user interface ~~progressively~~ decreases as a function of detecting a change in the first gesture.

188.-189. (Cancelled)

190. (Currently Amended) The method of Claim [[189]]158, wherein the magnitude of the blurring of the at least portion of the graphical user interface ~~progressively~~ decreases as a function of detecting the first gesture moving outward.

191. (Currently Amended) The method of Claim 158, wherein at least a [[portion]]part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward.

192. (Currently Amended) The method of Claim 191, wherein a magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively increases as a function of an increase in a magnitude of the second gesture being detected.

193. (Currently Amended) The method of Claim 192, wherein the magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture.

194. (Currently Amended) The method of Claim 191, wherein a magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively increases as a function of an increase in a distance magnitude of the second gesture being detected.

195. (Currently Amended) The method of Claim 191, wherein a magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively increases simultaneously with detecting the second gesture moving inward.

196. (Currently Amended) The method of Claim 195, wherein the magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively decreases as a function of detecting the second gesture moving outward.

197. (Previously Presented) The method of Claim 158, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the first operation includes performing a particular operation associated with the at least one of the one or more first menu items; and the second operation includes opening a contextual menu with one or more options associated with the at least one of the one or more first menu items;

the one or more second menu items include at least some of the application icons including a particular application icon associated with a particular application, where the third operation includes opening the particular application to display a particular application interface of the particular application instead of the home screen; and

hardware status indicia is displayed adjacent to the first edge.

198. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the first operation includes performing a particular operation associated with the at least one of the one or more first menu items; and the second operation includes opening a contextual menu with one or more options associated with the at least one of the one or more first menu items.

199. (Previously Presented) The method of Claim 158, wherein the first menu and the second menu are displayed in the at least one other virtual display layer.

200. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages associated with an application, and the second operation includes controlling at least one aspect of the application.

201. (Previously Presented) The method of Claim 158, and further comprising:

with the second menu being displayed including the one or more second menu items:

detecting, utilizing the touch interface, a second duration of contact on the at least one of the one or more second menu items,

in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, performing the third operation, and

in response to the second duration of contact on the at least one of the one or more second menu items being detected to surpass the threshold, performing a fourth operation.

202. (Previously Presented) The method of Claim 201, wherein, in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, the third operation is performed, in response to detection of a cessation of the second duration of contact.

203. (Previously Presented) The method of Claim 201, wherein the one or more second menu items include a network interface menu item and a volume menu item; the third operation includes selecting the at least one of the one or more second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items.

204. (Previously Presented) The method of Claim 201, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

205. (Previously Presented) The method of Claim 204, wherein the second operation is performed in response to:

the first duration of contact on the particular application icon being detected to surpass the threshold, and

the first duration of contact being detected to include a slide gesture component and the first duration of contact on the particular application icon being detected to surpass the threshold.

206. (Previously Presented) The method of Claim 204, wherein the one or more first menu items include only a subset of the application icons including the particular application icon.

207. (Previously Presented) The method of Claim 204, wherein the one or more first menu items include only a subset of the plurality of application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

208. (Previously Presented) The method of Claim 204, wherein the one or more first menu items include favorites of the application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

209. (Previously Presented) The method of Claim 201, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items;

the one or more second menu items further include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages, and the second operation includes controlling presentation of the at least one message; and

hardware status indicia is displayed adjacent to the second edge.

210. (Currently Amended) The method of Claim 201, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the first menu is at least partially translucent for viewing the graphical user interface thereunder, ~~at least a portion of the graphical user interface is blurred based on the detection of the first gesture that begins in connection with the first edge and moves inward, a magnitude of the blurring progressively increases with detecting the first gesture moving inward,~~ and the magnitude of the blurring ~~progressively~~ decreases as a function of detecting a change in the first gesture;

at least a part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward, a magnitude of the shading or fading of the at least part of the graphical user interface ~~progressively~~ increases with detecting the second gesture moving inward, and the magnitude of the shading or fading of the at least part of the graphical user interface ~~progressively~~ decreases as a function of detecting a change in the second gesture;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

211. (Previously Presented) The method of Claim 210, wherein at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the first edge, by beginning near the first edge;

the second gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the first edge, by beginning near the first edge;

the second gesture begins in connection with the first edge, by beginning at the first edge;

the second duration of contact is part of the selection contact;

the second duration of contact is not part of the selection contact;

the second duration of contact is separate from the selection contact;

the selection contact includes the second duration of contact;

the first gesture begins in connection with the first edge and moves inward from the first edge;

the second gesture that begins in connection with the second edge and moves inward from the second edge;

the display includes a top edge and the first gesture or the second gesture moves inward by moving, at least in part, downward from the top edge;

the display includes a top edge and the first gesture moves inward by moving, at least in part, downward from the top edge, and the second gesture moves inward by not moving, at least in part, downward from the top edge;

the first gesture and the second gesture move inward by moving, at least in part, toward a central area of the touch screen;

the second menu is displayed as sliding in;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are not displayed as sliding in via different directions;

the first menu is displayed as sliding in from the first edge;

the second menu is displayed as appearing from the second edge;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the one or more second menu items include representations of active applications;

the one or more second menu items include thumbnails of applications in a multi-tasking environment;

the first operation and the second operation are related to the same function;

the selection contact includes a press gesture;

the selection contact includes a top gesture;

the selection contact includes a static gesture;

the selection contact includes a dynamic gesture;

the selection contact is separate from the second gesture;

the first duration of contact is separate from the first gesture;

the first menu and the second menu are displayed in the same at least one other virtual display layer;

the first menu and the second menu are displayed in different at least one other virtual display layers;

the first menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer;

the first menu and the second menu are displayed in the at least one other virtual display layer;

each instance of the with includes an entire duration;

each instance of the with includes an entire display or contact duration;

each instance of the with includes at least a portion of a duration;

each instance of the with includes only a portion of a duration;

each instance of the with includes only a portion of a display or contact duration;

each instance of the with includes at least a portion of a display or contact duration;

each instance of the in response to, includes an immediate response to;

each instance of the in response to, includes a response after an intermediate operation;

the third operation and the fourth operation are related to the same function;

the blurring includes at least one of: dimming, displaying as indistinct, displaying as vague, displaying as cloudy, displaying as obscured, or displaying as smeared;

the first gesture and the second gesture move inward in different directions;

the first gesture and the second gesture do not move inward in different directions;

the first gesture and the second gesture do not move different directions;

the first gesture is detected to move inward by moving along a line that is perpendicular to the first edge;

the second gesture is detected to move inward by moving along a line that is perpendicular to the second edge;

only the first menu is displayed in the at least one other virtual display layer;

the first menu is displayed in the at least one other virtual display layer, and the second menu is not displayed in the at least one other virtual display layer;

only the second menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer, and the first menu is not displayed in the at least one other virtual display layer;

both the first menu and the second menu are displayed in the at least one other virtual display layer;

the display, the touch interface, and the memory are directly coupled to the one or more processors;

the display, the touch interface, and the memory are indirectly coupled to the one or more processors;

each instance of the displaying, the detecting, and the performing include acts;

each instance of the displaying, the detecting, and the performing do not include steps;

the shading includes at least one of: displaying as to suggest three-dimensionality, shadowing, or displaying as to include a varied degree of light and/or darkness;

the shading includes color shading;

the shading includes reducing a brightness;

the shading includes reducing a color brightness;

the shading includes moving towards black within a color space;

the shading includes incorporating less color;

the fading includes altering a level of disappearance;

the fading includes altering a transparency;

the fading includes altering a translucency;

the at least part is the same as the at least portion; or

the at least part is different from the at least portion.

212. (New) The method of Claim 158, wherein the magnitude of the first gesture includes a distance magnitude.

213. (New) An electronic device, comprising:

a display;

a touch interface;

one or more processors;

memory; and

one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for:

displaying, utilizing the display, a graphical user interface;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items including a particular application icon;

when the first menu is displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation, where the second operation is performed in response to the first

duration of contact on the particular application icon being detected to surpass the threshold, and the first duration of contact being detected to include a slide gesture component after the first duration of contact on the particular application icon is detected to surpass the threshold;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items;

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation;

wherein the electronic device is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer.

214. (New) The electronic device of Claim 213, wherein the electronic device is configured for:

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a second duration of contact on the at least one of the one or more second menu items,

in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, performing the third operation, and

in response to the second duration of contact on the at least one of the one or more second menu items being detected to surpass the threshold, performing a fourth operation.

215. (New) The electronic device of Claim 214, wherein the electronic device is configured such that in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, the third operation is performed, in response to detection of a cessation of the second duration of contact.

216. (New) The electronic device of Claim 214, wherein the electronic device is configured such that the one or more second menu items include a network interface menu item and a volume menu item; the third operation includes selecting the at least one of the one or more second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items.

217. (New) The electronic device of Claim 214, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the

particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

218. (New) The electronic device of Claim 217, wherein the electronic device is configured such that the one or more first menu items include only a subset of the application icons including the particular application icon.

219. (New) The electronic device of Claim 217, wherein the electronic device is configured such that the one or more first menu items include only a subset of the plurality of application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

220. (New) The electronic device of Claim 217, wherein the electronic device is configured such that the one or more first menu items include favorites of the application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

221. (New) The electronic device of Claim 214, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items;

the one or more second menu items further include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages, and the second operation includes controlling presentation of the at least one message; and

hardware status indicia is displayed adjacent to the second edge.

222. (New) The electronic device of Claim 214, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the first menu is at least partially translucent for viewing the graphical user interface thereunder, at least a portion of the graphical user interface is blurred based on the detection of the first gesture that begins in connection with the first edge and moves inward, a magnitude of the blurring progressively increases when detecting the first gesture moving inward, and the

magnitude of the blurring progressively decreases as a function of detecting a change in the first gesture;

at least a part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward, a magnitude of the shading or fading of the at least part of the graphical user interface progressively increases when detecting the second gesture moving inward, and the magnitude of the shading or fading of the at least part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

223. (New) The electronic device of Claim 222, wherein the electronic device is configured such that at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the first edge, by beginning near the first edge;

the second gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the first edge, by beginning near the first edge;

the second gesture begins in connection with the first edge, by beginning at the first edge;

the second duration of contact is part of the selection contact;

the second duration of contact is not part of the selection contact;

the second duration of contact is separate from the selection contact;

the selection contact includes the second duration of contact;

the first gesture begins in connection with the first edge and moves inward from the first edge;

the second gesture that begins in connection with the second edge and moves inward from the second edge;

the display includes a top edge and the first gesture or the second gesture moves inward by moving, at least in part, downward from the top edge;

the display includes a top edge and the first gesture moves inward by moving, at least in part, downward from the top edge, and the second gesture moves inward by not moving, at least in part, downward from the top edge;

the first gesture and the second gesture move inward by moving, at least in part, toward a central area of the touch screen;

the second menu is displayed as sliding in;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are not displayed as sliding in via different directions;

the first menu is displayed as sliding in from the first edge;

the second menu is displayed as appearing from the second edge;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the one or more second menu items include representations of active applications;

the one or more second menu items include thumbnails of applications in a multi-tasking environment;

the first operation and the second operation are related to the same function;

the selection contact includes a press gesture;

the selection contact includes a tap gesture;

the selection contact includes a static gesture;

the selection contact includes a dynamic gesture;

the selection contact is separate from the second gesture;

the first duration of contact is separate from the first gesture;

the electronic device is configured such that the first menu and the second menu are displayed in the same at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in different at least one other virtual display layers;

the electronic device is configured such that the first menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the second menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in the at least one other virtual display layer;

each instance of the when includes an entire duration;

each instance of the when includes an entire display or contact duration;

each instance of the when includes at least a portion of a duration;

each instance of the when includes only a portion of a duration;

each instance of the when includes only a portion of a display or contact duration;

each instance of the when includes at least a portion of a display or contact duration;

each instance of the in response to, includes an immediate response to;

each instance of the in response to, includes a response after an intermediate operation;

each instance of the in response to, includes a response after a delay;

the third operation and the fourth operation are related to the same function;

the blurring includes at least one of: dimming, displaying as indistinct, displaying as vague, displaying as cloudy, displaying as obscured, or displaying as smeared;

the first gesture and the second gesture move inward in different directions;

the first gesture and the second gesture do not move inward in different directions;

the first gesture and the second gesture do not move different directions;

the first gesture is detected to move inward by moving along a line that is perpendicular to the first edge;

the second gesture is detected to move inward by moving along a line that is perpendicular to the second edge;

only the first menu is displayed in the at least one other virtual display layer;

the first menu is displayed in the at least one other virtual display layer, and the second menu is not displayed in the at least one other virtual display layer;

only the second menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer, and the first menu is not displayed in the at least one other virtual display layer;

both the first menu and the second menu are displayed in the at least one other virtual display layer;

the shading includes at least one of: displaying as to suggest three-dimensionality, shadowing, or displaying as to include a varied degree of light and/or darkness;

the shading includes color shading;

the shading includes reducing a brightness;

the shading includes reducing a color brightness;

the shading includes moving towards black within a color space;

the shading includes incorporating less color;

the fading includes altering a level of disappearance;

the fading includes altering a transparency;

the fading includes altering a translucency;

the at least part is the same as the at least portion; or

the at least part is different from the at least portion.

224. (New) A method, comprising:

at an electronic device including a display, a touch interface, and memory coupled to one or more processors:

displaying, utilizing the display, a graphical user interface;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items with a particular application icon;

with the first menu being displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation, where the second operation is performed in response to the first duration of contact on the particular application icon being detected to surpass the threshold, and the first duration of contact being detected to include a slide gesture component after the first duration of contact on the particular application icon is detected to surpass the threshold;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items, such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer;

with the second menu being displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation.

225. (New) The method of Claim 224, and further comprising:

with the second menu being displayed including the one or more second menu items:

detecting, utilizing the touch interface, a second duration of contact on the at least one of the one or more second menu items,

in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, performing the third operation, and

in response to the second duration of contact on the at least one of the one or more second menu items being detected to surpass the threshold, performing a fourth operation.

226. (New) The method of Claim 225, wherein, in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, the third operation is performed, in response to detection of a cessation of the second duration of contact.

227. (New) The method of Claim 225, wherein the one or more second menu items include a network interface menu item and a volume menu item; the third operation includes selecting the at least one of the one or more second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items.

228. (New) The method of Claim 225, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

229. (New) The method of Claim 228, wherein the one or more first menu items include only a subset of the application icons including the particular application icon.

230. (New) The method of Claim 228, wherein the one or more first menu items include only a subset of the plurality of application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

231. (New) The method of Claim 228, wherein the one or more first menu items include favorites of the application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

232. (New) The method of Claim 225, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items;

the one or more second menu items further include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages, and the second operation includes controlling presentation of the at least one message; and

hardware status indicia is displayed adjacent to the second edge.

233. (New) The method of Claim 225, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the first menu is at least partially translucent for viewing the graphical user interface thereunder, at least a portion of the graphical user interface is blurred based on the detection of the first gesture that begins in connection with the first edge and moves inward, a magnitude of the

blurring progressively increases with detecting the first gesture moving inward, and the magnitude of the blurring progressively decreases as a function of detecting a change in the first gesture;

at least a part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward, a magnitude of the shading or fading of the at least part of the graphical user interface progressively increases with detecting the second gesture moving inward, and the magnitude of the shading or fading of the at least part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

234. (New) The method of Claim 233, wherein at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the first edge, by beginning near the first edge;

the second gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the first edge, by beginning near the first edge;

the second gesture begins in connection with the first edge, by beginning at the first edge;

the second duration of contact is part of the selection contact;

the second duration of contact is not part of the selection contact;

the second duration of contact is separate from the selection contact;

the selection contact includes the second duration of contact;

the first gesture begins in connection with the first edge and moves inward from the first edge;

the second gesture that begins in connection with the second edge and moves inward from the second edge;

the display includes a top edge and the first gesture or the second gesture moves inward by moving, at least in part, downward from the top edge;

the display includes a top edge and the first gesture moves inward by moving, at least in part, downward from the top edge, and the second gesture moves inward by not moving, at least in part, downward from the top edge;

the first gesture and the second gesture move inward by moving, at least in part, toward a central area of the touch screen;

the second menu is displayed as sliding in;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are not displayed as sliding in via different directions;

the first menu is displayed as sliding in from the first edge;

the second menu is displayed as appearing from the second edge;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the one or more second menu items include representations of active applications;

the one or more second menu items include thumbnails of applications in a multi-tasking environment;

the first operation and the second operation are related to the same function;

the selection contact includes a press gesture;

the selection contact includes a top gesture;

the selection contact includes a static gesture;

the selection contact includes a dynamic gesture;

the selection contact is separate from the second gesture;

the first duration of contact is separate from the first gesture;

the first menu and the second menu are displayed in the same at least one other virtual display layer;

the first menu and the second menu are displayed in different at least one other virtual display layers;

the first menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer;

the first menu and the second menu are displayed in the at least one other virtual display layer;

each instance of the with includes an entire duration;

each instance of the with includes an entire display or contact duration;

each instance of the with includes at least a portion of a duration;

each instance of the with includes only a portion of a duration;

each instance of the with includes only a portion of a display or contact duration;

each instance of the with includes at least a portion of a display or contact duration;

each instance of the in response to, includes an immediate response to;

each instance of the in response to, includes a response after an intermediate operation;

the third operation and the fourth operation are related to the same function;

the blurring includes at least one of: dimming, displaying as indistinct, displaying as vague, displaying as cloudy, displaying as obscured, or displaying as smeared;

the first gesture and the second gesture move inward in different directions;

the first gesture and the second gesture do not move inward in different directions;

the first gesture and the second gesture do not move different directions;

the first gesture is detected to move inward by moving along a line that is perpendicular to the first edge;

the second gesture is detected to move inward by moving along a line that is perpendicular to the second edge;

only the first menu is displayed in the at least one other virtual display layer;

the first menu is displayed in the at least one other virtual display layer, and the second menu is not displayed in the at least one other virtual display layer;

only the second menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer, and the first menu is not displayed in the at least one other virtual display layer;

both the first menu and the second menu are displayed in the at least one other virtual display layer;

the display, the touch interface, and the memory are directly coupled to the one or more processors;

the display, the touch interface, and the memory are indirectly coupled to the one or more processors;

each instance of the displaying, the detecting, and the performing include acts;

each instance of the displaying, the detecting, and the performing do not include steps;

the shading includes at least one of: displaying as to suggest three-dimensionality, shadowing, or displaying as to include a varied degree of light and/or darkness;

the shading includes color shading;

the shading includes reducing a brightness;

the shading includes reducing a color brightness;

the shading includes moving towards black within a color space;

the shading includes incorporating less color;

the fading includes altering a level of disappearance;

the fading includes altering a transparency;

the fading includes altering a translucency;

the at least part is the same as the at least portion; or

the at least part is different from the at least portion.

For Filing

From: Patrick E. Caldwell <pcaldwell@thecaldwellfirm.com>
Sent: Monday, February 3, 2020 8:22 AM
To: Antonio.xavier@uspto.gov
Subject: SMITH070AG (16/169,961) Proposed Amendment
Attachments: SMITH070AG_Proposed Amendment_20200201.rtf

Examiner Xavier,
Please consider the attached proposed amendment, which may be entered in exchange for an allowance.

--

Thanks,
Patrick

Patrick E. Caldwell, Esq.
The Caldwell Firm, LLC
PO Box 59655
Dallas, Texas 75229-0655
+1.214.734.2313 (mobile)
http://www.thecaldwellfirm.com/

CONFIDENTIALITY NOTICE: This email is covered by the Electronic Communications Privacy Act, 18 U.S.C. 2510-2521 and is legally privileged. The information contained in this email is intended for use of the individual or entity named above. If the reader of this message is not the intended recipient, or the employee or agent responsible to deliver it to the intended recipient, you are hereby notified that any dissemination, distribution or duplication of this communication is strictly prohibited. If you have received this communication in error, please immediately notify us by telephone (214-734-2313), and destroy the original message. Thank you.

- - APPENDIX A - -

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	Confirmation No.: 7650
MICHAEL S. SMITH	Examiner: XAVIER, ANTONIO J
Application No.: 16/169,961	Art Unit: 2623
File Date: 10-24-2018	Docket No.: SMITH070AG
Title: GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT	Date: 1/30/2020

PROPOSED AMENDMENT

Mail Stop Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

1.-103. (Cancelled)

104. (Currently Amended) An electronic device, comprising:

a display;

a touch interface;

one or more processors;

memory; and

one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for:

displaying, utilizing the display, a graphical user interface;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items, and blurring at least a portion of the graphical user interface such that a magnitude of the blurring of the at least portion of the graphical user interface progressively increases as a function of an increase in a magnitude of the first gesture being detected;

when the first menu is displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items;

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation;

wherein the electronic device is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer.

105. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that at least a portion of the at least one other virtual display layer is at least partially translucent such that at least a portion of the at least one virtual display layer is visible through the at least one other virtual display layer.

106. (Previously Presented) The electronic device of Claim 105, wherein the electronic device is configured such that the at least portion of the at least one virtual display layer that is visible through the at least one other virtual display layer, includes at least a portion of a background image.

107. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the first menu and the second menu are displayed in separate virtual display layers.

108. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the graphical user interface includes a home screen, for choosing among a plurality of applications.

109. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include messages in a list, the first operation includes displaying a view of at least one of the messages, and the second operation includes opening the at least one message.

110. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that hardware status indicia is displayed adjacent to the first edge.

111. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that only one of the first menu or the second menu is capable of being displayed at a time.

112. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that at least one of the first menu or the second menu substantially fills the display.

113. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that indicia is displayed via the graphical user interface for prompting a user as to an accessibility of at least one of the first menu or the second menu.

114. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the first menu is accessible via the first gesture; the second menu is accessible via the second gesture; at least one of the first or second operations is performed based on at least two different contact durations, in order to increase operation accessibility via the electronic device that includes a mobile device.

115. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the first gesture and the second gesture are capable of being detected as moving inward in different directions.

116. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include a plurality of application-specific menu items for accessing different applications.

117. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more second menu items include a plurality of application-specific menu items for accessing different applications.

118. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include a plurality of application menu items for launching different applications.

119. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a deletion operation.

120. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a move operation.

121. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a menu item rearrange operation.

122. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that, the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

123. (Previously Presented) The electronic device of Claim 122, wherein the electronic device is configured such that the second operation is performed in response to the first duration of contact on the at least one application menu item being detected to surpass the threshold, and in response to the first duration of contact being detected to include a slide gesture component.

124. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that, the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display another particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

125. (Previously Presented) The electronic device of Claim 124, wherein the electronic device is configured such that the second operation is performed in response to:

the first duration of contact on the at least one application menu item being detected to surpass the threshold, and

the first duration of contact being detected to include a slide gesture component after the first duration of contact on the at least one application menu item is detected to surpass the threshold.

126. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application for, in response to a detection of a selection thereof when the first duration of contact on the at least one application menu item is detected to surpass the threshold, launching the particular application to display a particular application interface of the particular application in an overlying and scaled virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

127. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass the threshold, the first operation is performed, in response to detection of a cessation of the first duration of contact.

128. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the first menu is at least partially translucent for viewing the graphical user interface thereunder.

129. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the first menu is at least partially translucent for viewing the graphical user interface, including a home screen, thereunder.

130. (Cancelled)

131. (Cancelled)

132. (Currently Amended) The electronic device of Claim {{131}}104, wherein the electronic device is configured such that the magnitude of the blurring of the at least portion of the graphical user interface progressively decreases as a function of detecting a change in the first gesture.

133.-135. (Cancelled)

136. (Currently Amended) The electronic device of Claim [[135]]104, wherein the electronic device is configured such that the magnitude of the blurring of the at least portion of the graphical user interface progressively decreases as a function of detecting the first gesture moving outward.

137. (Currently Amended) The electronic device of Claim 104, wherein the electronic device is configured such that at least a [[portion]]part of the graphical user interface is shaded or faded

based on the detection of the second gesture that begins in connection with the second edge and moves inward.

138. (Currently Amended) The electronic device of Claim 137, wherein the electronic device is configured such that a magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively increases as a function of an increase in a magnitude of the second gesture being detected.

139. (Currently Amended) The electronic device of Claim 138, wherein the electronic device is configured such that the magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture.

140. (Currently Amended) The electronic device of Claim 137, wherein the electronic device is configured such that a magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively increases as a function of an increase in a distance magnitude of the second gesture being detected.

141. (Currently Amended) The electronic device of Claim 137, wherein the electronic device is configured such that a magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively increases while detecting the second gesture moving inward.

142. (Currently Amended) The electronic device of Claim 141, wherein the electronic device is configured such that the magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively decreases as a function of detecting the second gesture moving outward.

143. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the electronic device is configured such that the one or more first menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the first operation includes performing a particular operation associated with the at least one of the one or more first menu items; and the second operation includes opening a contextual menu with one or more options associated with the at least one of the one or more first menu items;

the one or more second menu items include at least some of the application icons including a particular application icon associated with a particular application, where the third operation includes opening the particular application to display a particular application interface of the particular application instead of the home screen; and

hardware status indicia is displayed adjacent to the first edge.

144. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the first operation includes performing a particular operation associated with the at least one of the one or more first menu items; and the second operation includes opening a contextual menu with one or more options associated with the at least one of the one or more first menu items.

145. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the electronic device is configured such that the first menu and the second menu are displayed in the at least one other virtual display layer.

146. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages

associated with an application, and the second operation includes controlling at least one aspect of the application.

147. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured for:

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a second duration of contact on the at least one of the one or more second menu items,

in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, performing the third operation, and

in response to the second duration of contact on the at least one of the one or more second menu items being detected to surpass the threshold, performing a fourth operation.

148. (Previously Presented) The electronic device of Claim 147, wherein the electronic device is configured such that in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, the third operation is performed, in response to detection of a cessation of the second duration of contact.

149. (Previously Presented) The electronic device of Claim 147, wherein the electronic device is configured such that the one or more second menu items include a network interface menu item and a volume menu item; the third operation includes selecting the at least one of the one or more second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items.

150. (Previously Presented) The electronic device of Claim 147, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

151. (Previously Presented) The electronic device of Claim 150, wherein the electronic device is configured such that the second operation is performed in response to:

the first duration of contact on the particular application icon being detected to surpass the threshold, and

the first duration of contact being detected to include a slide gesture component after the first duration of contact on the particular application icon is detected to surpass the threshold.

152. (Previously Presented) The electronic device of Claim 150, wherein the electronic device is configured such that the one or more first menu items include only a subset of the application icons including the particular application icon.

153. (Previously Presented) The electronic device of Claim 150, wherein the electronic device is configured such that the one or more first menu items include only a subset of the plurality of application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

154. (Previously Presented) The electronic device of Claim 150, wherein the electronic device is configured such that the one or more first menu items include favorites of the application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

155. (Previously Presented) The electronic device of Claim 147, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items;

the one or more second menu items further include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages, and the second operation includes controlling presentation of the at least one message; and

hardware status indicia is displayed adjacent to the second edge.

156. (Currently Amended) The electronic device of Claim 147, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the first menu is at least partially translucent for viewing the graphical user interface thereunder, ~~at least a portion of the graphical user interface is blurred based on the detection of the first gesture that begins in connection with the first edge and moves inward, a magnitude of the blurring progressively increases when detecting the first gesture moving inward,~~ and the magnitude of the blurring progressively decreases as a function of detecting a change in the first gesture;

at least a part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward, a magnitude of the shading or fading of the at least part of the graphical user interface progressively increases when detecting the second gesture moving inward, and the magnitude of the shading or fading of the at least part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular

application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

157. (Previously Presented) The electronic device of Claim 156, wherein the electronic device is configured such that at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the second edge, by beginning near the second edge;

the second gesture begins in connection with the second edge, by beginning at the second edge;

the second gesture begins in connection with the second edge, by beginning near the second edge;

the second gesture begins in connection with the second edge, by beginning at the second edge;

the second duration of contact is part of the selection contact;

the second duration of contact is not part of the selection contact;

the second duration of contact is separate from the selection contact;

the selection contact includes the second duration of contact;

the first gesture begins in connection with the first edge and moves inward from the first edge;

the second gesture that begins in connection with the second edge and moves inward from the second edge;

the display includes a top edge and the first gesture or the second gesture moves inward by moving, at least in part, downward from the top edge;

the display includes a top edge and the first gesture moves inward by moving, at least in part, downward from the top edge, and the second gesture moves inward by not moving, at least in part, downward from the top edge;

the first gesture and the second gesture move inward by moving, at least in part, toward a central area of the touch screen;

the second menu is displayed as sliding in;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are not displayed as sliding in via different directions;

the first menu is displayed as sliding in from the first edge;

the second menu is displayed as appearing from the second edge;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the one or more second menu items include representations of active applications;

the one or more second menu items include thumbnails of applications in a multi-tasking environment;

the first operation and the second operation are related to the same function;

the selection contact includes a press gesture;

the selection contact includes a tap gesture;

the selection contact includes a static gesture;

the selection contact includes a dynamic gesture;

the selection contact is separate from the second gesture;

the first duration of contact is separate from the first gesture;

the electronic device is configured such that the first menu and the second menu are displayed in the same at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in different at least one other virtual display layers;

the electronic device is configured such that the first menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the second menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in the at least one other virtual display layer;

each instance of the when includes an entire duration;

each instance of the when includes an entire display or contact duration;

each instance of the when includes at least a portion of a duration;

each instance of the when includes only a portion of a duration;

each instance of the when includes only a portion of a display or contact duration;

each instance of the when includes at least a portion of a display or contact duration;

each instance of the in response to, includes an immediate response to;

each instance of the in response to, includes a response after an intermediate operation;

each instance of the in response to, includes a response after a delay;

the third operation and the fourth operation are related to the same function;

the blurring includes at least one of: dimming, displaying as indistinct, displaying as vague, displaying as cloudy, displaying as obscured, or displaying as smeared;

the first gesture and the second gesture move inward in different directions;

the first gesture is detected to move inward by moving along a line that is perpendicular to the first edge;

the second gesture is detected to move inward by moving along a line that is perpendicular to the second edge;

only the first menu is displayed in the at least one other virtual display layer;

the first menu is displayed in the at least one other virtual display layer, and the second menu is not displayed in the at least one other virtual display layer;

only the second menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer, and the first menu is not displayed in the at least one other virtual display layer;

both the first menu and the second menu are displayed in the at least one other virtual display layer;

the shading includes at least one of: displaying as to suggest three-dimensionality, shadowing, or displaying as to include a varied degree of light and/or darkness;

the shading includes color shading;

the shading includes reducing a brightness;

the shading includes reducing a color brightness;

the shading includes moving towards black within a color space;

the shading includes incorporating less color;

the fading includes altering a level of disappearance;

the fading includes altering a transparency;

the fading includes altering a translucency;

the at least part is the same as the at least portion; or

the at least part is different from the at least portion.

158. (Currently Amended) A method, comprising:

at an electronic device including a display, a touch interface, and memory coupled to one or more processors:

displaying, utilizing the display, a graphical user interface;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items, and blurring at least a portion of the graphical user interface such that a magnitude of the blurring of the at least portion of the graphical user interface increases as a function of an increase in a magnitude of the first gesture being detected;

with the first menu being displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items, such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer;

with the second menu being displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation.

159. (Previously Presented) The method of Claim 158, wherein at least a portion of the at least one other virtual display layer is at least partially translucent such that at least a portion of the at least one virtual display layer is visible through the at least one other virtual display layer.

160. (Previously Presented) The method of Claim 159, wherein the at least portion of the at least one virtual display layer that is visible through the at least one other virtual display layer, includes at least a portion of a background image.

161. (Previously Presented) The method of Claim 158, wherein the first menu and the second menu are displayed in separate virtual display layers.

162. (Previously Presented) The method of Claim 158, wherein the graphical user interface includes a home screen, for choosing among a plurality of applications.

163. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include messages in a list, the first operation includes displaying a view of at least one of the messages, and the second operation includes opening the at least one message.

164. (Previously Presented) The method of Claim 158, wherein hardware status indicia is displayed adjacent to the first edge.

165. (Previously Presented) The method of Claim 158, wherein only one of the first menu or the second menu is capable of being displayed at a time.

166. (Previously Presented) The method of Claim 158, wherein at least one of the first menu or the second menu substantially fills the display.

167. (Previously Presented) The method of Claim 158, wherein indicia is displayed via the graphical user interface for prompting a user as to an accessibility of at least one of the first menu or the second menu.

168. (Previously Presented) The method of Claim 158, wherein the first menu is accessible via the first gesture; the second menu is accessible via the second gesture; at least one of the first or second operations is performed based on at least two different contact durations, in order to increase operation accessibility via the electronic device that includes a mobile device.

169. (Previously Presented) The method of Claim 158, wherein the first gesture and the second gesture are capable of being detected as moving inward in different directions.

170. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include a plurality of application-specific menu items for accessing different applications.

171. (Previously Presented) The method of Claim 158, wherein the one or more second menu items include a plurality of application-specific menu items for accessing different applications.

172. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include a plurality of application menu items for launching different applications.

173. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a deletion operation.

174. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a move operation.

175. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a menu item rearrange operation.

176. (Previously Presented) The method of Claim 158, wherein the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application.

177. (Previously Presented) The method of Claim 158, wherein the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the

home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

178. (Previously Presented) The method of Claim 177, wherein the second operation is performed in response to the first duration of contact on the at least one application menu item being detected to surpass the threshold, and in response to the first duration of contact being detected to include a slide gesture component.

179. (Previously Presented) The method of Claim 158, wherein the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display another particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

180. (Previously Presented) The method of Claim 179, wherein the second operation is performed in response to:

the first duration of contact on the at least one application menu item being detected to surpass the threshold, and

the first duration of contact being detected to include a slide gesture component subsequent to the first duration of contact on the at least one application menu item being detected to surpass the threshold.

181. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include at least one application menu item associated with a particular application for, in response to a detection of a selection thereof and the first duration of contact on the at least one

application menu item being detected to surpass the threshold, launching the particular application to display a particular application interface of the particular application in an overlying and scaled virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

182. (Previously Presented) The method of Claim 158, wherein, in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass the threshold, the first operation is performed, in response to detection of a cessation of the first duration of contact.

183. (Previously Presented) The method of Claim 158, wherein the first menu is at least partially translucent for viewing the graphical user interface thereunder.

184. (Previously Presented) The method of Claim 158, wherein the first menu is at least partially translucent for viewing the graphical user interface, including a home screen, thereunder.

185.-186. (Cancelled)

187. (Currently Amended) The method of Claim [[186]]158, wherein the magnitude of the blurring of the at least portion of the graphical user interface ~~progressively~~ decreases as a function of detecting a change in the first gesture.

188.-189. (Cancelled)

190. (Currently Amended) The method of Claim [[189]]158, wherein the magnitude of the blurring of the at least portion of the graphical user interface ~~progressively~~ decreases as a function of detecting the first gesture moving outward.

191. (Currently Amended) The method of Claim 158, wherein at least a [[portion]]part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward.

192. (Currently Amended) The method of Claim 191, wherein a magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively increases as a function of an increase in a magnitude of the second gesture being detected.

193. (Currently Amended) The method of Claim 192, wherein the magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture.

194. (Currently Amended) The method of Claim 191, wherein a magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively increases as a function of an increase in a distance magnitude of the second gesture being detected.

195. (Currently Amended) The method of Claim 191, wherein a magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively increases simultaneously with detecting the second gesture moving inward.

196. (Currently Amended) The method of Claim 195, wherein the magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively decreases as a function of detecting the second gesture moving outward.

197. (Previously Presented) The method of Claim 158, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the first operation includes

performing a particular operation associated with the at least one of the one or more first menu items; and the second operation includes opening a contextual menu with one or more options associated with the at least one of the one or more first menu items;

the one or more second menu items include at least some of the application icons including a particular application icon associated with a particular application, where the third operation includes opening the particular application to display a particular application interface of the particular application instead of the home screen; and

hardware status indicia is displayed adjacent to the first edge.

198. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the first operation includes performing a particular operation associated with the at least one of the one or more first menu items; and the second operation includes opening a contextual menu with one or more options associated with the at least one of the one or more first menu items.

199. (Previously Presented) The method of Claim 158, wherein the first menu and the second menu are displayed in the at least one other virtual display layer.

200. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages associated with an application, and the second operation includes controlling at least one aspect of the application.

201. (Previously Presented) The method of Claim 158, and further comprising:

with the second menu being displayed including the one or more second menu items:

detecting, utilizing the touch interface, a second duration of contact on the at least one of the one or more second menu items,

in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, performing the third operation, and

in response to the second duration of contact on the at least one of the one or more second menu items being detected to surpass the threshold. performing a fourth operation.

202. (Previously Presented) The method of Claim 201, wherein, in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, the third operation is performed, in response to detection of a cessation of the second duration of contact.

203. (Previously Presented) The method of Claim 201, wherein the one or more second menu items include a network interface menu item and a volume menu item; the third operation includes selecting the at least one of the one or more second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items.

204. (Previously Presented) The method of Claim 201, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application. where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching

the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

205. (Previously Presented) The method of Claim 204, wherein the second operation is performed in response to:

the first duration of contact on the particular application icon being detected to surpass the threshold, and

the first duration of contact being detected to include a slide gesture component and the first duration of contact on the particular application icon being detected to surpass the threshold.

206. (Previously Presented) The method of Claim 204, wherein the one or more first menu items include only a subset of the application icons including the particular application icon.

207. (Previously Presented) The method of Claim 204, wherein the one or more first menu items include only a subset of the plurality of application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

208. (Previously Presented) The method of Claim 204, wherein the one or more first menu items include favorites of the application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

209. (Previously Presented) The method of Claim 201, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items;

the one or more second menu items further include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages, and the second operation includes controlling presentation of the at least one message; and

hardware status indicia is displayed adjacent to the second edge.

210. (Currently Amended) The method of Claim 201, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the first menu is at least partially translucent for viewing the graphical user interface thereunder, ~~at least a portion of the graphical user interface is blurred based on the detection of the first~~

~~gesture that begins in connection with the first edge and moves inward, a magnitude of the blurring progressively increases with detecting the first gesture moving inward,~~ and the magnitude of the blurring ~~progressively~~ decreases as a function of detecting a change in the first gesture;

at least a part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward, a magnitude of the shading or fading of the at least part of the graphical user interface ~~progressively~~ increases with detecting the second gesture moving inward, and the magnitude of the shading or fading of the at least part of the graphical user interface ~~progressively~~ decreases as a function of detecting a change in the second gesture;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

211. (Previously Presented) The method of Claim 210, wherein at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the second edge, by beginning near the second edge;

the second gesture begins in connection with the second edge, by beginning at the second edge;

the second gesture begins in connection with the second edge, by beginning near the second edge;

the second gesture begins in connection with the second edge, by beginning at the second edge;

the second duration of contact is part of the selection contact;

the second duration of contact is not part of the selection contact;

the second duration of contact is separate from the selection contact;

the selection contact includes the second duration of contact;

the first gesture begins in connection with the first edge and moves inward from the first edge;

the second gesture that begins in connection with the second edge and moves inward from the second edge;

the display includes a top edge and the first gesture or the second gesture moves inward by moving, at least in part, downward from the top edge;

the display includes a top edge and the first gesture moves inward by moving, at least in part, downward from the top edge, and the second gesture moves inward by not moving, at least in part, downward from the top edge;

the first gesture and the second gesture move inward by moving, at least in part, toward a central area of the touch screen;

the second menu is displayed as sliding in;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are not displayed as sliding in via different directions;

the first menu is displayed as sliding in from the first edge;

the second menu is displayed as appearing from the second edge;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the one or more second menu items include representations of active applications;

the one or more second menu items include thumbnails of applications in a multi-tasking environment;

the first operation and the second operation are related to the same function;

the selection contact includes a press gesture;

the selection contact includes a top gesture;

the selection contact includes a static gesture;

the selection contact includes a dynamic gesture;

the selection contact is separate from the second gesture;

the first duration of contact is separate from the first gesture;

the first menu and the second menu are displayed in the same at least one other virtual display layer;

the first menu and the second menu are displayed in different at least one other virtual display layers;

the first menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer;

the first menu and the second menu are displayed in the at least one other virtual display layer;

each instance of the with includes an entire duration;

each instance of the with includes an entire display or contact duration;

each instance of the with includes at least a portion of a duration;

each instance of the with includes only a portion of a duration;

each instance of the with includes only a portion of a display or contact duration;

each instance of the with includes at least a portion of a display or contact duration;

each instance of the in response to, includes an immediate response to;

each instance of the in response to, includes a response after an intermediate operation;

the third operation and the fourth operation are related to the same function;

the blurring includes at least one of: dimming, displaying as indistinct, displaying as vague, displaying as cloudy, displaying as obscured, or displaying as smeared;

the first gesture and the second gesture move inward in different directions;

the first gesture is detected to move inward by moving along a line that is perpendicular to the first edge;

the second gesture is detected to move inward by moving along a line that is perpendicular to the second edge;

only the first menu is displayed in the at least one other virtual display layer;

the first menu is displayed in the at least one other virtual display layer, and the second menu is not displayed in the at least one other virtual display layer;

only the second menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer, and the first menu is not displayed in the at least one other virtual display layer;

both the first menu and the second menu are displayed in the at least one other virtual display layer;

the display, the touch interface, and the memory are directly coupled to the one or more processors;

the display, the touch interface, and the memory are indirectly coupled to the one or more processors;

each instance of the displaying, the detecting, and the performing include acts;

each instance of the displaying, the detecting, and the performing do not include steps;

the shading includes at least one of: displaying as to suggest three-dimensionality, shadowing, or displaying as to include a varied degree of light and/or darkness;

the shading includes color shading;

the shading includes reducing a brightness;

the shading includes reducing a color brightness;

the shading includes moving towards black within a color space;

the shading includes incorporating less color;

the fading includes altering a level of disappearance;

the fading includes altering a transparency;

the fading includes altering a translucency;

the at least part is the same as the at least portion; or

the at least part is different from the at least portion.

212. (New) The method of Claim 158, wherein the magnitude of the first gesture includes a distance magnitude.

213. (New) An electronic device, comprising:

a display;

a touch interface;

one or more processors;

memory; and

one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for:

displaying, utilizing the display, a graphical user interface;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items including a particular application icon;

when the first menu is displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation, where the second operation is performed in response to the first duration of contact on the particular application icon being detected to surpass the threshold, and the first duration of contact being detected to include a slide gesture component after the first duration of contact on the particular application icon is detected to surpass the threshold;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items;

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation;

wherein the electronic device is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer.

214. (New) The electronic device of Claim 213, wherein the electronic device is configured for:

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a second duration of contact on the at least one of the one or more second menu items,

in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, performing the third operation, and

in response to the second duration of contact on the at least one of the one or more second menu items being detected to surpass the threshold, performing a fourth operation.

215. (New) The electronic device of Claim 214, wherein the electronic device is configured such that in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, the third operation is performed, in response to detection of a cessation of the second duration of contact.

216. (New) The electronic device of Claim 214, wherein the electronic device is configured such that the one or more second menu items include a network interface menu item and a volume menu item; the third operation includes selecting the at least one of the one or more second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items.

217. (New) The electronic device of Claim 214, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

218. (New) The electronic device of Claim 217, wherein the electronic device is configured such that the one or more first menu items include only a subset of the application icons including the particular application icon.

219. (New) The electronic device of Claim 217, wherein the electronic device is configured such that the one or more first menu items include only a subset of the plurality of application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

220. (New) The electronic device of Claim 217, wherein the electronic device is configured such that the one or more first menu items include favorites of the application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

221. (New) The electronic device of Claim 214, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching

the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items;

the one or more second menu items further include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages, and the second operation includes controlling presentation of the at least one message; and

hardware status indicia is displayed adjacent to the second edge.

222. (New) The electronic device of Claim 214, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the first menu is at least partially translucent for viewing the graphical user interface thereunder, at least a portion of the graphical user interface is blurred based on the detection of the first gesture that begins in connection with the first edge and moves inward, a magnitude of the blurring progressively increases when detecting the first gesture moving inward, and the magnitude of the blurring progressively decreases as a function of detecting a change in the first gesture;

at least a part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward, a magnitude of the shading or fading of the at least part of the graphical user interface progressively increases

when detecting the second gesture moving inward, and the magnitude of the shading or fading of the at least part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

223. (New) The electronic device of Claim 222, wherein the electronic device is configured such that at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the second edge, by beginning near the second edge;

the second gesture begins in connection with the second edge, by beginning at the second edge;

the second gesture begins in connection with the second edge, by beginning near the second edge;

the second gesture begins in connection with the second edge, by beginning at the second edge;

the second duration of contact is part of the selection contact;

the second duration of contact is not part of the selection contact;

the second duration of contact is separate from the selection contact;

the selection contact includes the second duration of contact;

the first gesture begins in connection with the first edge and moves inward from the first edge;

the second gesture that begins in connection with the second edge and moves inward from the second edge;

the display includes a top edge and the first gesture or the second gesture moves inward by moving, at least in part, downward from the top edge;

the display includes a top edge and the first gesture moves inward by moving, at least in part, downward from the top edge, and the second gesture moves inward by not moving, at least in part, downward from the top edge;

the first gesture and the second gesture move inward by moving, at least in part, toward a central area of the touch screen;

the second menu is displayed as sliding in;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are not displayed as sliding in via different directions;

the first menu is displayed as sliding in from the first edge;

the second menu is displayed as appearing from the second edge;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the one or more second menu items include representations of active applications;

the one or more second menu items include thumbnails of applications in a multi-tasking environment;

the first operation and the second operation are related to the same function;

the selection contact includes a press gesture;

the selection contact includes a top gesture;

the selection contact includes a static gesture;

the selection contact includes a dynamic gesture;

the selection contact is separate from the second gesture;

the first duration of contact is separate from the first gesture;

the electronic device is configured such that the first menu and the second menu are displayed in the same at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in different at least one other virtual display layers;

the electronic device is configured such that the first menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the second menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in the at least one other virtual display layer;

each instance of the when includes an entire duration;

each instance of the when includes an entire display or contact duration;

each instance of the when includes at least a portion of a duration;

each instance of the when includes only a portion of a duration;

each instance of the when includes only a portion of a display or contact duration;

each instance of the when includes at least a portion of a display or contact duration;

each instance of the in response to, includes an immediate response to;

each instance of the in response to, includes a response after an intermediate operation;

each instance of the in response to, includes a response after a delay;

the third operation and the fourth operation are related to the same function;

the blurring includes at least one of: dimming, displaying as indistinct, displaying as vague, displaying as cloudy, displaying as obscured, or displaying as smeared;

the first gesture and the second gesture move inward in different directions;

the first gesture is detected to move inward by moving along a line that is perpendicular to the first edge;

the second gesture is detected to move inward by moving along a line that is perpendicular to the second edge;

only the first menu is displayed in the at least one other virtual display layer;

the first menu is displayed in the at least one other virtual display layer, and the second menu is not displayed in the at least one other virtual display layer;

only the second menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer, and the first menu is not displayed in the at least one other virtual display layer;

both the first menu and the second menu are displayed in the at least one other virtual display layer;

the shading includes at least one of: displaying as to suggest three-dimensionality, shadowing, or displaying as to include a varied degree of light and/or darkness;

the shading includes color shading;

the shading includes reducing a brightness;

the shading includes reducing a color brightness;

the shading includes moving towards black within a color space;

the shading includes incorporating less color;

the fading includes altering a level of disappearance;

the fading includes altering a transparency;

the fading includes altering a translucency;

the at least part is the same as the at least portion; or

the at least part is different from the at least portion.

224. (New) A method, comprising:

at an electronic device including a display, a touch interface, and memory coupled to one or more processors:

displaying, utilizing the display, a graphical user interface;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items with a particular application icon;

with the first menu being displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation, where the second operation is performed in response to the first

duration of contact on the particular application icon being detected to surpass the threshold, and the first duration of contact being detected to include a slide gesture component after the first duration of contact on the particular application icon is detected to surpass the threshold;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items, such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer;

with the second menu being displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation.

225. (New) The method of Claim 224, and further comprising:

with the second menu being displayed including the one or more second menu items:

detecting, utilizing the touch interface, a second duration of contact on the at least one of the one or more second menu items,

in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, performing the third operation, and

in response to the second duration of contact on the at least one of the one or more second menu items being detected to surpass the threshold, performing a fourth operation.

226. (New) The method of Claim 225, wherein, in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, the third operation is performed, in response to detection of a cessation of the second duration of contact.

227. (New) The method of Claim 225, wherein the one or more second menu items include a network interface menu item and a volume menu item; the third operation includes selecting the at least one of the one or more second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items.

228. (New) The method of Claim 225, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular

application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

229. (New) The method of Claim 228, wherein the one or more first menu items include only a subset of the application icons including the particular application icon.

230. (New) The method of Claim 228, wherein the one or more first menu items include only a subset of the plurality of application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

231. (New) The method of Claim 228, wherein the one or more first menu items include favorites of the application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

232. (New) The method of Claim 225, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching

the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items;

the one or more second menu items further include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages, and the second operation includes controlling presentation of the at least one message; and

hardware status indicia is displayed adjacent to the second edge.

233. (New) The method of Claim 225, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the first menu is at least partially translucent for viewing the graphical user interface thereunder, at least a portion of the graphical user interface is blurred based on the detection of the first gesture that begins in connection with the first edge and moves inward, a magnitude of the blurring progressively increases with detecting the first gesture moving inward, and the magnitude of the blurring progressively decreases as a function of detecting a change in the first gesture;

at least a part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward, a magnitude of the shading or fading of the at least part of the graphical user interface progressively increases with detecting the second gesture moving inward, and the magnitude of the shading or fading of

the at least part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

234. (New) The method of Claim 233, wherein at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the second edge, by beginning near the second edge;

the second gesture begins in connection with the second edge, by beginning at the second edge;

the second gesture begins in connection with the second edge, by beginning near the second edge;

the second gesture begins in connection with the second edge, by beginning at the second edge;

the second duration of contact is part of the selection contact;

the second duration of contact is not part of the selection contact;

the second duration of contact is separate from the selection contact;

the selection contact includes the second duration of contact;

the first gesture begins in connection with the first edge and moves inward from the first edge;

the second gesture that begins in connection with the second edge and moves inward from the second edge;

the display includes a top edge and the first gesture or the second gesture moves inward by moving, at least in part, downward from the top edge;

the display includes a top edge and the first gesture moves inward by moving, at least in part, downward from the top edge, and the second gesture moves inward by not moving, at least in part, downward from the top edge;

the first gesture and the second gesture move inward by moving, at least in part, toward a central area of the touch screen;

the second menu is displayed as sliding in;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are not displayed as sliding in via different directions;

the first menu is displayed as sliding in from the first edge;

the second menu is displayed as appearing from the second edge;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the one or more second menu items include representations of active applications;

the one or more second menu items include thumbnails of applications in a multi-tasking environment;

the first operation and the second operation are related to the same function;

the selection contact includes a press gesture;

the selection contact includes a top gesture;

the selection contact includes a static gesture;

the selection contact includes a dynamic gesture;

the selection contact is separate from the second gesture;

the first duration of contact is separate from the first gesture;

the first menu and the second menu are displayed in the same at least one other virtual display layer;

the first menu and the second menu are displayed in different at least one other virtual display layers;

the first menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer;

the first menu and the second menu are displayed in the at least one other virtual display layer;

each instance of the with includes an entire duration;

each instance of the with includes an entire display or contact duration;

each instance of the with includes at least a portion of a duration;

each instance of the with includes only a portion of a duration;

each instance of the with includes only a portion of a display or contact duration;

each instance of the with includes at least a portion of a display or contact duration;

each instance of the in response to, includes an immediate response to;

each instance of the in response to, includes a response after an intermediate operation;

the third operation and the fourth operation are related to the same function;

the blurring includes at least one of: dimming, displaying as indistinct, displaying as vague, displaying as cloudy, displaying as obscured, or displaying as smeared;

the first gesture and the second gesture move inward in different directions;

the first gesture is detected to move inward by moving along a line that is perpendicular to the first edge;

the second gesture is detected to move inward by moving along a line that is perpendicular to the second edge;

only the first menu is displayed in the at least one other virtual display layer;

the first menu is displayed in the at least one other virtual display layer, and the second menu is not displayed in the at least one other virtual display layer;

only the second menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer, and the first menu is not displayed in the at least one other virtual display layer;

both the first menu and the second menu are displayed in the at least one other virtual display layer;

the display, the touch interface, and the memory are directly coupled to the one or more processors;

the display, the touch interface, and the memory are indirectly coupled to the one or more processors;

each instance of the displaying, the detecting, and the performing include acts;

each instance of the displaying, the detecting, and the performing do not include steps;

the shading includes at least one of: displaying as to suggest three-dimensionality, shadowing, or displaying as to include a varied degree of light and/or darkness;

the shading includes color shading;

the shading includes reducing a brightness;

the shading includes reducing a color brightness;

the shading includes moving towards black within a color space;

the shading includes incorporating less color;

the fading includes altering a level of disappearance;

the fading includes altering a transparency;

the fading includes altering a translucency;

the at least part is the same as the at least portion; or

the at least part is different from the at least portion.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), by mail or fax, or via EFS-Web.

By mail, send to: Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

By fax, send to: (571)-273-2885

INSTRUCTIONS. This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

92045 7590 02/07/2020
The Caldwell Firm, LLC
PO Box 59655
Dept. SVIPGP
Dallas, TX 75229

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being transmitted to the USPTO via EFS-Web or by facsimile to (571) 273-2885, on the date below.

(Typed or printed name)

(Signature)

(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/169,961	10/24/2018	Michael S. Smith	SMITH070AG	7650

TITLE OF INVENTION: GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$500	$0.00	$0.00	$500	05/07/2020

EXAMINER	ART UNIT	CLASS-SUBCLASS
XAVIER, ANTONIO J	2623	345-174000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-09 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 Patrick E. Caldwell, Esq.
2 The Caldwell Firm, LLC
3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document must have been previously recorded, or filed for recordation, as set forth in 37 CFR 3.11 and 37 CFR 3.81(a). Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE	(B) RESIDENCE: (CITY and STATE OR COUNTRY)
P4TENTS1, LLC	Wilmington DE

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. Fees submitted: ☒ Issue Fee ☒ Publication Fee (if required) ☐ Advance Order - # of Copies _____

4b. Method of Payment: *(Please first reapply any previously paid fee shown above)*

☒ Electronic Payment via EFS-Web ☐ Enclosed check ☐ Non-electronic payment by credit card (Attach form PTO-2038)

☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. .....

5. **Change in Entity Status** (from status indicated above)

☐ Applicant certifying micro entity status. See 37 CFR 1.29

☐ Applicant asserting small entity status. See 37 CFR 1.27

☐ Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature /Patrick Caldwell/ Date 31 Mar 2020

Typed or printed name Patrick Caldwell Registration No. 44,580

Electronic Patent Application Fee Transmittal

Application Number:	16169961
Filing Date:	24-Oct-2018
Title of Invention:	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT
First Named Inventor/Applicant Name:	Michael S. Smith
Filer:	Patrick Edgar Caldwell
Attorney Docket Number:	SMITH070AG

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
CLAIMS IN EXCESS OF 20	2202	13	50	650
INDEPENDENT CLAIMS IN EXCESS OF 3	2201	1	230	230
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Post-Allowance-and-Post-Issuance:				
UTILITY APPL ISSUE FEE	2501	1	500	500
Extension-of-Time:				
Miscellaneous:				
		Total in USD ($)		**1380**

Electronic Acknowledgement Receipt	
EFS ID:	39028531
Application Number:	16169961
International Application Number:	
Confirmation Number:	7650
Title of Invention:	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT
First Named Inventor/Applicant Name:	Michael S. Smith
Customer Number:	92045
Filer:	Patrick Edgar Caldwell
Filer Authorized By:	
Attorney Docket Number:	SMITH070AG
Receipt Date:	31-MAR-2020
Filing Date:	24-OCT-2018
Time Stamp:	23:39:42
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$1380
RAM confirmation Number	E20203UN40064677
Deposit Account	
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Amendment after Notice of Allowance (Rule 312)	SMITH070AG_312Amendment_vF_31-Mar-2020.pdf	273502 f76231fb6c32fdec289ec7f5ee9de6fd2dc73d1c	no	66
Warnings:					
Information:					
2	Post Allowance Communication - Incoming	SMITH070AG_Comments-L_vF_31-Mar-2020.pdf	217332 29c409c4def67aa721b68aad2fda766607a0f48ea	no	13
Warnings:					
Information:					
3	Applicant summary of interview with examiner	SMITH070AG_ExaminerInterview_vF_31-Mar-2020.pdf	20847769 026512e4f09654e4cbf079c611e191d567fc6aec	no	125
Warnings:					
Information:					
4	Issue Fee Payment (PTO-85B)	SMITH070AG_fee-transmittal_vF_31-Mar-2020.pdf	218426 9cfd44d9fcd2cb04ed31ea564c5c18cd8c114faa	no	1
Warnings:					
Information:					
5	Fee Worksheet (SB06)	fee-info.pdf	33719 a0e3d6bf35eef98dc027c2cd322d573e3fe1cc46	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	21590748		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	Confirmation No.: 7650
Michael S. Smith	Examiner: Antonio J XAVIER
Application No.: 16/169,961	Art Unit: 2623
File Date: 2018-10-24	Docket No.: SMITH070AG
Title: GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT	Date: March 31, 2020

AMENDMENT AFTER ALLOWANCE
UNDER 37 C.F.R. § 1.312

Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

Examiner:

Prior to issuance of the patent, applicant respectfully requests entry of this amendment under 37 C.F.R. 1.312 for the above-captioned patent application.

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

1.-103. (Cancelled)

104. (Previously presented) An electronic device, comprising:

a display;

a touch interface;

one or more processors;

memory; and

one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for:

displaying, utilizing the display, a graphical user interface;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items, and blurring at least a portion of the graphical user interface such that a magnitude of the blurring of the at least portion of

the graphical user interface progressively increases as a function of an increase in a magnitude of the first gesture being detected;

when the first menu is displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items;

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation;

wherein the electronic device is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer.

105. (Previously presented) The electronic device of Claim 104, wherein the electronic device is configured such that at least a portion of the at least one other virtual display layer is at least partially translucent such that at least a portion of the at least one virtual display layer is visible through the at least one other virtual display layer.

106. (Previously presented) The electronic device of Claim 105, wherein the electronic device is configured such that the at least portion of the at least one virtual display layer that is visible through the at least one other virtual display layer, includes at least a portion of a background image.

107. (Previously presented) The electronic device of Claim 104, wherein the electronic device is configured such that the first menu and the second menu are displayed in separate virtual display layers.

108. (Previously presented) The electronic device of Claim 104, wherein the electronic device is configured such that the graphical user interface includes a home screen, for choosing among a plurality of applications.

109. (Previously presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include messages in a list, the first

operation includes displaying a view of at least one of the messages, and the second operation includes opening the at least one message.

110. (Previously presented) The electronic device of Claim 104, wherein the electronic device is configured such that hardware status indicia is displayed adjacent to the first edge.

111. (Previously presented) The electronic device of Claim 104, wherein the electronic device is configured such that only one of the first menu or the second menu is capable of being displayed at a time.

112. (Previously presented) The electronic device of Claim 104, wherein the electronic device is configured such that at least one of the first menu or the second menu substantially fills the display.

113. (Previously presented) The electronic device of Claim 104, wherein the electronic device is configured such that indicia is displayed via the graphical user interface for prompting a user as to an accessibility of at least one of the first menu or the second menu.

114. (Previously presented) The electronic device of Claim 104, wherein the electronic device is configured such that the first menu is accessible via the first gesture; the second menu is accessible via the second gesture; at least one of the first or second operations is performed based on at least two different contact durations, in order to increase operation accessibility via the electronic device that includes a mobile device.

115. (Previously presented) The electronic device of Claim 104, wherein the electronic device is configured such that the first gesture and the second gesture are capable of being detected as moving inward in different directions.

116. (Previously presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include a plurality of application-specific menu items for accessing different applications.

117. (Previously presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more second menu items include a plurality of application-specific menu items for accessing different applications.

118. (Previously presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include a plurality of application menu items for launching different applications.

119. (Previously presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a deletion operation.

120. (Previously presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a move operation.

121. (Previously presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a menu item rearrange operation.

122. (Previously presented) The electronic device of Claim 104, wherein the electronic device is configured such that, the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

123. (Previously presented) The electronic device of Claim 122, wherein the electronic device is configured such that the second operation is performed in response to the first duration of contact on the at least one application menu item being detected to surpass the threshold, and in response to the first duration of contact being detected to include a slide gesture component.

124. (Previously presented) The electronic device of Claim 104, wherein the electronic device is configured such that, the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display another particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

125. (Previously presented) The electronic device of Claim 124, wherein the electronic device is configured such that the second operation is performed in response to:

the first duration of contact on the at least one application menu item being detected to surpass the threshold, and

the first duration of contact being detected to include a slide gesture component after the first duration of contact on the at least one application menu item is detected to surpass the threshold.

126. (Previously presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application for, in response to a detection of a selection thereof when the first duration of contact on the at least one application menu item is detected to surpass the threshold, launching the particular application to display a particular application interface of the particular application in an overlying and scaled virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

127. (Previously presented) The electronic device of Claim 104, wherein the electronic device is configured such that in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass the threshold, the first operation is performed, in response to detection of a cessation of the first duration of contact.

128. (Previously presented) The electronic device of Claim 104, wherein the electronic device is configured such that the first menu is at least partially translucent for viewing the graphical user interface thereunder.

129. (Previously presented) The electronic device of Claim 104, wherein the electronic device is configured such that the first menu is at least partially translucent for viewing the graphical user interface, including a home screen, thereunder.

130. (Cancelled)

131. (Cancelled)

132. (Previously presented) The electronic device of Claim 104, wherein the electronic device is configured such that the magnitude of the blurring of the at least portion of the graphical user interface progressively decreases as a function of detecting a change in the first gesture.

133.-135. (Cancelled)

136. (Previously presented) The electronic device of Claim 104, wherein the electronic device is configured such that the magnitude of the blurring of the at least portion of the graphical user interface progressively decreases as a function of detecting the first gesture moving outward.

137. (Previously presented) The electronic device of Claim 104, wherein the electronic device is configured such that at least a part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward.

138. (Previously presented) The electronic device of Claim 137, wherein the electronic device is configured such that a magnitude of the shading or fading of the at least part of the graphical user interface progressively increases as a function of an increase in a magnitude of the second gesture being detected.

139. (Previously presented) The electronic device of Claim 138, wherein the electronic device is configured such that the magnitude of the shading or fading of the at least part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture.

140. (Previously presented) The electronic device of Claim 137, wherein the electronic device is configured such that a magnitude of the shading or fading of the at least part of the graphical user interface progressively increases as a function of an increase in a distance magnitude of the second gesture being detected.

141. (Previously presented) The electronic device of Claim 137, wherein the electronic device is configured such that a magnitude of the shading or fading of the at least part of the graphical user interface progressively increases while detecting the second gesture moving inward.

142. (Previously presented) The electronic device of Claim 141, wherein the electronic device is configured such that the magnitude of the shading or fading of the at least part of the graphical user interface progressively decreases as a function of detecting the second gesture moving outward.

143. (Previously presented) The electronic device of Claim 104, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the electronic device is configured such that the one or more first menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the first operation includes performing a particular operation associated with the at least one of the one or more first menu items; and the second operation includes opening a contextual menu with one or more options associated with the at least one of the one or more first menu items;

the one or more second menu items include at least some of the application icons including a particular application icon associated with a particular application, where the third operation

includes opening the particular application to display a particular application interface of the particular application instead of the home screen; and

hardware status indicia is displayed adjacent to the first edge.

144. (Previously presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the first operation includes performing a particular operation associated with the at least one of the one or more first menu items; and the second operation includes opening a contextual menu with one or more options associated with the at least one of the one or more first menu items.

145. (Previously presented) The electronic device of Claim 104, wherein the electronic device is configured such that the electronic device is configured such that the first menu and the second menu are displayed in the at least one other virtual display layer.

146. (Previously presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages associated with an application, and the second operation includes controlling at least one aspect of the application.

147. (Previously presented) The electronic device of Claim 104, wherein the electronic device is configured for:

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a second duration of contact on the at least one of the one or more second menu items,

in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, performing the third operation, and

in response to the second duration of contact on the at least one of the one or more second menu items being detected to surpass the threshold, performing a fourth operation.

148. (Previously presented) The electronic device of Claim 147, wherein the electronic device is configured such that in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, the third operation is performed, in response to detection of a cessation of the second duration of contact.

149. (Previously presented) The electronic device of Claim 147, wherein the electronic device is configured such that the one or more second menu items include a network interface menu item and a volume menu item; the third operation includes selecting the at least one of the one or more second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items.

150. (Previously presented) The electronic device of Claim 147, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

151. (Previously presented) The electronic device of Claim 150, wherein the electronic device is configured such that the second operation is performed in response to:

the first duration of contact on the particular application icon being detected to surpass the threshold, and

the first duration of contact being detected to include a slide gesture component after the first duration of contact on the particular application icon is detected to surpass the threshold.

152. (Previously presented) The electronic device of Claim 150, wherein the electronic device is configured such that the one or more first menu items include only a subset of the application icons including the particular application icon.

153. (Previously presented) The electronic device of Claim 150, wherein the electronic device is configured such that the one or more first menu items include only a subset of the plurality of application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

154. (Previously presented) The electronic device of Claim 150, wherein the electronic device is configured such that the one or more first menu items include favorites of the application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

155. (Previously presented) The electronic device of Claim 147, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items;

the one or more second menu items further include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages, and the second operation includes controlling presentation of the at least one message; and

hardware status indicia is displayed adjacent to the second edge.

156. (Previously presented) The electronic device of Claim 147, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the first menu is at least partially translucent for viewing the graphical user interface thereunder, and the magnitude of the blurring progressively decreases as a function of detecting a change in the first gesture;

at least a part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward, a magnitude of the shading or fading of the at least part of the graphical user interface progressively increases when detecting the second gesture moving inward, and the magnitude of the shading or fading of the at least part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular

application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

157. (Previously presented) The electronic device of Claim 156, wherein the electronic device is configured such that at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the second edge, by beginning near the second edge;

the second gesture begins in connection with the second edge, by beginning at the second edge;

the second duration of contact is part of the selection contact;

the second duration of contact is not part of the selection contact;

the second duration of contact is separate from the selection contact;

the selection contact includes the second duration of contact;

the first gesture begins in connection with the first edge and moves inward from the first edge;

the second gesture that begins in connection with the second edge and moves inward from the second edge;

the display includes a top edge and the first gesture or the second gesture moves inward by moving, at least in part, downward from the top edge;

the display includes a top edge and the first gesture moves inward by moving, at least in part, downward from the top edge, and the second gesture moves inward by not moving, at least in part, downward from the top edge;

the first gesture and the second gesture move inward by moving, at least in part, toward a central area of the touch screen;

the second menu is displayed as sliding in;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are not displayed as sliding in via different directions;

the first menu is displayed as sliding in from the first edge;

the second menu is displayed as appearing from the second edge;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the one or more second menu items include representations of active applications;

the one or more second menu items include thumbnails of applications in a multi-tasking environment;

the first operation and the second operation are related to the same function;

the selection contact includes a press gesture;

the selection contact includes a top gesture;

the selection contact includes a static gesture;

the selection contact includes a dynamic gesture;

the selection contact is separate from the second gesture;

the first duration of contact is separate from the first gesture;

the electronic device is configured such that the first menu and the second menu are displayed in the same at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in different at least one other virtual display layers;

the electronic device is configured such that the first menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the second menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in the at least one other virtual display layer;

each instance of the when includes an entire duration;

each instance of the when includes an entire display or contact duration;

each instance of the when includes at least a portion of a duration;

each instance of the when includes only a portion of a duration;

each instance of the when includes only a portion of a display or contact duration;

each instance of the when includes at least a portion of a display or contact duration;

each instance of the in response to, includes an immediate response to;

each instance of the in response to, includes a response after an intermediate operation;

each instance of the in response to, includes a response after a delay;

the third operation and the fourth operation are related to the same function;

the blurring includes at least one of: dimming, displaying as indistinct, displaying as vague, displaying as cloudy, displaying as obscured, or displaying as smeared;

the first gesture is detected to move inward by moving along a line that is perpendicular to the first edge;

the second gesture is detected to move inward by moving along a line that is perpendicular to the second edge;

only the first menu is displayed in the at least one other virtual display layer;

the first menu is displayed in the at least one other virtual display layer, and the second menu is not displayed in the at least one other virtual display layer;

only the second menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer, and the first menu is not displayed in the at least one other virtual display layer;

both the first menu and the second menu are displayed in the at least one other virtual display layer;

the shading includes at least one of: displaying as to suggest three-dimensionality, shadowing, or displaying as to include a varied degree of light and/or darkness;

the shading includes color shading;

the shading includes reducing a brightness;

the shading includes reducing a color brightness;

the shading includes moving towards black within a color space;

the shading includes incorporating less color;

the fading includes altering a level of disappearance;

the fading includes altering a transparency;

the fading includes altering a translucency;

the at least part is the same as the at least portion; or

the at least part is different from the at least portion.

158. (Previously presented) A method, comprising:

at an electronic device including a display, a touch interface, and memory coupled to one or more processors:

displaying, utilizing the display, a graphical user interface;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items, and blurring at least a portion of the graphical user interface such that a magnitude of the blurring of the at least portion of the graphical user interface increases as a function of an increase in a magnitude of the first gesture being detected;

with the first menu being displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items, such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer;

with the second menu being displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation.

159. (Previously presented) The method of Claim 158, wherein at least a portion of the at least one other virtual display layer is at least partially translucent such that at least a portion of the at least one virtual display layer is visible through the at least one other virtual display layer.

160. (Previously presented) The method of Claim 159, wherein the at least portion of the at least one virtual display layer that is visible through the at least one other virtual display layer, includes at least a portion of a background image.

161. (Previously presented) The method of Claim 158, wherein the first menu and the second menu are displayed in separate virtual display layers.

162. (Previously presented) The method of Claim 158, wherein the graphical user interface includes a home screen, for choosing among a plurality of applications.

163. (Previously presented) The method of Claim 158, wherein the one or more first menu items include messages in a list, the first operation includes displaying a view of at least one of the messages, and the second operation includes opening the at least one message.

164. (Previously presented) The method of Claim 158, wherein hardware status indicia is displayed adjacent to the first edge.

165. (Previously presented) The method of Claim 158, wherein only one of the first menu or the second menu is capable of being displayed at a time.

166. (Previously presented) The method of Claim 158, wherein at least one of the first menu or the second menu substantially fills the display.

167. (Previously presented) The method of Claim 158, wherein indicia is displayed via the graphical user interface for prompting a user as to an accessibility of at least one of the first menu or the second menu.

168. (Previously presented) The method of Claim 158, wherein the first menu is accessible via the first gesture; the second menu is accessible via the second gesture; at least one of the first or second operations is performed based on at least two different contact durations, in order to increase operation accessibility via the electronic device that includes a mobile device.

169. (Previously presented) The method of Claim 158, wherein the first gesture and the second gesture are capable of being detected as moving inward in different directions.

170. (Previously presented) The method of Claim 158, wherein the one or more first menu items include a plurality of application-specific menu items for accessing different applications.

171. (Previously presented) The method of Claim 158, wherein the one or more second menu items include a plurality of application-specific menu items for accessing different applications.

172. (Previously presented) The method of Claim 158, wherein the one or more first menu items include a plurality of application menu items for launching different applications.

173. (Previously presented) The method of Claim 158, wherein the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a deletion operation.

174. (Previously presented) The method of Claim 158, wherein the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a move operation.

175. (Previously presented) The method of Claim 158, wherein the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a menu item rearrange operation.

176. (Previously presented) The method of Claim 158, wherein the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of

the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application.

177. (Previously presented) The method of Claim 158, wherein the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

178. (Previously presented) The method of Claim 177, wherein the second operation is performed in response to the first duration of contact on the at least one application menu item being detected to surpass the threshold, and in response to the first duration of contact being detected to include a slide gesture component.

179. (Previously presented) The method of Claim 158, wherein the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display another particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

180. (Previously presented) The method of Claim 179, wherein the second operation is performed in response to:

the first duration of contact on the at least one application menu item being detected to surpass the threshold, and

the first duration of contact being detected to include a slide gesture component subsequent to the first duration of contact on the at least one application menu item being detected to surpass the threshold.

181. (Previously presented) The method of Claim 158, wherein the one or more first menu items include at least one application menu item associated with a particular application for, in response to a detection of a selection thereof and the first duration of contact on the at least one application menu item being detected to surpass the threshold, launching the particular application to display a particular application interface of the particular application in an overlying and scaled virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

182. (Previously presented) The method of Claim 158, wherein, in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass the threshold, the first operation is performed, in response to detection of a cessation of the first duration of contact.

183. (Previously presented) The method of Claim 158, wherein the first menu is at least partially translucent for viewing the graphical user interface thereunder.

184. (Previously presented) The method of Claim 158, wherein the first menu is at least partially translucent for viewing the graphical user interface, including a home screen, thereunder.

185.-186. (Cancelled)

187. (Previously presented) The method of Claim 158, wherein the magnitude of the blurring of the at least portion of the graphical user interface decreases as a function of detecting a change in the first gesture.

188.-189. (Cancelled)

190. (Previously presented) The method of Claim 158, wherein the magnitude of the blurring of the at least portion of the graphical user interface decreases as a function of detecting the first gesture moving outward.

191. (Previously presented) The method of Claim 158, wherein at least a part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward.

192. (Previously presented) The method of Claim 191, wherein a magnitude of the shading or fading of the at least part of the graphical user interface progressively increases as a function of an increase in a magnitude of the second gesture being detected.

193. (Previously presented) The method of Claim 192, wherein the magnitude of the shading or fading of the at least part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture.

194. (Previously presented) The method of Claim 191, wherein a magnitude of the shading or fading of the at least part of the graphical user interface progressively increases as a function of an increase in a distance magnitude of the second gesture being detected.

195. (Previously presented) The method of Claim 191, wherein a magnitude of the shading or fading of the at least part of the graphical user interface progressively increases simultaneously with detecting the second gesture moving inward.

196. (Previously presented) The method of Claim 195, wherein the magnitude of the shading or fading of the at least part of the graphical user interface progressively decreases as a function of detecting the second gesture moving outward.

197. (Previously presented) The method of Claim 158, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the first operation includes performing a particular operation associated with the at least one of the one or more first menu items; and the second operation includes opening a contextual menu with one or more options associated with the at least one of the one or more first menu items;

the one or more second menu items include at least some of the application icons including a particular application icon associated with a particular application, where the third operation includes opening the particular application to display a particular application interface of the particular application instead of the home screen; and

hardware status indicia is displayed adjacent to the first edge.

198. (Previously presented) The method of Claim 158, wherein the one or more first menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the first operation includes performing a

particular operation associated with the at least one of the one or more first menu items; and the second operation includes opening a contextual menu with one or more options associated with the at least one of the one or more first menu items.

199. (Previously presented) The method of Claim 158, wherein the first menu and the second menu are displayed in the at least one other virtual display layer.

200. (Previously presented) The method of Claim 158, wherein the one or more first menu items include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages associated with an application, and the second operation includes controlling at least one aspect of the application.

201. (Previously presented) The method of Claim 158, and further comprising:

with the second menu being displayed including the one or more second menu items:

detecting, utilizing the touch interface, a second duration of contact on the at least one of the one or more second menu items,

in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, performing the third operation, and

in response to the second duration of contact on the at least one of the one or more second menu items being detected to surpass the threshold, performing a fourth operation.

202. (Previously presented) The method of Claim 201, wherein, in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, the third operation is performed, in response to detection of a cessation of the second duration of contact.

203. (Previously presented) The method of Claim 201, wherein the one or more second menu items include a network interface menu item and a volume menu item; the third operation includes selecting the at least one of the one or more second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items.

204. (Previously presented) The method of Claim 201, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

205. (Previously presented) The method of Claim 204, wherein the second operation is performed in response to:

the first duration of contact on the particular application icon being detected to surpass the threshold, and

the first duration of contact being detected to include a slide gesture component and the first duration of contact on the particular application icon being detected to surpass the threshold.

206. (Previously presented) The method of Claim 204, wherein the one or more first menu items include only a subset of the application icons including the particular application icon.

207. (Previously presented) The method of Claim 204, wherein the one or more first menu items include only a subset of the plurality of application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

208. (Previously presented) The method of Claim 204, wherein the one or more first menu items include favorites of the application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

209. (Previously presented) The method of Claim 201, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items;

the one or more second menu items further include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages, and the second operation includes controlling presentation of the at least one message; and

hardware status indicia is displayed adjacent to the second edge.

210. (Currently amended) The method of Claim 201, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the first menu is at least partially translucent for viewing the graphical user interface thereunder, ~~at least a portion of the graphical user interface is blurred based on the detection of the first gesture that begins in connection with the first edge and moves inward, a magnitude of the blurring progressively increases with detecting the first gesture moving inward,~~ and the

magnitude of the blurring ~~progressively~~ decreases as a function of detecting a change in the first gesture;

at least a part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward, a magnitude of the shading or fading of the at least part of the graphical user interface ~~progressively~~ increases with detecting the second gesture moving inward, and the magnitude of the shading or fading of the at least part of the graphical user interface ~~progressively~~ decreases as a function of detecting a change in the second gesture;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

211. (Previously presented) The method of Claim 210, wherein at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the second edge, by beginning near the second edge;

the second gesture begins in connection with the second edge, by beginning at the second edge;

the second duration of contact is part of the selection contact;

the second duration of contact is not part of the selection contact;

the second duration of contact is separate from the selection contact;

the selection contact includes the second duration of contact;

the first gesture begins in connection with the first edge and moves inward from the first edge;

the second gesture that begins in connection with the second edge and moves inward from the second edge;

the display includes a top edge and the first gesture or the second gesture moves inward by moving, at least in part, downward from the top edge;

the display includes a top edge and the first gesture moves inward by moving, at least in part, downward from the top edge, and the second gesture moves inward by not moving, at least in part, downward from the top edge;

the first gesture and the second gesture move inward by moving, at least in part, toward a central area of the touch screen;

the second menu is displayed as sliding in;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are not displayed as sliding in via different directions;

the first menu is displayed as sliding in from the first edge;

the second menu is displayed as appearing from the second edge;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the one or more second menu items include representations of active applications;

the one or more second menu items include thumbnails of applications in a multi-tasking environment;

the first operation and the second operation are related to the same function;

the selection contact includes a press gesture;

the selection contact includes a top gesture;

the selection contact includes a static gesture;

the selection contact includes a dynamic gesture;

the selection contact is separate from the second gesture;

the first duration of contact is separate from the first gesture;

the first menu and the second menu are displayed in the same at least one other virtual display layer;

the first menu and the second menu are displayed in different at least one other virtual display layers;

the first menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer;

the first menu and the second menu are displayed in the at least one other virtual display layer;

each instance of the with includes an entire duration;

each instance of the with includes an entire display or contact duration;

each instance of the with includes at least a portion of a duration;

each instance of the with includes only a portion of a duration;

each instance of the with includes only a portion of a display or contact duration;

each instance of the with includes at least a portion of a display or contact duration;

each instance of the in response to, includes an immediate response to;

each instance of the in response to, includes a response after an intermediate operation;

the third operation and the fourth operation are related to the same function;

the blurring includes at least one of: dimming, displaying as indistinct, displaying as vague, displaying as cloudy, displaying as obscured, or displaying as smeared;

the first gesture is detected to move inward by moving along a line that is perpendicular to the first edge;

the second gesture is detected to move inward by moving along a line that is perpendicular to the second edge;

only the first menu is displayed in the at least one other virtual display layer;

the first menu is displayed in the at least one other virtual display layer, and the second menu is not displayed in the at least one other virtual display layer;

only the second menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer, and the first menu is not displayed in the at least one other virtual display layer;

both the first menu and the second menu are displayed in the at least one other virtual display layer;

the display, the touch interface, and the memory are directly coupled to the one or more processors;

the display, the touch interface, and the memory are indirectly coupled to the one or more processors;

each instance of the displaying, the detecting, and the performing include acts;

each instance of the displaying, the detecting, and the performing do not include steps;

the shading includes at least one of: displaying as to suggest three-dimensionality, shadowing, or displaying as to include a varied degree of light and/or darkness;

the shading includes color shading;

the shading includes reducing a brightness;

the shading includes reducing a color brightness;

the shading includes moving towards black within a color space;

the shading includes incorporating less color;

the fading includes altering a level of disappearance;

the fading includes altering a transparency;

the fading includes altering a translucency;

the at least part is the same as the at least portion; or

the at least part is different from the at least portion.

212. (Previously presented) The method of Claim 158, wherein the magnitude of the first gesture includes a distance magnitude.

213. (Previously presented) An electronic device, comprising:

a display;

a touch interface;

one or more processors;

memory; and

one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for:

displaying, utilizing the display, a graphical user interface;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items including a particular application icon;

when the first menu is displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation, where the second operation is performed in response to the first duration of contact on the particular application icon being detected to surpass the threshold, and the first duration of contact being detected to include

a slide gesture component after the first duration of contact on the particular application icon is detected to surpass the threshold;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items;

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation;

wherein the electronic device is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer.

214. (Previously presented) The electronic device of Claim 213, wherein the electronic device is configured for:

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a second duration of contact on the at least one of the one or more second menu items,

in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, performing the third operation, and

in response to the second duration of contact on the at least one of the one or more second menu items being detected to surpass the threshold, performing a fourth operation.

215. (Previously presented) The electronic device of Claim 214, wherein the electronic device is configured such that in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, the third operation is performed, in response to detection of a cessation of the second duration of contact.

216. (Previously presented) The electronic device of Claim 214, wherein the electronic device is configured such that the one or more second menu items include a network interface menu item and a volume menu item; the third operation includes selecting the at least one of the one or more second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items.

217. (Previously presented) The electronic device of Claim 214, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

218. (Previously presented) The electronic device of Claim 217, wherein the electronic device is configured such that the one or more first menu items include only a subset of the application icons including the particular application icon.

219. (Previously presented) The electronic device of Claim 217, wherein the electronic device is configured such that the one or more first menu items include only a subset of the plurality of application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

220. (Previously presented) The electronic device of Claim 217, wherein the electronic device is configured such that the one or more first menu items include favorites of the application

icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

221. (Previously presented) The electronic device of Claim 214, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items;

the one or more second menu items further include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages, and the second operation includes controlling presentation of the at least one message; and

hardware status indicia is displayed adjacent to the second edge.

222. (Previously presented) The electronic device of Claim 214, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the first menu is at least partially translucent for viewing the graphical user interface thereunder, at least a portion of the graphical user interface is blurred based on the detection of the first gesture that begins in connection with the first edge and moves inward, a magnitude of the blurring progressively increases when detecting the first gesture moving inward, and the magnitude of the blurring progressively decreases as a function of detecting a change in the first gesture;

at least a part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward, a magnitude of the shading or fading of the at least part of the graphical user interface progressively increases when detecting the second gesture moving inward, and the magnitude of the shading or fading of the at least part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

223. (Previously presented) The electronic device of Claim 222, wherein the electronic device is configured such that at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the second edge, by beginning near the second edge;

the second gesture begins in connection with the second edge, by beginning at the second edge;

the second gesture begins in connection with the second edge, by beginning near the second edge;

the second gesture begins in connection with the second edge, by beginning at the second edge;

the second duration of contact is part of the selection contact;

the second duration of contact is not part of the selection contact;

the second duration of contact is separate from the selection contact;

the selection contact includes the second duration of contact;

the first gesture begins in connection with the first edge and moves inward from the first edge;

the second gesture that begins in connection with the second edge and moves inward from the second edge;

the display includes a top edge and the first gesture or the second gesture moves inward by moving, at least in part, downward from the top edge;

the display includes a top edge and the first gesture moves inward by moving, at least in part, downward from the top edge, and the second gesture moves inward by not moving, at least in part, downward from the top edge;

the first gesture and the second gesture move inward by moving, at least in part, toward a central area of the touch screen;

the second menu is displayed as sliding in;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are not displayed as sliding in via different directions;

the first menu is displayed as sliding in from the first edge;

the second menu is displayed as appearing from the second edge;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the one or more second menu items include representations of active applications;

the one or more second menu items include thumbnails of applications in a multi-tasking environment;

the first operation and the second operation are related to the same function;

the selection contact includes a press gesture;

the selection contact includes a top gesture;

the selection contact includes a static gesture;

the selection contact includes a dynamic gesture;

the selection contact is separate from the second gesture;

the first duration of contact is separate from the first gesture;

the electronic device is configured such that the first menu and the second menu are displayed in the same at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in different at least one other virtual display layers;

the electronic device is configured such that the first menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the second menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in the at least one other virtual display layer;

each instance of the when includes an entire duration;

each instance of the when includes an entire display or contact duration;

each instance of the when includes at least a portion of a duration;

each instance of the when includes only a portion of a duration;

each instance of the when includes only a portion of a display or contact duration;

each instance of the when includes at least a portion of a display or contact duration;

each instance of the in response to, includes an immediate response to;

each instance of the in response to, includes a response after an intermediate operation;

each instance of the in response to, includes a response after a delay;

the third operation and the fourth operation are related to the same function;

the blurring includes at least one of: dimming, displaying as indistinct, displaying as vague, displaying as cloudy, displaying as obscured, or displaying as smeared;

the first gesture and the second gesture move inward in different directions;

the first gesture is detected to move inward by moving along a line that is perpendicular to the first edge;

the second gesture is detected to move inward by moving along a line that is perpendicular to the second edge;

only the first menu is displayed in the at least one other virtual display layer;

the first menu is displayed in the at least one other virtual display layer, and the second menu is not displayed in the at least one other virtual display layer;

only the second menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer, and the first menu is not displayed in the at least one other virtual display layer;

both the first menu and the second menu are displayed in the at least one other virtual display layer;

the shading includes at least one of: displaying as to suggest three-dimensionality, shadowing, or displaying as to include a varied degree of light and/or darkness;

the shading includes color shading;

the shading includes reducing a brightness;

the shading includes reducing a color brightness;

the shading includes moving towards black within a color space;

the shading includes incorporating less color;

the fading includes altering a level of disappearance;

the fading includes altering a transparency;

the fading includes altering a translucency;

the at least part is the same as the at least portion; or

the at least part is different from the at least portion.

224. (Previously presented) A method, comprising:

at an electronic device including a display, a touch interface, and memory coupled to one or more processors:

displaying, utilizing the display, a graphical user interface;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items with a particular application icon;

with the first menu being displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation, where the second operation is performed in response to the first duration of contact on the particular application icon being detected to surpass the threshold, and the first duration of contact being detected to include a slide gesture component after the first duration of contact on the particular application icon is detected to surpass the threshold;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items, such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer;

with the second menu being displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation.

225. (Previously presented) The method of Claim 224, and further comprising:

with the second menu being displayed including the one or more second menu items:

detecting, utilizing the touch interface, a second duration of contact on the at least one of the one or more second menu items,

in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, performing the third operation, and

in response to the second duration of contact on the at least one of the one or more second menu items being detected to surpass the threshold, performing a fourth operation.

226. (Previously presented) The method of Claim 225, wherein, in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, the third operation is performed, in response to detection of a cessation of the second duration of contact.

227. (Previously presented) The method of Claim 225, wherein the one or more second menu items include a network interface menu item and a volume menu item; the third operation includes selecting the at least one of the one or more second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items.

228. (Previously presented) The method of Claim 225, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

229. (Previously presented) The method of Claim 228, wherein the one or more first menu items include only a subset of the application icons including the particular application icon.

230. (Previously presented) The method of Claim 228, wherein the one or more first menu items include only a subset of the plurality of application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

231. (Previously presented) The method of Claim 228, wherein the one or more first menu items include favorites of the application icons including the particular application icon, at least

a portion of which are included as the one or more first menu items in response to detection of user input.

232. (Previously presented) The method of Claim 225, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items;

the one or more second menu items further include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages, and the second operation includes controlling presentation of the at least one message; and

hardware status indicia is displayed adjacent to the second edge.

233. (Previously presented) The method of Claim 225, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the first menu is at least partially translucent for viewing the graphical user interface thereunder, at least a portion of the graphical user interface is blurred based on the detection of the first gesture that begins in connection with the first edge and moves inward, a magnitude of the blurring progressively increases with detecting the first gesture moving inward, and the magnitude of the blurring progressively decreases as a function of detecting a change in the first gesture;

at least a part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward, a magnitude of the shading or fading of the at least part of the graphical user interface progressively increases with detecting the second gesture moving inward, and the magnitude of the shading or fading of the at least part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

234. (Previously presented) The method of Claim 233, wherein at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the second edge, by beginning near the second edge;

the second gesture begins in connection with the second edge, by beginning at the second edge;

the second gesture begins in connection with the second edge, by beginning near the second edge;

the second gesture begins in connection with the second edge, by beginning at the second edge;

the second duration of contact is part of the selection contact;

the second duration of contact is not part of the selection contact;

the second duration of contact is separate from the selection contact;

the selection contact includes the second duration of contact;

the first gesture begins in connection with the first edge and moves inward from the first edge;

the second gesture that begins in connection with the second edge and moves inward from the second edge;

the display includes a top edge and the first gesture or the second gesture moves inward by moving, at least in part, downward from the top edge;

the display includes a top edge and the first gesture moves inward by moving, at least in part, downward from the top edge, and the second gesture moves inward by not moving, at least in part, downward from the top edge;

the first gesture and the second gesture move inward by moving, at least in part, toward a central area of the touch screen;

the second menu is displayed as sliding in;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are not displayed as sliding in via different directions;

the first menu is displayed as sliding in from the first edge;

the second menu is displayed as appearing from the second edge;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the one or more second menu items include representations of active applications;

the one or more second menu items include thumbnails of applications in a multi-tasking environment;

the first operation and the second operation are related to the same function;

the selection contact includes a press gesture;

the selection contact includes a top gesture;

the selection contact includes a static gesture;

the selection contact includes a dynamic gesture;

the selection contact is separate from the second gesture;

the first duration of contact is separate from the first gesture;

the first menu and the second menu are displayed in the same at least one other virtual display layer;

the first menu and the second menu are displayed in different at least one other virtual display layers;

the first menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer;

the first menu and the second menu are displayed in the at least one other virtual display layer;

each instance of the with includes an entire duration;

each instance of the with includes an entire display or contact duration;

each instance of the with includes at least a portion of a duration;

each instance of the with includes only a portion of a duration;

each instance of the with includes only a portion of a display or contact duration;

each instance of the with includes at least a portion of a display or contact duration;

each instance of the in response to, includes an immediate response to;

each instance of the in response to, includes a response after an intermediate operation;

the third operation and the fourth operation are related to the same function;

the blurring includes at least one of: dimming, displaying as indistinct, displaying as vague, displaying as cloudy, displaying as obscured, or displaying as smeared;

the first gesture and the second gesture move inward in different directions;

the first gesture is detected to move inward by moving along a line that is perpendicular to the first edge;

the second gesture is detected to move inward by moving along a line that is perpendicular to the second edge;

only the first menu is displayed in the at least one other virtual display layer;

the first menu is displayed in the at least one other virtual display layer, and the second menu is not displayed in the at least one other virtual display layer;

only the second menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer, and the first menu is not displayed in the at least one other virtual display layer;

both the first menu and the second menu are displayed in the at least one other virtual display layer;

the display, the touch interface, and the memory are directly coupled to the one or more processors;

the display, the touch interface, and the memory are indirectly coupled to the one or more processors;

each instance of the displaying, the detecting, and the performing include acts;

each instance of the displaying, the detecting, and the performing do not include steps;

the shading includes at least one of: displaying as to suggest three-dimensionality, shadowing, or displaying as to include a varied degree of light and/or darkness;

the shading includes color shading;

the shading includes reducing a brightness;

the shading includes reducing a color brightness;

the shading includes moving towards black within a color space;

the shading includes incorporating less color;

the fading includes altering a level of disappearance;

the fading includes altering a transparency;

the fading includes altering a translucency;

the at least part is the same as the at least portion; or

the at least part is different from the at least portion.

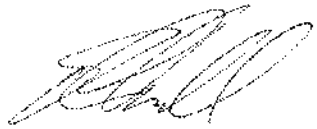
Remarks:

No new matter has been added. If it is determined that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

The amendments herein are based on the Examiner's Amendment found in the Notice of Allowance dated 02/07/2020.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 50-5939, under Order No. SMITH070AG from which the undersigned is authorized to draw.

Respectfully submitted,



Dated: 31 Mar 2020

The Caldwell Firm, LLC
PO Box 59655
Dallas, Texas 75229-0655
Telephone: (214) 734-2313
pcaldwell@thecaldwellfirm.com

Patrick E. Caldwell, Esq.
Reg. No. 44,580

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

92045 7590 02/07/2020

The Caldwell Firm, LLC
PO Box 59655
Dept. SVIPGP
Dallas, TX 75229

EXAMINER	
XAVIER, ANTONIO J	
ART UNIT	PAPER NUMBER
2623	

DATE MAILED: 02/07/2020

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/169,961	10/24/2018	Michael S. Smith	SMITH070AG	7650

TITLE OF INVENTION: GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$500	$0.00	$0.00	$500	05/07/2020

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Maintenance fees are due in utility patents issuing on applications filed on or after Dec. 12, 1980. It is patentee's responsibility to ensure timely payment of maintenance fees when due. More information is available at www.uspto.gov/PatentMaintenanceFees.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), by mail or fax, or via EFS-Web.

By mail, send to: Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

By fax, send to: (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

92045 7590 02/07/2020

The Caldwell Firm, LLC
PO Box 59655
Dept. SVIPGP
Dallas, TX 75229

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being transmitted to the USPTO via EFS-Web or by facsimile to (571) 273-2885, on the date below.

(Typed or printed name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/169,961	10/24/2018	Michael S. Smith	SMITH070AG	7650

TITLE OF INVENTION: GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$500	$0.00	$0.00	$500	05/07/2020

EXAMINER	ART UNIT	CLASS-SUBCLASS
XAVIER, ANTONIO J	2623	345-174000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-09 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document must have been previously recorded, or filed for recordation, as set forth in 37 CFR 3.11 and 37 CFR 3.81(a). Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. Fees submitted: ☐ Issue Fee ☐ Publication Fee (if required) ☐ Advance Order - # of Copies _____

4b. Method of Payment: *(Please first reapply any previously paid fee shown above)*

☐ Electronic Payment via EFS-Web ☐ Enclosed check ☐ Non-electronic payment by credit card (Attach form PTO-2038)

☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. _____

5. **Change in Entity Status** (from status indicated above)

☐ Applicant certifying micro entity status. See 37 CFR 1.29

☐ Applicant asserting small entity status. See 37 CFR 1.27

☐ Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/169,961	10/24/2018	Michael S. Smith	SMITH070AG	7650

92045 7590 02/07/2020

The Caldwell Firm, LLC
PO Box 59655
Dept. SVIPGP
Dallas, TX 75229

EXAMINER	
XAVIER, ANTONIO J	
ART UNIT	**PAPER NUMBER**
2623	

DATE MAILED: 02/07/2020

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No. 16/169,961	Applicant(s) Smith, Michael S.	
	Examiner ANTONIO J XAVIER	Art Unit 2623	AIA (FITF) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☑ This communication is responsive to 1/3/20.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

3. ☑ The allowed claim(s) is/are See Continuation Sheet . As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see **http://www.uspto.gov/patents/init_events/pph/index.jsp** or send an inquiry to **PPHfeedback@uspto.gov.**

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   Certified copies:

   a) ☐ All b) ☐ Some *c) ☐ None of the:

   1. ☐ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☑ Notice of References Cited (PTO-892)
2. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____.
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material _____.
4. ☑ Interview Summary (PTO-413), Paper No./Mail Date. _____.
5. ☑ Examiner's Amendment/Comment
6. ☑ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/Antonio Xavier/
Primary Examiner, Art Unit 2623

Continuation of 3. The allowed claim(s) is/are: 104-129,132,136-184,187 and 190-234

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 3, 2020 has been entered.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in an interview with Patrick E. Caldwell (Reg. No.: 44,580) on February 3, 2020.

The application has been amended as follows:

(1) Specification and (2) Claims

SPECIFICATION

[0001] The present application is a continuation of and claims priority to U.S. Patent Application No. 15/072,354, filed 03/16/2016, now U.S. Pat. No.: 10,133,397; which, in turn, is a continuation of and claims priority to U.S. Patent Application No. 13/567,004, filed 08/03/2012, now U.S. Pat. No.: 9,417,754; which, in turn, claims priority to U.S. Provisional Application No. 61/515,835, filed August 5, 2011, U.S. Provisional Application No. 61/566,577, filed December 2, 2011, U.S. Provisional Application No.61/569,213, filed December 9, 2011, and U.S. Provisional Application No. 61/581,918, filed December 30, 2011, the entire contents of all of which are incorporated herein by reference.

CLAIMS

1.-103. (Cancelled)

104. (Currently Amended) An electronic device, comprising:

a display;

a touch interface;

one or more processors;

memory; and

one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for:

displaying, utilizing the display, a graphical user interface;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items, and blurring at least a portion of the graphical user interface such that a magnitude of the blurring of the at least portion of the graphical user interface progressively increases as a function of an increase in a magnitude of the first gesture being detected;

when the first menu is displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items;

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation;

wherein the electronic device is configured such that the graphical user interface is

displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer.

105. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that at least a portion of the at least one other virtual display layer is at least partially translucent such that at least a portion of the at least one virtual display layer is visible through the at least one other virtual display layer.

106. (Previously Presented) The electronic device of Claim 105, wherein the electronic device is configured such that the at least portion of the at least one virtual display layer that is visible through the at least one other virtual display layer, includes at least a portion of a background image.

107. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the first menu and the second menu are displayed in separate virtual display layers.

108. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the graphical user interface includes a home screen, for choosing among a plurality of applications.

109. (Previously Presented) The electronic device of Claim 104, wherein the

electronic device is configured such that the one or more first menu items include messages in a list, the first operation includes displaying a view of at least one of the messages, and the second operation includes opening the at least one message.

110. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that hardware status indicia is displayed adjacent to the first edge.

111. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that only one of the first menu or the second menu is capable of being displayed at a time.

112. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that at least one of the first menu or the second menu substantially fills the display.

113. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that indicia is displayed via the graphical user interface for prompting a user as to an accessibility of at least one of the first menu or the second menu.

114. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the first menu is accessible via the first

gesture; the second menu is accessible via the second gesture; at least one of the first or second operations is performed based on at least two different contact durations, in order to increase operation accessibility via the electronic device that includes a mobile device.

115. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the first gesture and the second gesture are capable of being detected as moving inward in different directions.

116. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include a plurality of application-specific menu items for accessing different applications.

117. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more second menu items include a plurality of application-specific menu items for accessing different applications.

118. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include a plurality of application menu items for launching different applications.

119. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include at

least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a deletion operation.

120. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a move operation.

121. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a menu item rearrange operation.

122. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that, the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular

application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

123. (Previously Presented) The electronic device of Claim 122, wherein the electronic device is configured such that the second operation is performed in response to the first duration of contact on the at least one application menu item being detected to surpass the threshold, and in response to the first duration of contact being detected to include a slide gesture component.

124. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that, the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display another particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

125. (Previously Presented) The electronic device of Claim 124, wherein the electronic device is configured such that the second operation is performed in response

to:

the first duration of contact on the at least one application menu item being detected to surpass the threshold, and

the first duration of contact being detected to include a slide gesture component after the first duration of contact on the at least one application menu item is detected to surpass the threshold.

126. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application for, in response to a detection of a selection thereof when the first duration of contact on the at least one application menu item is detected to surpass the threshold, launching the particular application to display a particular application interface of the particular application in an overlying and scaled virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

127. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass the threshold, the first operation is performed, in response to detection of a cessation of the first duration of contact.

128. (Previously Presented) The electronic device of Claim 104, wherein the

electronic device is configured such that the first menu is at least partially translucent for viewing the graphical user interface thereunder.

129. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the first menu is at least partially translucent for viewing the graphical user interface, including a home screen, thereunder.

130. (Cancelled)

131. (Cancelled)

132. (Currently Amended) The electronic device of Claim [[131]]104, wherein the electronic device is configured such that the magnitude of the blurring of the at least portion of the graphical user interface progressively decreases as a function of detecting a change in the first gesture.

133.-135. (Cancelled)

136. (Currently Amended) The electronic device of Claim [[135]]104, wherein the electronic device is configured such that the magnitude of the blurring of the at least portion of the graphical user interface progressively decreases as a function of detecting the first gesture moving outward.

137. (Currently Amended) The electronic device of Claim 104, wherein the electronic device is configured such that at least a [[portion]]part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward.

138. (Currently Amended) The electronic device of Claim 137, wherein the electronic device is configured such that a magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively increases as a function of an increase in a magnitude of the second gesture being detected.

139. (Currently Amended) The electronic device of Claim 138, wherein the electronic device is configured such that the magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture.

140. (Currently Amended) The electronic device of Claim 137, wherein the electronic device is configured such that a magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively increases as a function of an increase in a distance magnitude of the second gesture being detected.

141. (Currently Amended) The electronic device of Claim 137, wherein the electronic device is configured such that a magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively increases while detecting the

second gesture moving inward.

142. (Currently Amended) The electronic device of Claim 141, wherein the electronic device is configured such that the magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively decreases as a function of detecting the second gesture moving outward.

143. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the electronic device is configured such that the one or more first menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the first operation includes performing a particular operation associated with the at least one of the one or more first menu items; and the second operation includes opening a contextual menu with one or more options associated with the at least one of the one or more first menu items;

the one or more second menu items include at least some of the application icons including a particular application icon associated with a particular application, where the third operation includes opening the particular application to display a particular

application interface of the particular application instead of the home screen; and

hardware status indicia is displayed adjacent to the first edge.

144. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the first operation includes performing a particular operation associated with the at least one of the one or more first menu items; and the second operation includes opening a contextual menu with one or more options associated with the at least one of the one or more first menu items.

145. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the electronic device is configured such that the first menu and the second menu are displayed in the at least one other virtual display layer.

146. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages associated with an application, and the second operation includes controlling at least one aspect of the application.

147. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured for:

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a second duration of contact on the at least one of the one or more second menu items,

in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, performing the third operation, and

in response to the second duration of contact on the at least one of the one or more second menu items being detected to surpass the threshold, performing a fourth operation.

148. (Previously Presented) The electronic device of Claim 147, wherein the electronic device is configured such that in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, the third operation is performed, in response to detection of a cessation of the second duration of contact.

149. (Previously Presented) The electronic device of Claim 147, wherein the

electronic device is configured such that the one or more second menu items include a network interface menu item and a volume menu item; the third operation includes selecting the at least one of the one or more second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items.

150. (Previously Presented) The electronic device of Claim 147, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the

one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

151. (Previously Presented) The electronic device of Claim 150, wherein the electronic device is configured such that the second operation is performed in response to:

the first duration of contact on the particular application icon being detected to surpass the threshold, and

the first duration of contact being detected to include a slide gesture component after the first duration of contact on the particular application icon is detected to surpass the threshold.

152. (Previously Presented) The electronic device of Claim 150, wherein the electronic device is configured such that the one or more first menu items include only a subset of the application icons including the particular application icon.

153. (Previously Presented) The electronic device of Claim 150, wherein the electronic device is configured such that the one or more first menu items include only a subset of the plurality of application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to

detection of user input.

154. (Previously Presented) The electronic device of Claim 150, wherein the electronic device is configured such that the one or more first menu items include favorites of the application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

155. (Previously Presented) The electronic device of Claim 147, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items;

the one or more second menu items further include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages, and the second operation includes controlling presentation of the at least one message; and

hardware status indicia is displayed adjacent to the second edge.

156. (Currently Amended) The electronic device of Claim 147, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the first menu is at least partially translucent for viewing the graphical user interface thereunder, ~~at least a portion of the graphical user interface is blurred based on the detection of the first gesture that begins in connection with the first edge and moves inward, a magnitude of the blurring progressively increases when detecting the first~~

~~gesture moving inward~~, and the magnitude of the blurring progressively decreases as a function of detecting a change in the first gesture;

at least a part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward, a magnitude of the shading or fading of the at least part of the graphical user interface progressively increases when detecting the second gesture moving inward, and the magnitude of the shading or fading of the at least part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual

menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

157. (Currently Amended) The electronic device of Claim 156, wherein the electronic device is configured such that at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

~~the first gesture begins in connection with the first edge, by beginning near the first edge;~~

~~the first gesture begins in connection with the first edge, by beginning at the first edge;~~

the second gesture begins in connection with the [[first]]second edge, by beginning near the [[first]]second edge;

the second gesture begins in connection with the [[first]]second edge, by beginning at the [[first]]second edge;

~~the second gesture begins in connection with the first edge, by beginning near the first edge;~~

~~the second gesture begins in connection with the first edge, by beginning at the first edge;~~

the second duration of contact is part of the selection contact;

the second duration of contact is not part of the selection contact;

the second duration of contact is separate from the selection contact;

the selection contact includes the second duration of contact;

the first gesture begins in connection with the first edge and moves inward from the first edge;

the second gesture that begins in connection with the second edge and moves inward from the second edge;

the display includes a top edge and the first gesture or the second gesture moves inward by moving, at least in part, downward from the top edge;

the display includes a top edge and the first gesture moves inward by moving, at least in part, downward from the top edge, and the second gesture moves inward by not moving, at least in part, downward from the top edge;

the first gesture and the second gesture move inward by moving, at least in part, toward a central area of the touch screen;

the second menu is displayed as sliding in;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are not displayed as sliding in via different directions;

the first menu is displayed as sliding in from the first edge;

the second menu is displayed as appearing from the second edge;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the one or more second menu items include representations of active applications;

the one or more second menu items include thumbnails of applications in a multi-tasking environment;

the first operation and the second operation are related to the same function;

the selection contact includes a press gesture;

the selection contact includes a top gesture;

the selection contact includes a static gesture;

the selection contact includes a dynamic gesture;

the selection contact is separate from the second gesture;

the first duration of contact is separate from the first gesture;

the electronic device is configured such that the first menu and the second menu are displayed in the same at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in different at least one other virtual display layers;

the electronic device is configured such that the first menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the second menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in the at least one other virtual display layer;

each instance of the when includes an entire duration;

each instance of the when includes an entire display or contact duration;

each instance of the when includes at least a portion of a duration;

each instance of the when includes only a portion of a duration;

each instance of the when includes only a portion of a display or contact duration;

each instance of the when includes at least a portion of a display or contact duration;

each instance of the in response to, includes an immediate response to;

each instance of the in response to, includes a response after an intermediate operation;

each instance of the in response to, includes a response after a delay;

the third operation and the fourth operation are related to the same function;

the blurring includes at least one of: dimming, displaying as indistinct, displaying as

vague, displaying as cloudy, displaying as obscured, or displaying as smeared;

the first gesture and the second gesture move inward in different directions;

~~the first gesture and the second gesture do not move inward in different directions;~~

~~the first gesture and the second gesture do not move different directions;~~

the first gesture is detected to move inward by moving along a line that is perpendicular to the first edge;

the second gesture is detected to move inward by moving along a line that is perpendicular to the second edge;

only the first menu is displayed in the at least one other virtual display layer;

the first menu is displayed in the at least one other virtual display layer, and the second menu is not displayed in the at least one other virtual display layer;

only the second menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer, and the first menu is not displayed in the at least one other virtual display layer;

both the first menu and the second menu are displayed in the at least one other virtual display layer;

the shading includes at least one of: displaying as to suggest three-dimensionality, shadowing, or displaying as to include a varied degree of light and/or darkness;

the shading includes color shading;

the shading includes reducing a brightness;

the shading includes reducing a color brightness;

the shading includes moving towards black within a color space;

the shading includes incorporating less color;

the fading includes altering a level of disappearance;

the fading includes altering a transparency;

the fading includes altering a translucency;

the at least part is the same as the at least portion; or

the at least part is different from the at least portion.

158. (Currently Amended) A method, comprising:

at an electronic device including a display, a touch interface, and memory coupled to one or more processors:

displaying, utilizing the display, a graphical user interface;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items, and blurring at least a portion of the graphical user interface such that a magnitude of the blurring of the at least portion of the graphical user interface increases as a function of an increase in a magnitude of the first gesture being detected;

with the first menu being displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items, such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer;

with the second menu being displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or

more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation.

159. (Previously Presented) The method of Claim 158, wherein at least a portion of the at least one other virtual display layer is at least partially translucent such that at least a portion of the at least one virtual display layer is visible through the at least one other virtual display layer.

160. (Previously Presented) The method of Claim 159, wherein the at least portion of the at least one virtual display layer that is visible through the at least one other virtual display layer, includes at least a portion of a background image.

161. (Previously Presented) The method of Claim 158, wherein the first menu and the second menu are displayed in separate virtual display layers.

162. (Previously Presented) The method of Claim 158, wherein the graphical user interface includes a home screen, for choosing among a plurality of applications.

163. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include messages in a list, the first operation includes displaying a view of at least one of the messages, and the second operation includes opening the at least

one message.

164. (Previously Presented) The method of Claim 158, wherein hardware status indicia is displayed adjacent to the first edge.

165. (Previously Presented) The method of Claim 158, wherein only one of the first menu or the second menu is capable of being displayed at a time.

166. (Previously Presented) The method of Claim 158, wherein at least one of the first menu or the second menu substantially fills the display.

167. (Previously Presented) The method of Claim 158, wherein indicia is displayed via the graphical user interface for prompting a user as to an accessibility of at least one of the first menu or the second menu.

168. (Previously Presented) The method of Claim 158, wherein the first menu is accessible via the first gesture; the second menu is accessible via the second gesture; at least one of the first or second operations is performed based on at least two different contact durations, in order to increase operation accessibility via the electronic device that includes a mobile device.

169. (Previously Presented) The method of Claim 158, wherein the first gesture and the second gesture are capable of being detected as moving inward in different

directions.

170. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include a plurality of application-specific menu items for accessing different applications.

171. (Previously Presented) The method of Claim 158, wherein the one or more second menu items include a plurality of application-specific menu items for accessing different applications.

172. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include a plurality of application menu items for launching different applications.

173. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a deletion operation.

174. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a move operation.

175. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a menu item rearrange operation.

176. (Previously Presented) The method of Claim 158, wherein the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application.

177. (Previously Presented) The method of Claim 158, wherein the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth

than the at least one virtual display layer in which the graphical user interface is displayed.

178. (Previously Presented) The method of Claim 177, wherein the second operation is performed in response to the first duration of contact on the at least one application menu item being detected to surpass the threshold, and in response to the first duration of contact being detected to include a slide gesture component.

179. (Previously Presented) The method of Claim 158, wherein the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display another particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

180. (Previously Presented) The method of Claim 179, wherein the second operation is performed in response to:
the first duration of contact on the at least one application menu item being detected to surpass the threshold, and

the first duration of contact being detected to include a slide gesture component subsequent to the first duration of contact on the at least one application menu item being detected to surpass the threshold.

181. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include at least one application menu item associated with a particular application for, in response to a detection of a selection thereof and the first duration of contact on the at least one application menu item being detected to surpass the threshold, launching the particular application to display a particular application interface of the particular application in an overlying and scaled virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

182. (Previously Presented) The method of Claim 158, wherein, in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass the threshold, the first operation is performed, in response to detection of a cessation of the first duration of contact.

183. (Previously Presented) The method of Claim 158, wherein the first menu is at least partially translucent for viewing the graphical user interface thereunder.

184. (Previously Presented) The method of Claim 158, wherein the first menu is at least partially translucent for viewing the graphical user interface, including a home

screen, thereunder.

185.-186. (Cancelled)

187. (Currently Amended) The method of Claim [[186]]158, wherein the magnitude of the blurring of the at least portion of the graphical user interface progressively decreases as a function of detecting a change in the first gesture.

188.-189. (Cancelled)

190. (Currently Amended) The method of Claim [[189]]158, wherein the magnitude of the blurring of the at least portion of the graphical user interface progressively decreases as a function of detecting the first gesture moving outward.

191. (Currently Amended) The method of Claim 158, wherein at least a [[portion]]part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward.

192. (Currently Amended) The method of Claim 191, wherein a magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively increases as a function of an increase in a magnitude of the second gesture being detected.

193. (Currently Amended) The method of Claim 192, wherein the magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture.

194. (Currently Amended) The method of Claim 191, wherein a magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively increases as a function of an increase in a distance magnitude of the second gesture being detected.

195. (Currently Amended) The method of Claim 191, wherein a magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively increases simultaneously with detecting the second gesture moving inward.

196. (Currently Amended) The method of Claim 195, wherein the magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively decreases as a function of detecting the second gesture moving outward.

197. (Previously Presented) The method of Claim 158, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the first operation includes performing a particular operation associated with the at least one of the one or more first menu items; and the second operation includes opening a contextual menu with one or more options associated with the at least one of the one or more first menu items;

the one or more second menu items include at least some of the application icons including a particular application icon associated with a particular application, where the third operation includes opening the particular application to display a particular application interface of the particular application instead of the home screen; and

hardware status indicia is displayed adjacent to the first edge.

198. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the first operation includes performing a particular operation associated with the at least one of the one or more first menu items; and the second operation includes opening a contextual menu with one or more options associated with the at least one of the one or more first menu items.

199. (Previously Presented) The method of Claim 158, wherein the first menu and the

second menu are displayed in the at least one other virtual display layer.

200. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages associated with an application, and the second operation includes controlling at least one aspect of the application.

201. (Previously Presented) The method of Claim 158, and further comprising:

with the second menu being displayed including the one or more second menu items:

detecting, utilizing the touch interface, a second duration of contact on the at least one of the one or more second menu items,

in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, performing the third operation, and

in response to the second duration of contact on the at least one of the one or more second menu items being detected to surpass the threshold, performing a fourth operation.

202. (Previously Presented) The method of Claim 201, wherein, in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, the third operation is performed, in response to detection of a cessation of the second duration of contact.

203. (Previously Presented) The method of Claim 201, wherein the one or more second menu items include a network interface menu item and a volume menu item; the third operation includes selecting the at least one of the one or more second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items.

204. (Previously Presented) The method of Claim 201, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the

graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

205. (Previously Presented) The method of Claim 204, wherein the second operation is performed in response to:
the first duration of contact on the particular application icon being detected to surpass the threshold, and
the first duration of contact being detected to include a slide gesture component and the first duration of contact on the particular application icon being detected to surpass the threshold.

206. (Previously Presented) The method of Claim 204, wherein the one or more first menu items include only a subset of the application icons including the particular application icon.

207. (Previously Presented) The method of Claim 204, wherein the one or more first

menu items include only a subset of the plurality of application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

208. (Previously Presented) The method of Claim 204, wherein the one or more first menu items include favorites of the application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

209. (Previously Presented) The method of Claim 201, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items;

the one or more second menu items further include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages, and the second operation includes controlling presentation of the at least one message; and hardware status indicia is displayed adjacent to the second edge.

210. (Currently Amended) The method of Claim 201, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the first menu is at least partially translucent for viewing the graphical user interface thereunder, at least a portion of the graphical user interface is blurred based on the detection of the first gesture that begins in connection with the first edge and moves inward, a magnitude of the blurring progressively increases with detecting the first gesture moving inward, and the magnitude of the blurring progressively decreases as a function of detecting a change in the first gesture;

at least a part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward, a magnitude of the shading or fading of the at least part of the graphical user interface progressively increases with detecting the second gesture moving inward, and the magnitude of the shading or fading of the at least part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

211. (Previously Presented) The method of Claim 210, wherein at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

~~the first gesture begins in connection with the first edge, by beginning near the first edge;~~

~~the first gesture begins in connection with the first edge, by beginning at the first edge;~~

the second gesture begins in connection with the [[first]]second edge, by beginning near the [[first]]second edge;

the second gesture begins in connection with the [[first]]second edge, by beginning at the [[first]]second edge;

~~the second gesture begins in connection with the first edge, by beginning near the first edge;~~

~~the second gesture begins in connection with the first edge, by beginning at the first edge;~~

the second duration of contact is part of the selection contact;

the second duration of contact is not part of the selection contact;

the second duration of contact is separate from the selection contact;

the selection contact includes the second duration of contact;

the first gesture begins in connection with the first edge and moves inward from the first

edge;

the second gesture that begins in connection with the second edge and moves inward from the second edge;

the display includes a top edge and the first gesture or the second gesture moves inward by moving, at least in part, downward from the top edge;

the display includes a top edge and the first gesture moves inward by moving, at least in part, downward from the top edge, and the second gesture moves inward by not moving, at least in part, downward from the top edge;

the first gesture and the second gesture move inward by moving, at least in part, toward a central area of the touch screen;

the second menu is displayed as sliding in;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are not displayed as sliding in via different directions;

the first menu is displayed as sliding in from the first edge;

the second menu is displayed as appearing from the second edge;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the one or more second menu items include representations of active applications;

the one or more second menu items include thumbnails of applications in a multi-tasking environment;

the first operation and the second operation are related to the same function;

the selection contact includes a press gesture;

the selection contact includes a top gesture;

the selection contact includes a static gesture;

the selection contact includes a dynamic gesture;

the selection contact is separate from the second gesture;

the first duration of contact is separate from the first gesture;

the first menu and the second menu are displayed in the same at least one other virtual display layer;

the first menu and the second menu are displayed in different at least one other virtual display layers;

the first menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer;

the first menu and the second menu are displayed in the at least one other virtual display layer;

each instance of the with includes an entire duration;

each instance of the with includes an entire display or contact duration;

each instance of the with includes at least a portion of a duration;

each instance of the with includes only a portion of a duration;

each instance of the with includes only a portion of a display or contact duration;

each instance of the with includes at least a portion of a display or contact duration;

each instance of the in response to, includes an immediate response to;

each instance of the in response to, includes a response after an intermediate operation;

the third operation and the fourth operation are related to the same function;

the blurring includes at least one of: dimming, displaying as indistinct, displaying as vague, displaying as cloudy, displaying as obscured, or displaying as smeared;

~~the first gesture and the second gesture move inward in different directions;~~

~~the first gesture and the second gesture do not move inward in different directions;~~

the first gesture and the second gesture do not move different directions;

the first gesture is detected to move inward by moving along a line that is perpendicular

to the first edge;

the second gesture is detected to move inward by moving along a line that is perpendicular to the second edge;

only the first menu is displayed in the at least one other virtual display layer;

the first menu is displayed in the at least one other virtual display layer, and the second menu is not displayed in the at least one other virtual display layer;

only the second menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer, and the first menu is not displayed in the at least one other virtual display layer;

both the first menu and the second menu are displayed in the at least one other virtual display layer;

the display, the touch interface, and the memory are directly coupled to the one or more processors;

the display, the touch interface, and the memory are indirectly coupled to the one or more processors;

each instance of the displaying, the detecting, and the performing include acts;

each instance of the displaying, the detecting, and the performing do not include steps;

the shading includes at least one of: displaying as to suggest three-dimensionality, shadowing, or displaying as to include a varied degree of light and/or darkness;

the shading includes color shading;

the shading includes reducing a brightness;

the shading includes reducing a color brightness;

the shading includes moving towards black within a color space;

the shading includes incorporating less color;

the fading includes altering a level of disappearance;

the fading includes altering a transparency;

the fading includes altering a translucency;

the at least part is the same as the at least portion; or

the at least part is different from the at least portion.

212. (New) The method of Claim 158, wherein the magnitude of the first gesture includes a distance magnitude.

213. (New) An electronic device, comprising:

a display;

a touch interface;

one or more processors;

memory; and

one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for:

displaying, utilizing the display, a graphical user interface;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items including a particular application icon;

when the first menu is displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation, where the second operation is performed in response to the first duration of contact on the particular application icon being detected to surpass the threshold, and the first duration of contact being detected to include a slide gesture component after the first duration of contact on the particular application icon is detected to surpass the threshold;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items;

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation;

wherein the electronic device is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer.

214. (New) The electronic device of Claim 213, wherein the electronic device is configured for:

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a second duration of contact on the at least one of the one or more second menu items,

in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, performing the third operation, and

in response to the second duration of contact on the at least one of the one or more second menu items being detected to surpass the threshold, performing a fourth operation.

215. (New) The electronic device of Claim 214, wherein the electronic device is configured such that in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, the third operation is performed, in response to detection of a cessation of the second duration of contact.

216. (New) The electronic device of Claim 214, wherein the electronic device is configured such that the one or more second menu items include a network interface menu item and a volume menu item; the third operation includes selecting the at least

one of the one or more second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items.

217. (New) The electronic device of Claim 214, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more

second menu items; and

hardware status indicia is displayed adjacent to the second edge.

218. (New) The electronic device of Claim 217, wherein the electronic device is configured such that the one or more first menu items include only a subset of the application icons including the particular application icon.

219. (New) The electronic device of Claim 217, wherein the electronic device is configured such that the one or more first menu items include only a subset of the plurality of application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

220. (New) The electronic device of Claim 217, wherein the electronic device is configured such that the one or more first menu items include favorites of the application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

221. (New) The electronic device of Claim 214, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons,

for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items;

the one or more second menu items further include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages, and the second operation includes controlling presentation of the at least one message; and

hardware status indicia is displayed adjacent to the second edge.

222. (New) The electronic device of Claim 214, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the first menu is at least partially translucent for viewing the graphical user interface thereunder, at least a portion of the graphical user interface is blurred based on the detection of the first gesture that begins in connection with the first edge and moves inward, a magnitude of the blurring progressively increases when detecting the first gesture moving inward, and the magnitude of the blurring progressively decreases as a function of detecting a change in the first gesture;

at least a part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward, a magnitude of the shading or fading of the at least part of the graphical user interface progressively increases when detecting the second gesture moving inward, and the magnitude of the shading or fading of the at least part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture;

the one or more first menu items include at least some of the application icons including

the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

223. (New) The electronic device of Claim 222, wherein the electronic device is configured such that at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the second edge, by beginning near the second edge;

the second gesture begins in connection with the first edge, by beginning at the first edge;

the second duration of contact is part of the selection contact;

the second duration of contact is not part of the selection contact;

the second duration of contact is separate from the selection contact;

the selection contact includes the second duration of contact;

the first gesture begins in connection with the first edge and moves inward from the first edge;

the second gesture that begins in connection with the second edge and moves inward from the second edge;

the display includes a top edge and the first gesture or the second gesture moves inward by moving, at least in part, downward from the top edge;

the display includes a top edge and the first gesture moves inward by moving, at least in part, downward from the top edge, and the second gesture moves inward by not moving, at least in part, downward from the top edge;

the first gesture and the second gesture move inward by moving, at least in part, toward a central area of the touch screen;

the second menu is displayed as sliding in;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are not displayed as sliding in via different directions;

the first menu is displayed as sliding in from the first edge;

the second menu is displayed as appearing from the second edge;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the one or more second menu items include representations of active applications;

the one or more second menu items include thumbnails of applications in a multi-tasking environment;

the first operation and the second operation are related to the same function;

the selection contact includes a press gesture;

the selection contact includes a top gesture;

the selection contact includes a static gesture;

the selection contact includes a dynamic gesture;

the selection contact is separate from the second gesture;

the first duration of contact is separate from the first gesture;

the electronic device is configured such that the first menu and the second menu are displayed in the same at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in different at least one other virtual display layers;

the electronic device is configured such that the first menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the second menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in the at least one other virtual display layer;

each instance of the when includes an entire duration;

each instance of the when includes an entire display or contact duration;

each instance of the when includes at least a portion of a duration;

each instance of the when includes only a portion of a duration;

each instance of the when includes only a portion of a display or contact duration;

each instance of the when includes at least a portion of a display or contact duration;

each instance of the in response to, includes an immediate response to;

each instance of the in response to, includes a response after an intermediate operation;

each instance of the in response to, includes a response after a delay;

the third operation and the fourth operation are related to the same function;

the blurring includes at least one of: dimming, displaying as indistinct, displaying as

vague, displaying as cloudy, displaying as obscured, or displaying as smeared;

the first gesture and the second gesture move inward in different directions;

the first gesture is detected to move inward by moving along a line that is perpendicular to the first edge;

the second gesture is detected to move inward by moving along a line that is perpendicular to the second edge;

only the first menu is displayed in the at least one other virtual display layer;

the first menu is displayed in the at least one other virtual display layer, and the second menu is not displayed in the at least one other virtual display layer;

only the second menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer, and the first menu is not displayed in the at least one other virtual display layer;

both the first menu and the second menu are displayed in the at least one other virtual display layer;

the shading includes at least one of: displaying as to suggest three-dimensionality, shadowing, or displaying as to include a varied degree of light and/or darkness;

the shading includes color shading;

the shading includes reducing a brightness;

the shading includes reducing a color brightness;

the shading includes moving towards black within a color space;

the shading includes incorporating less color;

the fading includes altering a level of disappearance;

the fading includes altering a transparency;

the fading includes altering a translucency;

the at least part is the same as the at least portion; or

the at least part is different from the at least portion.

224. (New) A method, comprising:

at an electronic device including a display, a touch interface, and memory coupled to one or more processors:

displaying, utilizing the display, a graphical user interface;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items with a particular application icon;

with the first menu being displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation, where the second operation is performed in response to the first duration of contact on the particular application icon being detected to surpass the threshold, and the first duration of contact being detected to include a slide gesture component after the first duration of contact on the particular application icon is detected to surpass the threshold;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items, such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer;

with the second menu being displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation.

225. (New) The method of Claim 224, and further comprising:

with the second menu being displayed including the one or more second menu items:

detecting, utilizing the touch interface, a second duration of contact on the at least one of the one or more second menu items,

in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, performing the third operation, and

in response to the second duration of contact on the at least one of the one or more second menu items being detected to surpass the threshold, performing a fourth operation.

226. (New) The method of Claim 225, wherein, in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, the third operation is performed, in response to detection of a cessation of the second duration of contact.

227. (New) The method of Claim 225, wherein the one or more second menu items include a network interface menu item and a volume menu item; the third operation includes selecting the at least one of the one or more second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items.

228. (New) The method of Claim 225, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual

menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

229. (New) The method of Claim 228, wherein the one or more first menu items include only a subset of the application icons including the particular application icon.

230. (New) The method of Claim 228, wherein the one or more first menu items include only a subset of the plurality of application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

231. (New) The method of Claim 228, wherein the one or more first menu items include favorites of the application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

232. (New) The method of Claim 225, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items;

the one or more second menu items further include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages, and the second operation includes controlling presentation of the at least one message; and

hardware status indicia is displayed adjacent to the second edge.

233. (New) The method of Claim 225, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the first menu is at least partially translucent for viewing the graphical user interface thereunder, at least a portion of the graphical user interface is blurred based on the detection of the first gesture that begins in connection with the first edge and moves inward, a magnitude of the blurring progressively increases with detecting the first gesture moving inward, and the magnitude of the blurring progressively decreases as a function of detecting a change in the first gesture;

at least a part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward, a magnitude of the shading or fading of the at least part of the graphical user interface progressively increases with detecting the second gesture moving inward, and the magnitude of the shading or fading of the at least part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular

application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

234. (New) The method of Claim 233, wherein at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the second edge, by beginning near the second edge;

the second gesture begins in connection with the second edge, by beginning at the second edge;

the second duration of contact is part of the selection contact;

the second duration of contact is not part of the selection contact;

the second duration of contact is separate from the selection contact;

the selection contact includes the second duration of contact;

the first gesture begins in connection with the first edge and moves inward from the first

edge;

the second gesture that begins in connection with the second edge and moves inward from the second edge;

the display includes a top edge and the first gesture or the second gesture moves inward by moving, at least in part, downward from the top edge;

the display includes a top edge and the first gesture moves inward by moving, at least in part, downward from the top edge, and the second gesture moves inward by not moving, at least in part, downward from the top edge;

the first gesture and the second gesture move inward by moving, at least in part, toward a central area of the touch screen;

the second menu is displayed as sliding in;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are not displayed as sliding in via different directions;

the first menu is displayed as sliding in from the first edge;

the second menu is displayed as appearing from the second edge;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the one or more second menu items include representations of active applications;

the one or more second menu items include thumbnails of applications in a multi-tasking environment;

the first operation and the second operation are related to the same function;

the selection contact includes a press gesture;

the selection contact includes a top gesture;

the selection contact includes a static gesture;

the selection contact includes a dynamic gesture;

the selection contact is separate from the second gesture;

the first duration of contact is separate from the first gesture;

the first menu and the second menu are displayed in the same at least one other virtual display layer;

the first menu and the second menu are displayed in different at least one other virtual display layers;

the first menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer;

the first menu and the second menu are displayed in the at least one other virtual display layer;

each instance of the with includes an entire duration;

each instance of the with includes an entire display or contact duration;

each instance of the with includes at least a portion of a duration;

each instance of the with includes only a portion of a duration;

each instance of the with includes only a portion of a display or contact duration;

each instance of the with includes at least a portion of a display or contact duration;

each instance of the in response to, includes an immediate response to;

each instance of the in response to, includes a response after an intermediate operation;

the third operation and the fourth operation are related to the same function;

the blurring includes at least one of: dimming, displaying as indistinct, displaying as vague, displaying as cloudy, displaying as obscured, or displaying as smeared;

the first gesture and the second gesture move inward in different directions;

the first gesture is detected to move inward by moving along a line that is perpendicular to the first edge;

the second gesture is detected to move inward by moving along a line that is perpendicular to the second edge;

only the first menu is displayed in the at least one other virtual display layer;

the first menu is displayed in the at least one other virtual display layer, and the second menu is not displayed in the at least one other virtual display layer;

only the second menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer, and the first menu is not displayed in the at least one other virtual display layer;

both the first menu and the second menu are displayed in the at least one other virtual display layer;

the display, the touch interface, and the memory are directly coupled to the one or more processors;

the display, the touch interface, and the memory are indirectly coupled to the one or more processors;

each instance of the displaying, the detecting, and the performing include acts;

each instance of the displaying, the detecting, and the performing do not include steps;

the shading includes at least one of: displaying as to suggest three-dimensionality, shadowing, or displaying as to include a varied degree of light and/or darkness;

the shading includes color shading;

the shading includes reducing a brightness;

the shading includes reducing a color brightness;

the shading includes moving towards black within a color space;

the shading includes incorporating less color;

the fading includes altering a level of disappearance;

the fading includes altering a transparency;

the fading includes altering a translucency;

the at least part is the same as the at least portion; or

the at least part is different from the at least portion.

Misc.

3. Examiner notes Claim 133 was accidentally missing from the prior claim listing dated October 1, 2019. The problem has been addressed by canceling the missing claim rather than renumbering all subsequent claims.

Examiner further notes minor changes from the proposed amendment were made to this claim listing. Specifically, additional changes were made to Claims 157, 211, 223 and 234 to remove duplicate limitations and update the claim identifiers.

Claim Interpretation

4. Examiner notes none of the claims have been interpreted as means plus function or generic placeholders subject to interpretation under 35 U.S.C. 112(f) or pre-AIA 35 U.S.C. 112, sixth paragraph.

Allowable Subject Matter

5. Claims 104-129, 132, 136-184, 187 and 190-234 are allowed.

The prior art of record teaches changes in touch states (see at least Abdo et al. USPN 2011/0248941) and fading in response to changes in pressure/duration (see at least Hotelling et al. USPN 2006/0026535.

However, the prior art of record fails to expressly teach or suggest "an electronic device, comprising: a display; a touch interface; one or more processors; memory; and one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for: displaying, utilizing the display, a graphical user interface; when the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward; in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items, and blurring at least a portion of the graphical user interface such that a **magnitude of the blurring of the at least portion of the graphical user interface progressively increases as a function of an increase in a magnitude** of the first gesture being detected; when the first menu is displayed including the one or more first menu items: detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items, in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation; when the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward; in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second

menu including one or more second menu items; when the second menu is displayed including the one or more second menu items: detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation; wherein the electronic device is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer" (see at least **Claim 104 –** emphasis added); and

"an electronic device, comprising: a display; a touch interface; one or more processors; memory; and one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for: displaying, utilizing the display, a graphical user interface; when the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward; in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items including a particular application icon; when the first menu is displayed including the one or more first menu items: **detecting,** utilizing the touch interface, **a first duration of contact on at least one of the one or more first menu items**, in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a **first operation**, and in response to the first duration of contact on the at least one of the one or more first menu items being detected to

surpass the threshold, performing a **second operation,** where the second operation is performed in response to the first duration of contact on the particular application icon being detected to surpass the threshold, **and the first duration of contact being detected to include a slide gesture component after the first duration of contact on the particular application icon is detected to surpass the threshold**; when the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward; in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items; when the second menu is displayed including the one or more second menu items: detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation; wherein the electronic device is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer" (see at least **Claim 203** – emphasis added).

Pertinent Art

6. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure:

a. Hotelling et al. (USPN 2006/0026535) teaches fading in response to changes in pressure/duration of a touch;

b. Abdo et al. (USPN 2011/0248941) teaches pressure and transparency depth cue variations; and

c. Rimas Ribauskus (USPN 2010/0153879) teaches touch and scaling.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANTONIO J XAVIER whose telephone number is (571)270-7688. The examiner can normally be reached on M-F 530am-2pm PST.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at http://www.uspto.gov/interviewpractice.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on 571-272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see https://ppair-my.uspto.gov/pair/PrivatePair. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Antonio Xavier/
Primary Examiner, Art Unit 2623

Examiner-Initiated Interview Summary	Application No. 16/169,961	Applicant(s) Smith, Michael S.	
	Examiner ANTONIO J XAVIER	Art Unit 2623	AIA (FITF) Status No

All participants (applicant, applicant's representative, PTO personnel):

(1) ANTONIO J. XAVIER. (3) _____.

(2) Patrick E. Caldwell (Reg. No.: 44,580). (4) _____.

Date of Interview: 03 February 2020.

Type: ☑ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☑ No.
If Yes, brief description: _____.

Issues Discussed ☐ 101 ☐ 112 ☐ 102 ☑ 103 ☑ Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: 131,151,157,211,223 and 234.

Identification of prior art discussed: N/A.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

See Continuation Sheet.

Applicant recordation instructions: It is not necessary for applicant to provide a separate record of the substance of interview.

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☑ Attachment

/Antonio Xavier/ Primary Examiner, Art Unit 2623	

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments:

Examiner called to propose an Examiner's Amendment and expedite a NOA.

Examiner indicated at least Claims 131 and 151 contained allowable subject matter.

Applicant provided proposed amendments (see attached).

Examiner also identified minor issues in Claims 157, 211, 223 and 234 for correction.

Applicant approved the additional changes and the final language was entered via Examiner's Amendment

Notice of References Cited	Application/Control No. 16/169,961	Applicant(s)/Patent Under Reexamination Smith, Michael S.	
	Examiner ANTONIO J XAVIER	Art Unit 2623	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-20110248941-A1	10-2011	Abdo; Samer	G06F3/0488	345/173
*	B	US-20100153879-A1	06-2010	RIMAS-RIBIKAUSKAS; EMILY	G06F3/0414	715/810
*	C	US-20060026535-A1	02-2006	Hotelling; Steve	G06F3/0418	715/863
	D					
	E					
	F					
	G					
	H					
	I					
	J					
	K					
	L					
	M					

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/169,961	Smith, Michael S.
	Examiner	Art Unit
	ANTONIO J XAVIER	2623

CPC								
Symbol							Type	Version
G06F	/	3	/	0416			F	2013-01-01
G06F	/	3	/	016			I	2013-01-01
G06F	/	3	/	044			I	2013-01-01
G06F	/	3	/	045			I	2013-01-01
G06F	/	3	/	0414			I	2013-01-01
G06F	/	3	/	04883			I	2013-01-01
G06F	/	3	/	0412			I	2013-01-01
G06F	/	2203	/	04104			A	2013-01-01

CPC Combination Sets								
Symbol					Type	Set	Ranking	Version
	/		/					

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	122	
/Antonio Xavier/ Primary Examiner, Art Unit 2623	03 February 2020	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	18

U.S. Patent and Trademark Office — Part of Paper No.: 20200130

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/169,961	Smith, Michael S.
	Examiner	**Art Unit**
	ANTONIO J XAVIER	2623

INTERNATIONAL CLASSIFICATION				
CLAIMED				
G06F	/	3	/	041
G06F	/	3	/	0488

NON-CLAIMED				
	/		/	

US ORIGINAL CLASSIFICATION	
CLASS	**SUBCLASS**

CROSS REFERENCES(S)						
CLASS	**SUBCLASS (ONE SUBCLASS PER BLOCK)**					

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	122	
/Antonio Xavier/ Primary Examiner, Art Unit 2623	03 February 2020	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	18

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/169,961	Smith, Michael S.
	Examiner	**Art Unit**
	ANTONIO J XAVIER	2623

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☑ T.D. ☐ R.1.47

CLAIMS

Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
-	1	-	31	-	61	-	91	18	121	43	151	73	181	99	211
-	2	-	32	-	62	-	92	19	122	44	152	74	182	100	212
-	3	-	33	-	63	-	93	20	123	45	153	75	183	101	213
-	4	-	34	-	64	-	94	21	124	46	154	76	184	102	214
-	5	-	35	-	65	-	95	22	125	47	155	-	185	103	215
-	6	-	36	-	66	-	96	23	126	48	156	-	186	104	216
-	7	-	37	-	67	-	97	24	127	49	157	77	187	105	217
-	8	-	38	-	68	-	98	25	128	50	158	-	188	106	218
-	9	-	39	-	69	-	99	26	129	51	159	-	189	107	219
-	10	-	40	-	70	-	100	-	130	52	160	78	190	108	220
-	11	-	41	-	71	-	101	-	131	53	161	79	191	109	221
-	12	-	42	-	72	-	102	27	132	54	162	80	192	110	222
-	13	-	43	-	73	-	103	-	133	55	163	81	193	111	223
-	14	-	44	-	74	1	104	-	134	56	164	82	194	112	224
-	15	-	45	-	75	2	105	-	135	57	165	83	195	113	225
-	16	-	46	-	76	3	106	28	136	58	166	84	196	114	226
-	17	-	47	-	77	4	107	29	137	59	167	85	197	115	227
-	18	-	48	-	78	5	108	30	138	60	168	86	198	116	228
-	19	-	49	-	79	6	109	31	139	61	169	87	199	117	229
-	20	-	50	-	80	7	110	32	140	62	170	88	200	118	230
-	21	-	51	-	81	8	111	33	141	63	171	89	201	119	231
-	22	-	52	-	82	9	112	34	142	64	172	90	202	120	232
-	23	-	53	-	83	10	113	35	143	65	173	91	203	121	233
-	24	-	54	-	84	11	114	36	144	66	174	92	204	122	234
-	25	-	55	-	85	12	115	37	145	67	175	93	205		
-	26	-	56	-	86	13	116	38	146	68	176	94	206		
-	27	-	57	-	87	14	117	39	147	69	177	95	207		
-	28	-	58	-	88	15	118	40	148	70	178	96	208		
-	29	-	59	-	89	16	119	41	149	71	179	97	209		
-	30	-	60	-	90	17	120	42	150	72	180	98	210		

NONE		**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	122	
/Antonio Xavier/ Primary Examiner, Art Unit 2623	03 February 2020	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	18

U.S. Patent and Trademark Office — Part of Paper No.: 20200130

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/169,961	Smith, Michael S.
	Examiner	Art Unit
	ANTONIO J XAVIER	2623

CPC - Searched*		
Symbol	Date	Examiner
G06F3/04817	02/27/2019	AX
G06F3/0482	02/27/2019	AX
G06F3/04847	02/27/2019	AX
G06F3/04883	02/27/2019	AX

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

/Antonio Xavier/ Primary Examiner, Art Unit 2623	

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/169,961	Smith, Michael S.
	Examiner	Art Unit
	ANTONIO J XAVIER	2623

Search Notes		
Search Notes	**Date**	**Examiner**
G06F3/04817	02/27/2019	AX
G06F3/0482	02/27/2019	AX
G06F3/04847	02/27/2019	AX
G06F3/04883	02/27/2019	AX
Inventor	02/27/2019	AX
EAST	02/27/2019	AX
Reviewed patent family	02/27/2019	AX
Updated EAST	05/16/2019	AX
Updated EAST	09/15/2019	AX
Updated EAST	12/13/2019	AX

Interference Search			
US Class/CPC Symbol	**US Subclass/CPC Group**	**Date**	**Examiner**
	Searched all listed above	02/03/2020	AX

/Antonio Xavier/ Primary Examiner, Art Unit 2623	

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/169,961	Smith, Michael S.
	Examiner	Art Unit
	ANTONIO J XAVIER	2623

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

CLAIMS

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☑ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	05/16/2019	09/15/2019	12/13/2019	02/03/2020					
-	1	-	-	-	-					
-	2	-	-	-	-					
-	3	-	-	-	-					
-	4	-	-	-	-					
-	5	-	-	-	-					
-	6	-	-	-	-					
-	7	-	-	-	-					
-	8	-	-	-	-					
-	9	-	-	-	-					
-	10	-	-	-	-					
-	11	-	-	-	-					
-	12	-	-	-	-					
-	13	-	-	-	-					
-	14	-	-	-	-					
-	15	-	-	-	-					
-	16	-	-	-	-					
-	17	-	-	-	-					
-	18	✓	✓	✓	-					
-	19	-	-	-	-					
-	20	-	-	-	-					
-	21	-	-	-	-					
-	22	✓	✓	-	-					
-	23	-	-	-	-					
-	24	✓	-	-	-					
-	25	✓	✓	-	-					
-	26	✓	-	-	-					
-	27	✓	-	-	-					
-	28	✓	✓	-	-					
-	29	✓	✓	-	-					
-	30	✓	✓	-	-					
-	31	✓	✓	-	-					
-	32	✓	✓	-	-					
-	33	✓	✓	-	-					
-	34	✓	✓	-	-					
-	35	✓	✓	-	-					
-	36	✓	-	-	-					
-	37	✓	✓	-	-					
-	38	✓	✓	-	-					
-	39	✓	-	-	-					
-	40	✓	-	-	-					
-	41		✓	-	-					
-	42		✓	-	-					

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/169,961	Smith, Michael S.
	Examiner	Art Unit
	ANTONIO J XAVIER	2623

CLAIM		DATE								
Final	Original	05/16/2019	09/15/2019	12/13/2019	02/03/2020					
-	43		✓	-	-					
-	44		✓	-	-					
-	45		✓	✓	-					
-	46		✓	✓	-					
-	47		✓	✓	-					
-	48		✓	✓	-					
-	49		✓	✓	-					
-	50		✓	-	-					
-	51		✓	✓	-					
-	52		✓	✓	-					
-	53		✓	✓	-					
-	54		✓	✓	-					
-	55		✓	✓	-					
-	56		✓	✓	-					
-	57		✓	✓	-					
-	58		✓	-	-					
-	59		✓	-	-					
-	60		✓	-	-					
-	61			✓	-					
-	62			✓	-					
-	63			✓	-					
-	64			✓	-					
-	65			✓	-					
-	66			✓	-					
-	67			✓	-					
-	68			✓	-					
-	69			✓	-					
-	70			✓	-					
-	71			✓	-					
-	72			✓	-					
-	73			✓	-					
-	74			✓	-					
-	75			✓	-					
-	76			✓	-					
-	77			✓	-					
-	78			✓	-					
-	79			✓	-					
-	80			✓	-					
-	81			✓	-					
-	82			✓	-					
-	83			✓	-					
-	84			✓	-					
-	85			✓	-					
-	86			✓	-					
-	87			✓	-					
-	88			✓	-					
-	89			✓	-					
-	90			✓	-					
-	91			✓	-					
-	92			✓	-					
-	93			✓	-					
-	94			✓	-					

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/169,961	Smith, Michael S.
	Examiner	Art Unit
	ANTONIO J XAVIER	2623

CLAIM		DATE								
Final	Original	05/16/2019	09/15/2019	12/13/2019	02/03/2020					
-	95			✓	-					
-	96			✓	-					
-	97			✓	-					
-	98			✓	-					
-	99			✓	-					
-	100			✓	-					
-	101			✓	-					
-	102			✓	-					
-	103			✓	-					
1	104				=					
2	105				=					
3	106				=					
4	107				=					
5	108				=					
6	109				=					
7	110				=					
8	111				=					
9	112				=					
10	113				=					
11	114				=					
12	115				=					
13	116				=					
14	117				=					
15	118				=					
16	119				=					
17	120				=					
18	121				=					
19	122				=					
20	123				=					
21	124				=					
22	125				=					
23	126				=					
24	127				=					
25	128				=					
26	129				=					
-	130				-					
-	131				-					
27	132				=					
-	133				-					
-	134				-					
-	135				-					
28	136				=					
29	137				=					
30	138				=					
31	139				=					
32	140				=					
33	141				=					
34	142				=					
35	143				=					
36	144				=					
37	145				=					
38	146				=					

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/169,961	Smith, Michael S.
	Examiner	Art Unit
	ANTONIO J XAVIER	2623

CLAIM		DATE								
Final	Original	05/16/2019	09/15/2019	12/13/2019	02/03/2020					
39	147				=					
40	148				=					
41	149				=					
42	150				=					
43	151				=					
44	152				=					
45	153				=					
46	154				=					
47	155				=					
48	156				=					
49	157				=					
50	158				=					
51	159				=					
52	160				=					
53	161				=					
54	162				=					
55	163				=					
56	164				=					
57	165				=					
58	166				=					
59	167				=					
60	168				=					
61	169				=					
62	170				=					
63	171				=					
64	172				=					
65	173				=					
66	174				=					
67	175				=					
68	176				=					
69	177				=					
70	178				=					
71	179				=					
72	180				=					
73	181				=					
74	182				=					
75	183				=					
76	184				=					
-	185				-					
-	186				-					
77	187				=					
-	188				-					
-	189				-					
78	190				=					
79	191				=					
80	192				=					
81	193				=					
82	194				=					
83	195				=					
84	196				=					
85	197				=					
86	198				=					

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/169,961	Smith, Michael S.
	Examiner	Art Unit
	ANTONIO J XAVIER	2623

CLAIM		DATE								
Final	Original	05/16/2019	09/15/2019	12/13/2019	02/03/2020					
87	199				=					
88	200				=					
89	201				=					
90	202				=					
91	203				=					
92	204				=					
93	205				=					
94	206				=					
95	207				=					
96	208				=					
97	209				=					
98	210				=					
99	211				=					
100	212				=					
101	213				=					
102	214				=					
103	215				=					
104	216				=					
105	217				=					
106	218				=					
107	219				=					
108	220				=					
109	221				=					
110	222				=					
111	223				=					
112	224				=					
113	225				=					
114	226				=					
115	227				=					
116	228				=					
117	229				=					
118	230				=					
119	231				=					
120	232				=					
121	233				=					
122	234				=					

Bibliographic Data

Application No: 16/169,961

Foreign Priority claimed: ○ Yes ◉ No

35 USC 119 (a-d) conditions met: ☐ Yes ☑ No ☐ Met After Allowance

Verified and Acknowledged: /Antonio Xavier/ (Examiner's Signature) | (Initials)

Title: GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT

FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
10/24/2018	345	2623	SMITH070AG
RULE			

APPLICANTS

P4TENTS1, LLC, Wilmington, DE,

INVENTORS

Michael S. Smith Palo Alto, CA, UNITED STATES

CONTINUING DATA

This application is a CON of 15072354 03/16/2016 PAT 10133397

15072354 is a CON of 13567004 08/03/2012 PAT 9417754

13567004 has PRO of 61581918 12/30/2011

13567004 has PRO of 61569213 12/09/2011

13567004 has PRO of 61566577 12/02/2011

13567004 has PRO of 61515835 08/05/2011

FOREIGN APPLICATIONS

IF REQUIRED, FOREIGN LICENSE GRANTED**

11/14/2018

**** SMALL ENTITY ****

STATE OR COUNTRY

UNITED STATES

ADDRESS

The Caldwell Firm, LLC
PO Box 59655
Dept. SVIPGP
Dallas, TX 75229
UNITED STATES

FILING FEE RECEIVED

$3,055

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	3	"20060026535".pn. or "20110248941".pn. or "20100153879".pn.	US-PGPUB; USPAT	ADJ	ON	2020/02/01 07:30
L3	3	(US-20070189737-$).did. or (US-8713458-$ or US-7743341-$).did.	US-PGPUB; USPAT	ADJ	ON	2020/02/01 07:31
L4	2	l3 AND (layer)	US-PGPUB; USPAT	ADJ	ON	2020/02/01 07:31
S1	0	"15719406"	US-PGPUB; USPAT	ADJ	ON	2017/12/12 12:33
S2	0	"15072351"	US-PGPUB; USPAT	ADJ	ON	2017/12/12 12:36
S3	2	"13567004"	US-PGPUB; USPAT	ADJ	ON	2017/12/12 12:36
S4	3560	(("SMITH") near3 ("Michael")).INV.	US-PGPUB; USPAT; USOCR	ADJ	ON	2017/12/12 12:40
S5	19	(US-20090231290-$ or US-20070268261-$ or US-20060197750-$ or US-20060044281-$ or US-20030234768-$ or US-20080259046-$ or US-20110059777-$ or US-20080088602-$ or US-20110260984-$ or US-20100328230-$ or US-20070273671-$ or US-20070236470-$ or US-20110084921-$ or US-20110057889-$ or US-20110045813-$ or US-20100045621-$).did. or (US-6020878-$ or US-5729219-$ or US-8730199-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:21
S6	9	(US-20100058211-$ or US-20130076649-$ or US-20110261002-$ or US-20080146285-$ or US-20100035656-$ or US-20120060123-$ or US-20110059777-$ or US-20130321340-$ or US-20110291945-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:21
S7	27	S5 or S6	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:21
S8	990	touch screen AND (vibrate or vibrator) AND (pressure) AND (menu) AND ((launch$3 or open$3) WITH (program or application or software))	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:25
S9	782	S8 AND ((electronic$1mail or electronic mail or e$1mail) or (SMS or short message) or (social network))	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:26

S10	0	S4 AND S9	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:26
S11	0	S4 AND S8	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:27
S12	901	S4 AND touch	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:27
S13	508	S12 AND pressure	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:27
S14	36	S13 AND menu	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:27
S15	244	S4 AND menu	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:27
S16	133	S4 AND menu AND touch	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:27
S17	97	S16 NOT S14	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:41
S18	0	(back$1touch settings)	US-PGPUB; USPAT	ADJ	ON	2017/12/13 12:27
S19	2	(back$1touch near settings)	US-PGPUB; USPAT	ADJ	ON	2017/12/13 12:31
S20	3561	(("SMITH") near3 ("Michael")).INV.	US-PGPUB; USPAT; USOCR	ADJ	ON	2017/12/14 09:58
S21	82	S20 AND (touch$3 AND menu AND (social or sharing))	US-PGPUB; USPAT; USOCR	ADJ	ON	2017/12/14 09:58
S22	6	(US-20140053116-$ or US-20110302493-$ or US-20110153653-$ or US-20110096174-$ or US-20110025842-$ or US-20080177662-$).did.	US-PGPUB	ADJ	ON	2017/12/14 11:30
S23	0	S22 AND ((pressure or magnitude) WITH (touch))	US-PGPUB; USPAT	ADJ	ON	2017/12/14 11:30
S24	0	S22 AND ((pressure or magnitude))	US-PGPUB; USPAT	ADJ	ON	2017/12/14 11:30
S25	120	(menu) WITH (social media) WITH (shar$3)	US-PGPUB; USPAT	ADJ	ON	2017/12/14 13:58
S26	73418	(custom or programmable) WITH (gesture or input) WITH (application or program or function)	US-PGPUB; USPAT	ADJ	ON	2017/12/14 18:39
S27	3561	(("SMITH") near3 ("Michael")).INV.	US-PGPUB; USPAT;	ADJ	ON	2017/12/14 18:40

			USOCR			
S28	69	S26 AND S27	US-PGPUB; USPAT	ADJ	ON	2017/12/14 18:40
S29	1879	touch WITH (pressure or magnitude) WITH thresholds	US-PGPUB; USPAT	ADJ	ON	2017/12/14 18:59
S30	4	touch WITH (pressure or magnitude) WITH thresholds WITH (context)	US-PGPUB; USPAT	ADJ	ON	2017/12/14 18:59
S31	62	("5745719").URPN.	USPAT	ADJ	ON	2017/12/14 19:20
S32	5	"11038590"	USPAT	ADJ	ON	2017/12/14 19:21
S33	1	"20060161871".pn.	US-PGPUB; USPAT	ADJ	ON	2017/12/14 19:22
S34	1	"20060026535".pn.	US-PGPUB; USPAT	ADJ	ON	2017/12/14 19:24
S35	15	(US-20140053116-$ or US-20110302493-$ or US-20110153653-$ or US-20110096174-$ or US-20110025842-$ or US-20080177662-$ or US-20130291126-$ or US-20060161871-$ or US-20060026535-$ or US-20090058829-$ or US-20090085881-$ or US-20100090982-$ or US-20100188327-$).did. or (US-9524042-$ or US-5745719-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/12/14 19:51
S36	57422	(touch WITH pressure)	US-PGPUB; USPAT	ADJ	ON	2017/12/14 19:51
S37	5	S35 and S36	US-PGPUB; USPAT	ADJ	ON	2017/12/14 19:51
S38	45	(social network or social application) WITH (shar$3 object)	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:22
S39	9596	(social network or social application) WITH (post)	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:37
S40	2866	S39 AND (SMS and e$1mail)	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:37
S41	196	S40 AND (menu WITH GUI)	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:37
S42	18	S41 AND (touch WITH (pressure or magnitude))	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:38
S43	37	(GUI or menu) WITH (pressure or magnitude) WITH (context)	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:50
S44	3	"12597684"	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:52
S45	581	((context sensitive or context$1sensitive)	US-	ADJ	ON	2017/12/16

		WITH (icon))	PGPUB; USPAT			16:13
S46	7	S45 AND (pressure WITH touch)	US-PGPUB; USPAT	ADJ	ON	2017/12/16 16:15
S47	13	menu WITH historical usage	US-PGPUB; USPAT	ADJ	ON	2017/12/18 13:40
S48	1	"8191015".pn.	US-PGPUB; USPAT	ADJ	ON	2017/12/18 13:44
S49	1	"20080065991".pn. AND (menu WITH usage)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 13:44
S50	6827	(social network or social media) WITH (shar$3 WITH (object or link or image or photo))	US-PGPUB; USPAT	ADJ	ON	2017/12/18 19:20
S51	6	S50 WITH (touch$3 WITH menu)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 19:21
S52	12	S50 SAME (touch$3 WITH menu)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 19:22
S53	233	S50 AND (touch$3 WITH menu)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 19:39
S54	165	S50 AND (touch WITH pressure)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 20:34
S55	8887	G06F3/04847.cpc.	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:43
S56	10393	G06F3/04817.cpc.	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:44
S57	23568	g06f3/0482.cpc.	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:44
S58	18904	g06f3/04883.cpc.	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:44
S59	46941	S55 or S56 or S57 or S58	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:44
S60	6344	S59 AND (pressure WITH touch)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:44
S61	2168	S60 AND (touch WITH menu)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:44
S62	141649	(pressure WITH (magnitude or threshold))	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:45
S63	465	S62 AND S61	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:45
S64	30	S63 AND S50	US-	ADJ	ON	2017/12/18

			PGPUB; USPAT			21:47
S65	100	(slide WITH gesture WITH menu)	US-PGPUB; USPAT	ADJ	ON	2017/12/22 21:32
S66	3	S65 AND (slide WITH pressure)	US-PGPUB; USPAT	ADJ	ON	2017/12/22 21:39
S67	6	S65 AND (slide SAME pressure)	US-PGPUB; USPAT	ADJ	ON	2017/12/22 21:41
S68	0	"15072354"	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:52
S69	3580	(("SMITH") near3 ("Michael")).INV.	US-PGPUB; USPAT; USOCR	ADJ	ON	2018/01/20 17:52
S70	11	S69 AND (intermediate state)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:52
S71	19	S69 AND (gesture WITH menu)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:54
S72	9007	G06F3/04847.cpc.	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:56
S73	10547	G06F3/04817.cpc.	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:56
S74	23888	g06f3/0482.cpc.	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:56
S75	19105	g06f3/04883.cpc.	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:56
S76	47534	(S72 or S73 or S74 or S75)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:56
S77	843	S76 AND (intermediate WITH (pressure or signal or state))	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:57
S78	15	S76 AND (intermediate WITH (pressure or signal or state) WITH menu)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:57
S79	208	("20010005692" | "20010043291" | "20020002629" | "20020005111" | "20020008691" | "20020033919" | "20020045854" | "20020085952" | "20020116952" | "20020116959" | "20020118180" | "20020130832" | "20020180763" | "20030117408" | "20030123328" | "20030147041" | "20030151589" | "20030217972" | "20030232192" | "20030235452" | "20040084372" | "20040108995" | "20040109788" | "20040121855" | "20040191509" | "20040207542" |	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:23

		"20040212598"	"20040239624"				
		"20040263488"	"20050045540"				
		"20050099403"	"20050231461"				
		"20050242034"	"20050264521"				
		"20050280746"	"20060001654"				
		"20060001800"	"20060033701"				
		"20060077186"	"20060107719"				
		"20060138983"	"20060146032"				
		"20060167400"	"20060179088"				
		"20060195064"	"20060197736"				
		"20060197737"	"20060209039"				
		"20060238495"	"20060260711"				
		"20060262099"	"20060284874"				
		"20070008064"	"20070035526"				
		"20070040814"	"20070070047"				
		"20070085837"	"20070103454"				
		"20070137901"	"20070146313"				
		"20070148371"	"20070153215"				
		"20070176902"	"20070182864"				
		"20070195029"	"20070229477"				
		"20070237170"	"20070262967"				
		"20080007675"	"20080018613"				
		"20080024459"	"20080024712"				
		"20080060854"	"20080062169"				
		"20080068343"	"20080094367"				
		"20080100584"	"20080105600"				
		"20080130910"	"20080136790"				
		"20080158171"	"20080204427"				
		"20080210843"	"20080211786"				
		"20080215192"	"20080252607"				
		"20080252616"	"20080259046"				
		"20080295839"	"20080304431"				
		"20090002312"	"20090022256"				
		"20090036176"	"20090046110"				
		"20090051659"	"20090066660"				
		"20090073138"	"20090086420"				
		"20090091536"	"20090143652"				
		"20090158152"	"20090160781"				
		"20090213066"	"20090225053"				
		"20090271731"	"20090289912"				
		"20090295747"	"20100005390"				
		"20100017872"	"20100020039"				
		"20100026640"	"20100035656"				
		"20100045612"	"20100053103"				
		"20100053532"	"20100077829"				
		"20100079398"	"20100085500"				
		"20100097347"	"20100134429"				
		"20100134448"	"20100149101"				
		"20100149124"	"20100164884"				
		"20100188365"	"20100194709"				
		"20100201651"	"20100206560"				
		"20100207900"	"20100214499"				
		"20100222735"	"20100225608"				
		"20100259490"	"20100277432"				
		"20110001706"	"20110007023"				
		"20110012921"	"20110025969"				
		"20110037726"	"20110044064"				
		"20110050591"	"20110050592"				
		"20110050593"	"20110050594"				
		"20110050608"	"20110051334"				
		"20110063248"	"20110088416"				
		"20110102336"	"20110102347"				
		"20110105446"	"20110109573"				
		"20110115738"	"20110118029"				

		"20110122084" | "20110152739" | "20110169775" | "20110175845" | "20110181552" | "20110210942" | "20110210943" | "20110227836" | "20110227877" | "20110239110" | "20110248941" | "20110254793" | "20110260994" | "20110273394" | "20110273396" | "20110291953" | "20120007821" | "20120013566" | "20120019448" | "20120023450" | "20120032876" | "20120034954" | "20120044172" | "20120056846" | "20120086670" | "20120105367" | "20120105370" | "20120109037" | "20120154328" | "20120162087" | "20120182249" | "20120194461" | "20120194462" | "20120223900" | "20120229403" | "20120229404" | "20120229405" | "20120231853" | "20120240044" | "20120242610" | "20120244348" | "20120254747" | "20120266072" | "20120274662" | "20120293449" | "20120306764" | "20120306765" | "20120306766" | "20120313888" | "20130002610" | "20130009869" | "20130021285" | "20130021295" | "20130027350".PN.				
S80	234	("20130124993" | "20130125322" | "20130127765" | "20130132838" | "20130141388" | "20130181928" | "20130181931" | "20130188336" | "20130215064" | "20130307809" | "20130307827" | "20130321317" | "20130332876" | "20130335357" | "20140028601" | "20140057102" | "20140066139" | "20140096092" | "20140099235" | "20140104219" | "20140104220" | "20140132548" | "20140132549" | "20140134433" | "20140134434" | "20140139473" | "20140168128" | "20140191962" | "20140208248" | "20140210786" | "20140340358" | "20140368455" | "20150068526" | "20150197670" | "20150234518" | "20150253609" | "3633322" | "3738166" | "3772685" | "3777222" | "4293734" | "4296756" | "4302011" | "4353552" | "4524421" | "4554419" | "4636632" | "4644101" | "4770281" | "5241308" | "5247434" | "5276787" | "5305423" | "5309172" | "5311302" | "5343650" | "5386219" | "5448263" | "5486286" | "5487827" | "5566096" | "5680160" | "5742894" | "5743859" | "5744027" | "5838244" | "5856822" | "5947334" | "5999892" | "6108064" | "6118435" | "6141000" | "6193152" | "6283763" | "6284131" | "6337681" | "6351271" | "6392638" | "6417845" | "6441807" | "6509847" | "6526315" | "6533757" | "6567102" | "6626013" | "6636203" | "6689947" | "6721019" | "6738514" | "6747636" | "6776546" | "6791640" | "6801211" |	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:24

		"6879318" | "6880998" | "6888537" | "6917282" | "6919927" | "6933991" | "6961015" | "6967903" | "7030854" | "7097903" | "7098776" | "7122149" | "7138984" | "7205983" | "7254973" | "7289113" | "7303680" | "7312784" | "7312791" | "7315336" | "7318892" | "7405779" | "7423557" | "7437221" | "7535463" | "7626579" | "7639239" | "7649577" | "7649605" | "7659885" | "7675580" | "7692627" | "7692637" | "7701329" | "7705824" | "7738068" | "7755612" | "7903096" | "7932893" | "7952566" | "7973777" | "7973778" | "7982721" | "8022933" | "8057419" | "8068021" | "8072430" | "8094134" | "8094673" | "8102496" | "8184228" | "8188982" | "8199116" | "8207945" | "8209628" | "8223799" | "8228309" | "8253699" | "8269731" | "8269733" | "8270148" | "8279361" | "8286102" | "8310452" | "8319743" | "8325143" | "8334835" | "8334850" | "8345018" | "8349228" | "8373675" | "8384674" | "8411039" | "8416210" | "8424590" | "8427434" | "8451238" | "8471824" | "8477111" | "8479110" | "8487900" | "8493384" | "8497884" | "8508494" | "8542193" | "8542209" | "8553012" | "8564559" | "8587542" | "8624851" | "8624867" | "8638311" | "8648839" | "8654104" | "8674947" | "8692815" | "8698777" | "8717303" | "8723826" | "8727557" | "8743076" | "8745514" | "8754862" | "8760408" | "8780089" | "8816993" | "8854317" | "8866785" | "8872798" | "8878809" | "8878810" | "8884913" | "8896575" | "8913031" | "8917262" | "8947381" | "8970540" | "8976128" | "8982081" | "8988364" | "9003591" | "9013414" | "9018030" | "9030427" | "9035897" | "9041679" | "9045670" | "9046999" | "9063597" | "9069204" | "9069416" | "9069460" | "9092129" | "9098193" | "9116609" | "9125630" | "9130651" | "9134880" | "9152258" | "9152288" | "RE41716").PN.				
S81	442	S79 or S80	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:24
S82	17	S81 AND (intermediate WITH (pressure or signal or state))	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:24
S83	297	S81 AND (second WITH (pressure or signal or state))	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:26
S84	58	S81 AND (second WITH (pressure or signal or state) WITH third)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:26
S85	1	S81 AND (second WITH (pressure or signal or state) WITH third) WITH menu	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:26

S86	1632	g06f2203/04105.cpc.	US-PGPUB; USPAT	ADJ	ON	2018/01/20 19:35
S87	302	S86 AND (second WITH (pressure or signal or state) WITH third)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 19:35
S88	302	S86 AND (second WITH (pressure or signal or state) WITH third)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 19:35
S89	1	S86 AND (second WITH (pressure or signal or state) WITH third) WITH menu	US-PGPUB; USPAT	ADJ	ON	2018/01/20 19:35
S90	50	S86 AND (intermediate WITH (pressure or signal or state))	US-PGPUB; USPAT	ADJ	ON	2018/01/20 19:36
S91	0	"15072354"	US-PGPUB; USPAT	ADJ	ON	2018/08/08 14:49
S92	14	(US-20130162667-$ or US-20110145764-$ or US-20100313166-$ or US-20080219493-$ or US-20040150644-$ or US-20120306788-$ or US-20110175805-$ or US-20100026640-$ or US-20080178126-$ or US-20110196935-$ or US-20090207175-$ or US-20120225413-$ or US-20080204427-$ or US-20080024459-$).did.	US-PGPUB; USPAT	ADJ	ON	2018/09/07 17:56
S97	1	"20110175805".pn.	US-PGPUB; USPAT	ADJ	ON	2019/01/19 15:58
S98	1	"3659229".pn.	US-PGPUB; USPAT	ADJ	ON	2019/01/19 15:59
S99	473	(cursor or icon) WITH (follow) WITH (gesture or touch)	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:02
S100	14	(cursor or icon) WITH (follow) WITH (gesture or touch) WITH (speed)	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:02
S101	0	"16153765"	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:02
S102	1	"15072354"	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:02
S103	2	(cursor or icon) WITH (follow) WITH (gesture or touch) WITH (gravity)	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:04
S104	51	(cursor or icon) WITH (gravity) WITH (gesture or touch) WITH (gravity)	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:05
S105	90	(cursor or icon) WITH (snap) WITH (gesture or touch)	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:08
S106	275	(icon) WITH (follow or trail) WITH (gesture or touch)	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:16
S107	14	(US-20130162667-$ or US-20120306788-$	US-	ADJ	ON	2019/02/27

		or US-20120225413-$ or US-20110196935-$ or US-20110175805-$ or US-20110145764-$ or US-20100313166-$ or US-20100026640-$ or US-20090207175-$ or US-20080219493-$ or US-20080204427-$ or US-20080178126-$ or US-20080024459-$ or US-20040150644-$).did.	PGPUB			07:26
S108	18	(US-20110302493-$ or US-20080177662-$ or US-20060161871-$ or US-20060026535-$ or US-20090058829-$ or US-20090085881-$ or US-20100090982-$ or US-20100188327-$ or US-20100251119-$ or US-20100127983-$ or US-20100241989-$ or US-20100088654-$ or US-20050114794-$ or US-20110061021-$ or US-20120054691-$ or US-20120306788-$ or US-20120182296-$).did. or (US-9524042-$).did.	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:26
S109	31	S107 or S108	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:26
S110	0	S109 AND (virtual layer)	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:26
S111	3	S109 AND (fog or blur)	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:26
S112	2	S109 AND (fore$1ground AND back$1ground)	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:29
S113	1005	(menu WITH (fore$1ground AND back$1ground))	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:30
S114	0	(menu WITH (fore$1ground AND back$1ground)) WITH virtual layer	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:30
S115	23	(menu WITH (fore$1ground AND back$1ground)) WITH layer	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:30
S116	5542	(fore$1ground or back$1ground) WITH (fog or blur)	US-PGPUB; USPAT	ADJ	ON	2019/02/27 13:12
S117	4	(fore$1ground or back$1ground) WITH (fog or blur) WITH menu	US-PGPUB; USPAT	ADJ	ON	2019/02/27 13:12
S118	1	S116 AND (menu WITH transparent)	US-PGPUB; USPAT	ADJ	ON	2019/02/27 13:13
S119	29	(edge WITH inward WITH menu)	US-PGPUB; USPAT	ADJ	ON	2019/05/16 23:00
S120	0	((slide or drag) near (in or inward)) WITH (edge or periphery) WITH (menu)	US-PGPUB; USPAT	ADJ	ON	2019/09/15 18:39
S121	773	((slide or drag) near (in or inward)) WITH (edge or periphery)	US-PGPUB; USPAT	ADJ	ON	2019/09/15 18:40

S122	9	S121 AND ((edge or periphery) WITH (menu))	US-PGPUB; USPAT	ADJ	ON	2019/09/15 18:41
S123	85	S121 AND (phone)	US-PGPUB; USPAT	ADJ	ON	2019/09/15 18:41
S124	25	((swipe) near (in or inward)) WITH (edge or periphery)	US-PGPUB; USPAT	ADJ	ON	2019/09/15 18:45
S125	24	((swipe) WITH (inward)) WITH (edge or periphery)	US-PGPUB; USPAT	ADJ	ON	2019/09/15 18:46
S126	180	((drag) WITH (inward)) WITH (edge or periphery)	US-PGPUB; USPAT	ADJ	ON	2019/09/15 18:46
S127	363	((edge or periphery) WITH (menu) WITH (swipe or drag or gesture))	US-PGPUB; USPAT	ADJ	ON	2019/12/13 11:01
S128	0	"16169961"	US-PGPUB; USPAT	ADJ	ON	2020/01/31 09:42
S129	3	(US-20070189737-$).did. or (US-8713458-$ or US-7743341-$).did.	US-PGPUB; USPAT	ADJ	ON	2020/01/31 11:36

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S93	3480	G06F3/04847.cpc.	USPAT	ADJ	ON	2018/09/07 17:58
S94	4153	G06F3/04817.cpc.	USPAT	ADJ	ON	2018/09/07 17:58
S95	9279	g06f3/0482.cpc.	USPAT	ADJ	ON	2018/09/07 17:58
S96	7394	g06f3/04883.cpc.	USPAT	ADJ	ON	2018/09/07 17:58
S130	2099	(("SMITH") near3 ("Michael")).INV.	USPAT	ADJ	ON	2020/01/31 13:00
S131	35	S130 AND (slide).clm.	USPAT	ADJ	ON	2020/01/31 13:03
S132	1	S130 AND (slide WITH duration).clm.	USPAT	ADJ	ON	2020/01/31 13:04
S133	2	S130 AND (slide WITH contact).clm.	USPAT	ADJ	ON	2020/01/31 13:05
S134	10	S130 AND (slide WITH gesture).clm.	USPAT	ADJ	ON	2020/01/31 13:06
S135	24	S130 AND (blur or blurry or blurring or fog or foggy or fogging).clm.	USPAT	ADJ	ON	2020/01/31 13:09
S136	13	S130 AND ((blur or blurry or blurring or fog or foggy or fogging) WITH (magnitude or intensity or distance)).clm.	USPAT	ADJ	ON	2020/01/31 13:12
S137	16	S130 AND ((blur or blurry or blurring or fog or foggy or fogging) WITH (pressure)).clm.	USPAT	ADJ	ON	2020/01/31 13:17
S138	5	S137 NOT S136	USPAT	ADJ	ON	2020/01/31 13:17

S139	2	"10540039".pn. or "10386960".pn.	USPAT	ADJ	ON	2020/01/31 13:35
S140	1	S139 AND (blur or blurry or blurring or fog or foggy or fogging).clm. AND (magnitude or pressure).clm.	USPAT	ADJ	ON	2020/01/31 13:36
S141	5129	G06F3/04847.cpc.	USPAT	ADJ	ON	2020/01/31 20:23
S142	5802	G06F3/04817.cpc.	USPAT	ADJ	ON	2020/01/31 20:23
S143	12997	g06f3/0482.cpc.	USPAT	ADJ	ON	2020/01/31 20:23
S144	9855	g06f3/04883.cpc.	USPAT	ADJ	ON	2020/01/31 20:23
S145	25236	S141 or S142 or S143 or S144	USPAT	ADJ	ON	2020/01/31 20:23
S146	27	S145 AND (blur or blurry or blurring or fog or foggy or fogging).clm. AND (magnitude or pressure).clm.	USPAT	ADJ	ON	2020/01/31 20:23

2/ 1/ 2020 7:33:43 AM
C:\ Users\ axavier\ Desktop\ axavier data files\ EAST workspaces\ 16169961-CON of 15072354-CON of 13567004.wsp

From:	Patrick E. Caldwell
To:	Xavier, Antonio
Subject:	SMITH070AG (16/169,961) Proposed Amendment
Date:	Monday, February 3, 2020 8:24:10 AM
Attachments:	SMITH070AG Proposed Amendment 20200201.rtf

Examiner Xavier,
Please consider the attached proposed amendment, which may be entered in exchange for an allowance.

--

Thanks,
Patrick

Patrick E. Caldwell, Esq.
The Caldwell Firm, LLC
PO Box 59655
Dallas, Texas 75229-0655
+1.214.734.2313 (mobile)
http://www.thecaldwellfirm.com/

CONFIDENTIALITY NOTICE: This email is covered by the Electronic Communications Privacy Act, 18 U.S.C. 2510-2521
and is legally privileged. The information contained in this email is intended for use of the individual or entity named
above. If the reader of this message is not the intended recipient, or the employee or agent responsible to deliver it
to the intended recipient, you are hereby notified that any dissemination, distribution or duplication of this
communication is strictly prohibited. If you have received this communication in error, please immediately notify us
by telephone (214-734-2313), and destroy the original message. Thank you.

From:	Patrick E. Caldwell
To:	Xavier, Antonio
Subject:	SMITH070AG (16/169,961) Proposed Amendment
Date:	Thursday, January 30, 2020 1:08:43 PM
Attachments:	SMITH070AG Proposed Amendment 20200130.rtf

Examiner Xavier,
Please consider the attached proposed amendment, which may be entered in exchange for an allowance.
--

Thanks,
Patrick

Patrick E. Caldwell, Esq.
The Caldwell Firm, LLC
PO Box 59655
Dallas, Texas 75229-0655
+1.214.734.2313 (mobile)
http://www.thecaldwellfirm.com/

CONFIDENTIALITY NOTICE: This email is covered by the Electronic Communications Privacy Act, 18 U.S.C. 2510-2521
and is legally privileged. The information contained in this email is intended for use of the individual or entity named
above. If the reader of this message is not the intended recipient, or the employee or agent responsible to deliver it
to the intended recipient, you are hereby notified that any dissemination, distribution or duplication of this
communication is strictly prohibited. If you have received this communication in error, please immediately notify us
by telephone (214-734-2313), and destroy the original message. Thank you.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	Confirmation No.: 7650
MICHAEL S. SMITH	Examiner: XAVIER, ANTONIO J
Application No.: 16/169,961	Art Unit: 2623
File Date: 10-24-2018	Docket No.: SMITH070AG
Title: GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT	Date: 1/30/2020

PROPOSED AMENDMENT

Mail Stop Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

1.-103. (Cancelled)

104. (Currently Amended) An electronic device, comprising:

a display;

a touch interface;

one or more processors;

memory; and

one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for:

displaying, utilizing the display, a graphical user interface;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items, and blurring at least a portion of the graphical user interface such that a magnitude of the blurring of the at least portion of the graphical user interface progressively increases as a function of an increase in a magnitude of the first gesture being detected;

when the first menu is displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items;

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation;

wherein the electronic device is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer.

105. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that at least a portion of the at least one other virtual display layer is at least partially translucent such that at least a portion of the at least one virtual display layer is visible through the at least one other virtual display layer.

106. (Previously Presented) The electronic device of Claim 105, wherein the electronic device is configured such that the at least portion of the at least one virtual display layer that is visible through the at least one other virtual display layer, includes at least a portion of a background image.

107. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the first menu and the second menu are displayed in separate virtual display layers.

108. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the graphical user interface includes a home screen, for choosing among a plurality of applications.

109. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include messages in a list, the first operation includes displaying a view of at least one of the messages, and the second operation includes opening the at least one message.

110. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that hardware status indicia is displayed adjacent to the first edge.

111. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that only one of the first menu or the second menu is capable of being displayed at a time.

112. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that at least one of the first menu or the second menu substantially fills the display.

113. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that indicia is displayed via the graphical user interface for prompting a user as to an accessibility of at least one of the first menu or the second menu.

114. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the first menu is accessible via the first gesture; the second menu is accessible via the second gesture; at least one of the first or second operations is performed based on at least two different contact durations, in order to increase operation accessibility via the electronic device that includes a mobile device.

115. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the first gesture and the second gesture are capable of being detected as moving inward in different directions.

116. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include a plurality of application-specific menu items for accessing different applications.

117. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more second menu items include a plurality of application-specific menu items for accessing different applications.

118. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include a plurality of application menu items for launching different applications.

119. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a deletion operation.

120. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a move operation.

121. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a menu item rearrange operation.

122. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that, the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

123. (Previously Presented) The electronic device of Claim 122, wherein the electronic device is configured such that the second operation is performed in response to the first duration of contact on the at least one application menu item being detected to surpass the threshold, and in response to the first duration of contact being detected to include a slide gesture component.

124. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that, the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display another particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

125. (Previously Presented) The electronic device of Claim 124, wherein the electronic device is configured such that the second operation is performed in response to:

the first duration of contact on the at least one application menu item being detected to surpass the threshold, and

the first duration of contact being detected to include a slide gesture component after the first duration of contact on the at least one application menu item is detected to surpass the threshold.

126. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application for, in response to a detection of a selection thereof when the first duration of contact on the at least one application menu item is detected to surpass the threshold, launching the particular application to display a particular application interface of the particular application in an overlying and scaled virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

127. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass the threshold, the first operation is performed, in response to detection of a cessation of the first duration of contact.

128. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the first menu is at least partially translucent for viewing the graphical user interface thereunder.

129. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the first menu is at least partially translucent for viewing the graphical user interface, including a home screen, thereunder.

130. (Cancelled)

131. (Cancelled)

132. (Currently Amended) The electronic device of Claim [[131]]104, wherein the electronic device is configured such that the magnitude of the blurring of the at least portion of the graphical user interface progressively decreases as a function of detecting a change in the first gesture.

133.-135. (Cancelled)

136. (Currently Amended) The electronic device of Claim [[135]]104, wherein the electronic device is configured such that the magnitude of the blurring of the at least portion of the graphical user interface progressively decreases as a function of detecting the first gesture moving outward.

137. (Currently Amended) The electronic device of Claim 104, wherein the electronic device is configured such that at least a [[portion]]part of the graphical user interface is shaded or faded

based on the detection of the second gesture that begins in connection with the second edge and moves inward.

138. (Currently Amended) The electronic device of Claim 137, wherein the electronic device is configured such that a magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively increases as a function of an increase in a magnitude of the second gesture being detected.

139. (Currently Amended) The electronic device of Claim 138, wherein the electronic device is configured such that the magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture.

140. (Currently Amended) The electronic device of Claim 137, wherein the electronic device is configured such that a magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively increases as a function of an increase in a distance magnitude of the second gesture being detected.

141. (Currently Amended) The electronic device of Claim 137, wherein the electronic device is configured such that a magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively increases while detecting the second gesture moving inward.

142. (Currently Amended) The electronic device of Claim 141, wherein the electronic device is configured such that the magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively decreases as a function of detecting the second gesture moving outward.

143. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the electronic device is configured such that the one or more first menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the first operation includes performing a particular operation associated with the at least one of the one or more first menu items; and the second operation includes opening a contextual menu with one or more options associated with the at least one of the one or more first menu items;

the one or more second menu items include at least some of the application icons including a particular application icon associated with a particular application, where the third operation includes opening the particular application to display a particular application interface of the particular application instead of the home screen; and

hardware status indicia is displayed adjacent to the first edge.

144. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the first operation includes performing a particular operation associated with the at least one of the one or more first menu items; and the second operation includes opening a contextual menu with one or more options associated with the at least one of the one or more first menu items.

145. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the electronic device is configured such that the first menu and the second menu are displayed in the at least one other virtual display layer.

146. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages

associated with an application, and the second operation includes controlling at least one aspect of the application.

147. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured for:

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a second duration of contact on the at least one of the one or more second menu items,

in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, performing the third operation, and

in response to the second duration of contact on the at least one of the one or more second menu items being detected to surpass the threshold, performing a fourth operation.

148. (Previously Presented) The electronic device of Claim 147, wherein the electronic device is configured such that in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, the third operation is performed, in response to detection of a cessation of the second duration of contact.

149. (Previously Presented) The electronic device of Claim 147, wherein the electronic device is configured such that the one or more second menu items include a network interface menu item and a volume menu item; the third operation includes selecting the at least one of the one or more second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items.

150. (Previously Presented) The electronic device of Claim 147, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

151. (Previously Presented) The electronic device of Claim 150, wherein the electronic device is configured such that the second operation is performed in response to:

the first duration of contact on the particular application icon being detected to surpass the threshold, and

the first duration of contact being detected to include a slide gesture component after the first duration of contact on the particular application icon is detected to surpass the threshold.

152. (Previously Presented) The electronic device of Claim 150, wherein the electronic device is configured such that the one or more first menu items include only a subset of the application icons including the particular application icon.

153. (Previously Presented) The electronic device of Claim 150, wherein the electronic device is configured such that the one or more first menu items include only a subset of the plurality of application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

154. (Previously Presented) The electronic device of Claim 150, wherein the electronic device is configured such that the one or more first menu items include favorites of the application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

155. (Previously Presented) The electronic device of Claim 147, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items;

the one or more second menu items further include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages, and the second operation includes controlling presentation of the at least one message; and

hardware status indicia is displayed adjacent to the second edge.

156. (Currently Amended) The electronic device of Claim 147, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the first menu is at least partially translucent for viewing the graphical user interface thereunder, ~~at least a portion of the graphical user interface is blurred based on the detection of the first gesture that begins in connection with the first edge and moves inward, a magnitude of the blurring progressively increases when detecting the first gesture moving inward,~~ and the magnitude of the blurring progressively decreases as a function of detecting a change in the first gesture;

at least a part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward, a magnitude of the shading or fading of the at least part of the graphical user interface progressively increases when detecting the second gesture moving inward, and the magnitude of the shading or fading of the at least part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular

application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

157. (Previously Presented) The electronic device of Claim 156, wherein the electronic device is configured such that at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the second edge, by beginning near the second edge;

the second gesture begins in connection with the second edge, by beginning at the second edge;

the second gesture begins in connection with the second edge, by beginning near the second edge;

the second gesture begins in connection with the second edge, by beginning at the second edge;

the second duration of contact is part of the selection contact;

the second duration of contact is not part of the selection contact;

the second duration of contact is separate from the selection contact;

the selection contact includes the second duration of contact;

the first gesture begins in connection with the first edge and moves inward from the first edge;

the second gesture that begins in connection with the second edge and moves inward from the second edge;

the display includes a top edge and the first gesture or the second gesture moves inward by moving, at least in part, downward from the top edge;

the display includes a top edge and the first gesture moves inward by moving, at least in part, downward from the top edge, and the second gesture moves inward by not moving, at least in part, downward from the top edge;

the first gesture and the second gesture move inward by moving, at least in part, toward a central area of the touch screen;

the second menu is displayed as sliding in;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are not displayed as sliding in via different directions;

the first menu is displayed as sliding in from the first edge;

the second menu is displayed as appearing from the second edge;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the one or more second menu items include representations of active applications;

the one or more second menu items include thumbnails of applications in a multi-tasking environment;

the first operation and the second operation are related to the same function;

the selection contact includes a press gesture;

the selection contact includes a top gesture;

the selection contact includes a static gesture;

the selection contact includes a dynamic gesture;

the selection contact is separate from the second gesture;

the first duration of contact is separate from the first gesture;

the electronic device is configured such that the first menu and the second menu are displayed in the same at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in different at least one other virtual display layers;

the electronic device is configured such that the first menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the second menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in the at least one other virtual display layer;

each instance of the when includes an entire duration;

each instance of the when includes an entire display or contact duration;

each instance of the when includes at least a portion of a duration;

each instance of the when includes only a portion of a duration;

each instance of the when includes only a portion of a display or contact duration;

each instance of the when includes at least a portion of a display or contact duration;

each instance of the in response to, includes an immediate response to;

each instance of the in response to, includes a response after an intermediate operation;

each instance of the in response to, includes a response after a delay;

the third operation and the fourth operation are related to the same function;

the blurring includes at least one of: dimming, displaying as indistinct, displaying as vague, displaying as cloudy, displaying as obscured, or displaying as smeared;

the first gesture and the second gesture move inward in different directions;

the first gesture is detected to move inward by moving along a line that is perpendicular to the first edge;

the second gesture is detected to move inward by moving along a line that is perpendicular to the second edge;

only the first menu is displayed in the at least one other virtual display layer;

the first menu is displayed in the at least one other virtual display layer, and the second menu is not displayed in the at least one other virtual display layer;

only the second menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer, and the first menu is not displayed in the at least one other virtual display layer;

both the first menu and the second menu are displayed in the at least one other virtual display layer;

the shading includes at least one of: displaying as to suggest three-dimensionality, shadowing, or displaying as to include a varied degree of light and/or darkness;

the shading includes color shading;

the shading includes reducing a brightness;

the shading includes reducing a color brightness;

the shading includes moving towards black within a color space;

the shading includes incorporating less color;

the fading includes altering a level of disappearance;

the fading includes altering a transparency;

the fading includes altering a translucency;

the at least part is the same as the at least portion; or

the at least part is different from the at least portion.

158. (Currently Amended) A method, comprising:

at an electronic device including a display, a touch interface, and memory coupled to one or more processors:

displaying, utilizing the display, a graphical user interface;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items, and blurring at least a portion of the graphical user interface such that a magnitude of the blurring of the at least portion of the graphical user interface increases as a function of an increase in a magnitude of the first gesture being detected;

with the first menu being displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items, such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer;

with the second menu being displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation.

159. (Previously Presented) The method of Claim 158, wherein at least a portion of the at least one other virtual display layer is at least partially translucent such that at least a portion of the at least one virtual display layer is visible through the at least one other virtual display layer.

160. (Previously Presented) The method of Claim 159, wherein the at least portion of the at least one virtual display layer that is visible through the at least one other virtual display layer, includes at least a portion of a background image.

161. (Previously Presented) The method of Claim 158, wherein the first menu and the second menu are displayed in separate virtual display layers.

162. (Previously Presented) The method of Claim 158, wherein the graphical user interface includes a home screen, for choosing among a plurality of applications.

163. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include messages in a list, the first operation includes displaying a view of at least one of the messages, and the second operation includes opening the at least one message.

164. (Previously Presented) The method of Claim 158, wherein hardware status indicia is displayed adjacent to the first edge.

165. (Previously Presented) The method of Claim 158, wherein only one of the first menu or the second menu is capable of being displayed at a time.

166. (Previously Presented) The method of Claim 158, wherein at least one of the first menu or the second menu substantially fills the display.

167. (Previously Presented) The method of Claim 158, wherein indicia is displayed via the graphical user interface for prompting a user as to an accessibility of at least one of the first menu or the second menu.

168. (Previously Presented) The method of Claim 158, wherein the first menu is accessible via the first gesture; the second menu is accessible via the second gesture; at least one of the first or second operations is performed based on at least two different contact durations, in order to increase operation accessibility via the electronic device that includes a mobile device.

169. (Previously Presented) The method of Claim 158, wherein the first gesture and the second gesture are capable of being detected as moving inward in different directions.

170. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include a plurality of application-specific menu items for accessing different applications.

171. (Previously Presented) The method of Claim 158, wherein the one or more second menu items include a plurality of application-specific menu items for accessing different applications.

172. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include a plurality of application menu items for launching different applications.

173. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a deletion operation.

174. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a move operation.

175. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a menu item rearrange operation.

176. (Previously Presented) The method of Claim 158, wherein the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application.

177. (Previously Presented) The method of Claim 158, wherein the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the

home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

178. (Previously Presented) The method of Claim 177, wherein the second operation is performed in response to the first duration of contact on the at least one application menu item being detected to surpass the threshold, and in response to the first duration of contact being detected to include a slide gesture component.

179. (Previously Presented) The method of Claim 158, wherein the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display another particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

180. (Previously Presented) The method of Claim 179, wherein the second operation is performed in response to:

the first duration of contact on the at least one application menu item being detected to surpass the threshold, and

the first duration of contact being detected to include a slide gesture component subsequent to the first duration of contact on the at least one application menu item being detected to surpass the threshold.

181. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include at least one application menu item associated with a particular application for, in response to a detection of a selection thereof and the first duration of contact on the at least one

application menu item being detected to surpass the threshold, launching the particular application to display a particular application interface of the particular application in an overlying and scaled virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

182. (Previously Presented) The method of Claim 158, wherein, in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass the threshold, the first operation is performed, in response to detection of a cessation of the first duration of contact.

183. (Previously Presented) The method of Claim 158, wherein the first menu is at least partially translucent for viewing the graphical user interface thereunder.

184. (Previously Presented) The method of Claim 158, wherein the first menu is at least partially translucent for viewing the graphical user interface, including a home screen, thereunder.

185.-186. (Cancelled)

187. (Currently Amended) The method of Claim [[186]]158, wherein the magnitude of the blurring of the at least portion of the graphical user interface ~~progressively~~ decreases as a function of detecting a change in the first gesture.

188.-189. (Cancelled)

190. (Currently Amended) The method of Claim [[189]]158, wherein the magnitude of the blurring of the at least portion of the graphical user interface ~~progressively~~ decreases as a function of detecting the first gesture moving outward.

191. (Currently Amended) The method of Claim 158, wherein at least a [[portion]]part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward.

192. (Currently Amended) The method of Claim 191, wherein a magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively increases as a function of an increase in a magnitude of the second gesture being detected.

193. (Currently Amended) The method of Claim 192, wherein the magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture.

194. (Currently Amended) The method of Claim 191, wherein a magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively increases as a function of an increase in a distance magnitude of the second gesture being detected.

195. (Currently Amended) The method of Claim 191, wherein a magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively increases simultaneously with detecting the second gesture moving inward.

196. (Currently Amended) The method of Claim 195, wherein the magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively decreases as a function of detecting the second gesture moving outward.

197. (Previously Presented) The method of Claim 158, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the first operation includes

performing a particular operation associated with the at least one of the one or more first menu items; and the second operation includes opening a contextual menu with one or more options associated with the at least one of the one or more first menu items;

the one or more second menu items include at least some of the application icons including a particular application icon associated with a particular application, where the third operation includes opening the particular application to display a particular application interface of the particular application instead of the home screen; and

hardware status indicia is displayed adjacent to the first edge.

198. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the first operation includes performing a particular operation associated with the at least one of the one or more first menu items; and the second operation includes opening a contextual menu with one or more options associated with the at least one of the one or more first menu items.

199. (Previously Presented) The method of Claim 158, wherein the first menu and the second menu are displayed in the at least one other virtual display layer.

200. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages associated with an application, and the second operation includes controlling at least one aspect of the application.

201. (Previously Presented) The method of Claim 158, and further comprising:

with the second menu being displayed including the one or more second menu items:

detecting, utilizing the touch interface, a second duration of contact on the at least one of the one or more second menu items,

in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, performing the third operation, and

in response to the second duration of contact on the at least one of the one or more second menu items being detected to surpass the threshold, performing a fourth operation.

202. (Previously Presented) The method of Claim 201, wherein, in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, the third operation is performed, in response to detection of a cessation of the second duration of contact.

203. (Previously Presented) The method of Claim 201, wherein the one or more second menu items include a network interface menu item and a volume menu item; the third operation includes selecting the at least one of the one or more second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items.

204. (Previously Presented) The method of Claim 201, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching

the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

205. (Previously Presented) The method of Claim 204, wherein the second operation is performed in response to:

the first duration of contact on the particular application icon being detected to surpass the threshold, and

the first duration of contact being detected to include a slide gesture component and the first duration of contact on the particular application icon being detected to surpass the threshold.

206. (Previously Presented) The method of Claim 204, wherein the one or more first menu items include only a subset of the application icons including the particular application icon.

207. (Previously Presented) The method of Claim 204, wherein the one or more first menu items include only a subset of the plurality of application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

208. (Previously Presented) The method of Claim 204, wherein the one or more first menu items include favorites of the application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

209. (Previously Presented) The method of Claim 201, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items;

the one or more second menu items further include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages, and the second operation includes controlling presentation of the at least one message; and

hardware status indicia is displayed adjacent to the second edge.

210. (Currently Amended) The method of Claim 201, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the first menu is at least partially translucent for viewing the graphical user interface thereunder, ~~at least a portion of the graphical user interface is blurred based on the detection of the first~~

~~gesture that begins in connection with the first edge and moves inward, a magnitude of the blurring progressively increases with detecting the first gesture moving inward,~~ and the magnitude of the blurring ~~progressively~~ decreases as a function of detecting a change in the first gesture;

at least a part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward, a magnitude of the shading or fading of the at least part of the graphical user interface ~~progressively~~ increases with detecting the second gesture moving inward, and the magnitude of the shading or fading of the at least part of the graphical user interface ~~progressively~~ decreases as a function of detecting a change in the second gesture;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

211. (Previously Presented) The method of Claim 210, wherein at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the second edge, by beginning near the second edge;

the second gesture begins in connection with the second edge, by beginning at the second edge;

the second gesture begins in connection with the second edge, by beginning near the second edge;

the second gesture begins in connection with the second edge, by beginning at the second edge;

the second duration of contact is part of the selection contact;

the second duration of contact is not part of the selection contact;

the second duration of contact is separate from the selection contact;

the selection contact includes the second duration of contact;

the first gesture begins in connection with the first edge and moves inward from the first edge;

the second gesture that begins in connection with the second edge and moves inward from the second edge;

the display includes a top edge and the first gesture or the second gesture moves inward by moving, at least in part, downward from the top edge;

the display includes a top edge and the first gesture moves inward by moving, at least in part, downward from the top edge, and the second gesture moves inward by not moving, at least in part, downward from the top edge;

the first gesture and the second gesture move inward by moving, at least in part, toward a central area of the touch screen;

the second menu is displayed as sliding in;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are not displayed as sliding in via different directions;

the first menu is displayed as sliding in from the first edge;

the second menu is displayed as appearing from the second edge;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the one or more second menu items include representations of active applications;

the one or more second menu items include thumbnails of applications in a multi-tasking environment;

the first operation and the second operation are related to the same function;

the selection contact includes a press gesture;

the selection contact includes a top gesture;

the selection contact includes a static gesture;

the selection contact includes a dynamic gesture;

the selection contact is separate from the second gesture;

the first duration of contact is separate from the first gesture;

the first menu and the second menu are displayed in the same at least one other virtual display layer;

the first menu and the second menu are displayed in different at least one other virtual display layers;

the first menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer;

the first menu and the second menu are displayed in the at least one other virtual display layer;

each instance of the with includes an entire duration;

each instance of the with includes an entire display or contact duration;

each instance of the with includes at least a portion of a duration;

each instance of the with includes only a portion of a duration;

each instance of the with includes only a portion of a display or contact duration;

each instance of the with includes at least a portion of a display or contact duration;

each instance of the in response to, includes an immediate response to;

each instance of the in response to, includes a response after an intermediate operation;

the third operation and the fourth operation are related to the same function;

the blurring includes at least one of: dimming, displaying as indistinct, displaying as vague, displaying as cloudy, displaying as obscured, or displaying as smeared;

the first gesture and the second gesture move inward in different directions;

the first gesture is detected to move inward by moving along a line that is perpendicular to the first edge;

the second gesture is detected to move inward by moving along a line that is perpendicular to the second edge;

only the first menu is displayed in the at least one other virtual display layer;

the first menu is displayed in the at least one other virtual display layer, and the second menu is not displayed in the at least one other virtual display layer;

only the second menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer, and the first menu is not displayed in the at least one other virtual display layer;

both the first menu and the second menu are displayed in the at least one other virtual display layer;

the display, the touch interface, and the memory are directly coupled to the one or more processors;

the display, the touch interface, and the memory are indirectly coupled to the one or more processors;

each instance of the displaying, the detecting, and the performing include acts;

each instance of the displaying, the detecting, and the performing do not include steps;

the shading includes at least one of: displaying as to suggest three-dimensionality, shadowing, or displaying as to include a varied degree of light and/or darkness;

the shading includes color shading;

the shading includes reducing a brightness;

the shading includes reducing a color brightness;

the shading includes moving towards black within a color space;

the shading includes incorporating less color;

the fading includes altering a level of disappearance;

the fading includes altering a transparency;

the fading includes altering a translucency;

the at least part is the same as the at least portion; or

the at least part is different from the at least portion.

212. (New) The method of Claim 158, wherein the magnitude of the first gesture includes a distance magnitude.

213. (New) An electronic device, comprising:

a display;

a touch interface;

one or more processors;

memory; and

one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for:

displaying, utilizing the display, a graphical user interface;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items including a particular application icon;

when the first menu is displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation, where the second operation is performed in response to the first duration of contact on the particular application icon being detected to surpass the threshold, and the first duration of contact being detected to include a slide gesture component after the first duration of contact on the particular application icon is detected to surpass the threshold;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items;

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation;

wherein the electronic device is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer.

214. (New) The electronic device of Claim 213, wherein the electronic device is configured for:

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a second duration of contact on the at least one of the one or more second menu items,

in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, performing the third operation, and

in response to the second duration of contact on the at least one of the one or more second menu items being detected to surpass the threshold, performing a fourth operation.

215. (New) The electronic device of Claim 214, wherein the electronic device is configured such that in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, the third operation is performed, in response to detection of a cessation of the second duration of contact.

216. (New) The electronic device of Claim 214, wherein the electronic device is configured such that the one or more second menu items include a network interface menu item and a volume menu item; the third operation includes selecting the at least one of the one or more second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items.

217. (New) The electronic device of Claim 214, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

218. (New) The electronic device of Claim 217, wherein the electronic device is configured such that the one or more first menu items include only a subset of the application icons including the particular application icon.

219. (New) The electronic device of Claim 217, wherein the electronic device is configured such that the one or more first menu items include only a subset of the plurality of application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

220. (New) The electronic device of Claim 217, wherein the electronic device is configured such that the one or more first menu items include favorites of the application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

221. (New) The electronic device of Claim 214, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching

the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items;

the one or more second menu items further include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages, and the second operation includes controlling presentation of the at least one message; and

hardware status indicia is displayed adjacent to the second edge.

222. (New) The electronic device of Claim 214, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the first menu is at least partially translucent for viewing the graphical user interface thereunder, at least a portion of the graphical user interface is blurred based on the detection of the first gesture that begins in connection with the first edge and moves inward, a magnitude of the blurring progressively increases when detecting the first gesture moving inward, and the magnitude of the blurring progressively decreases as a function of detecting a change in the first gesture;

at least a part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward, a magnitude of the shading or fading of the at least part of the graphical user interface progressively increases

when detecting the second gesture moving inward, and the magnitude of the shading or fading of the at least part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

223. (New) The electronic device of Claim 222, wherein the electronic device is configured such that at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the second edge, by beginning near the second edge;

the second gesture begins in connection with the second edge, by beginning at the second edge;

the second gesture begins in connection with the second edge, by beginning near the second edge;

the second gesture begins in connection with the second edge, by beginning at the second edge;

the second duration of contact is part of the selection contact;

the second duration of contact is not part of the selection contact;

the second duration of contact is separate from the selection contact;

the selection contact includes the second duration of contact;

the first gesture begins in connection with the first edge and moves inward from the first edge;

the second gesture that begins in connection with the second edge and moves inward from the second edge;

the display includes a top edge and the first gesture or the second gesture moves inward by moving, at least in part, downward from the top edge;

the display includes a top edge and the first gesture moves inward by moving, at least in part, downward from the top edge, and the second gesture moves inward by not moving, at least in part, downward from the top edge;

the first gesture and the second gesture move inward by moving, at least in part, toward a central area of the touch screen;

the second menu is displayed as sliding in;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are not displayed as sliding in via different directions;

the first menu is displayed as sliding in from the first edge;

the second menu is displayed as appearing from the second edge;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the one or more second menu items include representations of active applications;

the one or more second menu items include thumbnails of applications in a multi-tasking environment;

the first operation and the second operation are related to the same function;

the selection contact includes a press gesture;

the selection contact includes a top gesture;

the selection contact includes a static gesture;

the selection contact includes a dynamic gesture;

the selection contact is separate from the second gesture;

the first duration of contact is separate from the first gesture;

the electronic device is configured such that the first menu and the second menu are displayed in the same at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in different at least one other virtual display layers;

the electronic device is configured such that the first menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the second menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in the at least one other virtual display layer;

each instance of the when includes an entire duration;

each instance of the when includes an entire display or contact duration;

each instance of the when includes at least a portion of a duration;

each instance of the when includes only a portion of a duration;

each instance of the when includes only a portion of a display or contact duration;

each instance of the when includes at least a portion of a display or contact duration;

each instance of the in response to, includes an immediate response to;

each instance of the in response to, includes a response after an intermediate operation;

each instance of the in response to, includes a response after a delay;

the third operation and the fourth operation are related to the same function;

the blurring includes at least one of: dimming, displaying as indistinct, displaying as vague, displaying as cloudy, displaying as obscured, or displaying as smeared;

the first gesture and the second gesture move inward in different directions;

the first gesture is detected to move inward by moving along a line that is perpendicular to the first edge;

the second gesture is detected to move inward by moving along a line that is perpendicular to the second edge;

only the first menu is displayed in the at least one other virtual display layer;

the first menu is displayed in the at least one other virtual display layer, and the second menu is not displayed in the at least one other virtual display layer;

only the second menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer, and the first menu is not displayed in the at least one other virtual display layer;

both the first menu and the second menu are displayed in the at least one other virtual display layer;

the shading includes at least one of: displaying as to suggest three-dimensionality, shadowing, or displaying as to include a varied degree of light and/or darkness;

the shading includes color shading;

the shading includes reducing a brightness;

the shading includes reducing a color brightness;

the shading includes moving towards black within a color space;

the shading includes incorporating less color;

the fading includes altering a level of disappearance;

the fading includes altering a transparency;

the fading includes altering a translucency;

the at least part is the same as the at least portion; or

the at least part is different from the at least portion.

224. (New) A method, comprising:

at an electronic device including a display, a touch interface, and memory coupled to one or more processors:

displaying, utilizing the display, a graphical user interface;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items with a particular application icon;

with the first menu being displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation, where the second operation is performed in response to the first

duration of contact on the particular application icon being detected to surpass the threshold, and the first duration of contact being detected to include a slide gesture component after the first duration of contact on the particular application icon is detected to surpass the threshold;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items, such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer;

with the second menu being displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation.

225. (New) The method of Claim 224, and further comprising:

with the second menu being displayed including the one or more second menu items:

detecting, utilizing the touch interface, a second duration of contact on the at least one of the one or more second menu items,

in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, performing the third operation, and

in response to the second duration of contact on the at least one of the one or more second menu items being detected to surpass the threshold, performing a fourth operation.

226. (New) The method of Claim 225, wherein, in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, the third operation is performed, in response to detection of a cessation of the second duration of contact.

227. (New) The method of Claim 225, wherein the one or more second menu items include a network interface menu item and a volume menu item; the third operation includes selecting the at least one of the one or more second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items.

228. (New) The method of Claim 225, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular

application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

229. (New) The method of Claim 228, wherein the one or more first menu items include only a subset of the application icons including the particular application icon.

230. (New) The method of Claim 228, wherein the one or more first menu items include only a subset of the plurality of application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

231. (New) The method of Claim 228, wherein the one or more first menu items include favorites of the application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

232. (New) The method of Claim 225, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching

the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items;

the one or more second menu items further include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages, and the second operation includes controlling presentation of the at least one message; and

hardware status indicia is displayed adjacent to the second edge.

233. (New) The method of Claim 225, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the first menu is at least partially translucent for viewing the graphical user interface thereunder, at least a portion of the graphical user interface is blurred based on the detection of the first gesture that begins in connection with the first edge and moves inward, a magnitude of the blurring progressively increases with detecting the first gesture moving inward, and the magnitude of the blurring progressively decreases as a function of detecting a change in the first gesture;

at least a part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward, a magnitude of the shading or fading of the at least part of the graphical user interface progressively increases with detecting the second gesture moving inward, and the magnitude of the shading or fading of

the at least part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

234. (New) The method of Claim 233, wherein at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the second edge, by beginning near the second edge;

the second gesture begins in connection with the second edge, by beginning at the second edge;

the second gesture begins in connection with the second edge, by beginning near the second edge;

the second gesture begins in connection with the second edge, by beginning at the second edge;

the second duration of contact is part of the selection contact;

the second duration of contact is not part of the selection contact;

the second duration of contact is separate from the selection contact;

the selection contact includes the second duration of contact;

the first gesture begins in connection with the first edge and moves inward from the first edge;

the second gesture that begins in connection with the second edge and moves inward from the second edge;

the display includes a top edge and the first gesture or the second gesture moves inward by moving, at least in part, downward from the top edge;

the display includes a top edge and the first gesture moves inward by moving, at least in part, downward from the top edge, and the second gesture moves inward by not moving, at least in part, downward from the top edge;

the first gesture and the second gesture move inward by moving, at least in part, toward a central area of the touch screen;

the second menu is displayed as sliding in;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are not displayed as sliding in via different directions;

the first menu is displayed as sliding in from the first edge;

the second menu is displayed as appearing from the second edge;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the one or more second menu items include representations of active applications;

the one or more second menu items include thumbnails of applications in a multi-tasking environment;

the first operation and the second operation are related to the same function;

the selection contact includes a press gesture;

the selection contact includes a top gesture;

the selection contact includes a static gesture;

the selection contact includes a dynamic gesture;

the selection contact is separate from the second gesture;

the first duration of contact is separate from the first gesture;

the first menu and the second menu are displayed in the same at least one other virtual display layer;

the first menu and the second menu are displayed in different at least one other virtual display layers;

the first menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer;

the first menu and the second menu are displayed in the at least one other virtual display layer;

each instance of the with includes an entire duration;

each instance of the with includes an entire display or contact duration;

each instance of the with includes at least a portion of a duration;

each instance of the with includes only a portion of a duration;

each instance of the with includes only a portion of a display or contact duration;

each instance of the with includes at least a portion of a display or contact duration;

each instance of the in response to, includes an immediate response to;

each instance of the in response to, includes a response after an intermediate operation;

the third operation and the fourth operation are related to the same function;

the blurring includes at least one of: dimming, displaying as indistinct, displaying as vague, displaying as cloudy, displaying as obscured, or displaying as smeared;

the first gesture and the second gesture move inward in different directions;

the first gesture is detected to move inward by moving along a line that is perpendicular to the first edge;

the second gesture is detected to move inward by moving along a line that is perpendicular to the second edge;

only the first menu is displayed in the at least one other virtual display layer;

the first menu is displayed in the at least one other virtual display layer, and the second menu is not displayed in the at least one other virtual display layer;

only the second menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer, and the first menu is not displayed in the at least one other virtual display layer;

both the first menu and the second menu are displayed in the at least one other virtual display layer;

the display, the touch interface, and the memory are directly coupled to the one or more processors;

the display, the touch interface, and the memory are indirectly coupled to the one or more processors;

each instance of the displaying, the detecting, and the performing include acts;

each instance of the displaying, the detecting, and the performing do not include steps;

the shading includes at least one of: displaying as to suggest three-dimensionality, shadowing, or displaying as to include a varied degree of light and/or darkness;

the shading includes color shading;

the shading includes reducing a brightness;

the shading includes reducing a color brightness;

the shading includes moving towards black within a color space;

the shading includes incorporating less color;

the fading includes altering a level of disappearance;

the fading includes altering a transparency;

the fading includes altering a translucency;

the at least part is the same as the at least portion; or

the at least part is different from the at least portion.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	Confirmation No.: 7650
MICHAEL S. SMITH	Examiner: XAVIER, ANTONIO J
Application No.: 16/169,961	Art Unit: 2623
File Date: 10-24-2018	Docket No.: SMITH070AG
Title: GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT	Date: 1/30/2020

PROPOSED AMENDMENT

Mail Stop Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

1.-103. (Cancelled)

104. (Currently Amended) An electronic device, comprising:

a display;

a touch interface;

one or more processors;

memory; and

one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for:

displaying, utilizing the display, a graphical user interface;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items, and blurring at least a portion of the graphical user interface such that a magnitude of the blurring of the at least portion of the graphical user interface progressively increases as a function of an increase in a magnitude of the first gesture being detected;

when the first menu is displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items;

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation;

wherein the electronic device is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer.

105. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that at least a portion of the at least one other virtual display layer is at least partially translucent such that at least a portion of the at least one virtual display layer is visible through the at least one other virtual display layer.

106. (Previously Presented) The electronic device of Claim 105, wherein the electronic device is configured such that the at least portion of the at least one virtual display layer that is visible through the at least one other virtual display layer, includes at least a portion of a background image.

107. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the first menu and the second menu are displayed in separate virtual display layers.

108. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the graphical user interface includes a home screen, for choosing among a plurality of applications.

109. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include messages in a list, the first operation includes displaying a view of at least one of the messages, and the second operation includes opening the at least one message.

110. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that hardware status indicia is displayed adjacent to the first edge.

111. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that only one of the first menu or the second menu is capable of being displayed at a time.

112. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that at least one of the first menu or the second menu substantially fills the display.

113. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that indicia is displayed via the graphical user interface for prompting a user as to an accessibility of at least one of the first menu or the second menu.

114. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the first menu is accessible via the first gesture; the second menu is accessible via the second gesture; at least one of the first or second operations is performed based on at least two different contact durations, in order to increase operation accessibility via the electronic device that includes a mobile device.

115. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the first gesture and the second gesture are capable of being detected as moving inward in different directions.

116. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include a plurality of application-specific menu items for accessing different applications.

117. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more second menu items include a plurality of application-specific menu items for accessing different applications.

118. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include a plurality of application menu items for launching different applications.

119. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a deletion operation.

120. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a move operation.

121. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a menu item rearrange operation.

122. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that, the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

123. (Previously Presented) The electronic device of Claim 122, wherein the electronic device is configured such that the second operation is performed in response to the first duration of contact on the at least one application menu item being detected to surpass the threshold, and in response to the first duration of contact being detected to include a slide gesture component.

124. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that, the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display another particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

125. (Previously Presented) The electronic device of Claim 124, wherein the electronic device is configured such that the second operation is performed in response to:

the first duration of contact on the at least one application menu item being detected to surpass the threshold, and

the first duration of contact being detected to include a slide gesture component after the first duration of contact on the at least one application menu item is detected to surpass the threshold.

126. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application for, in response to a detection of a selection thereof when the first duration of contact on the at least one application menu item is detected to surpass the threshold, launching the particular application to display a particular application interface of the particular application in an overlying and scaled virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

127. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass the threshold, the first operation is performed, in response to detection of a cessation of the first duration of contact.

128. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the first menu is at least partially translucent for viewing the graphical user interface thereunder.

129. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the first menu is at least partially translucent for viewing the graphical user interface, including a home screen, thereunder.

130. (Cancelled)

131. (Cancelled)

132. (Currently Amended) The electronic device of Claim [[131]]104, wherein the electronic device is configured such that the magnitude of the blurring of the at least portion of the graphical user interface progressively decreases as a function of detecting a change in the first gesture.

133.-135. (Cancelled)

136. (Currently Amended) The electronic device of Claim [[135]]104, wherein the electronic device is configured such that the magnitude of the blurring of the at least portion of the graphical user interface progressively decreases as a function of detecting the first gesture moving outward.

137. (Currently Amended) The electronic device of Claim 104, wherein the electronic device is configured such that at least a [[portion]]part of the graphical user interface is shaded or faded

based on the detection of the second gesture that begins in connection with the second edge and moves inward.

138. (Currently Amended) The electronic device of Claim 137, wherein the electronic device is configured such that a magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively increases as a function of an increase in a magnitude of the second gesture being detected.

139. (Currently Amended) The electronic device of Claim 138, wherein the electronic device is configured such that the magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture.

140. (Currently Amended) The electronic device of Claim 137, wherein the electronic device is configured such that a magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively increases as a function of an increase in a distance magnitude of the second gesture being detected.

141. (Currently Amended) The electronic device of Claim 137, wherein the electronic device is configured such that a magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively increases while detecting the second gesture moving inward.

142. (Currently Amended) The electronic device of Claim 141, wherein the electronic device is configured such that the magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively decreases as a function of detecting the second gesture moving outward.

143. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the electronic device is configured such that the one or more first menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the first operation includes performing a particular operation associated with the at least one of the one or more first menu items; and the second operation includes opening a contextual menu with one or more options associated with the at least one of the one or more first menu items;

the one or more second menu items include at least some of the application icons including a particular application icon associated with a particular application, where the third operation includes opening the particular application to display a particular application interface of the particular application instead of the home screen; and

hardware status indicia is displayed adjacent to the first edge.

144. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the first operation includes performing a particular operation associated with the at least one of the one or more first menu items; and the second operation includes opening a contextual menu with one or more options associated with the at least one of the one or more first menu items.

145. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the electronic device is configured such that the first menu and the second menu are displayed in the at least one other virtual display layer.

146. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages

associated with an application, and the second operation includes controlling at least one aspect of the application.

147. (Previously Presented) The electronic device of Claim 104, wherein the electronic device is configured for:

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a second duration of contact on the at least one of the one or more second menu items,

in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, performing the third operation, and

in response to the second duration of contact on the at least one of the one or more second menu items being detected to surpass the threshold, performing a fourth operation.

148. (Previously Presented) The electronic device of Claim 147, wherein the electronic device is configured such that in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, the third operation is performed, in response to detection of a cessation of the second duration of contact.

149. (Previously Presented) The electronic device of Claim 147, wherein the electronic device is configured such that the one or more second menu items include a network interface menu item and a volume menu item; the third operation includes selecting the at least one of the one or more second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items.

150. (Previously Presented) The electronic device of Claim 147, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

151. (Previously Presented) The electronic device of Claim 150, wherein the electronic device is configured such that the second operation is performed in response to:

the first duration of contact on the particular application icon being detected to surpass the threshold, and

the first duration of contact being detected to include a slide gesture component after the first duration of contact on the particular application icon is detected to surpass the threshold.

152. (Previously Presented) The electronic device of Claim 150, wherein the electronic device is configured such that the one or more first menu items include only a subset of the application icons including the particular application icon.

153. (Previously Presented) The electronic device of Claim 150, wherein the electronic device is configured such that the one or more first menu items include only a subset of the plurality of application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

154. (Previously Presented) The electronic device of Claim 150, wherein the electronic device is configured such that the one or more first menu items include favorites of the application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

155. (Previously Presented) The electronic device of Claim 147, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items;

the one or more second menu items further include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages, and the second operation includes controlling presentation of the at least one message; and

hardware status indicia is displayed adjacent to the second edge.

156. (Currently Amended) The electronic device of Claim 147, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the first menu is at least partially translucent for viewing the graphical user interface thereunder, ~~at least a portion of the graphical user interface is blurred based on the detection of the first gesture that begins in connection with the first edge and moves inward, a magnitude of the blurring progressively increases when detecting the first gesture moving inward,~~ and the magnitude of the blurring progressively decreases as a function of detecting a change in the first gesture;

at least a part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward, a magnitude of the shading or fading of the at least part of the graphical user interface progressively increases when detecting the second gesture moving inward, and the magnitude of the shading or fading of the at least part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular

application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

157. (Previously Presented) The electronic device of Claim 156, wherein the electronic device is configured such that at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the first edge, by beginning near the first edge;

the second gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the first edge, by beginning near the first edge;

the second gesture begins in connection with the first edge, by beginning at the first edge;

the second duration of contact is part of the selection contact;

the second duration of contact is not part of the selection contact;

the second duration of contact is separate from the selection contact;

the selection contact includes the second duration of contact;

the first gesture begins in connection with the first edge and moves inward from the first edge;

the second gesture that begins in connection with the second edge and moves inward from the second edge;

the display includes a top edge and the first gesture or the second gesture moves inward by moving, at least in part, downward from the top edge;

the display includes a top edge and the first gesture moves inward by moving, at least in part, downward from the top edge, and the second gesture moves inward by not moving, at least in part, downward from the top edge;

the first gesture and the second gesture move inward by moving, at least in part, toward a central area of the touch screen;

the second menu is displayed as sliding in;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are not displayed as sliding in via different directions;

the first menu is displayed as sliding in from the first edge;

the second menu is displayed as appearing from the second edge;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the one or more second menu items include representations of active applications;

the one or more second menu items include thumbnails of applications in a multi-tasking environment;

the first operation and the second operation are related to the same function;

the selection contact includes a press gesture;

the selection contact includes a top gesture;

the selection contact includes a static gesture;

the selection contact includes a dynamic gesture;

the selection contact is separate from the second gesture;

the first duration of contact is separate from the first gesture;

the electronic device is configured such that the first menu and the second menu are displayed in the same at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in different at least one other virtual display layers;

the electronic device is configured such that the first menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the second menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in the at least one other virtual display layer;

each instance of the when includes an entire duration;

each instance of the when includes an entire display or contact duration;

each instance of the when includes at least a portion of a duration;

each instance of the when includes only a portion of a duration;

each instance of the when includes only a portion of a display or contact duration;

each instance of the when includes at least a portion of a display or contact duration;

each instance of the in response to, includes an immediate response to;

each instance of the in response to, includes a response after an intermediate operation;

each instance of the in response to, includes a response after a delay;

the third operation and the fourth operation are related to the same function;

the blurring includes at least one of: dimming, displaying as indistinct, displaying as vague, displaying as cloudy, displaying as obscured, or displaying as smeared;

the first gesture and the second gesture move inward in different directions;

the first gesture and the second gesture do not move inward in different directions;

the first gesture and the second gesture do not move different directions;

the first gesture is detected to move inward by moving along a line that is perpendicular to the first edge;

the second gesture is detected to move inward by moving along a line that is perpendicular to the second edge;

only the first menu is displayed in the at least one other virtual display layer;

the first menu is displayed in the at least one other virtual display layer, and the second menu is not displayed in the at least one other virtual display layer;

only the second menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer, and the first menu is not displayed in the at least one other virtual display layer;

both the first menu and the second menu are displayed in the at least one other virtual display layer;

the shading includes at least one of: displaying as to suggest three-dimensionality, shadowing, or displaying as to include a varied degree of light and/or darkness;

the shading includes color shading;

the shading includes reducing a brightness;

the shading includes reducing a color brightness;

the shading includes moving towards black within a color space;

the shading includes incorporating less color;

the fading includes altering a level of disappearance;

the fading includes altering a transparency;

the fading includes altering a translucency;

the at least part is the same as the at least portion; or

the at least part is different from the at least portion.

158. (Currently Amended) A method, comprising:

at an electronic device including a display, a touch interface, and memory coupled to one or more processors:

displaying, utilizing the display, a graphical user interface;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items, and blurring at least a portion of the graphical user interface such that a magnitude of the blurring of the at least portion of the graphical user interface increases as a function of an increase in a magnitude of the first gesture being detected;

with the first menu being displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items, such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer;

with the second menu being displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation.

159. (Previously Presented) The method of Claim 158, wherein at least a portion of the at least one other virtual display layer is at least partially translucent such that at least a portion of the at least one virtual display layer is visible through the at least one other virtual display layer.

160. (Previously Presented) The method of Claim 159, wherein the at least portion of the at least one virtual display layer that is visible through the at least one other virtual display layer, includes at least a portion of a background image.

161. (Previously Presented) The method of Claim 158, wherein the first menu and the second menu are displayed in separate virtual display layers.

162. (Previously Presented) The method of Claim 158, wherein the graphical user interface includes a home screen, for choosing among a plurality of applications.

163. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include messages in a list, the first operation includes displaying a view of at least one of the messages, and the second operation includes opening the at least one message.

164. (Previously Presented) The method of Claim 158, wherein hardware status indicia is displayed adjacent to the first edge.

165. (Previously Presented) The method of Claim 158, wherein only one of the first menu or the second menu is capable of being displayed at a time.

166. (Previously Presented) The method of Claim 158, wherein at least one of the first menu or the second menu substantially fills the display.

167. (Previously Presented) The method of Claim 158, wherein indicia is displayed via the graphical user interface for prompting a user as to an accessibility of at least one of the first menu or the second menu.

168. (Previously Presented) The method of Claim 158, wherein the first menu is accessible via the first gesture; the second menu is accessible via the second gesture; at least one of the first or second operations is performed based on at least two different contact durations, in order to increase operation accessibility via the electronic device that includes a mobile device.

169. (Previously Presented) The method of Claim 158, wherein the first gesture and the second gesture are capable of being detected as moving inward in different directions.

170. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include a plurality of application-specific menu items for accessing different applications.

171. (Previously Presented) The method of Claim 158, wherein the one or more second menu items include a plurality of application-specific menu items for accessing different applications.

172. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include a plurality of application menu items for launching different applications.

173. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a deletion operation.

174. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a move operation.

175. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a menu item rearrange operation.

176. (Previously Presented) The method of Claim 158, wherein the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application.

177. (Previously Presented) The method of Claim 158, wherein the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first

menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

178. (Previously Presented) The method of Claim 177, wherein the second operation is performed in response to the first duration of contact on the at least one application menu item being detected to surpass the threshold, and in response to the first duration of contact being detected to include a slide gesture component.

179. (Previously Presented) The method of Claim 158, wherein the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display another particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

180. (Previously Presented) The method of Claim 179, wherein the second operation is performed in response to:

the first duration of contact on the at least one application menu item being detected to surpass the threshold, and

the first duration of contact being detected to include a slide gesture component subsequent to the first duration of contact on the at least one application menu item being detected to surpass the threshold.

181. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include at least one application menu item associated with a particular application for, in response to a detection of a selection thereof and the first duration of contact on the at least one application menu item being detected to surpass the threshold, launching the particular application to display a particular application interface of the particular application in an overlying and scaled virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

182. (Previously Presented) The method of Claim 158, wherein, in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass the threshold, the first operation is performed, in response to detection of a cessation of the first duration of contact.

183. (Previously Presented) The method of Claim 158, wherein the first menu is at least partially translucent for viewing the graphical user interface thereunder.

184. (Previously Presented) The method of Claim 158, wherein the first menu is at least partially translucent for viewing the graphical user interface, including a home screen, thereunder.

185.-186. (Cancelled)

187. (Currently Amended) The method of Claim [[186]]158, wherein the magnitude of the blurring of the at least portion of the graphical user interface ~~progressively~~ decreases as a function of detecting a change in the first gesture.

188.-189. (Cancelled)

190. (Currently Amended) The method of Claim [[189]]158, wherein the magnitude of the blurring of the at least portion of the graphical user interface ~~progressively~~ decreases as a function of detecting the first gesture moving outward.

191. (Currently Amended) The method of Claim 158, wherein at least a [[portion]]part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward.

192. (Currently Amended) The method of Claim 191, wherein a magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively increases as a function of an increase in a magnitude of the second gesture being detected.

193. (Currently Amended) The method of Claim 192, wherein the magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture.

194. (Currently Amended) The method of Claim 191, wherein a magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively increases as a function of an increase in a distance magnitude of the second gesture being detected.

195. (Currently Amended) The method of Claim 191, wherein a magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively increases simultaneously with detecting the second gesture moving inward.

196. (Currently Amended) The method of Claim 195, wherein the magnitude of the shading or fading of the at least [[portion]]part of the graphical user interface progressively decreases as a function of detecting the second gesture moving outward.

197. (Previously Presented) The method of Claim 158, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the first operation includes performing a particular operation associated with the at least one of the one or more first menu items; and the second operation includes opening a contextual menu with one or more options associated with the at least one of the one or more first menu items;

the one or more second menu items include at least some of the application icons including a particular application icon associated with a particular application, where the third operation includes opening the particular application to display a particular application interface of the particular application instead of the home screen; and

hardware status indicia is displayed adjacent to the first edge.

198. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the first operation includes performing a particular operation associated with the at least one of the one or more first menu items; and the second operation includes opening a contextual menu with one or more options associated with the at least one of the one or more first menu items.

199. (Previously Presented) The method of Claim 158, wherein the first menu and the second menu are displayed in the at least one other virtual display layer.

200. (Previously Presented) The method of Claim 158, wherein the one or more first menu items include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages associated with an application, and the second operation includes controlling at least one aspect of the application.

201. (Previously Presented) The method of Claim 158, and further comprising:

with the second menu being displayed including the one or more second menu items:

detecting, utilizing the touch interface, a second duration of contact on the at least one of the one or more second menu items,

in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, performing the third operation, and

in response to the second duration of contact on the at least one of the one or more second menu items being detected to surpass the threshold, performing a fourth operation.

202. (Previously Presented) The method of Claim 201, wherein, in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, the third operation is performed, in response to detection of a cessation of the second duration of contact.

203. (Previously Presented) The method of Claim 201, wherein the one or more second menu items include a network interface menu item and a volume menu item; the third operation includes selecting the at least one of the one or more second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items.

204. (Previously Presented) The method of Claim 201, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

205. (Previously Presented) The method of Claim 204, wherein the second operation is performed in response to:

the first duration of contact on the particular application icon being detected to surpass the threshold, and

the first duration of contact being detected to include a slide gesture component and the first duration of contact on the particular application icon being detected to surpass the threshold.

206. (Previously Presented) The method of Claim 204, wherein the one or more first menu items include only a subset of the application icons including the particular application icon.

207. (Previously Presented) The method of Claim 204, wherein the one or more first menu items include only a subset of the plurality of application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

208. (Previously Presented) The method of Claim 204, wherein the one or more first menu items include favorites of the application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

209. (Previously Presented) The method of Claim 201, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items;

the one or more second menu items further include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages, and the second operation includes controlling presentation of the at least one message; and

hardware status indicia is displayed adjacent to the second edge.

210. (Currently Amended) The method of Claim 201, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the first menu is at least partially translucent for viewing the graphical user interface thereunder, ~~at least a portion of the graphical user interface is blurred based on the detection of the first gesture that begins in connection with the first edge and moves inward, a magnitude of the blurring progressively increases with detecting the first gesture moving inward,~~ and the magnitude of the blurring ~~progressively~~ decreases as a function of detecting a change in the first gesture;

at least a part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward, a magnitude of the shading or fading of the at least part of the graphical user interface ~~progressively~~ increases with detecting the second gesture moving inward, and the magnitude of the shading or fading of the at least part of the graphical user interface ~~progressively~~ decreases as a function of detecting a change in the second gesture;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

211. (Previously Presented) The method of Claim 210, wherein at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the first edge, by beginning near the first edge;

the second gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the first edge, by beginning near the first edge;

the second gesture begins in connection with the first edge, by beginning at the first edge;

the second duration of contact is part of the selection contact;

the second duration of contact is not part of the selection contact;

the second duration of contact is separate from the selection contact;

the selection contact includes the second duration of contact;

the first gesture begins in connection with the first edge and moves inward from the first edge;

the second gesture that begins in connection with the second edge and moves inward from the second edge;

the display includes a top edge and the first gesture or the second gesture moves inward by moving, at least in part, downward from the top edge;

the display includes a top edge and the first gesture moves inward by moving, at least in part, downward from the top edge, and the second gesture moves inward by not moving, at least in part, downward from the top edge;

the first gesture and the second gesture move inward by moving, at least in part, toward a central area of the touch screen;

the second menu is displayed as sliding in;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are not displayed as sliding in via different directions;

the first menu is displayed as sliding in from the first edge;

the second menu is displayed as appearing from the second edge;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the one or more second menu items include representations of active applications;

the one or more second menu items include thumbnails of applications in a multi-tasking environment;

the first operation and the second operation are related to the same function;

the selection contact includes a press gesture;

the selection contact includes a top gesture;

the selection contact includes a static gesture;

the selection contact includes a dynamic gesture;

the selection contact is separate from the second gesture;

the first duration of contact is separate from the first gesture;

the first menu and the second menu are displayed in the same at least one other virtual display layer;

the first menu and the second menu are displayed in different at least one other virtual display layers;

the first menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer;

the first menu and the second menu are displayed in the at least one other virtual display layer;

each instance of the with includes an entire duration;

each instance of the with includes an entire display or contact duration;

each instance of the with includes at least a portion of a duration;

each instance of the with includes only a portion of a duration;

each instance of the with includes only a portion of a display or contact duration;

each instance of the with includes at least a portion of a display or contact duration;

each instance of the in response to, includes an immediate response to;

each instance of the in response to, includes a response after an intermediate operation;

the third operation and the fourth operation are related to the same function;

the blurring includes at least one of: dimming, displaying as indistinct, displaying as vague, displaying as cloudy, displaying as obscured, or displaying as smeared;

the first gesture and the second gesture move inward in different directions;

the first gesture and the second gesture do not move inward in different directions;

the first gesture and the second gesture do not move different directions;

the first gesture is detected to move inward by moving along a line that is perpendicular to the first edge;

the second gesture is detected to move inward by moving along a line that is perpendicular to the second edge;

only the first menu is displayed in the at least one other virtual display layer;

the first menu is displayed in the at least one other virtual display layer, and the second menu is not displayed in the at least one other virtual display layer;

only the second menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer, and the first menu is not displayed in the at least one other virtual display layer;

both the first menu and the second menu are displayed in the at least one other virtual display layer;

the display, the touch interface, and the memory are directly coupled to the one or more processors;

the display, the touch interface, and the memory are indirectly coupled to the one or more processors;

each instance of the displaying, the detecting, and the performing include acts;

each instance of the displaying, the detecting, and the performing do not include steps;

the shading includes at least one of: displaying as to suggest three-dimensionality, shadowing, or displaying as to include a varied degree of light and/or darkness;

the shading includes color shading;

the shading includes reducing a brightness;

the shading includes reducing a color brightness;

the shading includes moving towards black within a color space;

the shading includes incorporating less color;

the fading includes altering a level of disappearance;

the fading includes altering a transparency;

the fading includes altering a translucency;

the at least part is the same as the at least portion; or

the at least part is different from the at least portion.

212. (New) The method of Claim 158, wherein the magnitude of the first gesture includes a distance magnitude.

213. (New) An electronic device, comprising:

a display;

a touch interface;

one or more processors;

memory; and

one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for:

displaying, utilizing the display, a graphical user interface;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items including a particular application icon;

when the first menu is displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation, where the second operation is performed in response to the first

duration of contact on the particular application icon being detected to surpass the threshold, and the first duration of contact being detected to include a slide gesture component after the first duration of contact on the particular application icon is detected to surpass the threshold;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items;

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation;

wherein the electronic device is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer.

214. (New) The electronic device of Claim 213, wherein the electronic device is configured for:

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a second duration of contact on the at least one of the one or more second menu items,

in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, performing the third operation, and

in response to the second duration of contact on the at least one of the one or more second menu items being detected to surpass the threshold, performing a fourth operation.

215. (New) The electronic device of Claim 214, wherein the electronic device is configured such that in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, the third operation is performed, in response to detection of a cessation of the second duration of contact.

216. (New) The electronic device of Claim 214, wherein the electronic device is configured such that the one or more second menu items include a network interface menu item and a volume menu item; the third operation includes selecting the at least one of the one or more second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items.

217. (New) The electronic device of Claim 214, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the

particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

218. (New) The electronic device of Claim 217, wherein the electronic device is configured such that the one or more first menu items include only a subset of the application icons including the particular application icon.

219. (New) The electronic device of Claim 217, wherein the electronic device is configured such that the one or more first menu items include only a subset of the plurality of application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

220. (New) The electronic device of Claim 217, wherein the electronic device is configured such that the one or more first menu items include favorites of the application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

221. (New) The electronic device of Claim 214, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items;

the one or more second menu items further include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages, and the second operation includes controlling presentation of the at least one message; and

hardware status indicia is displayed adjacent to the second edge.

222. (New) The electronic device of Claim 214, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the first menu is at least partially translucent for viewing the graphical user interface thereunder, at least a portion of the graphical user interface is blurred based on the detection of the first gesture that begins in connection with the first edge and moves inward, a magnitude of the blurring progressively increases when detecting the first gesture moving inward, and the

magnitude of the blurring progressively decreases as a function of detecting a change in the first gesture;

at least a part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward, a magnitude of the shading or fading of the at least part of the graphical user interface progressively increases when detecting the second gesture moving inward, and the magnitude of the shading or fading of the at least part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

223. (New) The electronic device of Claim 222, wherein the electronic device is configured such that at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the first edge, by beginning near the first edge;

the second gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the first edge, by beginning near the first edge;

the second gesture begins in connection with the first edge, by beginning at the first edge;

the second duration of contact is part of the selection contact;

the second duration of contact is not part of the selection contact;

the second duration of contact is separate from the selection contact;

the selection contact includes the second duration of contact;

the first gesture begins in connection with the first edge and moves inward from the first edge;

the second gesture that begins in connection with the second edge and moves inward from the second edge;

the display includes a top edge and the first gesture or the second gesture moves inward by moving, at least in part, downward from the top edge;

the display includes a top edge and the first gesture moves inward by moving, at least in part, downward from the top edge, and the second gesture moves inward by not moving, at least in part, downward from the top edge;

the first gesture and the second gesture move inward by moving, at least in part, toward a central area of the touch screen;

the second menu is displayed as sliding in;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are not displayed as sliding in via different directions;

the first menu is displayed as sliding in from the first edge;

the second menu is displayed as appearing from the second edge;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the one or more second menu items include representations of active applications;

the one or more second menu items include thumbnails of applications in a multi-tasking environment;

the first operation and the second operation are related to the same function;

the selection contact includes a press gesture;

the selection contact includes a top gesture;

the selection contact includes a static gesture;

the selection contact includes a dynamic gesture;

the selection contact is separate from the second gesture;

the first duration of contact is separate from the first gesture;

the electronic device is configured such that the first menu and the second menu are displayed in the same at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in different at least one other virtual display layers;

the electronic device is configured such that the first menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the second menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in the at least one other virtual display layer;

each instance of the when includes an entire duration;

each instance of the when includes an entire display or contact duration;

each instance of the when includes at least a portion of a duration;

each instance of the when includes only a portion of a duration;

each instance of the when includes only a portion of a display or contact duration;

each instance of the when includes at least a portion of a display or contact duration;

each instance of the in response to, includes an immediate response to;

each instance of the in response to, includes a response after an intermediate operation;

each instance of the in response to, includes a response after a delay;

the third operation and the fourth operation are related to the same function;

the blurring includes at least one of: dimming, displaying as indistinct, displaying as vague, displaying as cloudy, displaying as obscured, or displaying as smeared;

the first gesture and the second gesture move inward in different directions;

the first gesture and the second gesture do not move inward in different directions;

the first gesture and the second gesture do not move different directions;

the first gesture is detected to move inward by moving along a line that is perpendicular to the first edge;

the second gesture is detected to move inward by moving along a line that is perpendicular to the second edge;

only the first menu is displayed in the at least one other virtual display layer;

the first menu is displayed in the at least one other virtual display layer, and the second menu is not displayed in the at least one other virtual display layer;

only the second menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer, and the first menu is not displayed in the at least one other virtual display layer;

both the first menu and the second menu are displayed in the at least one other virtual display layer;

the shading includes at least one of: displaying as to suggest three-dimensionality, shadowing, or displaying as to include a varied degree of light and/or darkness;

the shading includes color shading;

the shading includes reducing a brightness;

the shading includes reducing a color brightness;

the shading includes moving towards black within a color space;

the shading includes incorporating less color;

the fading includes altering a level of disappearance;

the fading includes altering a transparency;

the fading includes altering a translucency;

the at least part is the same as the at least portion; or

the at least part is different from the at least portion.

224. (New) A method, comprising:

at an electronic device including a display, a touch interface, and memory coupled to one or more processors:

displaying, utilizing the display, a graphical user interface;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items with a particular application icon;

with the first menu being displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation, where the second operation is performed in response to the first duration of contact on the particular application icon being detected to surpass the threshold, and the first duration of contact being detected to include a slide gesture component after the first duration of contact on the particular application icon is detected to surpass the threshold;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items, such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer;

with the second menu being displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation.

225. (New) The method of Claim 224, and further comprising:

with the second menu being displayed including the one or more second menu items:

detecting, utilizing the touch interface, a second duration of contact on the at least one of the one or more second menu items,

in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, performing the third operation, and

in response to the second duration of contact on the at least one of the one or more second menu items being detected to surpass the threshold, performing a fourth operation.

226. (New) The method of Claim 225, wherein, in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, the third operation is performed, in response to detection of a cessation of the second duration of contact.

227. (New) The method of Claim 225, wherein the one or more second menu items include a network interface menu item and a volume menu item; the third operation includes selecting the at least one of the one or more second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items.

228. (New) The method of Claim 225, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

229. (New) The method of Claim 228, wherein the one or more first menu items include only a subset of the application icons including the particular application icon.

230. (New) The method of Claim 228, wherein the one or more first menu items include only a subset of the plurality of application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

231. (New) The method of Claim 228, wherein the one or more first menu items include favorites of the application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

232. (New) The method of Claim 225, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items;

the one or more second menu items further include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages, and the second operation includes controlling presentation of the at least one message; and

hardware status indicia is displayed adjacent to the second edge.

233. (New) The method of Claim 225, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the first menu is at least partially translucent for viewing the graphical user interface thereunder, at least a portion of the graphical user interface is blurred based on the detection of the first gesture that begins in connection with the first edge and moves inward, a magnitude of the

blurring progressively increases with detecting the first gesture moving inward, and the magnitude of the blurring progressively decreases as a function of detecting a change in the first gesture;

at least a part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward, a magnitude of the shading or fading of the at least part of the graphical user interface progressively increases with detecting the second gesture moving inward, and the magnitude of the shading or fading of the at least part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture;

the one or more first menu items include at least some of the application icons including the particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

234. (New) The method of Claim 233, wherein at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the first edge, by beginning near the first edge;

the second gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the first edge, by beginning near the first edge;

the second gesture begins in connection with the first edge, by beginning at the first edge;

the second duration of contact is part of the selection contact;

the second duration of contact is not part of the selection contact;

the second duration of contact is separate from the selection contact;

the selection contact includes the second duration of contact;

the first gesture begins in connection with the first edge and moves inward from the first edge;

the second gesture that begins in connection with the second edge and moves inward from the second edge;

the display includes a top edge and the first gesture or the second gesture moves inward by moving, at least in part, downward from the top edge;

the display includes a top edge and the first gesture moves inward by moving, at least in part, downward from the top edge, and the second gesture moves inward by not moving, at least in part, downward from the top edge;

the first gesture and the second gesture move inward by moving, at least in part, toward a central area of the touch screen;

the second menu is displayed as sliding in;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are not displayed as sliding in via different directions;

the first menu is displayed as sliding in from the first edge;

the second menu is displayed as appearing from the second edge;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the one or more second menu items include representations of active applications;

the one or more second menu items include thumbnails of applications in a multi-tasking environment;

the first operation and the second operation are related to the same function;

the selection contact includes a press gesture;

the selection contact includes a top gesture;

the selection contact includes a static gesture;

the selection contact includes a dynamic gesture;

the selection contact is separate from the second gesture;

the first duration of contact is separate from the first gesture;

the first menu and the second menu are displayed in the same at least one other virtual display layer;

the first menu and the second menu are displayed in different at least one other virtual display layers;

the first menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer;

the first menu and the second menu are displayed in the at least one other virtual display layer;

each instance of the with includes an entire duration;

each instance of the with includes an entire display or contact duration;

each instance of the with includes at least a portion of a duration;

each instance of the with includes only a portion of a duration;

each instance of the with includes only a portion of a display or contact duration;

each instance of the with includes at least a portion of a display or contact duration;

each instance of the in response to, includes an immediate response to;

each instance of the in response to, includes a response after an intermediate operation;

the third operation and the fourth operation are related to the same function;

the blurring includes at least one of: dimming, displaying as indistinct, displaying as vague, displaying as cloudy, displaying as obscured, or displaying as smeared;

the first gesture and the second gesture move inward in different directions;

the first gesture and the second gesture do not move inward in different directions;

the first gesture and the second gesture do not move different directions;

the first gesture is detected to move inward by moving along a line that is perpendicular to the first edge;

the second gesture is detected to move inward by moving along a line that is perpendicular to the second edge;

only the first menu is displayed in the at least one other virtual display layer;

the first menu is displayed in the at least one other virtual display layer, and the second menu is not displayed in the at least one other virtual display layer;

only the second menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer, and the first menu is not displayed in the at least one other virtual display layer;

both the first menu and the second menu are displayed in the at least one other virtual display layer;

the display, the touch interface, and the memory are directly coupled to the one or more processors;

the display, the touch interface, and the memory are indirectly coupled to the one or more processors;

each instance of the displaying, the detecting, and the performing include acts;

each instance of the displaying, the detecting, and the performing do not include steps;

the shading includes at least one of: displaying as to suggest three-dimensionality, shadowing, or displaying as to include a varied degree of light and/or darkness;

the shading includes color shading;

the shading includes reducing a brightness;

the shading includes reducing a color brightness;

the shading includes moving towards black within a color space;

the shading includes incorporating less color;

the fading includes altering a level of disappearance;

the fading includes altering a transparency;

the fading includes altering a translucency;

the at least part is the same as the at least portion; or

the at least part is different from the at least portion.

Doc Code: DIST.E.FILE Document Description: Electronic Terminal Disclaimer - Filed	PTO/SB/26 U.S. Patent and Trademark Office Department of Commerce

Electronic Petition Request	**TERMINAL DISCLAIMER TO OBVIATE A DOUBLE PATENTING REJECTION OVER A "PRIOR" PATENT**
Application Number	16169961
Filing Date	24-Oct-2018
First Named Inventor	Michael Smith
Attorney Docket Number	SMITH070AG
Title of Invention	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT

☒ Filing of terminal disclaimer does not obviate requirement for response under 37 CFR 1.111 to outstanding Office Action

☒ This electronic Terminal Disclaimer is not being used for a Joint Research Agreement.

Owner	Percent Interest
P4TENTS1, LLC	100%

The owner(s) with percent interest listed above in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application which would extend beyond the expiration date of the full statutory term of prior patent number(s)

10275086

10133397

10222893

10120480

10365758

10275087

10222895

10222894

10203794

10162448

10156921

10146353

10209809

10209808

10209807

10209806

10222892

as the term of said prior patent is presently shortened by any terminal disclaimer. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and the prior patent are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.

In making the above disclaimer, the owner does not disclaim the terminal part of the term of any patent granted on the instant application that would extend to the expiration date of the full statutory term of the prior patent, "as the term of said prior patent is presently shortened by any terminal disclaimer," in the event that said prior patent later:
- expires for failure to pay a maintenance fee;
- is held unenforceable;
- is found invalid by a court of competent jurisdiction;
- is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321;
- has all claims canceled by a reexamination certificate;
- is reissued; or
- is in any manner terminated prior to the expiration of its full statutory term as presently shortened by any terminal disclaimer.

(●) Terminal disclaimer fee under 37 CFR 1.20(d) is included with Electronic Terminal Disclaimer request.

( ) I certify, in accordance with 37 CFR 1.4(d)(4), that the terminal disclaimer fee under 37 CFR 1.20(d) required for this terminal disclaimer has already been paid in the above-identified application.

Applicant claims the following fee status:

(●) Small Entity

( ) Micro Entity

( ) Regular Undiscounted

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

THIS PORTION MUST BE COMPLETED BY THE SIGNATORY OR SIGNATORIES

I certify, in accordance with 37 CFR 1.4(d)(4) that I am:

(●) An attorney or agent registered to practice before the Patent and Trademark Office who is of record in this application

Registration Number 44580

( ) A sole inventor

( ) A joint inventor; I certify that I am authorized to sign this submission on behalf of all of the inventors as evidenced by the power of attorney in the application

( ) A joint inventor; all of whom are signing this request

Signature	/Patrick Caldwell/

Name	Patrick Caldwell

*Statement under 37 CFR 3.73(b) is required if terminal disclaimer is signed by the assignee (owner).
Form PTO/SB/96 may be used for making this certification. See MPEP § 324.

Electronic Patent Application Fee Transmittal

Application Number:	16169961
Filing Date:	24-Oct-2018
Title of Invention:	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT
First Named Inventor/Applicant Name:	Michael S. Smith
Filer:	Patrick Edgar Caldwell
Attorney Docket Number:	SMITH070AG

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
STATUTORY OR TERMINAL DISCLAIMER	2814	1	160	160
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
			Total in USD ($)	**160**

Doc Code: DISQ.E.FILE
Document Description: Electronic Terminal Disclaimer – Approved

Application No.: 16169961

Filing Date: 24-Oct-2018

Applicant/Patent under Reexamination: Smith

Electronic Terminal Disclaimer filed on January 31, 2020

☒ APPROVED

This patent is subject to a terminal disclaimer

☐ DISAPPROVED

Approved/Disapproved by: Electronic Terminal Disclaimer automatically approved by EFS-Web

U.S. Patent and Trademark Office

Electronic Acknowledgement Receipt	
EFS ID:	38467160
Application Number:	16169961
International Application Number:	
Confirmation Number:	7650
Title of Invention:	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT
First Named Inventor/Applicant Name:	Michael S. Smith
Customer Number:	92045
Filer:	Patrick Edgar Caldwell
Filer Authorized By:	
Attorney Docket Number:	SMITH070AG
Receipt Date:	31-JAN-2020
Filing Date:	24-OCT-2018
Time Stamp:	23:50:49
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$160
RAM confirmation Number	E20201UN50466798
Deposit Account	
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Terminal Disclaimer-Filed (Electronic)	eTerminal-Disclaimer.pdf	39718 1d985cb1f55a8b2604172b209e0df72470d24f9a	no	3
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30361 b67d4bf5c4c68dd0ea662cb2d52d7022cdb70a8	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	70079		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.
National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.
New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 16/169,961	Filing Date 10/24/2018	☐ To be Mailed

ENTITY: ☐ LARGE ☑ SMALL ☐ MICRO

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA		RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A		N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A		N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*		x $50 =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*		x $230 =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).				
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))					
* If the difference in column 1 is less than zero, enter "0" in column 2.				TOTAL	

APPLICATION AS AMENDED - PART II

		(Column 1)		(Column 2)	(Column 3)			
AMENDMENT	01/03/2020	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 109	Minus	** 56	= 53		x $50 =	2650
	Independent (37 CFR 1.16(h))	* 3	Minus	*** 3	= 0		x $230 =	0
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	2650

		(Column 1)		(Column 2)	(Column 3)			
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=		x $0 =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=		x $0 =	
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.	LIE
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".	/TRINA RIDDICK/
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".	
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.	

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Doc code: RCEX
Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL
(Submitted Only via EFS-Web)

Application Number	16/169,961	Filing Date	2018-10-24	Docket Number (if applicable)	SMITH070AG	Art Unit	2623
First Named Inventor	Michael S. Smith			Examiner Name	Antonio J XAVIER		

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.
Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV

SUBMISSION REQUIRED UNDER 37 CFR 1.114

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

- ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
- ☐ Other _____

☒ Enclosed

- ☒ Amendment/Reply
- ☐ Information Disclosure Statement (IDS)
- ☐ Affidavit(s)/ Declaration(s)
- ☐ Other _____

MISCELLANEOUS

☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months _____ (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

☐ Other _____

FEES

☒ **The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.**
The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to Deposit Account No 504964

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

X Patent Practitioner Signature

Applicant Signature

PTO/SB/30EFS (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Signature of Registered U.S. Patent Practitioner			
Signature	/Patrick Caldwell/	Date (YYYY-MM-DD)	2020-01-03
Name	Patrick Caldwell	Registration Number	44580

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

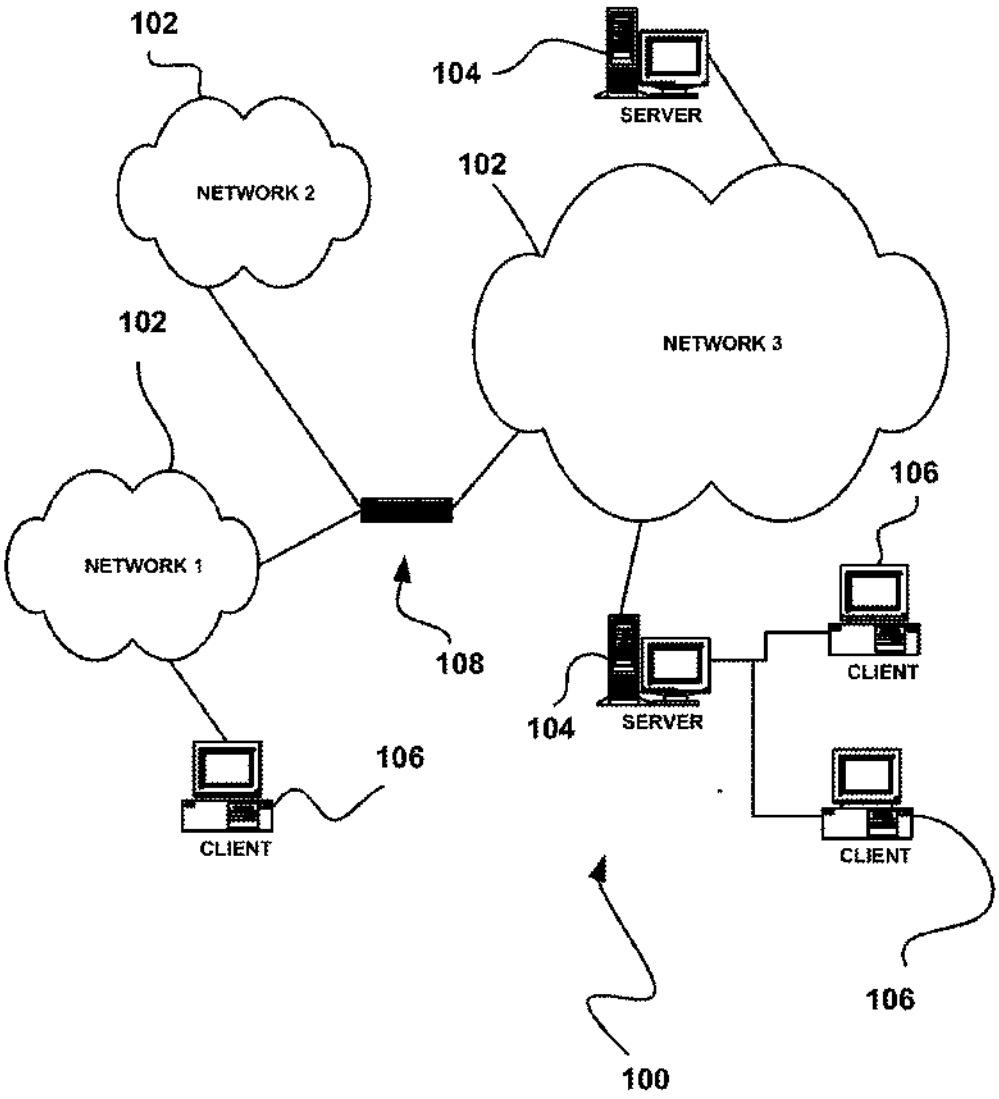

102
104
SERVER
NETWORK 2
102
NETWORK 3
102
106
NETWORK 1
108
CLIENT
104
SERVER
106
CLIENT
CLIENT
106
100

FIGURE 1

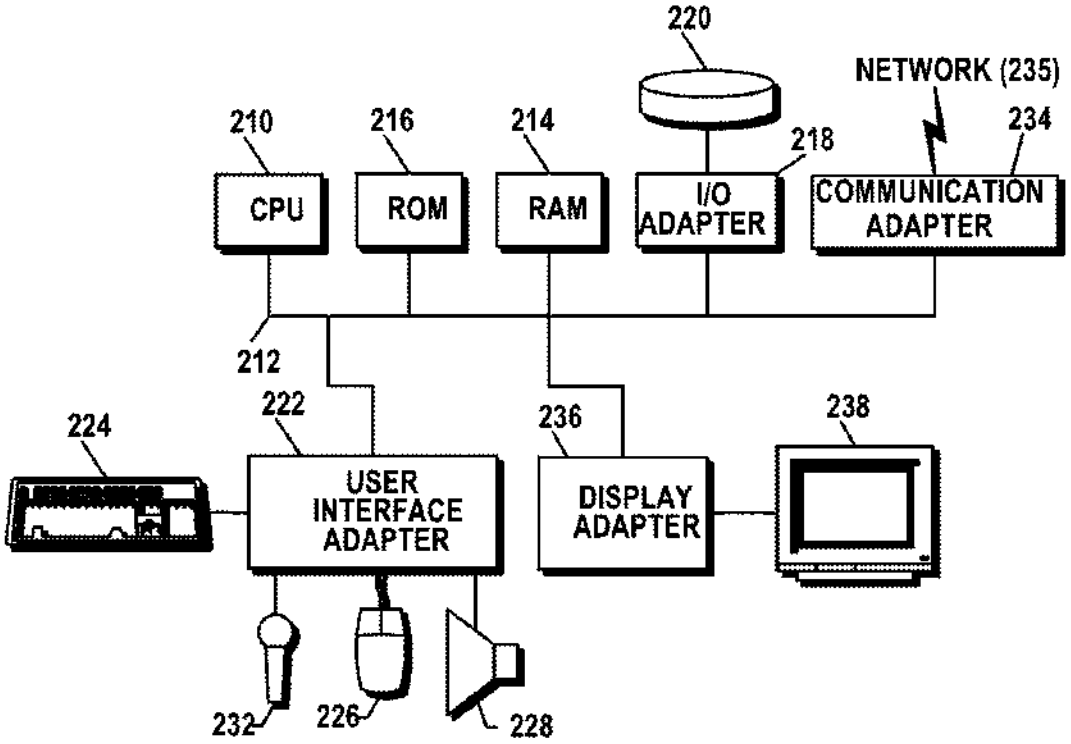

220
NETWORK (235)
210
216
214
218
234
CPU
ROM
RAM
I/O ADAPTER
COMMUNICATION ADAPTER
212
222
224
236
238
USER INTERFACE ADAPTER
DISPLAY ADAPTER
232
226
228

FIGURE 2

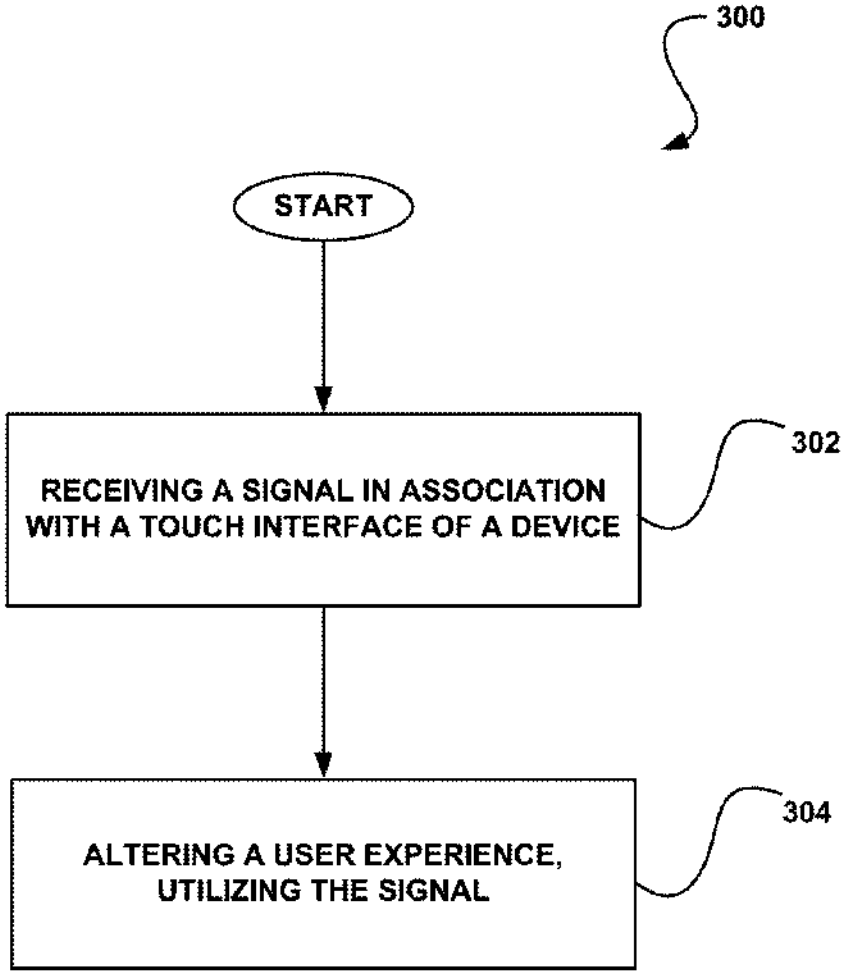

300
START
RECEIVING A SIGNAL IN ASSOCIATION WITH A TOUCH INTERFACE OF A DEVICE
302
ALTERING A USER EXPERIENCE, UTILIZING THE SIGNAL
304

FIGURE 3

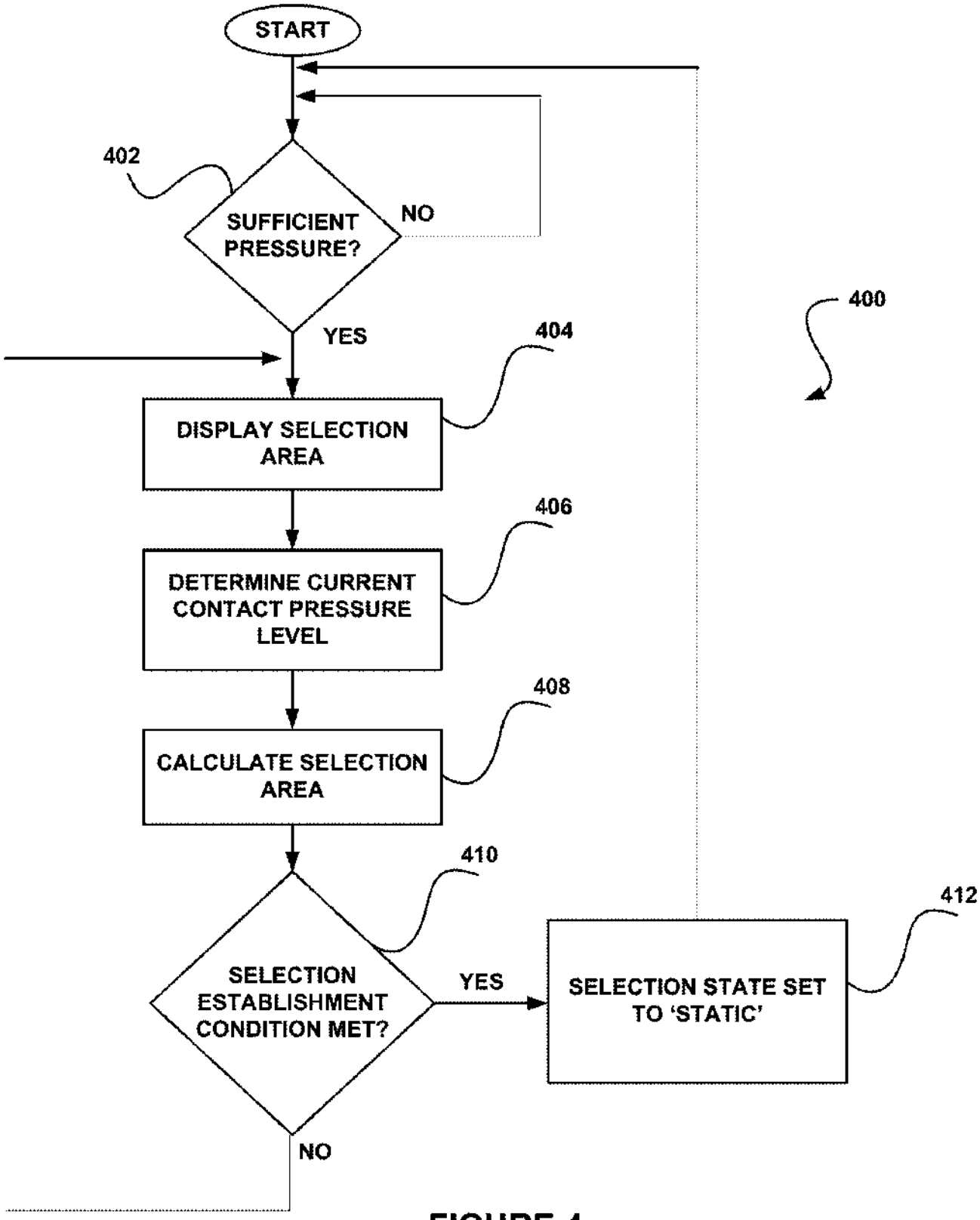

START
402
SUFFICIENT PRESSURE?
NO
YES
400
404
DISPLAY SELECTION AREA
406
DETERMINE CURRENT CONTACT PRESSURE LEVEL
408
CALCULATE SELECTION AREA
410
SELECTION ESTABLISHMENT CONDITION MET?
YES
412
SELECTION STATE SET TO 'STATIC'
NO

FIGURE 4

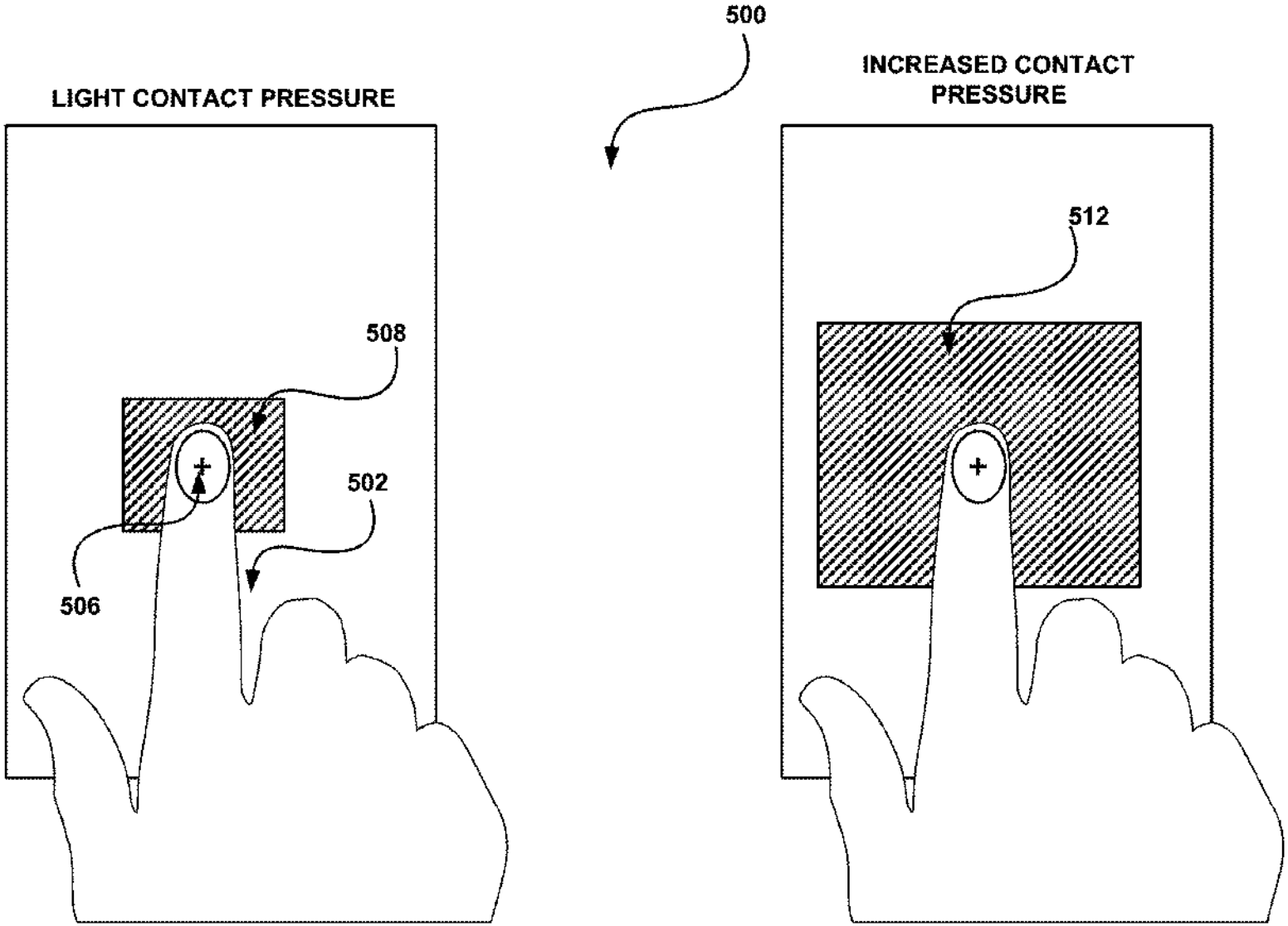

500
LIGHT CONTACT PRESSURE
INCREASED CONTACT PRESSURE
508
502
506
512

FIGURE 5

480

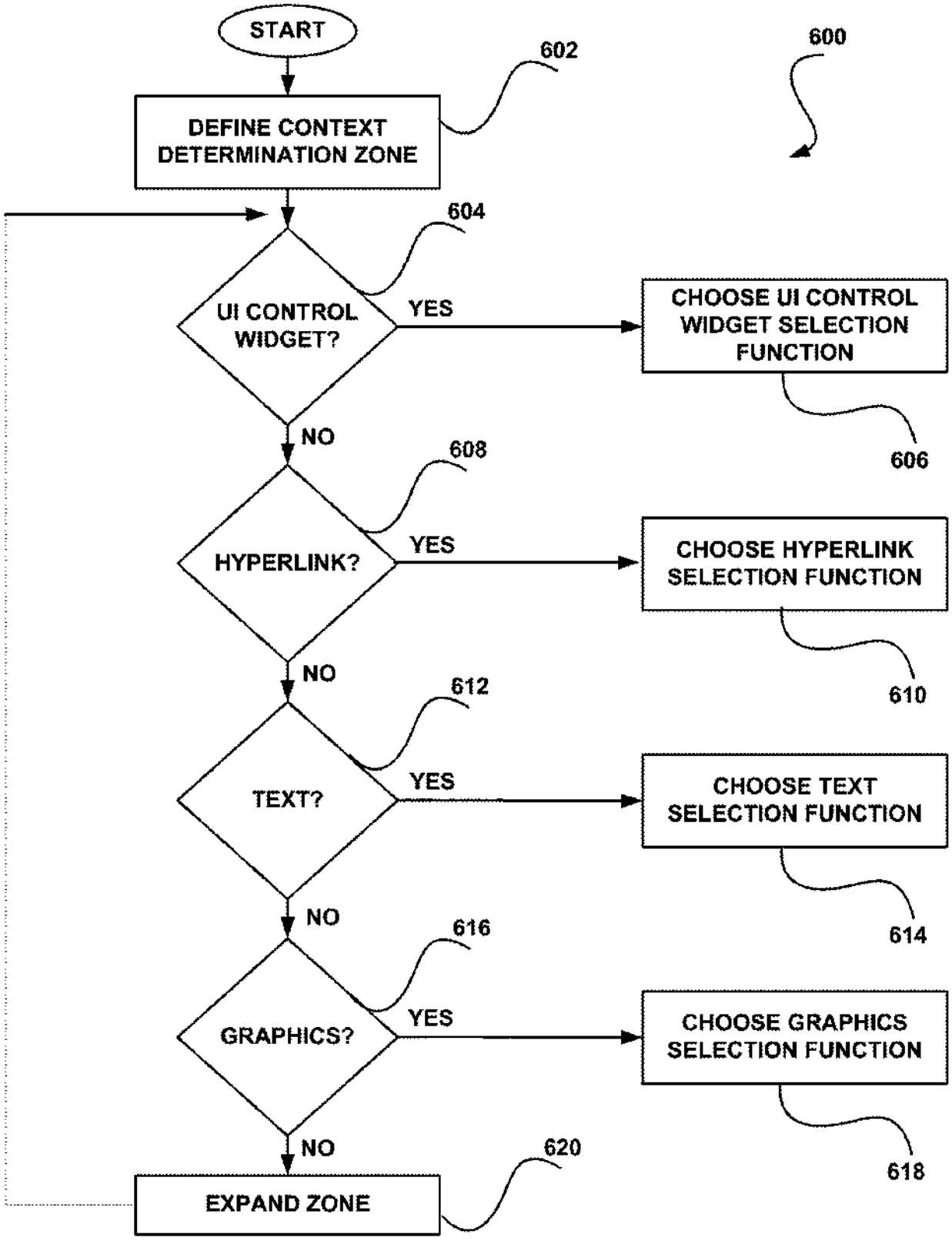

START
600
602
DEFINE CONTEXT DETERMINATION ZONE
604
UI CONTROL WIDGET?
YES
CHOOSE UI CONTROL WIDGET SELECTION FUNCTION
606
NO
608
HYPERLINK?
YES
CHOOSE HYPERLINK SELECTION FUNCTION
610
NO
612
TEXT?
YES
CHOOSE TEXT SELECTION FUNCTION
614
NO
616
GRAPHICS?
YES
CHOOSE GRAPHICS SELECTION FUNCTION
618
NO
620
EXPAND ZONE

FIGURE 6

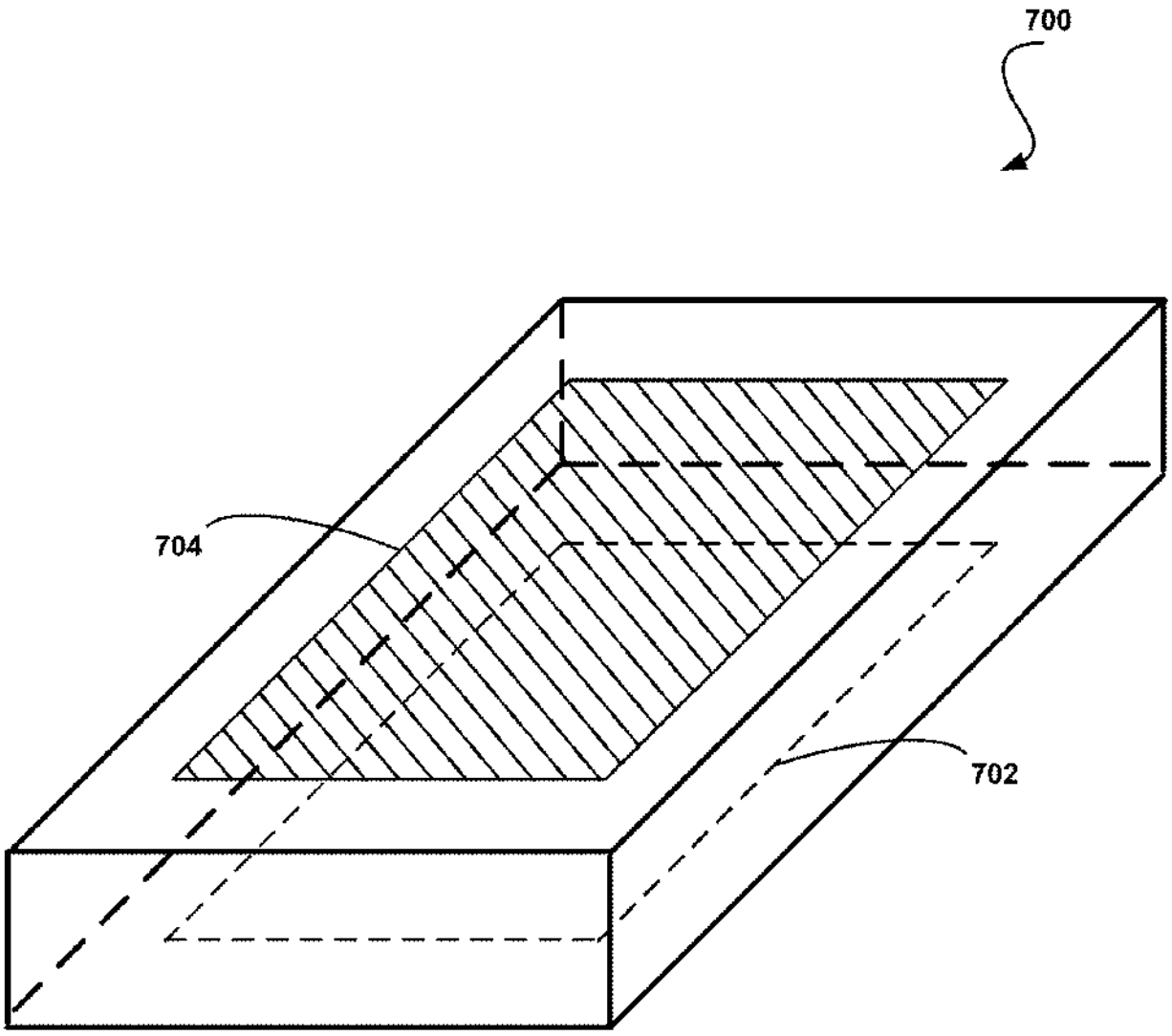


FIGURE 7

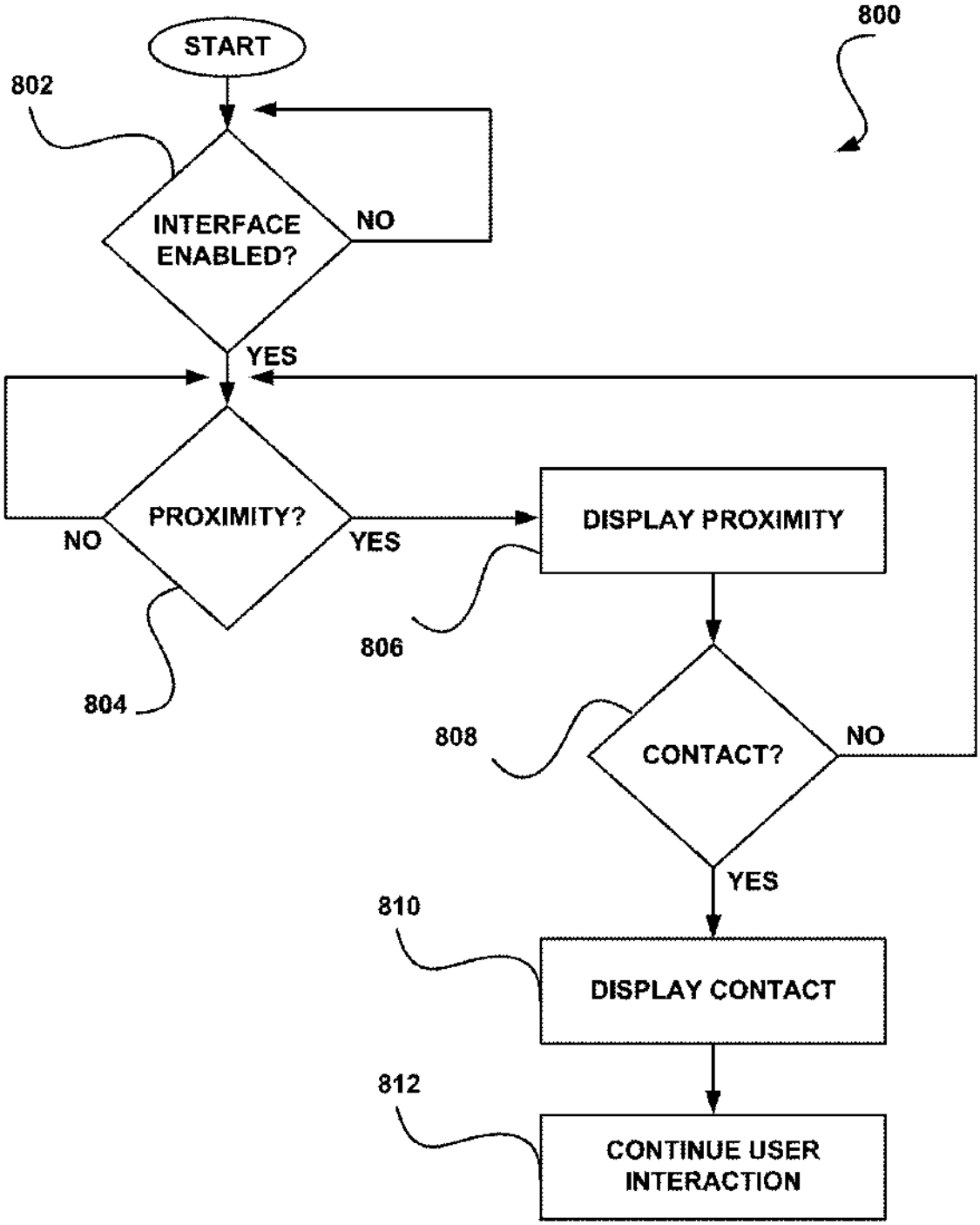

800
START
802
INTERFACE ENABLED?
NO
YES
PROXIMITY?
NO
YES
804
DISPLAY PROXIMITY
806
808
CONTACT?
NO
YES
810
DISPLAY CONTACT
812
CONTINUE USER INTERACTION

FIGURE 8

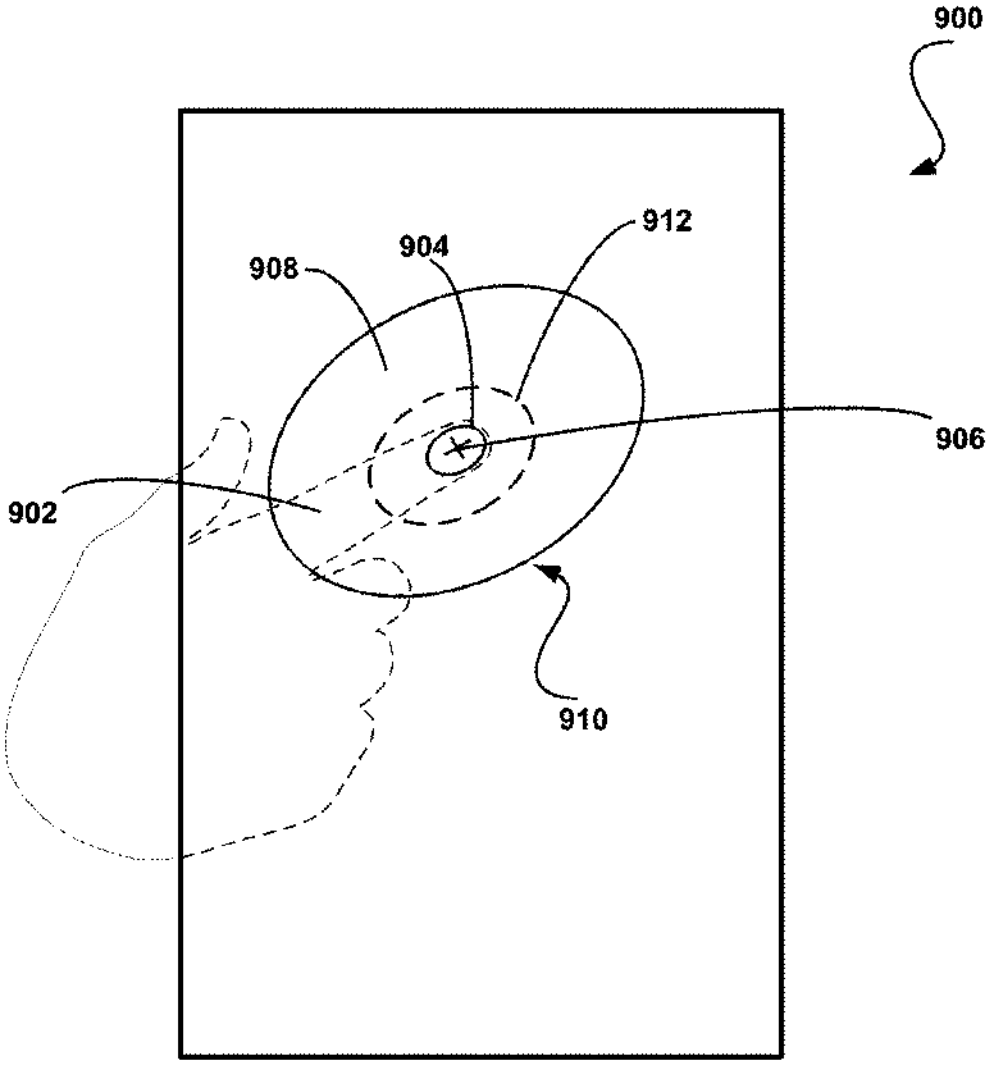


FIGURE 9

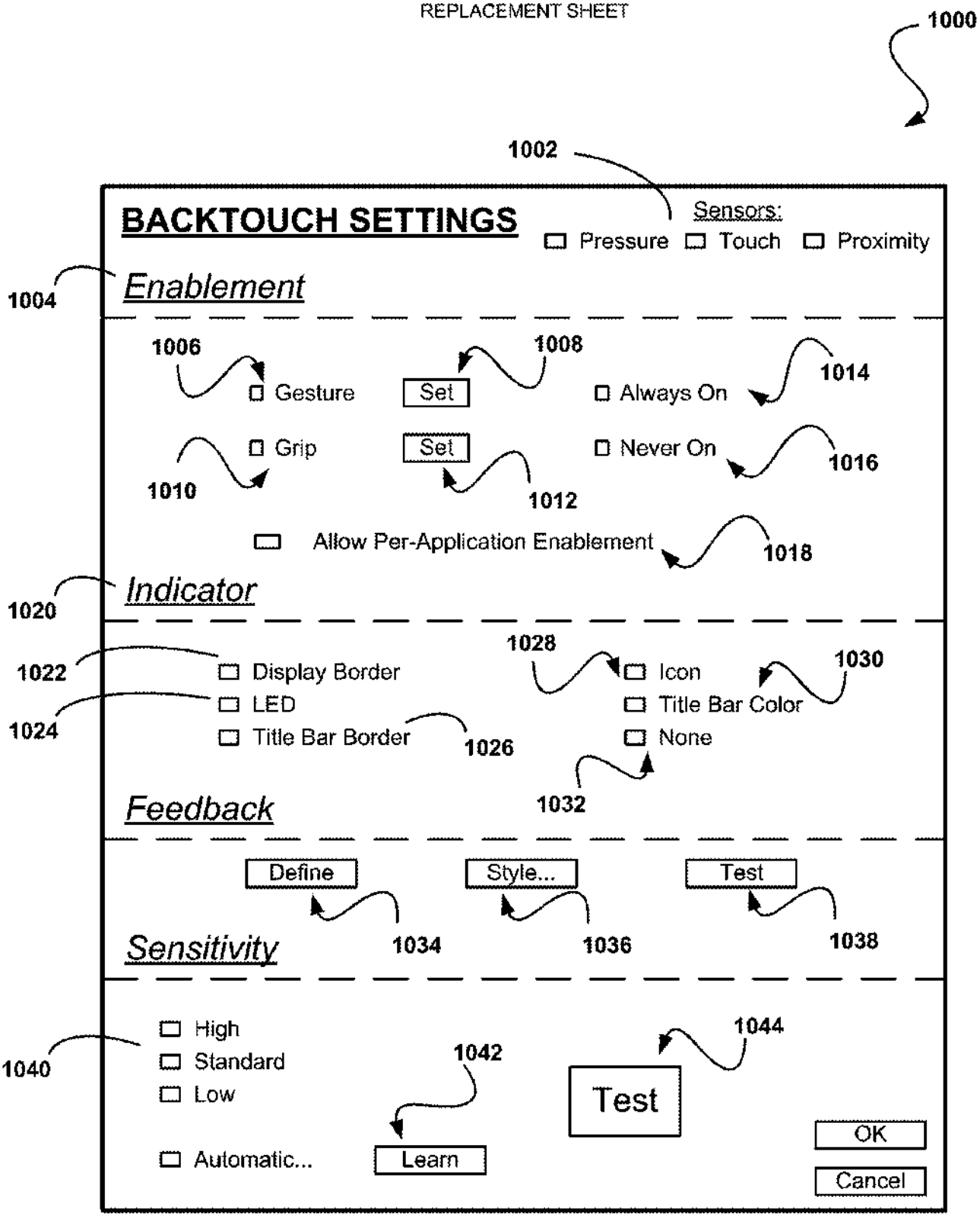

1000
1002
BACKTOUCH SETTINGS
Sensors:
Pressure
Touch
Proximity
1004
Enablement
1006
Gesture
Set
1008
Always On
1014
Grip
Set
Never On
1016
1010
1012
Allow Per-Application Enablement
1018
1020
Indicator
1022
Display Border
1028
Icon
1030
1024
LED
Title Bar Color
Title Bar Border
1026
None
1032
Feedback
Define
Style...
Test
Sensitivity
1034
1036
1038
1040
High
Standard
Low
1042
1044
Test
Automatic...
Learn
OK
Cancel

FIGURE 10

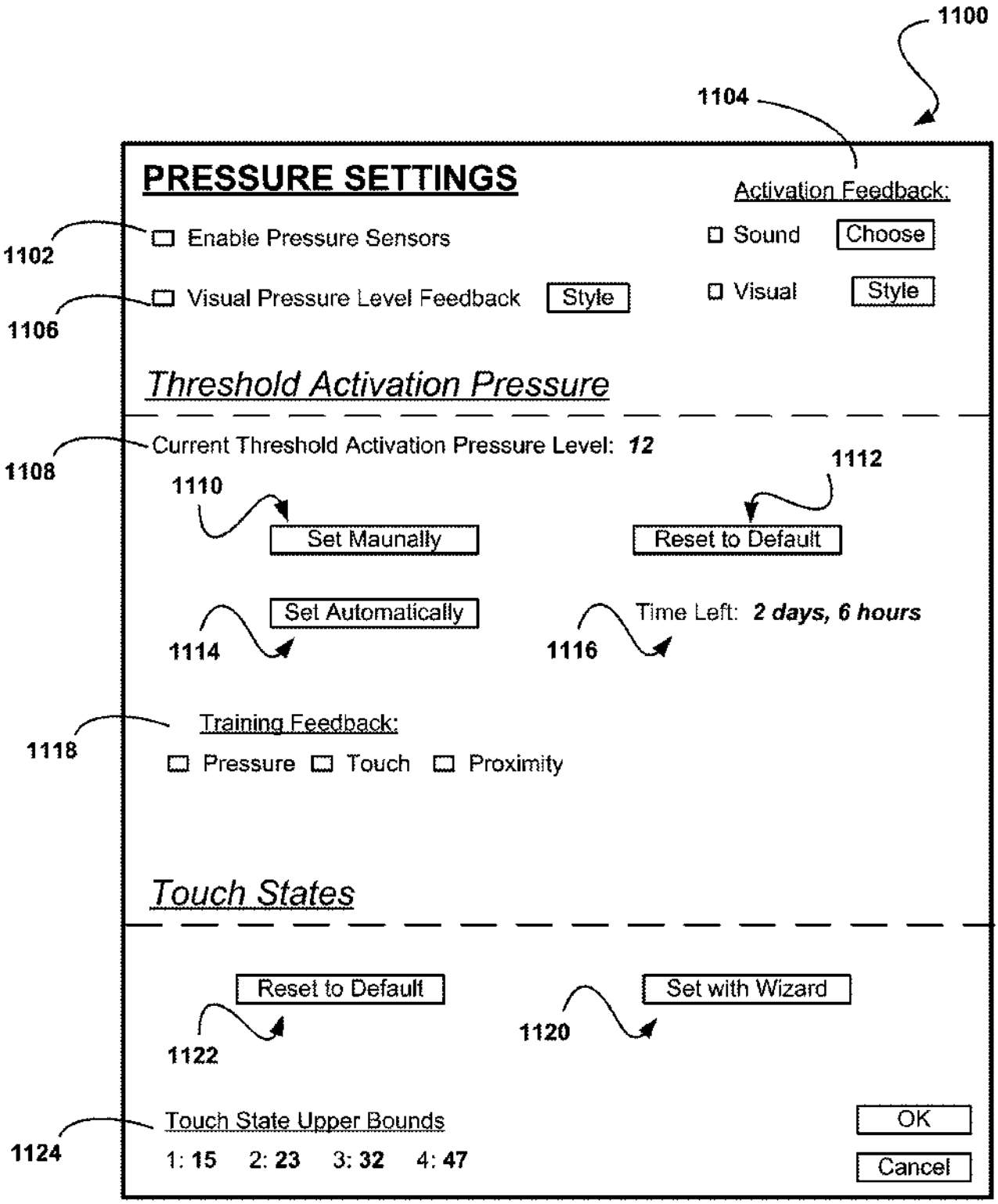

1100
1104
PRESSURE SETTINGS
Activation Feedback:
1102
Enable Pressure Sensors
Sound
Choose
1106
Visual Pressure Level Feedback
Style
Visual
Style
Threshold Activation Pressure
1108
Current Threshold Activation Pressure Level: 12
1110
1112
Set Maunally
Reset to Default
Set Automatically
1114
1116
Time Left: 2 days, 6 hours
1118
Training Feedback:
Pressure
Touch
Proximity
Touch States
Reset to Default
Set with Wizard
1122
1120
1124
Touch State Upper Bounds
1: 15 2: 23 3: 32 4: 47
OK
Cancel

FIGURE 11

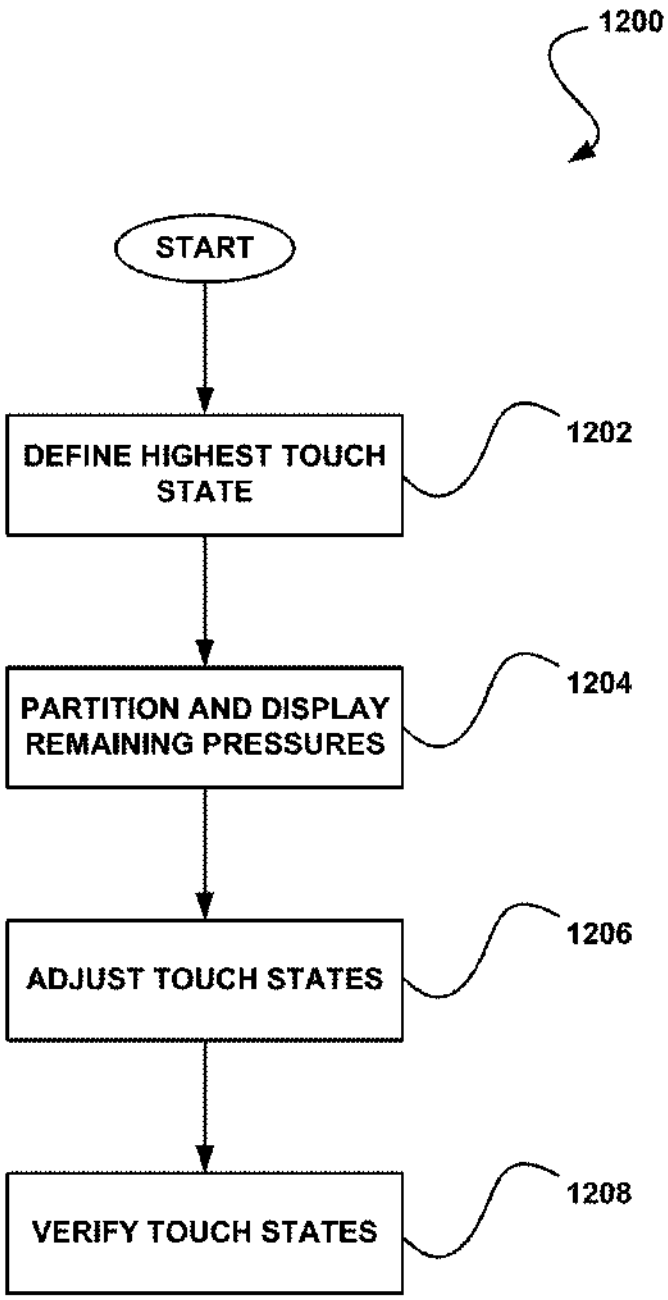

1200
START
DEFINE HIGHEST TOUCH STATE
1202
PARTITION AND DISPLAY REMAINING PRESSURES
1204
ADJUST TOUCH STATES
1206
VERIFY TOUCH STATES
1208

FIGURE 12

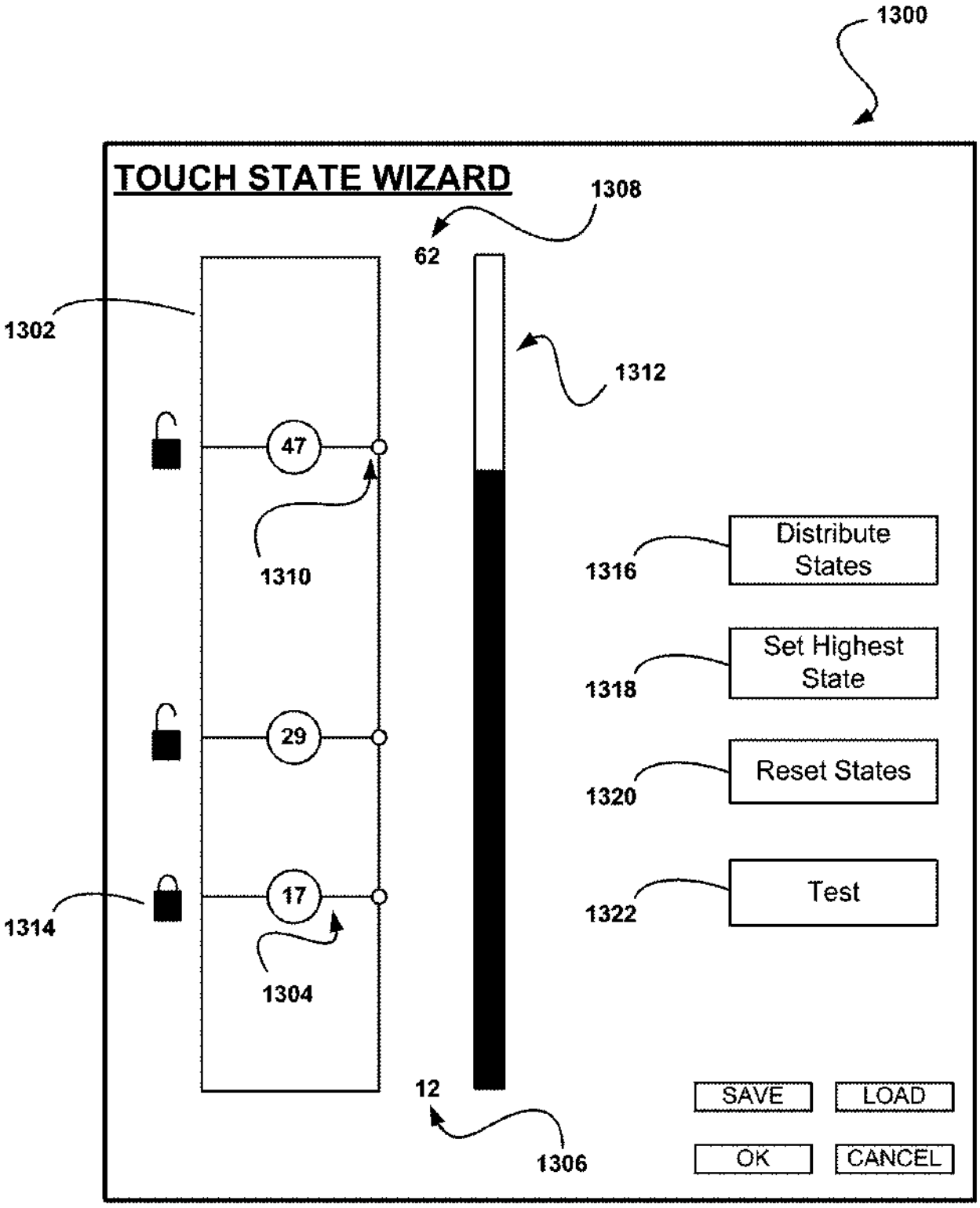

1300
TOUCH STATE WIZARD
1308
62
1302
1312
47
1310
29
17
1304
1314
Distribute States
1316
Set Highest State
1318
Reset States
1320
Test
1322
12
1306
SAVE
LOAD
OK
CANCEL

FIGURE 13

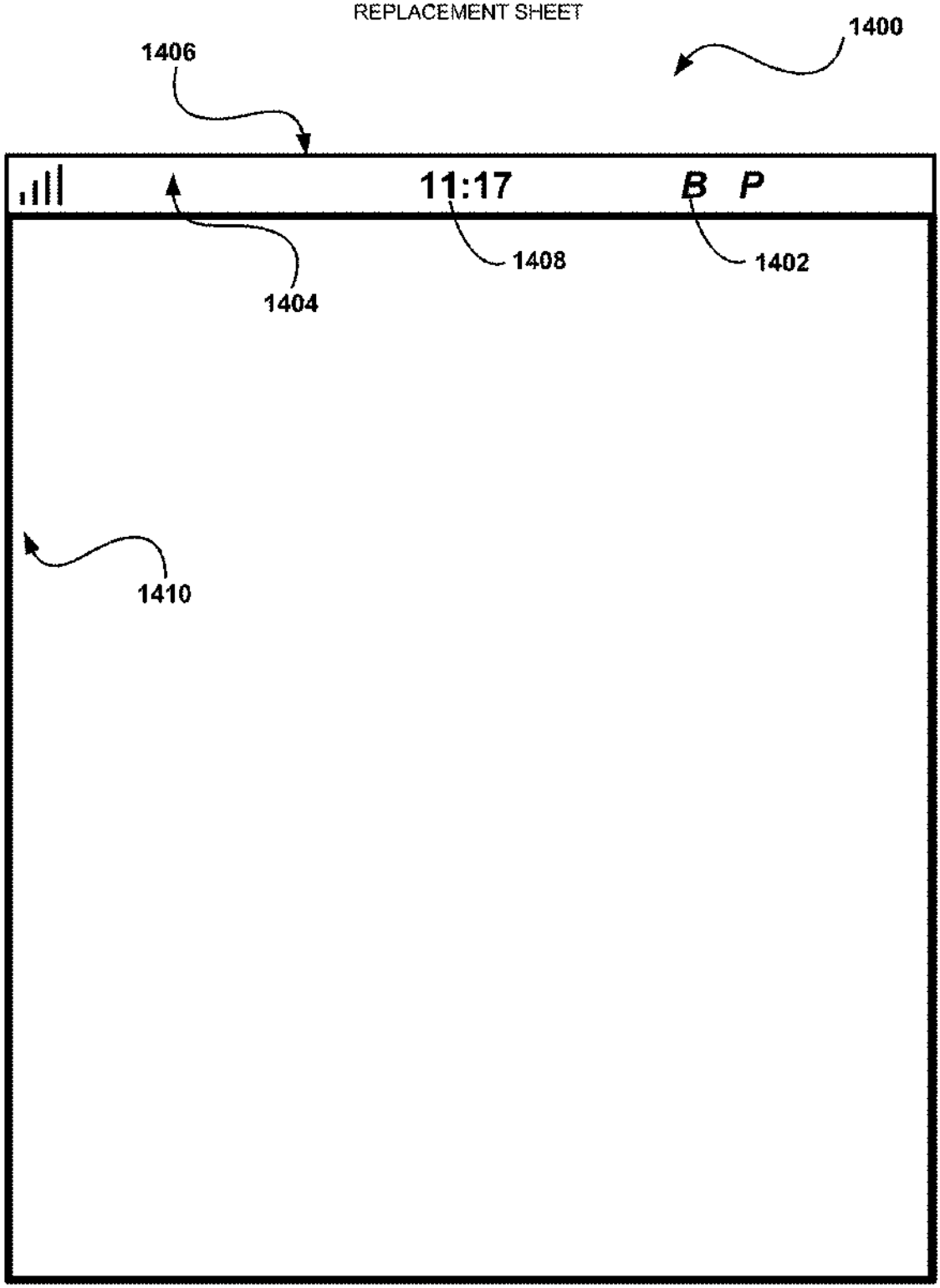


FIGURE 14

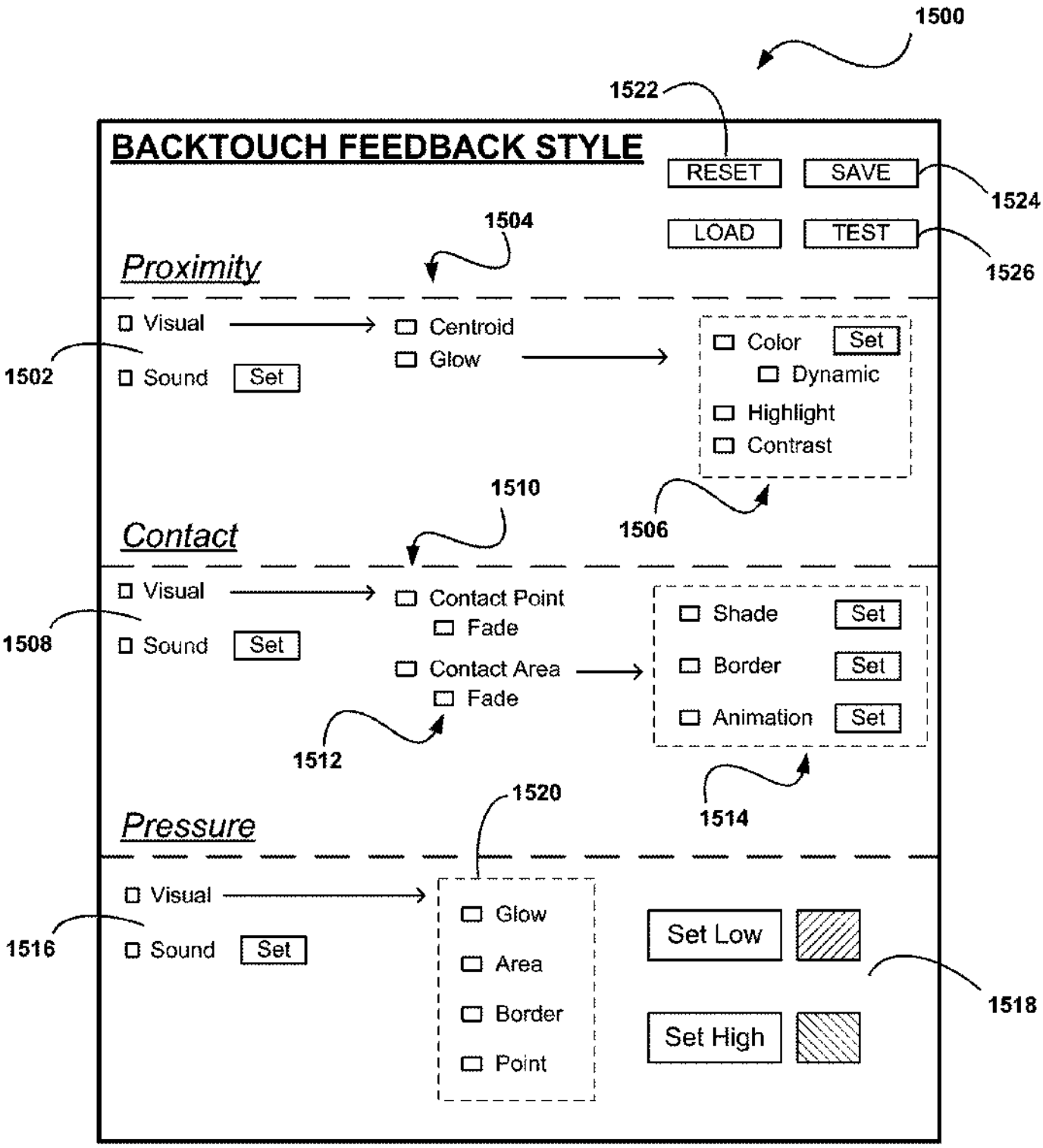

1500
1522
BACKTOUCH FEEDBACK STYLE
RESET
SAVE
1524
LOAD
TEST
1526
1504
Proximity
Visual
Centroid
Glow
Color
Set
Dynamic
Highlight
Contrast
1502
Sound
Set
1506
1510
Contact
Visual
Contact Point
Fade
Contact Area
Fade
Shade
Set
Border
Set
Animation
Set
1508
Sound
Set
1512
1514
1520
Pressure
Visual
Glow
Area
Border
Point
Set Low
Set High
1516
Sound
Set
1518

FIGURE 15

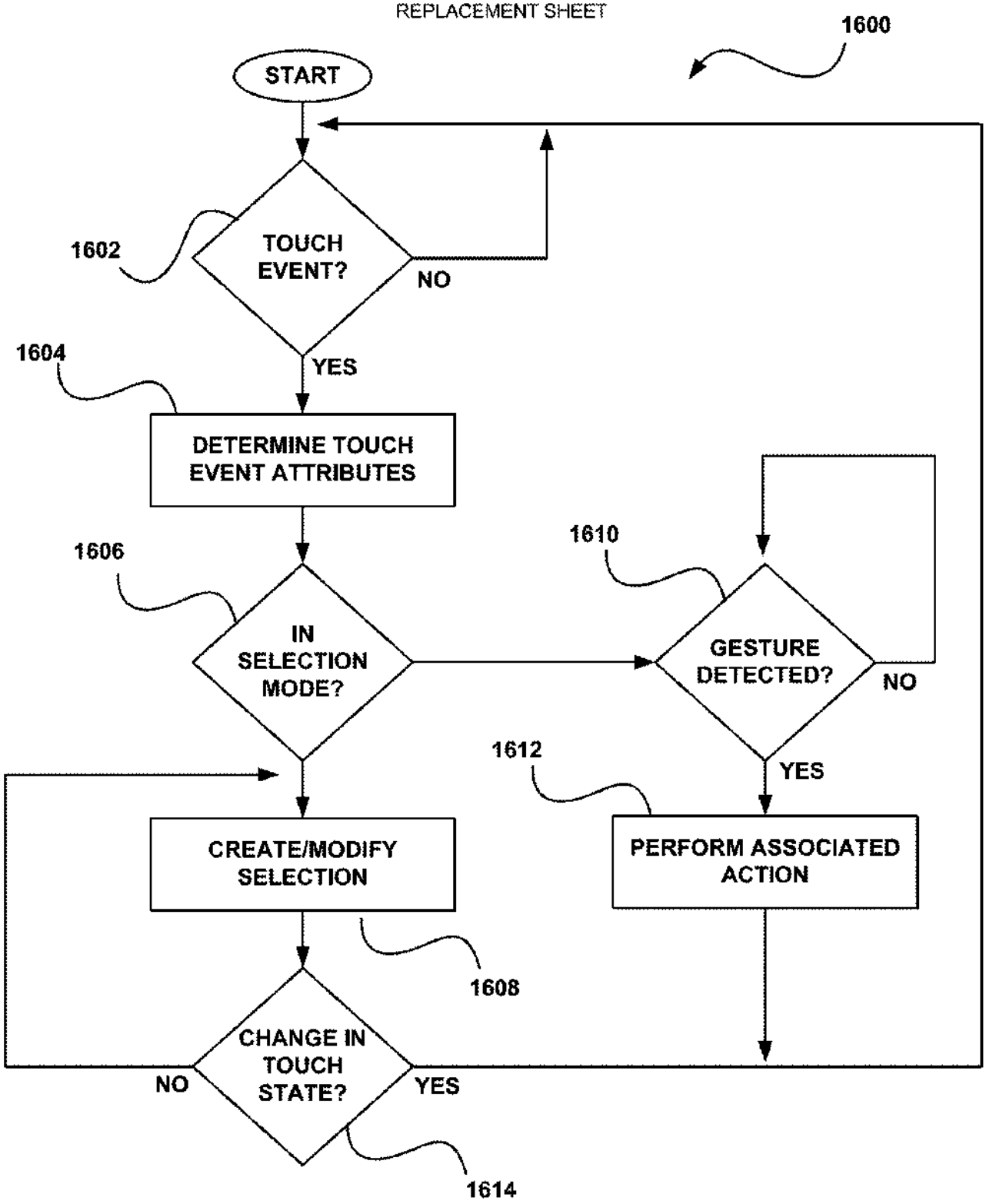

1600
START
1602
TOUCH EVENT?
NO
YES
1604
DETERMINE TOUCH EVENT ATTRIBUTES
1606
IN SELECTION MODE?
1610
GESTURE DETECTED?
NO
YES
1612
CREATE/MODIFY SELECTION
PERFORM ASSOCIATED ACTION
1608
CHANGE IN TOUCH STATE?
NO
YES
1614

FIGURE 16

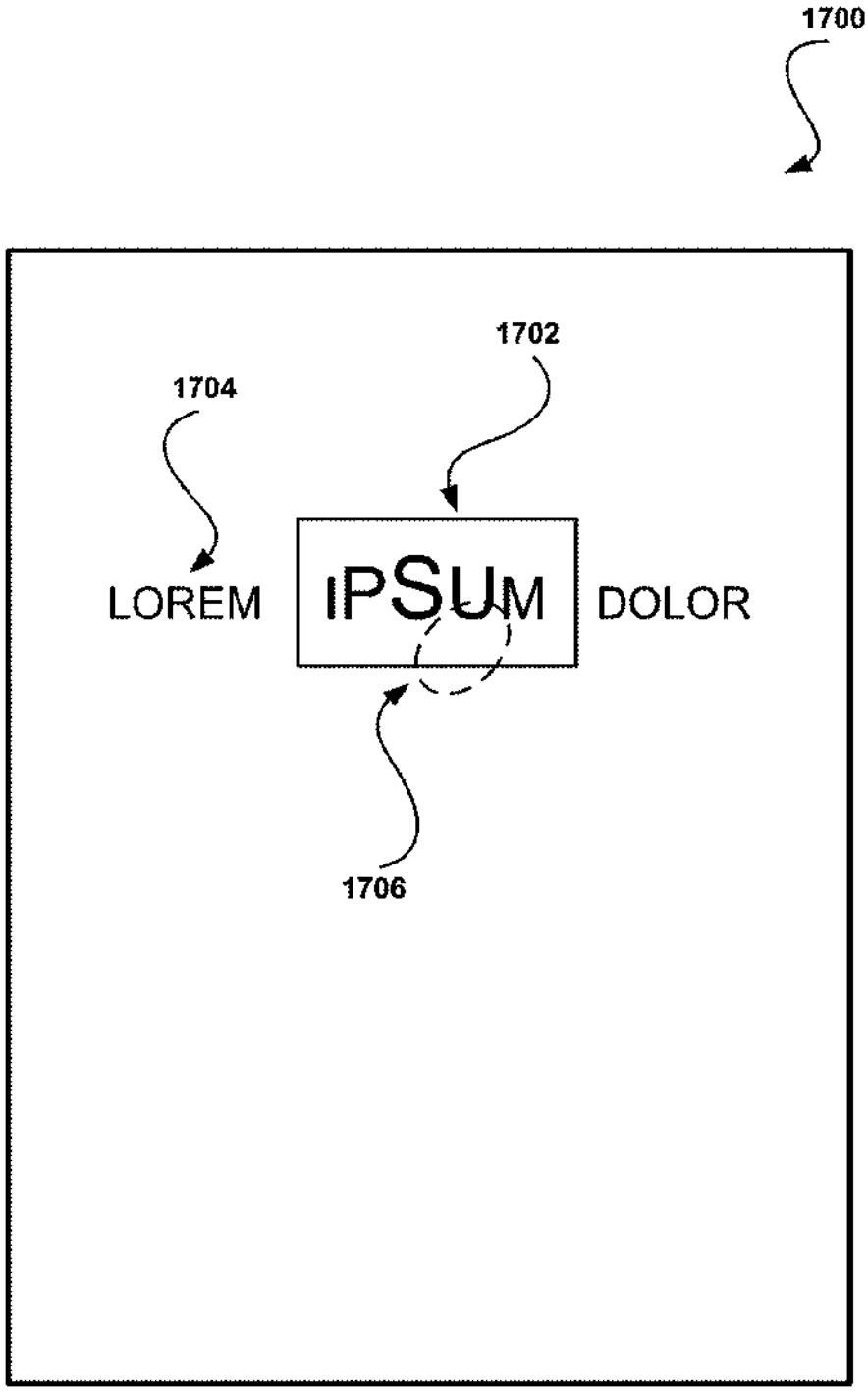


FIGURE 17

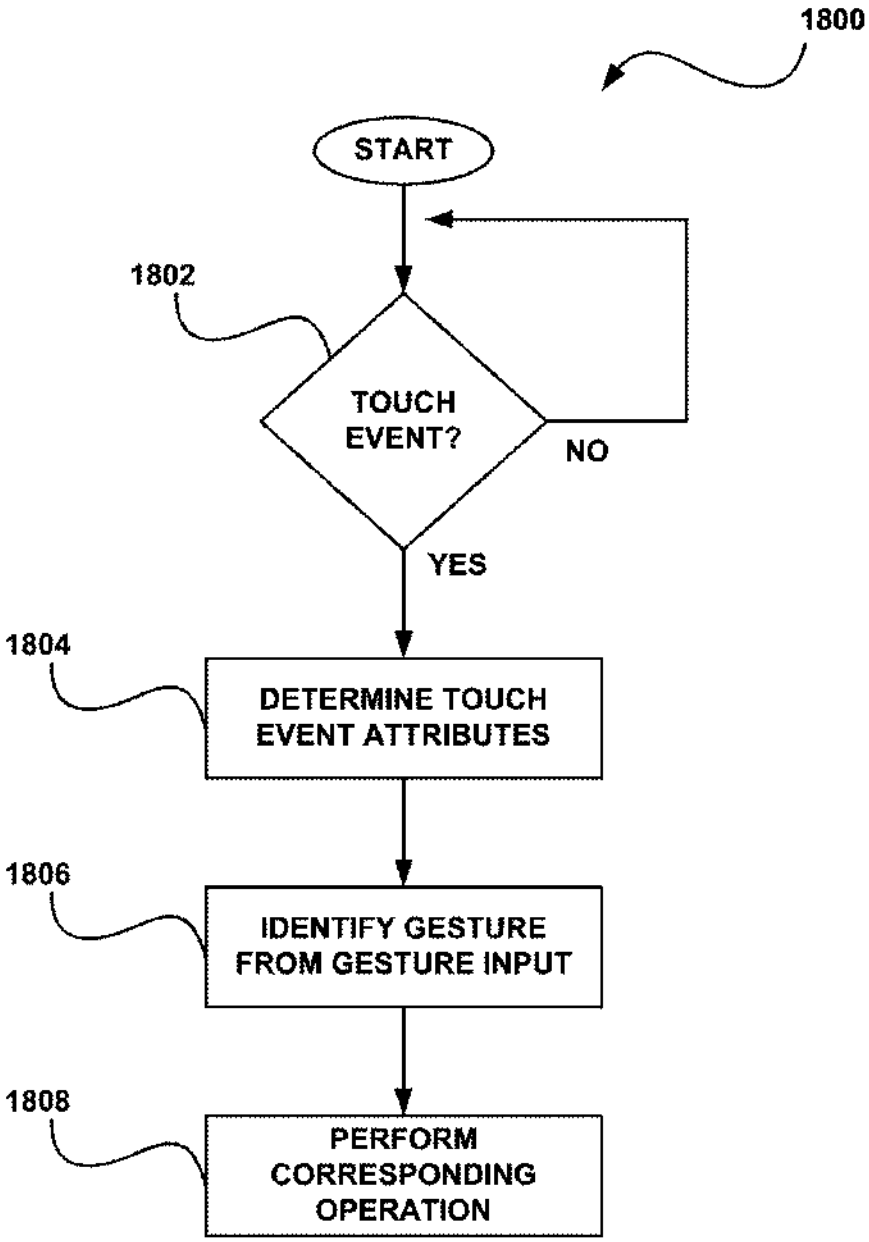

1800
START
1802
TOUCH EVENT?
NO
YES
1804
DETERMINE TOUCH EVENT ATTRIBUTES
1806
IDENTIFY GESTURE FROM GESTURE INPUT
1808
PERFORM CORRESPONDING OPERATION

FIGURE 18

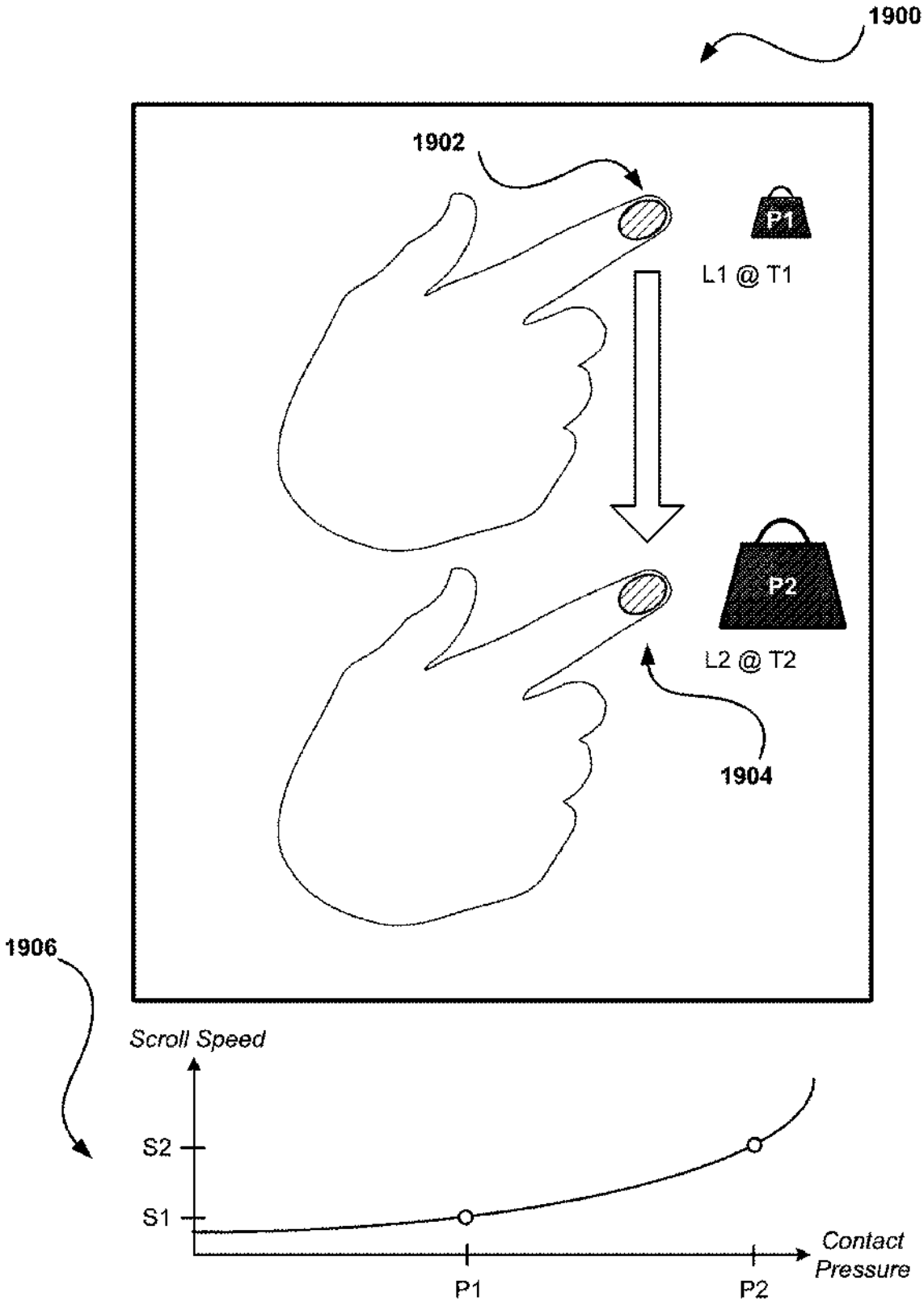

1900
1902
P1
L1 @ T1
P2
L2 @ T2
1904
1906
Scroll Speed
S2
S1
P1
P2
Contact Pressure

FIGURE 19

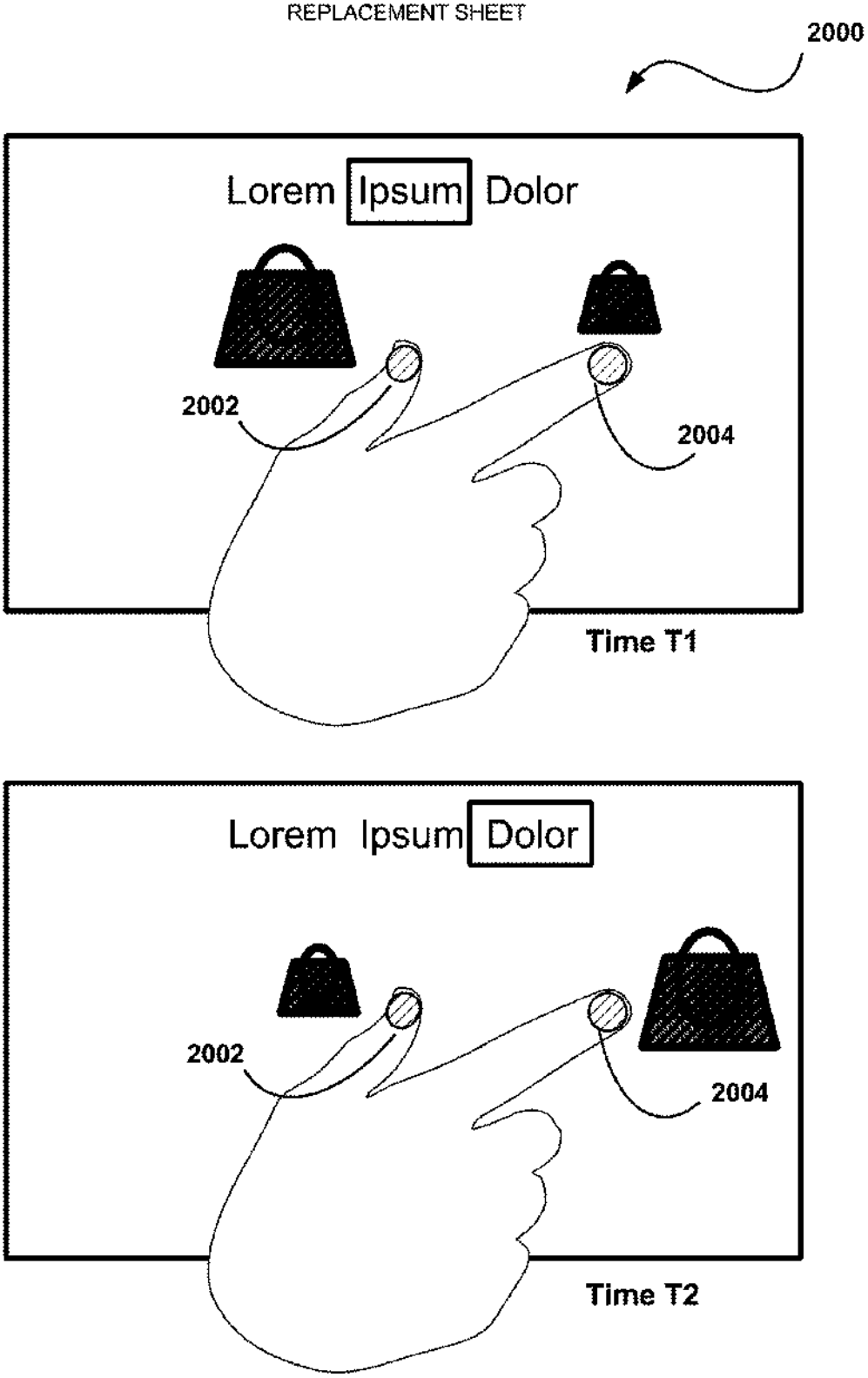

2000
Lorem Ipsum Dolor
2002
2004
Time T1
Lorem Ipsum Dolor
2002
2004
Time T2

FIGURE 20

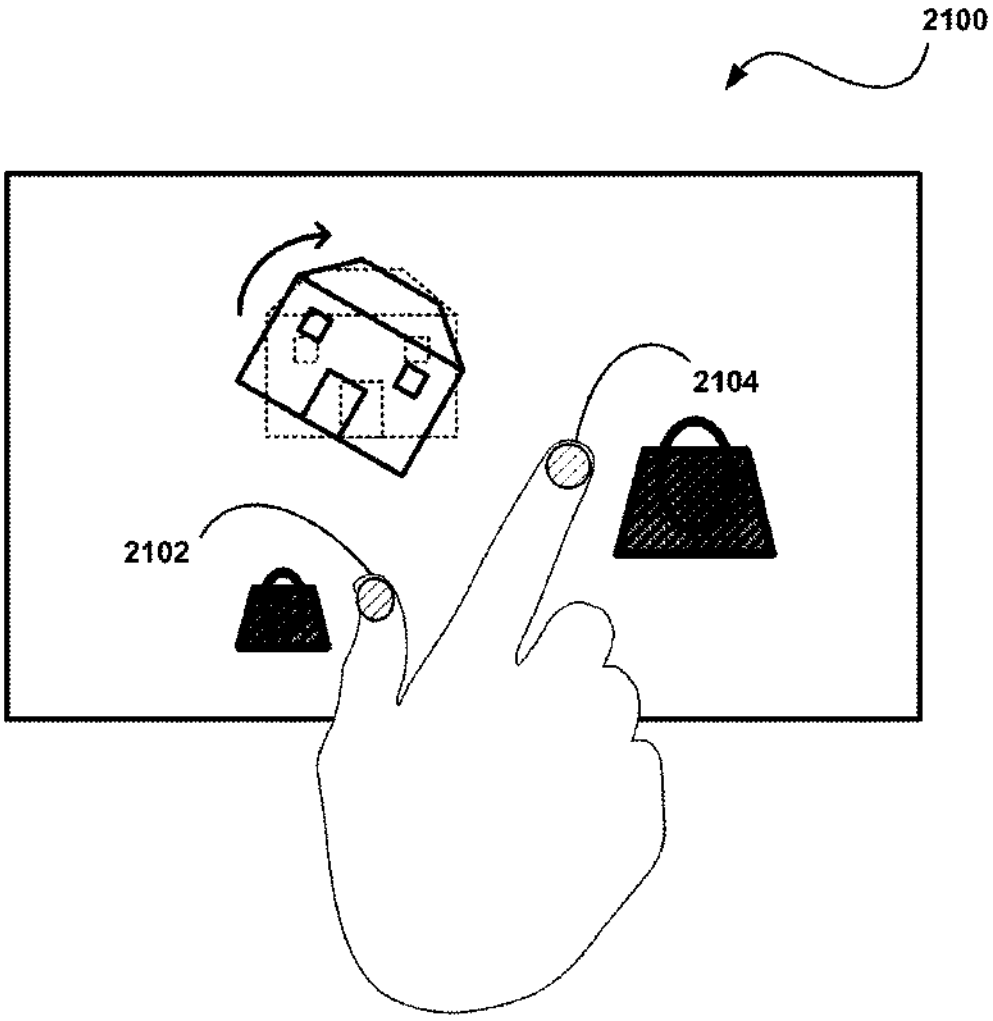


FIGURE 21

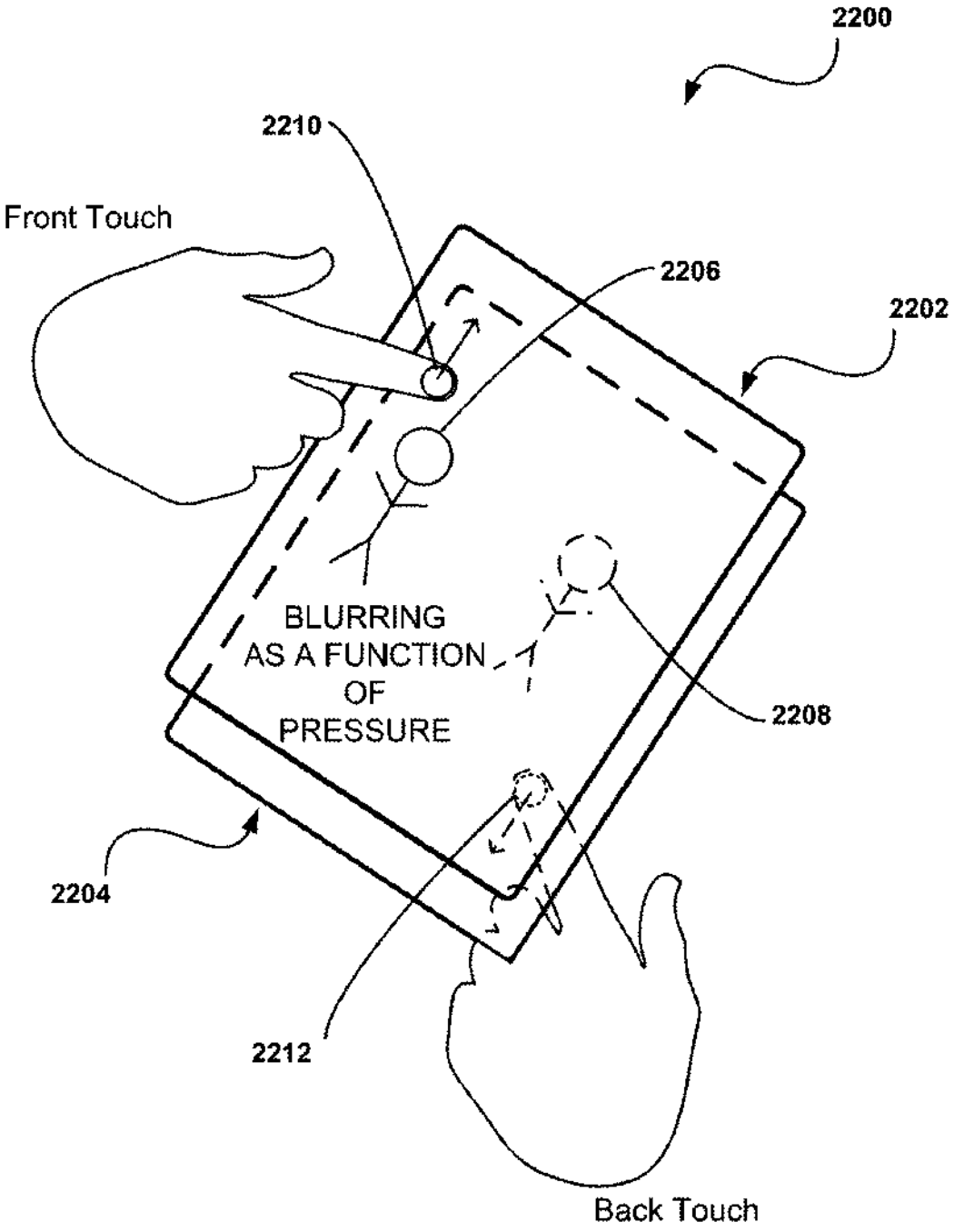
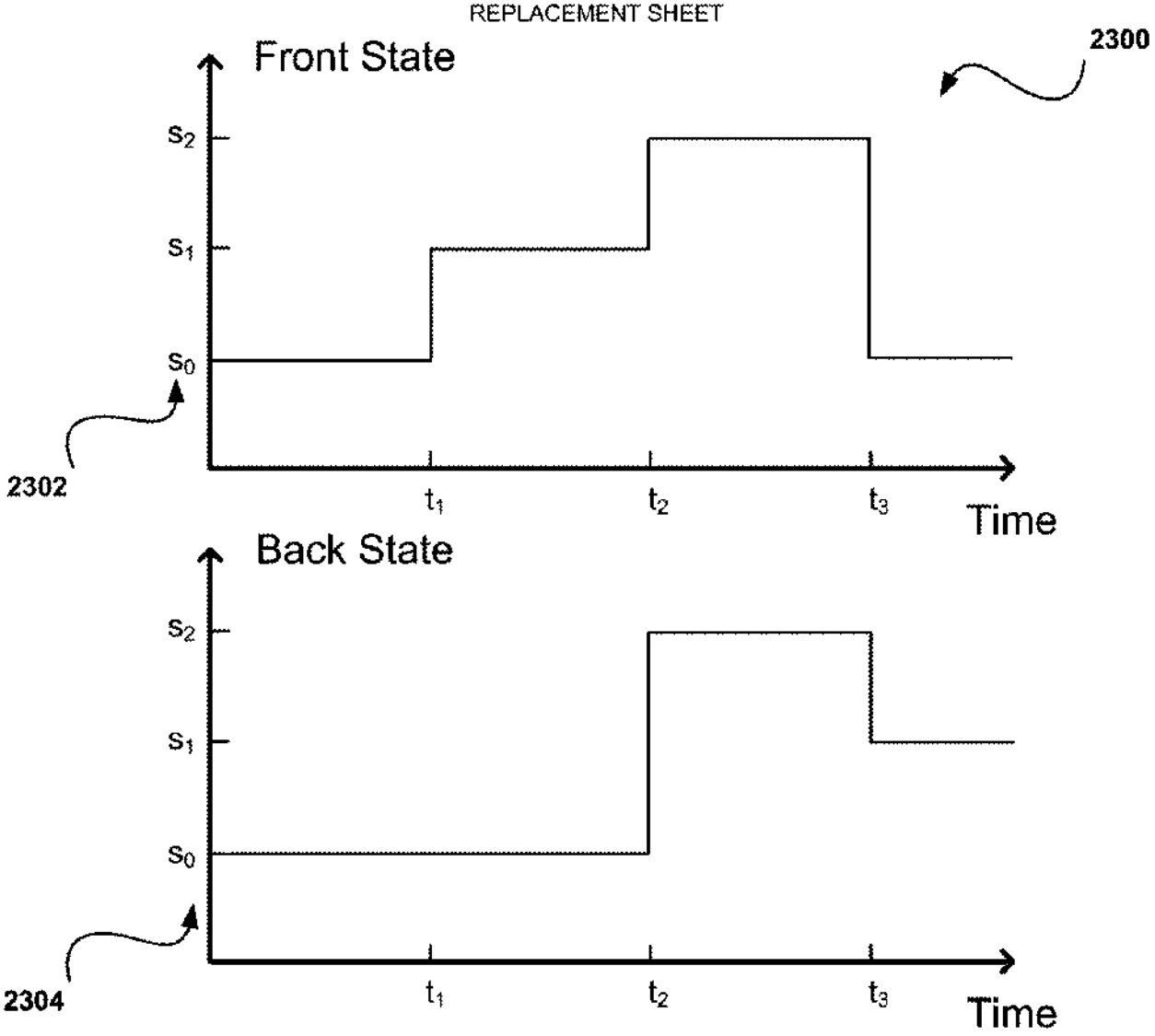
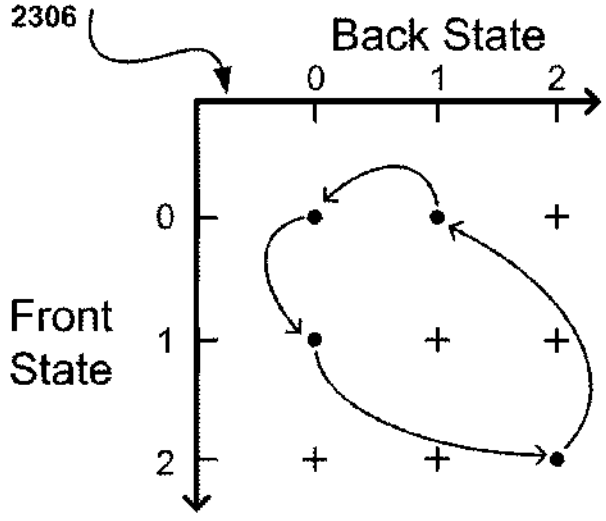

2200
2210
Front Touch
2206
2202
BLURRING
AS A FUNCTION
OF
PRESSURE
2208
2204
2212
Back Touch

FIGURE 22





IN RESPONSE TO THE DETECTION OF THE SECOND GESTURE THAT BEGINS IN CONNECTION WITH THE SECOND PORTION OF THE DISPLAY AND MOVES INWARD, DISPLAYING, UTILIZING THE DISPLAY, A SECOND MENU INCLUDING A PLURALITY OF SECOND MENU ITEMS

FIGURE 23

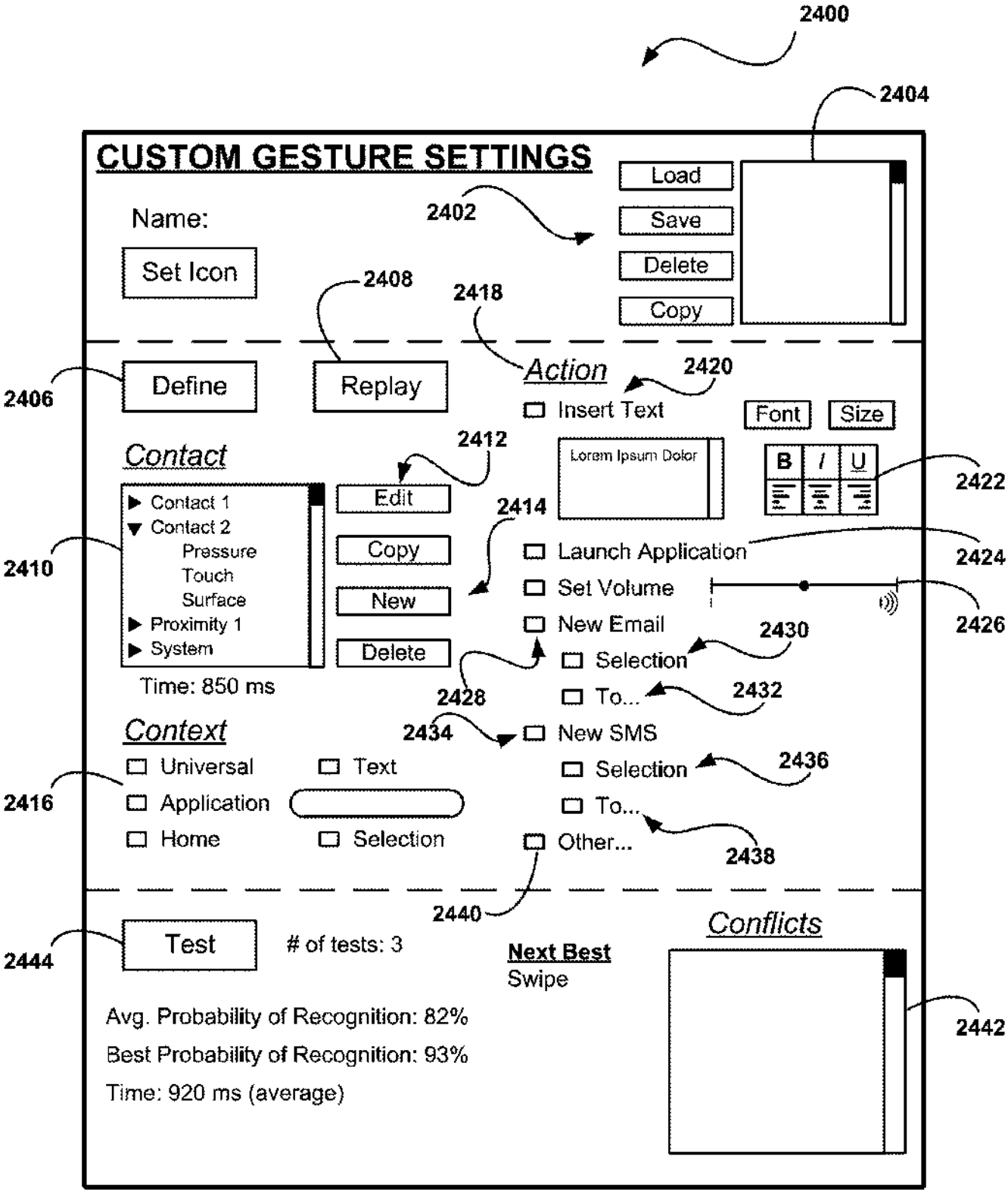

2400
2404
CUSTOM GESTURE SETTINGS
Load
Save
Delete
Copy
Name:
2402
Set Icon
2408
2418
Define
Replay
Action
2420
2406
Insert Text
Font
Size
Contact
2412
Lorem Ipsum Dolor
B
I
U
2422
Edit
2414
Contact 1
Contact 2
Pressure
Touch
Surface
Proximity 1
System
2410
Copy
Launch Application
2424
New
Set Volume
2426
New Email
2430
Delete
Selection
2428
To...
2432
Time: 850 ms
2434
Context
New SMS
Universal
Text
Selection
2436
2416
Application
To...
Home
Selection
Other...
2438
2440
Conflicts
2444
Test
of tests: 3
Next Best
Swipe
2442
Avg. Probability of Recognition: 82%
Best Probability of Recognition: 93%
Time: 920 ms (average)

FIGURE 24

Electronic Patent Application Fee Transmittal

Application Number:	16169961
Filing Date:	24-Oct-2018
Title of Invention:	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT
First Named Inventor/Applicant Name:	Michael S. Smith
Filer:	Patrick Edgar Caldwell
Attorney Docket Number:	SMITH070AG

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
CLAIMS IN EXCESS OF 20	2202	53	50	2650
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
RCE- 2ND AND SUBSEQUENT REQUEST	2820	1	950	950
		Total in USD ($)		**3600**

Electronic Acknowledgement Receipt	
EFS ID:	38203333
Application Number:	16169961
International Application Number:	
Confirmation Number:	7650
Title of Invention:	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT
First Named Inventor/Applicant Name:	Michael S. Smith
Customer Number:	92045
Filer:	Patrick Edgar Caldwell
Filer Authorized By:	
Attorney Docket Number:	SMITH070AG
Receipt Date:	03-JAN-2020
Filing Date:	24-OCT-2018
Time Stamp:	20:49:05
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$3600
RAM confirmation Number	E202013K49271456
Deposit Account	
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Continued Examination (RCE)	SMITH070AG_RCE_vF_03-Jan-2020.pdf	1364032 1118cdfea00bc2a05e1f42fc097c7ebe72c34c9	no	3
Warnings:					
Information:					
2	Drawings-only black and white line drawings	SMITH070AG_Drawings_replacement_Fig23_vF_03-Jan-2020.pdf	2656451 2a443f6c2c123150b95ce5c87cf2a4c7e123f21d	no	24
Warnings:					
Information:					
3	Amendment Submitted/Entered with Filing of CPA/RCE	SMITH070AG_Amendment_E_vF_03-Jan-2020.pdf	179183 5595f3173f3e45787 2005d52fb4cf4803aae43d9	no	48
Warnings:					
Information:					
4	Fee Worksheet (SB06)	fee-info.pdf	32341 8dc4cb04a6886e462afdf1ae1a8499 18156c0ee30	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	4232007		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	Confirmation No.: 7650
MICHAEL S. SMITH	Examiner: XAVIER, ANTONIO J
Application No.: 16/169,961	Art Unit: 2623
File Date: 10-24-2018	Docket No.: SMITH070AG
Title: GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT	Date: 1/3/2020

AMENDMENT E

AND

REQUEST FOR CONTINUED EXAMINATION (RCE)

Mail Stop Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Examiner:

In response to the Office Action mailed 12/19/2019, please enter the following.

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

1.-17. (Cancelled)

18. (Currently Amended) An electronic device, comprising:

a display;

a touch interface;

one or more processors;

memory; and

one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for:

displaying, utilizing the display, a graphical user interface;

[[while]]when the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first portion of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first portion of the display and moves inward, displaying, utilizing the display, a first menu as sliding in and including a plurality of first menu items;

when the first menu is displayed including the plurality of first menu items:

detecting, utilizing the touch interface, a first pressure on at least one of the first menu items,

when the first pressure on the at least one of the first menu items surpasses a first threshold, performing a first operation, and

when the first pressure on the at least one of the first menu items surpasses a second threshold, performing a second operation;

[[while]]when the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second portion of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second portion of the display and moves inward, displaying, utilizing the display, a second menu including a plurality of second menu items;

when the second menu is displayed including the plurality of second menu items:

detecting, utilizing the touch interface, a second pressure on at least one of the second menu items,

when the second pressure on the at least one of the second menu items surpasses the first threshold, performing a third operation, and

when the second pressure on the at least one of the second menu items surpasses the second threshold, performing a fourth operation;

wherein the electronic device is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer;

wherein the electronic device is configured such that the first portion of the display and the second portion of the display are not a same edge.

19.-103. (Cancelled)

104. (New) An electronic device, comprising:

a display;

a touch interface;

one or more processors;

memory; and

one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for:

displaying, utilizing the display, a graphical user interface;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items;

when the first menu is displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items;

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation;

wherein the electronic device is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer.

105. (New) The electronic device of Claim 104, wherein the electronic device is configured such that at least a portion of the at least one other virtual display layer is at least partially translucent such that at least a portion of the at least one virtual display layer is visible through the at least one other virtual display layer.

106. (New) The electronic device of Claim 105, wherein the electronic device is configured such that the at least portion of the at least one virtual display layer that is visible through the at least one other virtual display layer, includes at least a portion of a background image.

107. (New) The electronic device of Claim 104, wherein the electronic device is configured such that the first menu and the second menu are displayed in separate virtual display layers.

108. (New) The electronic device of Claim 104, wherein the electronic device is configured such that the graphical user interface includes a home screen, for choosing among a plurality of applications.

109. (New) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include messages in a list, the first operation includes displaying a view of at least one of the messages, and the second operation includes opening the at least one message.

110. (New) The electronic device of Claim 104, wherein the electronic device is configured such that hardware status indicia is displayed adjacent to the first edge.

111. (New) The electronic device of Claim 104, wherein the electronic device is configured such that only one of the first menu or the second menu is capable of being displayed at a time.

112. (New) The electronic device of Claim 104, wherein the electronic device is configured such that at least one of the first menu or the second menu substantially fills the display.

113. (New) The electronic device of Claim 104, wherein the electronic device is configured such that indicia is displayed via the graphical user interface for prompting a user as to an accessibility of at least one of the first menu or the second menu.

114. (New) The electronic device of Claim 104, wherein the electronic device is configured such that the first menu is accessible via the first gesture; the second menu is accessible via the second gesture; at least one of the first or second operations is performed based on at least two different contact durations, in order to increase operation accessibility via the electronic device that includes a mobile device.

115. (New) The electronic device of Claim 104, wherein the electronic device is configured such that the first gesture and the second gesture are capable of being detected as moving inward in different directions.

116. (New) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include a plurality of application-specific menu items for accessing different applications.

117. (New) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more second menu items include a plurality of application-specific menu items for accessing different applications.

118. (New) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include a plurality of application menu items for launching different applications.

119. (New) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a deletion operation.

120. (New) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a move operation.

121. (New) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a menu item rearrange operation.

122. (New) The electronic device of Claim 104, wherein the electronic device is configured such that, the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

123. (New) The electronic device of Claim 122, wherein the electronic device is configured such that the second operation is performed in response to the first duration of contact on the at least one application menu item being detected to surpass the threshold, and in response to the first duration of contact being detected to include a slide gesture component.

124. (New) The electronic device of Claim 104, wherein the electronic device is configured such that, the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching

the particular application to display another particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

125. (New) The electronic device of Claim 124, wherein the electronic device is configured such that the second operation is performed in response to:

the first duration of contact on the at least one application menu item being detected to surpass the threshold, and

the first duration of contact being detected to include a slide gesture component after the first duration of contact on the at least one application menu item is detected to surpass the threshold.

126. (New) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application for, in response to a detection of a selection thereof when the first duration of contact on the at least one application menu item is detected to surpass the threshold, launching the particular application to display a particular application interface of the particular application in an overlying and scaled virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

127. (New) The electronic device of Claim 104, wherein the electronic device is configured such that in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass the threshold, the first operation is performed, in response to detection of a cessation of the first duration of contact.

128. (New) The electronic device of Claim 104, wherein the electronic device is configured such that the first menu is at least partially translucent for viewing the graphical user interface thereunder.

129. (New) The electronic device of Claim 104, wherein the electronic device is configured such that the first menu is at least partially translucent for viewing the graphical user interface, including a home screen, thereunder.

130. (New) The electronic device of Claim 104, wherein the electronic device is configured such that at least a portion of the graphical user interface is blurred based on the detection of the first gesture that begins in connection with the first edge and moves inward.

131. (New) The electronic device of Claim 130, wherein the electronic device is configured such that a magnitude of the blurring of the at least portion of the graphical user interface progressively increases as a function of an increase in a magnitude of the first gesture being detected.

132. (New) The electronic device of Claim 131, wherein the electronic device is configured such that the magnitude of the blurring of the at least portion of the graphical user interface progressively decreases as a function of detecting a change in the first gesture.

134. (New) The electronic device of Claim 130, wherein the electronic device is configured such that a magnitude of the blurring of the at least portion of the graphical user interface progressively increases as a function of an increase in a distance magnitude of the first gesture being detected.

135. (New) The electronic device of Claim 130, wherein the electronic device is configured such that a magnitude of the blurring of the at least portion of the graphical user interface progressively increases while detecting the first gesture moving inward.

136. (New) The electronic device of Claim 135, wherein the electronic device is configured such that the magnitude of the blurring of the at least portion of the graphical user interface progressively decreases as a function of detecting the first gesture moving outward.

137. (New) The electronic device of Claim 104, wherein the electronic device is configured such that at least a portion of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward.

138. (New) The electronic device of Claim 137, wherein the electronic device is configured such that a magnitude of the shading or fading of the at least portion of the graphical user interface progressively increases as a function of an increase in a magnitude of the second gesture being detected.

139. (New) The electronic device of Claim 138, wherein the electronic device is configured such that the magnitude of the shading or fading of the at least portion of the graphical user interface progressively decreases as a function of detecting a change in the second gesture.

140. (New) The electronic device of Claim 137, wherein the electronic device is configured such that a magnitude of the shading or fading of the at least portion of the graphical user interface progressively increases as a function of an increase in a distance magnitude of the second gesture being detected.

141. (New) The electronic device of Claim 137, wherein the electronic device is configured such that a magnitude of the shading or fading of the at least portion of the graphical user interface progressively increases while detecting the second gesture moving inward.

142. (New) The electronic device of Claim 141, wherein the electronic device is configured such that the magnitude of the shading or fading of the at least portion of the graphical user interface progressively decreases as a function of detecting the second gesture moving outward.

143. (New) The electronic device of Claim 104, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the electronic device is configured such that the one or more first menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the first operation includes performing a particular operation associated with the at least one of the one or more first menu items; and the second operation includes opening a contextual menu with one or more options associated with the at least one of the one or more first menu items;

the one or more second menu items include at least some of the application icons including a particular application icon associated with a particular application, where the third operation includes opening the particular application to display a particular application interface of the particular application instead of the home screen; and

hardware status indicia is displayed adjacent to the first edge.

144. (New) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the first operation includes performing a particular operation associated with the at least one of the one or more first menu items; and the second operation includes opening a contextual menu with one or more options associated with the at least one of the one or more first menu items.

145. (New) The electronic device of Claim 104, wherein the electronic device is configured such that the electronic device is configured such that the first menu and the second menu are displayed in the at least one other virtual display layer.

146. (New) The electronic device of Claim 104, wherein the electronic device is configured such that the one or more first menu items include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages associated with

an application, and the second operation includes controlling at least one aspect of the application.

147. (New) The electronic device of Claim 104, wherein the electronic device is configured for:

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a second duration of contact on the at least one of the one or more second menu items,

in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, performing the third operation, and

in response to the second duration of contact on the at least one of the one or more second menu items being detected to surpass the threshold, performing a fourth operation.

148. (New) The electronic device of Claim 147, wherein the electronic device is configured such that in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, the third operation is performed, in response to detection of a cessation of the second duration of contact.

149. (New) The electronic device of Claim 147, wherein the electronic device is configured such that the one or more second menu items include a network interface menu item and a volume menu item; the third operation includes selecting the at least one of the one or more second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items.

150. (New) The electronic device of Claim 147, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

151. (New) The electronic device of Claim 150, wherein the electronic device is configured such that the second operation is performed in response to:

the first duration of contact on the particular application icon being detected to surpass the threshold, and

the first duration of contact being detected to include a slide gesture component after the first duration of contact on the particular application icon is detected to surpass the threshold.

152. (New) The electronic device of Claim 150, wherein the electronic device is configured such that the one or more first menu items include only a subset of the application icons including the particular application icon.

153. (New) The electronic device of Claim 150, wherein the electronic device is configured such that the one or more first menu items include only a subset of the plurality of application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

154. (New) The electronic device of Claim 150, wherein the electronic device is configured such that the one or more first menu items include favorites of the application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

155. (New) The electronic device of Claim 147, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items;

the one or more second menu items further include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages, and the second operation includes controlling presentation of the at least one message; and

hardware status indicia is displayed adjacent to the second edge.

156. (New) The electronic device of Claim 147, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the first menu is at least partially translucent for viewing the graphical user interface thereunder, at least a portion of the graphical user interface is blurred based on the detection of the first gesture that begins in connection with the first edge and moves inward, a magnitude of the blurring progressively increases when detecting the first gesture moving inward, and the magnitude of the blurring progressively decreases as a function of detecting a change in the first gesture;

at least a part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward, a magnitude of the shading or fading of the at least part of the graphical user interface progressively increases when detecting the second gesture moving inward, and the magnitude of the shading or fading of the at least part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular

application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

157. (New) The electronic device of Claim 156, wherein the electronic device is configured such that at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the first edge, by beginning near the first edge;

the second gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the first edge, by beginning near the first edge;

the second gesture begins in connection with the first edge, by beginning at the first edge;

the second duration of contact is part of the selection contact;

the second duration of contact is not part of the selection contact;

the second duration of contact is separate from the selection contact;

the selection contact includes the second duration of contact;

the first gesture begins in connection with the first edge and moves inward from the first edge;

the second gesture that begins in connection with the second edge and moves inward from the second edge;

the display includes a top edge and the first gesture or the second gesture moves inward by moving, at least in part, downward from the top edge;

the display includes a top edge and the first gesture moves inward by moving, at least in part, downward from the top edge, and the second gesture moves inward by not moving, at least in part, downward from the top edge;

the first gesture and the second gesture move inward by moving, at least in part, toward a central area of the touch screen;

the second menu is displayed as sliding in;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are not displayed as sliding in via different directions;

the first menu is displayed as sliding in from the first edge;

the second menu is displayed as appearing from the second edge;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the one or more second menu items include representations of active applications;

the one or more second menu items include thumbnails of applications in a multi-tasking environment;

the first operation and the second operation are related to the same function;

the selection contact includes a press gesture;

the selection contact includes a top gesture;

the selection contact includes a static gesture;

the selection contact includes a dynamic gesture;

the selection contact is separate from the second gesture;

the first duration of contact is separate from the first gesture;

the electronic device is configured such that the first menu and the second menu are displayed in the same at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in different at least one other virtual display layers;

the electronic device is configured such that the first menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the second menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in the at least one other virtual display layer;

each instance of the when includes an entire duration;

each instance of the when includes an entire display or contact duration;

each instance of the when includes at least a portion of a duration;

each instance of the when includes only a portion of a duration;

each instance of the when includes only a portion of a display or contact duration;

each instance of the when includes at least a portion of a display or contact duration;

each instance of the in response to, includes an immediate response to;

each instance of the in response to, includes a response after an intermediate operation;

each instance of the in response to, includes a response after a delay;

the third operation and the fourth operation are related to the same function;

the blurring includes at least one of: dimming, displaying as indistinct, displaying as vague, displaying as cloudy, displaying as obscured, or displaying as smeared;

the first gesture and the second gesture move inward in different directions;

the first gesture and the second gesture do not move inward in different directions;

the first gesture and the second gesture do not move different directions;

the first gesture is detected to move inward by moving along a line that is perpendicular to the first edge;

the second gesture is detected to move inward by moving along a line that is perpendicular to the second edge;

only the first menu is displayed in the at least one other virtual display layer;

the first menu is displayed in the at least one other virtual display layer, and the second menu is not displayed in the at least one other virtual display layer;

only the second menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer, and the first menu is not displayed in the at least one other virtual display layer;

both the first menu and the second menu are displayed in the at least one other virtual display layer;

the shading includes at least one of: displaying as to suggest three-dimensionality, shadowing, or displaying as to include a varied degree of light and/or darkness;

the shading includes color shading;

the shading includes reducing a brightness;

the shading includes reducing a color brightness;

the shading includes moving towards black within a color space;

the shading includes incorporating less color;

the fading includes altering a level of disappearance;

the fading includes altering a transparency;

the fading includes altering a translucency;

the at least part is the same as the at least portion; or

the at least part is different from the at least portion.

158. (New) A method, comprising:

at an electronic device including a display, a touch interface, and memory coupled to one or more processors:

displaying, utilizing the display, a graphical user interface;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items;

with the first menu being displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items, such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer;

with the second menu being displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation.

159. (New) The method of Claim 158, wherein at least a portion of the at least one other virtual display layer is at least partially translucent such that at least a portion of the at least one virtual display layer is visible through the at least one other virtual display layer.

160. (New) The method of Claim 159, wherein the at least portion of the at least one virtual display layer that is visible through the at least one other virtual display layer, includes at least a portion of a background image.

161. (New) The method of Claim 158, wherein the first menu and the second menu are displayed in separate virtual display layers.

162. (New) The method of Claim 158, wherein the graphical user interface includes a home screen, for choosing among a plurality of applications.

163. (New) The method of Claim 158, wherein the one or more first menu items include messages in a list, the first operation includes displaying a view of at least one of the messages, and the second operation includes opening the at least one message.

164. (New) The method of Claim 158, wherein hardware status indicia is displayed adjacent to the first edge.

165. (New) The method of Claim 158, wherein only one of the first menu or the second menu is capable of being displayed at a time.

166. (New) The method of Claim 158, wherein at least one of the first menu or the second menu substantially fills the display.

167. (New) The method of Claim 158, wherein indicia is displayed via the graphical user interface for prompting a user as to an accessibility of at least one of the first menu or the second menu.

168. (New) The method of Claim 158, wherein the first menu is accessible via the first gesture; the second menu is accessible via the second gesture; at least one of the first or second operations is performed based on at least two different contact durations, in order to increase operation accessibility via the electronic device that includes a mobile device.

169. (New) The method of Claim 158, wherein the first gesture and the second gesture are capable of being detected as moving inward in different directions.

170. (New) The method of Claim 158, wherein the one or more first menu items include a plurality of application-specific menu items for accessing different applications.

171. (New) The method of Claim 158, wherein the one or more second menu items include a plurality of application-specific menu items for accessing different applications.

172. (New) The method of Claim 158, wherein the one or more first menu items include a plurality of application menu items for launching different applications.

173. (New) The method of Claim 158, wherein the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a deletion operation.

174. (New) The method of Claim 158, wherein the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a move operation.

175. (New) The method of Claim 158, wherein the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a menu item rearrange operation.

176. (New) The method of Claim 158, wherein the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application.

177. (New) The method of Claim 158, wherein the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the

second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

178. (New) The method of Claim 177, wherein the second operation is performed in response to the first duration of contact on the at least one application menu item being detected to surpass the threshold, and in response to the first duration of contact being detected to include a slide gesture component.

179. (New) The method of Claim 158, wherein the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display another particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

180. (New) The method of Claim 179, wherein the second operation is performed in response to:

the first duration of contact on the at least one application menu item being detected to surpass the threshold, and

the first duration of contact being detected to include a slide gesture component subsequent to the first duration of contact on the at least one application menu item being detected to surpass the threshold.

181. (New) The method of Claim 158, wherein the one or more first menu items include at least one application menu item associated with a particular application for, in response to a detection of a selection thereof and the first duration of contact on the at least one application

menu item being detected to surpass the threshold, launching the particular application to display a particular application interface of the particular application in an overlying and scaled virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

182. (New) The method of Claim 158, wherein, in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass the threshold, the first operation is performed, in response to detection of a cessation of the first duration of contact.

183. (New) The method of Claim 158, wherein the first menu is at least partially translucent for viewing the graphical user interface thereunder.

184. (New) The method of Claim 158, wherein the first menu is at least partially translucent for viewing the graphical user interface, including a home screen, thereunder.

185. (New) The method of Claim 158, wherein at least a portion of the graphical user interface is blurred based on the detection of the first gesture that begins in connection with the first edge and moves inward.

186. (New) The method of Claim 185, wherein a magnitude of the blurring of the at least portion of the graphical user interface progressively increases as a function of an increase in a magnitude of the first gesture being detected.

187. (New) The method of Claim 186, wherein the magnitude of the blurring of the at least portion of the graphical user interface progressively decreases as a function of detecting a change in the first gesture.

188. (New) The method of Claim 185, wherein a magnitude of the blurring of the at least portion of the graphical user interface progressively increases as a function of an increase in a distance magnitude of the first gesture being detected.

189. (New) The method of Claim 185, wherein a magnitude of the blurring of the at least portion of the graphical user interface progressively increases simultaneously with detecting the first gesture moving inward.

190. (New) The method of Claim 189, wherein the magnitude of the blurring of the at least portion of the graphical user interface progressively decreases as a function of detecting the first gesture moving outward.

191. (New) The method of Claim 158, wherein at least a portion of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward.

192. (New) The method of Claim 191, wherein a magnitude of the shading or fading of the at least portion of the graphical user interface progressively increases as a function of an increase in a magnitude of the second gesture being detected.

193. (New) The method of Claim 192, wherein the magnitude of the shading or fading of the at least portion of the graphical user interface progressively decreases as a function of detecting a change in the second gesture.

194. (New) The method of Claim 191, wherein a magnitude of the shading or fading of the at least portion of the graphical user interface progressively increases as a function of an increase in a distance magnitude of the second gesture being detected.

195. (New) The method of Claim 191, wherein a magnitude of the shading or fading of the at least portion of the graphical user interface progressively increases simultaneously with detecting the second gesture moving inward.

196. (New) The method of Claim 195, wherein the magnitude of the shading or fading of the at least portion of the graphical user interface progressively decreases as a function of detecting the second gesture moving outward.

197. (New) The method of Claim 158, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the first operation includes performing a particular operation associated with the at least one of the one or more first menu items; and the second operation includes opening a contextual menu with one or more options associated with the at least one of the one or more first menu items;

the one or more second menu items include at least some of the application icons including a particular application icon associated with a particular application, where the third operation includes opening the particular application to display a particular application interface of the particular application instead of the home screen; and

hardware status indicia is displayed adjacent to the first edge.

198. (New) The method of Claim 158, wherein the one or more first menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the first operation includes performing a particular operation associated with the at least one of the one or more first menu items; and the second operation includes opening a contextual menu with one or more options associated with the at least one of the one or more first menu items.

199. (New) The method of Claim 158, wherein the first menu and the second menu are displayed in the at least one other virtual display layer.

200. (New) The method of Claim 158, wherein the one or more first menu items include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages associated with an application, and the second operation includes controlling at least one aspect of the application.

201. (New) The method of Claim 158, and further comprising:

with the second menu being displayed including the one or more second menu items:

detecting, utilizing the touch interface, a second duration of contact on the at least one of the one or more second menu items,

in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, performing the third operation, and

in response to the second duration of contact on the at least one of the one or more second menu items being detected to surpass the threshold, performing a fourth operation.

202. (New) The method of Claim 201, wherein, in response to the second duration of contact on the at least one of the one or more second menu items being detected to not surpass the threshold, the third operation is performed, in response to detection of a cessation of the second duration of contact.

203. (New) The method of Claim 201, wherein the one or more second menu items include a network interface menu item and a volume menu item; the third operation includes selecting the at least one of the one or more second menu items; and the fourth operation includes opening a

contextual menu with one or more options associated with the at least one of the one or more second menu items.

204. (New) The method of Claim 201, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

205. (New) The method of Claim 204, wherein the second operation is performed in response to:

the first duration of contact on the particular application icon being detected to surpass the threshold, and

the first duration of contact being detected to include a slide gesture component and the first duration of contact on the particular application icon being detected to surpass the threshold.

206. (New) The method of Claim 204, wherein the one or more first menu items include only a subset of the application icons including the particular application icon.

207. (New) The method of Claim 204, wherein the one or more first menu items include only a subset of the plurality of application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

208. (New) The method of Claim 204, wherein the one or more first menu items include favorites of the application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

209. (New) The method of Claim 201, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items;

the one or more second menu items further include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages, and the second operation includes controlling presentation of the at least one message; and

hardware status indicia is displayed adjacent to the second edge.

210. (New) The method of Claim 201, wherein:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the first menu is at least partially translucent for viewing the graphical user interface thereunder, at least a portion of the graphical user interface is blurred based on the detection of the first gesture that begins in connection with the first edge and moves inward, a magnitude of the blurring progressively increases with detecting the first gesture moving inward, and the magnitude of the blurring progressively decreases as a function of detecting a change in the first gesture;

at least a part of the graphical user interface is shaded or faded based on the detection of the second gesture that begins in connection with the second edge and moves inward, a magnitude of the shading or fading of the at least part of the graphical user interface progressively increases with detecting the second gesture moving inward, and the magnitude of the shading or fading of the at least part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular

application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second edge.

211. (New) The method of Claim 210, wherein at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the first gesture begins in connection with the first edge, by beginning near the first edge;

the first gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the first edge, by beginning near the first edge;

the second gesture begins in connection with the first edge, by beginning at the first edge;

the second gesture begins in connection with the first edge, by beginning near the first edge;

the second gesture begins in connection with the first edge, by beginning at the first edge;

the second duration of contact is part of the selection contact;

the second duration of contact is not part of the selection contact;

the second duration of contact is separate from the selection contact;

the selection contact includes the second duration of contact;

the first gesture begins in connection with the first edge and moves inward from the first edge;

the second gesture that begins in connection with the second edge and moves inward from the second edge;

the display includes a top edge and the first gesture or the second gesture moves inward by moving, at least in part, downward from the top edge;

the display includes a top edge and the first gesture moves inward by moving, at least in part, downward from the top edge, and the second gesture moves inward by not moving, at least in part, downward from the top edge;

the first gesture and the second gesture move inward by moving, at least in part, toward a central area of the touch screen;

the second menu is displayed as sliding in;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are not displayed as sliding in via different directions;

the first menu is displayed as sliding in from the first edge;

the second menu is displayed as appearing from the second edge;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the one or more second menu items include representations of active applications;

the one or more second menu items include thumbnails of applications in a multi-tasking environment;

the first operation and the second operation are related to the same function;

the selection contact includes a press gesture;

the selection contact includes a tap gesture;

the selection contact includes a static gesture;

the selection contact includes a dynamic gesture;

the selection contact is separate from the second gesture;

the first duration of contact is separate from the first gesture;

the first menu and the second menu are displayed in the same at least one other virtual display layer;

the first menu and the second menu are displayed in different at least one other virtual display layers;

the first menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer;

the first menu and the second menu are displayed in the at least one other virtual display layer;

each instance of the with includes an entire duration;

each instance of the with includes an entire display or contact duration;

each instance of the with includes at least a portion of a duration;

each instance of the with includes only a portion of a duration;

each instance of the with includes only a portion of a display or contact duration;

each instance of the with includes at least a portion of a display or contact duration;

each instance of the in response to, includes an immediate response to;

each instance of the in response to, includes a response after an intermediate operation;

the third operation and the fourth operation are related to the same function;

the blurring includes at least one of: dimming, displaying as indistinct, displaying as vague, displaying as cloudy, displaying as obscured, or displaying as smeared;

the first gesture and the second gesture move inward in different directions;

the first gesture and the second gesture do not move inward in different directions;

the first gesture and the second gesture do not move different directions;

the first gesture is detected to move inward by moving along a line that is perpendicular to the first edge;

the second gesture is detected to move inward by moving along a line that is perpendicular to the second edge;

only the first menu is displayed in the at least one other virtual display layer;

the first menu is displayed in the at least one other virtual display layer, and the second menu is not displayed in the at least one other virtual display layer;

only the second menu is displayed in the at least one other virtual display layer;

the second menu is displayed in the at least one other virtual display layer, and the first menu is not displayed in the at least one other virtual display layer;

both the first menu and the second menu are displayed in the at least one other virtual display layer;

the display, the touch interface, and the memory are directly coupled to the one or more processors;

the display, the touch interface, and the memory are indirectly coupled to the one or more processors;

each instance of the displaying, the detecting, and the performing include acts;

each instance of the displaying, the detecting, and the performing do not include steps;

the shading includes at least one of: displaying as to suggest three-dimensionality, shadowing, or displaying as to include a varied degree of light and/or darkness;

the shading includes color shading;

the shading includes reducing a brightness;

the shading includes reducing a color brightness;

the shading includes moving towards black within a color space;

the shading includes incorporating less color;

the fading includes altering a level of disappearance;

the fading includes altering a transparency;

the fading includes altering a translucency;

the at least part is the same as the at least portion; or

the at least part is different from the at least portion.

Remarks:

The drawings have been the subject of an objection. Such objection is deemed avoided by virtue of the replacement drawing submitted herewith.

Claims 18, 45-49, 51-57 and 61-103 are rejected under 35 U.S.C. 112(a) or 35 U.S.C. 112 (pre-AIA), first paragraph. Applicant respectfully disagrees with the Examiner's latest arguments. However, in the interest of expediting prosecution, applicant has clarified the claims to avoid this rejection.

The Examiner has also generally cited Wilairat (USPN 2010/0302172). Applicant respectfully asserts that Wilairat does not disclose at least the following claim terms, in the specific context claimed (emphasis added):

"18. An electronic device, comprising:

a display;

a touch interface;

one or more processors;

memory; and

one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for:

displaying, utilizing the display, a graphical user interface;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first portion of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first portion of the display and moves inward, displaying, utilizing the display, a first menu as sliding in and including a plurality of first menu items;

when the first menu is displayed including the plurality of first menu items:

detecting, utilizing the touch interface, a first pressure on at least one of the first menu items,

when the first pressure on the at least one of the first menu items surpasses a first threshold, performing a first operation, and

when the first pressure on the at least one of the first menu items surpasses a second threshold, performing a second operation;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second portion of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second portion of the display and moves inward, displaying, utilizing the display, a second menu including a plurality of second menu items;

when the second menu is displayed including the plurality of second menu items:

detecting, utilizing the touch interface, a second pressure on at least one of the second menu items.

when the second pressure on the at least one of the second menu items surpasses the first threshold, performing a third operation, and

when the second pressure on the at least one of the second menu items surpasses the second threshold, performing a fourth operation;

wherein the electronic device is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer;

wherein the electronic device is configured such that the first portion of the display and the second portion of the display are not a same edge."

"104. An electronic device, comprising:

a display;

a touch interface;

one or more processors;

memory; and

one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for:

displaying, utilizing the display, a graphical user interface;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items;

when the first menu is displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation;

when the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items;

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation;

wherein the electronic device is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer."

"158. (New) A method, comprising:

at an electronic device including a display, a touch interface, and memory coupled to one or more processors:

displaying, utilizing the display, a graphical user interface;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first edge of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items;

with the first menu being displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

in response to the first duration of contact on the at least one of the one or more first menu items being detected to not surpass a threshold, performing a first operation, and

in response to the first duration of contact on the at least one of the one or more first menu items being detected to surpass the threshold, performing a second operation;

with the graphical user interface being displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second edge of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second edge and moves inward, displaying, utilizing the display, a second menu including one or more second menu items, such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer;

with the second menu being displayed including the one or more second menu items:

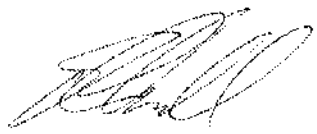
detecting, utilizing the touch interface, a selection contact on at least one of the one or more second menu items, and

in response to the selection contact being detected on the at least one of the one or more second menu items, performing a third operation."

It is believed that all of the pending issues have been addressed. However, the absence of a reply to a specific rejection, issue, or comment does not signify agreement with or concession of that rejection, issue, or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims)

that have not been expressed. Still yet, nothing in this reply should be construed as intention to concede any issue with regard to any claim, except as specifically stated in this reply. Finally, it should be noted that no claims are intended to be construed under 35 U.S.C. 112, paragraph 6.

Respectfully submitted,



Dated: 03 Jan 2020

Patrick E. Caldwell, Esq.
Reg. No. 44,580

The Caldwell Firm, LLC
PO Box 59655
Dallas, Texas 75229-0655
Telephone: (214) 734-2313
pcaldwell@thecaldwellfirm.com

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/169,961	10/24/2018	Michael S. Smith	SMITH070AG	7650

92045 7590 12/19/2019

The Caldwell Firm, LLC
PO Box 59655
Dept. SVIPGP
Dallas, TX 75229

EXAMINER
XAVIER, ANTONIO J

ART UNIT	PAPER NUMBER
2623	

NOTIFICATION DATE	DELIVERY MODE
12/19/2019	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

eofficeaction@appcoll.com
pcaldwell@thecaldwellfirm.com

Office Action Summary	Application No. 16/169,961	Applicant(s) Smith, Michael S.	
	Examiner ANTONIO J XAVIER	Art Unit 2623	AIA (FITF) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☑ Responsive to communication(s) filed on 10/1/19.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☑ This action is **FINAL.** 2b) ☐ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5) ☑ Claim(s) 18,45-49,51-57 and 61-103 is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6) ☐ Claim(s) _____ is/are allowed.

7) ☑ Claim(s) 18,45-49,51-57 and 61-103 is/are rejected.

8) ☐ Claim(s) _____ is/are objected to.

9) ☐ Claim(s) _____ are subject to restriction and/or election requirement

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to **PPHfeedback@uspto.gov.**

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☑ The drawing(s) filed on 10/1/19 is/are: a)☐ accepted or b)☑ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☑ Notice of References Cited (PTO-892)

2) ☑ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date _____.

4) ☐ Other: _____.

Notice of Pre-AIA or AIA Status

1. The present application is being examined under the pre-AIA first to invent provisions.

In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

Response to Arguments

2. Applicant's arguments filed October 1, 2019 (hereinafter "Remarks") have been considered but are moot in view of the new ground(s) of rejection.

Examiner notes the change from "periphery" to "display" is broader in scope and does not avoid the underlying problem.

In the interest of compact prosecution, Examiner suggests using a negative limitation to exclude the possibility of gestures on the same edge. Applicant is encouraged to contact Examiner for an interview to approve of claim language in the future.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "second gesture that begins in connection with a second portion of the periphery and moves inward; in response to the detection of the **second gesture** that begins in connection with the **second portion of the display** and moves inward, **displaying**, utilizing the display, **a second menu** including a plurality of second menu items" (see at least Claim 18 – emphasis added) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Examiner notes the replacement drawings submitted on October 1, 2019 are not being entered because of Fig. 23. Specifically, the language in proposed Fig. 23 does not appear to be supported by the specification as originally filed.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112(a):

> (a) IN GENERAL.—The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention.

The following is a quotation of the first paragraph of pre-AIA 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 18, 45-49, 51-57 and 61-103 are rejected under 35 U.S.C. 112(a) or 35 U.S.C. 112 (pre-AIA), first paragraph, because the specification, while being enabling for "in one embodiment, a pinch slide gesture which begins near an edge of a display and then moves inward may cause a menu or window to slide in from that edge of the display. As an option, the menu or window may remain visible until a selection is made. In another embodiment, there may be different menus or windows associated with **each edge** of a display" (paragraph [00475] – emphasis added) does not reasonably provide enablement for "second gesture that begins in connection with a

second portion of the at least one edge and moves inward; in response to the detection of the **second gesture** that begins in connection with the **second portion of the display** and moves inward, **displaying**, utilizing the display, **a second menu** including a plurality of second menu items" (**Claims 18, 45 and 103** – emphasis added). The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims.

The new language introduces the possibility of a second gesture creating a second menu from the same portion of the display. Multiple gestures and menus coming from the same portion of the display (i.e., includes the same edge) are not described or explained in the specification as filed.

Claims 46-49, 51-57 and 61-102 depend on Claim 45 and are rejected for substantially the same reasons, discussed above.

Pertinent Art

6. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure:

a. Figs. 1 and 3 and paragraphs [0015] and [0016] of Wilairat (USPN 2010/0302172) teach a pull-in gesture from any edge of a display can initiate a menu; and

b. Hinckley et al. (USPN 2011/0209088) and Nan et al. (USPN 2012/0304131) teach inward swipe gestures from an edge to drag out a menu.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANTONIO J XAVIER whose telephone number is (571)270-7688. The examiner can normally be reached on M-F 530am-2pm PST.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at http://www.uspto.gov/interviewpractice.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on 571-272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Antonio Xavier/
Primary Examiner, Art Unit 2623

Notice of References Cited	Application/Control No. 16/169,961	Applicant(s)/Patent Under Reexamination Smith, Michael S.	
	Examiner ANTONIO J XAVIER	Art Unit 2623	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-20110209088-A1	08-2011	Hinckley; Kenneth P.	G06F3/0488	715/810
*	B	US-20120304131-A1	11-2012	Nan; Jennifer	G06F3/04883	715/863
*	C	US-20100302172-A1	12-2010	Wilairat; Weerapan	G06F3/04883	345/173
	D					
	E					
	F					
	G					
	H					
	I					
	J					
	K					
	L					
	M					

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/169,961	Smith, Michael S.
	Examiner	Art Unit
	ANTONIO J XAVIER	2623

CPC - Searched*		
Symbol	Date	Examiner
G06F3/04817	02/27/2019	AX
G06F3/0482	02/27/2019	AX
G06F3/04847	02/27/2019	AX
G06F3/04883	02/27/2019	AX

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

/Antonio Xavier/ Primary Examiner, Art Unit 2623	

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/169,961	Smith, Michael S.
	Examiner	Art Unit
	ANTONIO J XAVIER	2623

Search Notes		
Search Notes	**Date**	**Examiner**
G06F3/04817	02/27/2019	AX
G06F3/0482	02/27/2019	AX
G06F3/04847	02/27/2019	AX
G06F3/04883	02/27/2019	AX
Inventor	02/27/2019	AX
EAST	02/27/2019	AX
Reviewed patent family	02/27/2019	AX
Updated EAST	05/16/2019	AX
Updated EAST	09/15/2019	AX
Updated EAST	12/13/2019	AX

Interference Search			
US Class/CPC Symbol	**US Subclass/CPC Group**	**Date**	**Examiner**

/Antonio Xavier/ Primary Examiner, Art Unit 2623	

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/169,961	Smith, Michael S.
	Examiner	Art Unit
	ANTONIO J XAVIER	2623

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

CLAIMS

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	05/16/2019	09/15/2019	12/13/2019						
	1	-	-	-						
	2	-	-	-						
	3	-	-	-						
	4	–	–	–						
	5	-	-	-						
	6	-	-	-						
	7	-	-	-						
	8	-	-	-						
	9	–	–	–						
	10	-	-	-						
	11	-	-	-						
	12	-	-	-						
	13	–	–	–						
	14	–	–	–						
	15	-	-	-						
	16	-	-	-						
	17	-	-	-						
	18	✓	✓	✓						
	19	-	-	-						
	20	-	-	-						
	21	-	-	-						
	22	✓	✓	-						
	23	–	–	–						
	24	✓	-	-						
	25	✓	✓	-						
	26	✓	-	-						
	27	✓	-	-						
	28	✓	✓	-						
	29	✓	✓	-						
	30	✓	✓	-						
	31	✓	✓	-						
	32	✓	✓	-						
	33	✓	✓	-						
	34	✓	✓	-						
	35	✓	✓	–						
	36	✓	-	-						
	37	✓	✓	-						
	38	✓	✓	-						
	39	✓	-	-						
	40	✓	–	–						
	41		✓	-						
	42		✓	-						

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/169,961	Smith, Michael S.
	Examiner	Art Unit
	ANTONIO J XAVIER	2623

CLAIM		DATE								
Final	Original	05/16/2019	09/15/2019	12/13/2019						
	43		✓	-						
	44		✓	-						
	45		✓	✓						
	46		✓	✓						
	47		✓	✓						
	48		✓	✓						
	49		✓	✓						
	50		✓	-						
	51		✓	✓						
	52		✓	✓						
	53		✓	✓						
	54		✓	✓						
	55		✓	✓						
	56		✓	✓						
	57		✓	✓						
	58		✓	-						
	59		✓	-						
	60		✓	-						
	61			✓						
	62			✓						
	63			✓						
	64			✓						
	65			✓						
	66			✓						
	67			✓						
	68			✓						
	69			✓						
	70			✓						
	71			✓						
	72			✓						
	73			✓						
	74			✓						
	75			✓						
	76			✓						
	77			✓						
	78			✓						
	79			✓						
	80			✓						
	81			✓						
	82			✓						
	83			✓						
	84			✓						
	85			✓						
	86			✓						
	87			✓						
	88			✓						
	89			✓						
	90			✓						
	91			✓						
	92			✓						
	93			✓						
	94			✓						

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/169,961	Smith, Michael S.
	Examiner	**Art Unit**
	ANTONIO J XAVIER	2623

CLAIM		DATE								
Final	Original	05/16/2019	09/15/2019	12/13/2019						
	95			✓						
	96			✓						
	97			✓						
	98			✓						
	99			✓						
	100			✓						
	101			✓						
	102			✓						
	103			✓						

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	10101898	B2	2018-10-16	AMELINE	
	2	10222891	B1	2019-03-05	Smith	
	3	10425284	B2	2019-09-24	Dellinger et al.	
	4	3358493	A	1967-12-19	Erich	
	5	3956986	A	1976-05-18	Wirz et al.	
	6	6030499	A	2000-02-29	Soderholm	
	7	6105600	A	2000-08-22	Wang	
	8	6526133	B1	2003-02-25	Izaki et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	9	7551899	B1	2009-06-23	Nicolas et al.	
	10	7555311	B2	2009-06-30	Kangas et al.	
	11	7721227	B2	2010-05-18	Ronkainen	
	12	7821506	B2	2010-10-26	Sato et al.	
	13	7930002	B2	2011-04-19	Gong	
	14	8103215	B2	2012-01-24	Rek	
	15	8248255	B2	2012-08-21	Tzidon et al.	
	16	8265709	B2	2012-09-11	Forstall	
	17	8265822	B2	2012-09-11	Nakashima et al.	
	18	8300016	B2	2012-10-30	Lu et al.	
	19	8331579	B2	2012-12-11	Kato	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	20	8355700	B2	2013-01-15	Lee	
	21	8400107	B2	2013-03-19	Taguchi et al.	
	22	8405528	B2	2013-03-26	Aghaei et al.	
	23	8441377	B2	2013-05-14	Liu	
	24	8468469	B1	2013-06-18	Mendis et al.	
	25	8534318	B2	2013-09-17	Kanemaru et al.	
	26	8566923	B2	2013-10-22	Fredette et al.	
	27	8591028	B2	2013-11-26	Dobashi	
	28	8606968	B2	2013-12-10	Blewett et al.	
	29	8712477	B2	2014-04-29	Yu et al.	
	30	8757198	B2	2014-06-24	Santamaria et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	31	8832577	B2	2014-09-09	Sirpal et al.	
	32	8838076	B2	2014-09-16	Lee	
	33	8954887	B1	2015-02-10	Tseng et al.	
	34	8988353	B2	2015-03-24	Shin et al.	
	35	9003515	B2	2015-04-07	Ganem	
	36	9047005	B2	2015-06-02	Hill et al.	
	37	9058061	B2	2015-06-16	Aono et al.	
	38	9058102	B2	2015-06-16	Miyamoto	
	39	9103691	B2	2015-08-11	Wäller et al.	
	40	9152240	B2	2015-10-06	Yeh	
	41	9195389	B2	2015-11-24	Park et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	42	9305531	B2	2016-04-05	Miwa	
	43	9405466	B2	2016-08-02	Suraqui	
	44	9430122	B2	2016-08-30	Cassar	
	45	9538346	B2	2017-01-03	Kim et al.	
	46	9619141	B2	2017-04-11	Konami	
	47	9684521	B2	2017-06-20	Shaffer et al.	
	48	9690474	B2	2017-06-27	Chen et al.	
	49	9881608	B2	2018-01-30	Lebeau et al.	
	50	9972297	B2	2018-05-15	Xu et al.	

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	1	20040244554	A1	2004-12-09	Rodriguez	
	2	20060078295	A1	2006-04-13	Yamashita	
	3	20070066310	A1	2007-03-22	Haar et al.	
	4	20070270179	A1	2007-11-22	Lee et al.	
	5	20070271513	A1	2007-11-22	Andren	
	6	20080169960	A1	2008-07-17	Rosenbury	
	7	20090179780	A1	2009-07-16	Tambe	
	8	20090315741	A1	2009-12-24	Kim	
	9	20090327979	A1	2009-12-31	Haverinen et al.	
	10	20100031186	A1	2010-02-04	Tseng et al.	
	11	20100241984	A1	2010-09-23	Nurmi et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	12	20100245282	A1	2010-09-30	Lai	
	13	20100302281	A1	2010-12-02	Kim	
	14	20110029868	A1	2011-02-03	Moran et al.	
	15	20110227830	A1	2011-09-22	Chun	
	16	20110310537	A1	2011-12-22	Imamura et al.	
	17	20110314423	A1	2011-12-22	Ohmiya et al.	
	18	20120081290	A1	2012-04-05	Heo	
	19	20120102401	A1	2012-04-26	Ijas et al.	
	20	20120117507	A1	2012-05-10	Tseng et al.	
	21	20120159387	A1	2012-06-21	OH et al.	
	22	20120162213	A1	2012-06-28	Shim et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	23	20120192108	A1	2012-07-26	Kolb	
	24	20120212420	A1	2012-08-23	Shin	
	25	20120252426	A1	2012-10-04	Nagaoka et al.	
	26	20120268361	A1	2012-10-25	Shotel et al.	
	27	20120289290	A1	2012-11-15	Chae et al.	
	28	20120290946	A1	2012-11-15	Schrock et al.	
	29	20120299980	A1	2012-11-29	Fujikawa	
	30	20120306775	A1	2012-12-06	MIYACHI et al.	
	31	20120312806	A1	2012-12-13	Burt et al.	
	32	20130016586	A1	2013-01-17	Craig	
	33	20130044062	A1	2013-02-21	Bose et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	34	20130050122	A1	2013-02-28	KANG et al.	
	35	20130050141	A1	2013-02-28	PARK et al.	
	36	20130120298	A1	2013-05-16	Zhou	
	37	20130125803	A1	2013-05-23	Tseng	
	38	20130154968	A1	2013-06-20	Tomimori	
	39	20130154981	A1	2013-06-20	Park et al.	
	40	20130160514	A1	2013-06-27	Mitze	
	41	20130169981	A1	2013-07-04	Takahashi	
	42	20130268853	A1	2013-10-10	Gommier et al.	
	43	20140006948	A1	2014-01-02	Yang et al.	
	44	20140143659	A1	2014-05-22	Xue et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	45	20140210727	A1	2014-07-31	Wassingbo	
	46	20140247216	A1	2014-09-04	Fang	
	47	20140303436	A1	2014-10-09	Pless et al.	
	48	20160041715	A1	2016-02-11	Sirpal et al.	

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1		

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature	/Antonio Xavier/	Date Considered	12/13/2019

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Patrick Caldwell/	Date (YYYY-MM-DD)	2019-11-19
Name/Print	Patrick Caldwell	Registration Number	44580

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	5581505	A	1996-12-03	Lee	
	2	5596638	A	1997-01-21	Paterson et al.	
	3	5675329	A	1997-10-07	Barker et al.	
	4	5680160	A	1997-10-21	LaPointe	
	5	5687733	A	1997-11-18	McKown	
	6	5699082	A	1997-12-16	Marks et al.	
	7	5708460	A	1998-01-13	Young et al.	
	8	5729219	A	1998-03-17	Armstrong et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	9	5729612	A	1998-03-17	Abel et al.	
	10	5742894	A	1998-04-21	Jambhekar et al.	
	11	5743859	A	1998-04-28	Wodlinger et al.	
	12	5744027	A	1998-04-28	Connell et al.	
	13	5794163	A	1998-08-11	Paterson et al.	
	14	5805950	A	1998-09-08	Inglese et al.	
	15	5825873	A	1998-10-20	Duncan et al.	
	16	5838244	A	1998-11-17	Schmidt et al.	
	17	5856822	A	1999-01-05	Du et al.	
	18	5859522	A	1999-01-12	Theobald	
	19	5884191	A	1999-03-16	Karpus et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	20	5887995	A	1999-03-30	Holehan	
	21	5889236	A	1999-03-30	Gillespie et al.	
	22	5925942	A	1999-07-20	Theobald	
	23	5947334	A	1999-09-07	Rudick et al.	
	24	5953674	A	1999-09-14	James A. Hutchison	
	25	5970092	A	1999-10-19	Currivan	
	26	5983100	A	1999-11-09	Johansson et al.	
	27	5999892	A	1999-12-07	Fan	
	28	6012105	A	2000-01-04	Rubbmark et al.	
	29	6020878	A	2000-02-01	Robinson	
	30	6030499	A	2000-02-29	Soderholm	Method and apparatus in a paper or board machine for dewatering the web

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	31	6038457	A	2000-03-14	Barkat	
	32	6040933	A	2000-03-21	Khaleghi et al.	
	33	6045512	A	2000-04-04	Roteliuk et al.	
	34	6081724	A	2000-06-27	Wilson	
	35	6097943	A	2000-08-01	Nordwall	
	36	6105600	A	2000-08-22	Wang	Inflation device comprising a connection head compatible with inflation valves of U.S. type and french type
	37	6108064	A	2000-08-22	Minoura et al.	
	38	6118435	A	2000-09-12	Fujita et al.	
	39	6119022	A	2000-09-12	Osborn et al.	
	40	6138036	A	2000-10-24	Breanndan O'Cinneide	
	41	6138245	A	2000-10-24	Son et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	42	6141000	A	2000-10-31	Martin	
	43	6163690	A	2000-12-19	Lilja	
	44	6169538	B1	2001-01-02	Nowlan et al.	
	45	6192238	B1	2001-02-20	Piirainen	
	46	6193152	B1	2001-02-27	Fernando et al.	
	47	6259729	B1	2001-07-10	Seki	
	48	6283763	B1	2001-09-04	Matsuzaki et al.	
	49	6284131	B1	2001-09-04	Hogard et al.	
	50	6285890	B1	2001-09-04	Panian	
	51	6330247	B1	2001-12-11	Chang et al.	
	52	6337681	B1	2002-01-08	Martin	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	53	6351271	B1	2002-02-26	Mainwaring et al.	
	54	6366530	B1	2002-04-02	Sluiter et al.	
	55	6371923	B1	2002-04-16	Roteliuk et al.	
	56	6377825	B1	2002-04-23	Kennedy et al.	
	57	6380581	B1	2002-04-30	Noble et al.	
	58	6385463	B1	2002-05-07	Lieberman et al.	
	59	6388655	B1	2002-05-14	Leung	
	60	6392638	B2	2002-05-21	Hanajima et al.	
	61	6417845	B1	2002-07-09	Chen et al.	
	62	6441807	B1	2002-08-27	Yamaguchi	
	63	6448959	B1	2002-09-10	Kawaguchi et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	64	6449492	B1	2002-09-10	Kenagy et al.	
	65	6456517	B2	2002-09-24	Kim et al.	
	66	6473630	B1	2002-10-29	Baranowski et al.	
	67	6476795	B1	2002-11-05	Derocher et al.	
	68	6477390	B1	2002-11-05	Gum et al.	
	69	6480149	B1	2002-11-12	Sutherland et al.	
	70	6492979	B1	2002-12-10	Kent et al.	
	71	6496854	B1	2002-12-17	Hagersten et al.	
	72	6504530	B1	2003-01-07	Wilson et al.	
	73	6509847	B1	2003-01-21	Anderson	
	74	6523124	B1	2003-02-18	Lunsford et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	75	6526133	B1	2003-02-25	Izaki et al.	Telephone set for continuously displaying caller telephone number by simple operation
	76	6526315	B1	2003-02-25	Inagawa et al.	
	77	6529744	B1	2003-03-04	Birkler et al.	
	78	6533757	B1	2003-03-18	Lampropoulos et al.	
	79	6546262	B1	2003-04-08	Freadman	
	80	6549790	B1	2003-04-15	Rubbmark et al.	
	81	6564285	B1	2003-05-13	Mills et al.	
	82	6567102	B2	2003-05-20	Kung	
	83	6590568	B1	2003-07-08	Astala et al.	
	84	6603986	B1	2003-08-05	Bozoukov	
	85	6626013	B2	2003-09-30	Ohta et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	86	6636203	B1	2003-10-21	Wong et al.	
	87	6636749	B2	2003-10-21	Holmes et al.	
	88	6636918	B1	2003-10-21	Aguilar et al.	
	89	6665803	B2	2003-12-16	Lunsford et al.	
	90	6670234	B2	2003-12-30	Hsu et al.	
	91	6689947	B2	2004-02-10	Ludwig	
	92	6714802	B1	2004-03-30	Barvesten	
	93	6721019	B2	2004-04-13	Kono et al.	
	94	6738514	B1	2004-05-18	Shin et al.	
	95	6747636	B2	2004-06-08	Martin	
	96	6751113	B2	2004-06-15	Bhakta et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	97	6765812	B2	2004-07-20	Anderson	
	98	6776546	B2	2004-08-17	Kraus et al.	
	99	6791640	B1	2004-09-14	Okamoto et al.	
	100	6801211	B2	2004-10-05	Forsline et al.	
	101	6804146	B2	2004-10-12	Johnson	
	102	6829297	B2	2004-12-07	Xia et al.	
	103	6873534	B2	2005-03-29	Bhakta et al.	
	104	6879318	B1	2005-04-12	Chan et al.	
	105	6880998	B2	2005-04-19	Kraus et al.	
	106	6888537	B2	2005-05-03	Benson et al.	
	107	6892270	B2	2005-05-10	Roohparvar	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	108	6917282	B2	2005-07-12	Giegerich	
	109	6919927	B1	2005-07-19	Hyodo	
	110	6928110	B2	2005-08-09	Ougi et al.	
	111	6928299	B1	2005-08-09	Rinne et al.	
	112	6928512	B2	2005-08-09	Ayukawa et al.	
	113	6930900	B2	2005-08-16	Bhakta et al.	
	114	6930903	B2	2005-08-16	Bhakta et al.	
	115	6933991	B2	2005-08-23	Sanelle et al.	
	116	6954495	B2	2005-10-11	Piirainen	
	117	6956562	B1	2005-10-18	Responte et al.	
	118	6961015	B2	2005-11-01	Kernahan et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	119	6967903	B2	2005-11-22	Guanter	
	120	6968208	B2	2005-11-22	Kacines	
	121	6975853	B2	2005-12-13	Fang et al.	
	122	6983169	B2	2006-01-03	Vogel et al.	
	123	6990044	B2	2006-01-24	Kang	
	124	7003316	B1	2006-02-21	Elias et al.	
	125	7006851	B2	2006-02-28	Holmes et al.	
	126	7006854	B2	2006-02-28	Choi	
	127	7010325	B1	2006-03-07	Oh	
	128	7020488	B1	2006-03-28	Bleile et al.	
	129	7024230	B2	2006-04-04	Curtiss et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	130	7030854	B2	2006-04-18	Baucom et al.	
	131	7031670	B2	2006-04-18	May	
	132	7046230	B2	2006-05-16	Zadesky et al.	
	133	7050783	B2	2006-05-23	Curtiss et al.	
	134	7062260	B2	2006-06-13	Vuori	
	135	7062261	B2	2006-06-13	Goldstein et al.	
	136	7064748	B2	2006-06-20	Cok	
	137	7097903	B2	2006-08-29	Kishioka et al.	
	138	7098776	B2	2006-08-29	Chang et al.	
	139	7111540	B2	2006-09-26	Rodriquez	Dual purpose puncher
	140	7122149	B2	2006-10-17	Li et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	141	7123936	B1	2006-10-17	Rydbeck et al.	
	142	7138984	B1	2006-11-21	Miles	
	143	7148882	B2	2006-12-12	Kamrath et al.	
	144	7149511	B1	2006-12-12	Edward F. Bachner et al.	
	145	7149552	B2	2006-12-12	Lair	
	146	7154481	B2	2006-12-26	Cross et al.	
	147	7155254	B2	2006-12-26	Pinder	
	148	7171239	B2	2007-01-30	Tan et al.	
	149	7176897	B2	2007-02-13	Roberts	
	150	7184794	B2	2007-02-27	Hess et al.	
	151	7190350	B2	2007-03-13	Roberts	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	152	7190720	B2	2007-03-13	Fimoff et al.	
	153	7196694	B2	2007-03-27	Roberts	
	154	7205983	B2	2007-04-17	Raap et al.	
	155	7224992	B2	2007-05-29	Patino et al.	
	156	7240836	B2	2007-07-10	Vrotsos et al.	
	157	7245293	B2	2007-07-17	Hoshino et al.	
	158	7254036	B2	2007-08-07	Pauley et al.	
	159	7254973	B2	2007-08-14	Campian	
	160	7269708	B2	2007-09-11	Ware	
	161	7280849	B1	2007-10-09	Bailey	
	162	7286436	B2	2007-10-23	Bhakta et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	163	7289113	B2	2007-10-30	Martin	
	164	7289386	B2	2007-10-30	Bhakta et al.	
	165	7296107	B2	2007-11-13	Lunsford et al.	
	166	7303680	B2	2007-12-04	Connell et al.	
	167	7312784	B2	2007-12-25	Baucom et al.	
	168	7312791	B2	2007-12-25	Hoshino et al.	
	169	7315336	B2	2008-01-01	North et al.	
	170	7318892	B2	2008-01-15	Connell et al.	
	171	7343177	B2	2008-03-11	Seshadri et al.	
	172	7343439	B2	2008-03-11	Mills et al.	
	173	7360022	B2	2008-04-15	Tian et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	174	7363054	B2	2008-04-22	Elias et al.	
	175	7375970	B2	2008-05-20	Pauley et al.	
	176	7386656	B2	2008-06-10	Rajan et al.	
	177	7392338	B2	2008-06-24	Rajan et al.	
	178	7398105	B2	2008-07-08	Kalogeropoulos	
	179	7403743	B2	2008-07-22	Welch	
	180	7405779	B2	2008-07-29	Sanelle et al.	
	181	7423557	B2	2008-09-09	Kang	
	182	7424312	B2	2008-09-09	Pinder et al.	
	183	7435636	B1	2008-10-14	Hanafi	
	184	7437221	B2	2008-10-14	Hardman et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	185	7442050	B1	2008-10-28	Bhakta et al.	
	186	7472220	B2	2008-12-30	Rajan et al.	
	187	7492890	B2	2009-02-17	Milani	
	188	7493109	B2	2009-02-17	Munje et al.	
	189	7511702	B2	2009-03-31	Hotelling	
	190	7523035	B2	2009-04-21	Rokusek et al.	
	191	7526317	B2	2009-04-28	Pinder et al.	
	192	7529872	B1	2009-05-05	Schubert et al.	
	193	7532492	B2	2009-05-12	Dobyns et al.	
	194	7532537	B2	2009-05-12	Solomon et al.	
	195	7535463	B2	2009-05-19	Wilson	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	196	7538760	B2	2009-05-26	Hotelling et al.	
	197	7551899	B1	2009-06-23	Nicolas et al.	Intelligent dialing scheme for telephony application
	198	7555311	B2	2009-06-30	Kangas et al.	Mobile communication terminal and method
	199	7555318	B2	2009-06-30	Seshadri et al.	
	200	7558130	B2	2009-07-07	Grunzke	
	201	7558529	B2	2009-07-07	Seshadri et al.	
	202	7558894	B1	2009-07-07	Lydon et al.	
	203	7565179	B2	2009-07-21	Hyatt	
	204	7565458	B2	2009-07-21	Thijssen	
	205	7571295	B2	2009-08-04	Sakarda et al.	
	206	7580312	B2	2009-08-25	Rajan et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	207	7581127	B2	2009-08-25	Rajan et al.	
	208	7590796	B2	2009-09-15	Rajan et al.	
	209	7598607	B2	2009-10-06	Chung et al.	
	210	7603148	B2	2009-10-13	Michalak	
	211	7609178	B2	2009-10-27	Son et al.	
	212	7609567	B2	2009-10-27	Rajan et al.	
	213	7612436	B1	2009-11-03	Lee et al.	
	214	7619893	B1	2009-11-17	Yu	
	215	7619912	B2	2009-11-17	Bhakta et al.	
	216	7620433	B2	2009-11-17	Bodley	
	217	7622365	B2	2009-11-24	Parekh	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	218	7622895	B1	2009-11-24	Griffin	
	219	7623667	B2	2009-11-24	Sander et al.	
	220	7626579	B2	2009-12-01	Hague et al.	
	221	7626594	B1	2009-12-01	Witehira et al.	
	222	7627128	B2	2009-12-01	Sander et al.	
	223	7627307	B2	2009-12-01	Droste et al.	
	224	7627352	B2	2009-12-01	Daniel M. Gauger et al.	
	225	7630202	B2	2009-12-08	Pauley et al.	
	226	7633963	B1	2009-12-15	Anderson et al.	
	227	7636274	B2	2009-12-22	Solomon et al.	
	228	7639239	B2	2009-12-29	Kajimoto et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	229	7643642	B2	2010-01-05	Palino et al.	
	230	7649577	B2	2010-01-19	Sanelle et al.	
	231	7649605	B2	2010-01-19	Kim	
	232	7650168	B2	2010-01-19	Bailey	
	233	7659885	B2	2010-02-09	Kraus et al.	
	234	7663607	B2	2010-02-16	Hotelling et al.	
	235	7675580	B2	2010-03-09	RHO	
	236	7680490	B2	2010-03-16	Bloebaum et al.	
	237	7680514	B2	2010-03-16	Cook et al.	
	238	7683889	B2	2010-03-23	Ribikauskas et al.	
	239	7689168	B2	2010-03-30	House	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	240	7692627	B2	2010-04-06	Wilson	
	241	7692637	B2	2010-04-06	Davis	
	242	7701329	B2	2010-04-20	Donohue	
	243	7705824	B2	2010-04-27	Baucom et al.	
	244	7715831	B2	2010-05-11	Wakefield	
	245	7715873	B1	2010-05-11	Biere et al.	
	246	7716411	B2	2010-05-11	Panabaker et al.	
	247	7721227	B2	2010-05-18	Ronkainen	Method for describing alternative actions caused by pushing a single button
	248	7724589	B2	2010-05-25	Rajan et al.	
	249	7730338	B2	2010-06-01	Rajan et al.	
	250	7738068	B2	2010-06-15	Lee	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	251	7755612	B2	2010-07-13	Park et al.	
	252	7760187	B2	2010-07-20	Kennedy	
	253	7761724	B2	2010-07-20	Rajan et al.	
	254	7769187	B1	2010-08-03	Farrar et al.	
	255	7777581	B2	2010-08-17	Pfaff et al.	
	256	7778601	B2	2010-08-17	Seshadri et al.	
	257	7779185	B2	2010-08-17	Schubert et al.	
	258	7796652	B2	2010-09-14	Reitlingshoefer et al.	
	259	7800592	B2	2010-09-21	Kerr et al.	
	260	7811097	B1	2010-10-12	Bhakta et al.	
	261	7813715	B2	2010-10-12	McKillop et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	262	7814287	B2	2010-10-12	Pratt	
	263	7818036	B2	2010-10-19	Lair et al.	
	264	7818037	B2	2010-10-19	Lair et al.	
	265	7821506	B2	2010-10-26	Sato et al.	Input device
	266	7826318	B2	2010-11-02	Holden et al.	
	267	7835809	B2	2010-11-16	Paul P. Griffin	
	268	7839643	B1	2010-11-23	Yu	
	269	7839645	B2	2010-11-23	Pauley et al.	
	270	7855931	B2	2010-12-21	LaBerge et al.	
	271	7857225	B2	2010-12-28	Challa et al.	
	272	7864627	B2	2011-01-04	Bhakta et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	273	7869608	B2	2011-01-11	Sander et al.	
	274	7881150	B2	2011-02-01	Solomon et al.	
	275	7889786	B2	2011-02-15	Lapointe	
	276	7902886	B2	2011-03-08	Pfaff et al.	
	277	7903090	B2	2011-03-08	Soss et al.	
	278	7903096	B2	2011-03-08	Jeon et al.	
	279	7912519	B2	2011-03-22	Lee et al.	Mobile communication device with function-assignable side key and method for controlling the side key
	280	7916574	B1	2011-03-29	Solomon et al.	
	281	7930002	B2	2011-04-19	Gong	Method for using multi-function key in a portable phone
	282	7932893	B1	2011-04-26	Berthaud	
	283	7940839	B2	2011-05-10	Lapointe et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	284	7941591	B2	2011-05-10	Aviles	
	285	7952566	B2	2011-05-31	Poupyrev et al.	
	286	7965578		2011-06-21	Bhakta et al.	
	287	7965579		2011-06-21	Solomon et al.	
	288	7966578	B2	2011-06-21	Tolmasky et al.	
	289	7973773	B2	2011-07-05	Pryor	
	290	7973777	B2	2011-07-05	Lee et al.	
	291	7973778	B2	2011-07-05	Chen	
	292	7978721	B2	2011-07-12	Jeddeloh et al.	
	293	7982721	B2	2011-07-19	Hio	
	294	7999795	B2	2011-08-16	Hamblin et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	295	8001434	B1	2011-08-16	Lee et al.	
	296	8018723	B1	2011-09-13	Yu et al.	
	297	8019589	B2	2011-09-13	Rajan et al.	
	298	8022933	B2	2011-09-20	Hardacker et al.	
	299	8033836	B1	2011-10-11	Bhakta et al.	
	300	8041881	B2	2011-10-18	Rajan et al.	

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] j	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button [Add]

NON-PATENT LITERATURE DOCUMENTS [Remove]

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T5
	1	IS&T/SPIE, "Electronic Imaging," Hyatt Regency Hotel, Jan. 2011, pp. 1-153.	
	2	JACOBSSON, Sarah, "Nexus one's Screen is Gorgeous, But With Issues," PC World, Feb. 32, 2010, pp. 1-5	
	3	JEDEC STANDARD, DDR3 SDRAM Standard, JESD79-3D, Revision of JESD79-3C, November 2008, September 2009, pp. 1-220	
	4	JEONG, JAE-WOO, et al., "Parfait: A New Scheduler Framework supporting Heterogeneous Xen-ARM schedulers," Jan. 2011, pp. 1-5	
	5	JIANG, HAI, et al., "Data Conversion for Process/Thread Migration and Checkpointing," Wayne State University, 2003 International Conference on Parallel Processing (ICPP'03), 2003, pp. 1-8	
	6	Jon Knight, "Qualcomm Sues Apple Over iPhone X Gestures," GadgetHacks, Article, 12/04/2017, available at https://smartphones.gadgethacks.com/news/qualcomm-sues-apple-over-iphone-x-gestures-0181495/	
	7	KALADY, SAIDALAVI, et al., "Implementation of a Purley Hardware-assisted VMM for x86 Architecture," Preceedings of the World congress on Engineering 2009 vol. 1, 2009, pp. 1-5	
	8	KALLA, NAVEEN et al. "Embedded VMM for Portable Virtual Machines." Date unknown. Prior to 2010. Cited in A. Kunk, P. Bohman, and E. Shaw "VMM based rootkit detection on Android," in University of Illinois at Urbana Champaign, May 2010, pp. 1-11	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	9	KARTHICK, A. R., "Memory Management and RMAP VM of 2.6," 14 slides, January 2004	
	10	KASER, DOMINIK, et al., "FingerGlass: Efficient Multiscale Interaction on Multitouch Screens," 2011, pp. 1-10	
	11	Keyword-highlights in JP2008033739A - "Touch screen interaction method and apparatus based on tactile force feedback and pressure measurement," 7/31/2006	
	12	KING, SAMUEL T., et al., "Operating Systems Extensions to Support Host Based Virtual Machines," Department of Electrical Engineering and Computer Science, University of Michigan, 2002, pp. 1-14	
	13	KISHAN, "Virtual Memory Exercises," Windows Internals Course, University of Tokyo, July 2003, pp. 1-3	
	14	KLARE, B. et al., "Assessment of H.264 Video Compression on Automated Face Recognition Performance in Surveillance and Mobile Video Scenarios," Proc. SPIE 7667, Biometric Technology for Human Identification VII, 76670X (14 April 2010), 8 pages	
	15	KLOSTER, J. F. et al., "On the Feasibility of Memory Sharing," June 2006, pp. 1-132	
	16	KLOSTER, JACOB FABER, et al., "Efficient Memory Sharing in the Xen Virtual Machine Monitor," Aalborg University, Jan. 2006, pp. 1-86	
	17	KOTZMANN, THOMAS, et al., "Design of the Java HotSpot Client Compiler for Java 6," May 2008, pp. 1-32	
	18	KOZUCH, MICHAEL A. et al., "Migration without Virtualization," Intel Research Pittsburg, 2005, pp. 1-5	
	19	KOZUCH, MICHAEL, et al., "Internet Suspend/Resume," Carnegie Mellon University and Intel Research Pittsburgh, 2002, pp. 1-7	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	20	KRATZ, SVEN et al., "Extending the Virtual Trackball Metaphor to Rear Touch Input," 2010, pp. 1-4	
	21	KRATZ, SVEN et al., "Gesture Recognition Using Motion Estimation on Mobile Phones," 2007, pp. 1-5	
	22	KRAUSE, MIKE et al., "Implementing PCI I/O Virtualization Standards," April 6, 2011, pp. 1-8	
	23	LAGAR-CAVILLA, Andres et al."Interactive Resource-Intensive Applications Made Easy," 2007 pp. 1-21.	
	24	LANMAN, DOUGLAS, et al., "Content-Adaptive Parallax Barriers: Optimizing Dual-layer 3D Displays using Low-Rank Light Field Factorization," 2010, pp. 1-10	
	25	LEE, C. J. et al., "DRAM-Aware Last-Level Cache Writeback: Reducing Write-Caused Interference in Memory Systems," April 2010, pp. 1-21	
	26	LI, J., "A Nanosensor Device for Cellphone Integration and Chemical Sensing Network," OHS CELL-ALL Phase II Workshop, July 29, 2010, 22 pages	
	27	LIEBERGELD, STEFFEN, "Efficient Virtualization on ARM Platforms," Techishe Universitat Dresden, May 6, 2009, pp. 1-52	
	28	LIN, M. et al., "Testable Design for Advanced Serial-Link Transceivers," 2007, pp. 1-6	
	29	LIN, X. et al., "A 2.5- to 3.5-Gb/s Adaptive FIR Equalizer With Continuous-Time Wide- Bandwidth Delay Line in 0.25-?m CMOS, IEEE Journal Of Solid-State Circuits, Vol. 41, No. 8, August 2006, pp. 1908-1918	
	30	LIU, C. Y. et al., "Comparison of Signaling and Equalization Schemes in High Speed SerDes (10-25Gbps)," DesignCon 2007, pp. 1-23	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	31	LIU, J. et al., "Equalization in High-Speed Communication Systems," IEEE CIRCUITS AND SYSTEMS MAGAZINE, 2004, pp. 1-14	
	32	LOWELL, DAVID E. et al., "Devirtualizable Virtual Machines Enabling General, Single-Node, Online Maintenance," Hewlett-Packard Laboratories, Oct. 7, 2004, pp. 1-13	
	33	LYNCH, JAMES P., "Nokia 6100 LCD Display Driver," 2010, pp. 1-55	
	34	MACKENZIE, I. SCOTI, et al., "The Tactile Touchpad," Conference on Human Factors in Computing Systems, 1997, pp. 1-5	
	35	MARKATOS, E., "On Using Network RAM as a non-volatile Buffer," August 1998, pp. 1-15	
	36	MARMOR, MICHAEL F., et al., "Visual Insignificance of the Foveal Pit," 2008, pp. 1-7	
	37	MAXIM, "1Gbps to 12.5Gbps; Passive Equalizer for Backplanes and Cables," MAX3787, 19-0406, Rev. 1, December 2005, pp. 1-15	
	38	MAXIM, "Designing a Simple, Small, Wide-band and Low-Power Equalizer for FR4 Copper Links (Featuring the MAX3785, IGbps to 6.4Gbps Equalizer)," DesignCon 2003, HFTA-06.0, 2003, pp. 1-14	
	39	McCALLUM, DAVID C. et al., "ARC-Pad: Absolute+Relative Cursor Positioning for Large Displays with a Mobile Touchscreen," University of Manitoba, Oct. 7, 2009, pp. 1-4	
	40	McCAMMON, ROB, "Android Solutions," Open Kernel Labs, 2009, slides 1-11	
	41	McCAMMON, ROB, "Streamlining Android Migration with Virtualization," ARM and Android, Jul. 19, 2012, pp. 1-4	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	42	McCAMMON, ROB, "Using Virtualization to Create Mass-Market Smartphones," Technology in Depth, 2011, pp. 1-4	
	43	MCGILL, KATHLEEN et al., "Process Migration for Resilient Applications," Dartmouth College, 2011, pp. 1-14	
	44	Memory Management 55 slides, CSE 451: Operating Systems Winter 2007, University of Washington, 1/28/2007	
	45	Micron Technology Announces Syncflash Memory, A New Flash Technology, 1999, pp. 1	
	46	MICRON, "NAND Flash Memory," 16Gb, 32Gb, 64Gb, 128Gb Asynchronous/Synchronous NAND Features, 2009, pp. 1-158	
	47	MIJAT, ROBERTO et al., "Virtualization is Coming to a Platform Near You," ARM, 2011, pp. 1-12	
	48	MOLNOS, ANCA et al., "Composable Processor Virtualization for Embedded Systems," 2010pp. 1-10.	
	49	MOORE, RYAN W. et al., "Addressing the Challenges of DBT for the ARM Architecture," University of Pittsburgh. 2009, pp. 1-10	
	50	MUTHITACHAROEN, ATHICHA, et al., "A Low-bandwidth Network File System," Laboratory for Computer Science, MIT, Department of Computer Science, NYU, Oct. 21, 2001, pp. 1-14	

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature	/Antonio Xavier/	Date Considered	12/13/2019

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

EFS Web 2.1.18

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Patrick Caldwell/	Date (YYYY-MM-DD)	2019-10-02
Name/Print	Patrick Caldwell	Registration Number	44580

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

REPLACEMENT SHEET

DO NOT ENTER: /AX/

12/13/2019

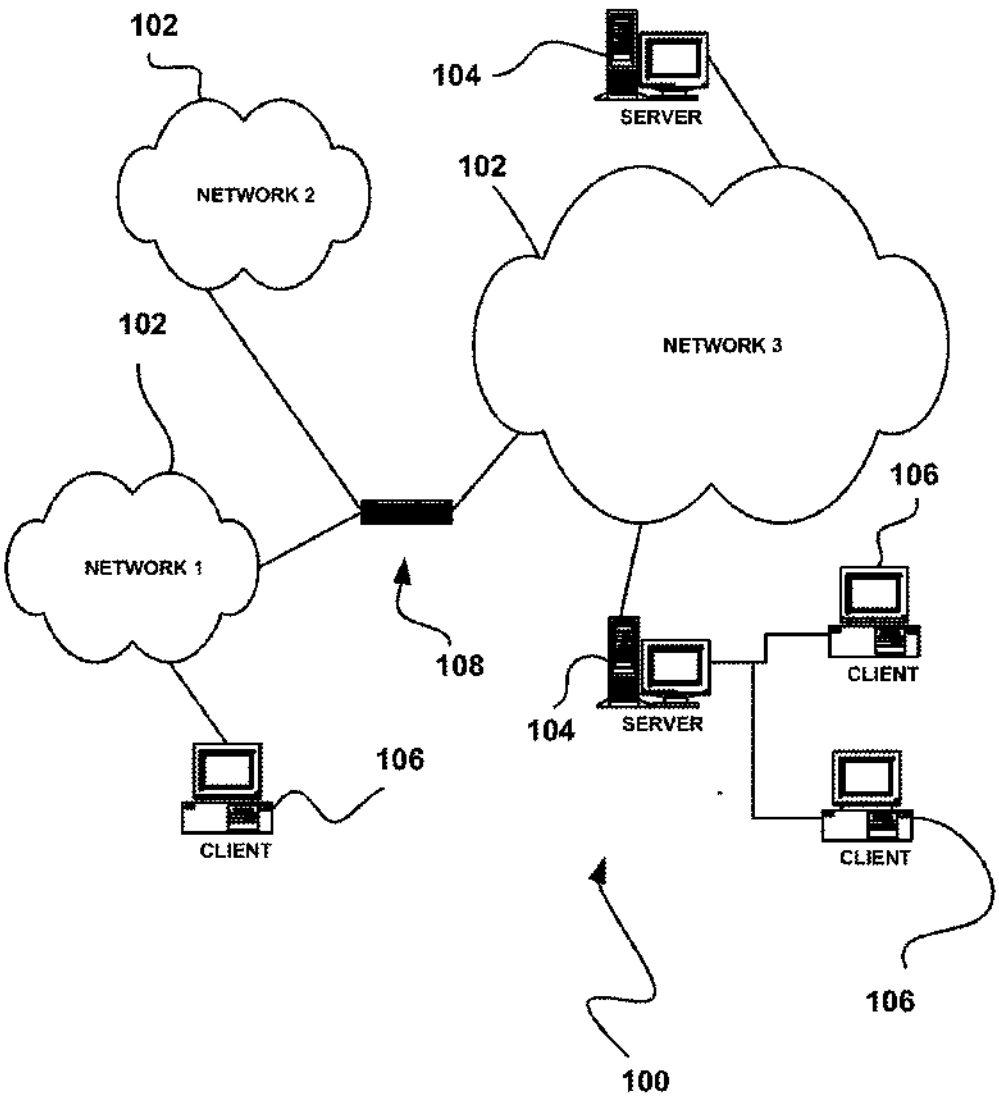


FIGURE 1

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

REPLACEMENT SHEET

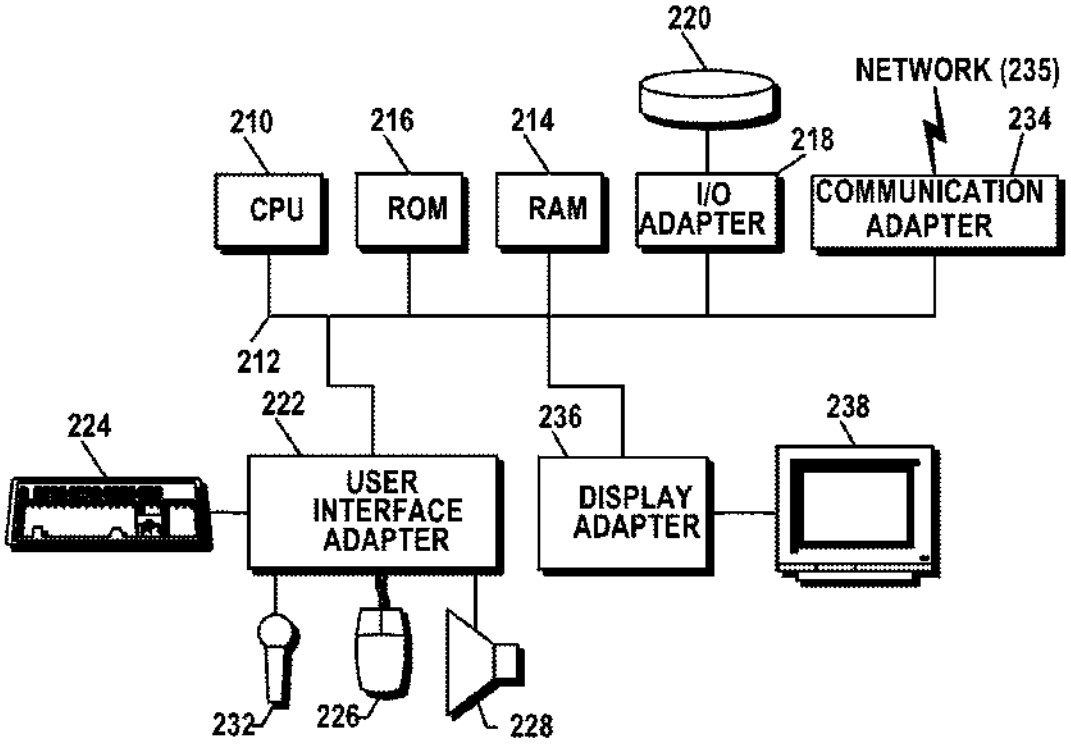


FIGURE 2

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

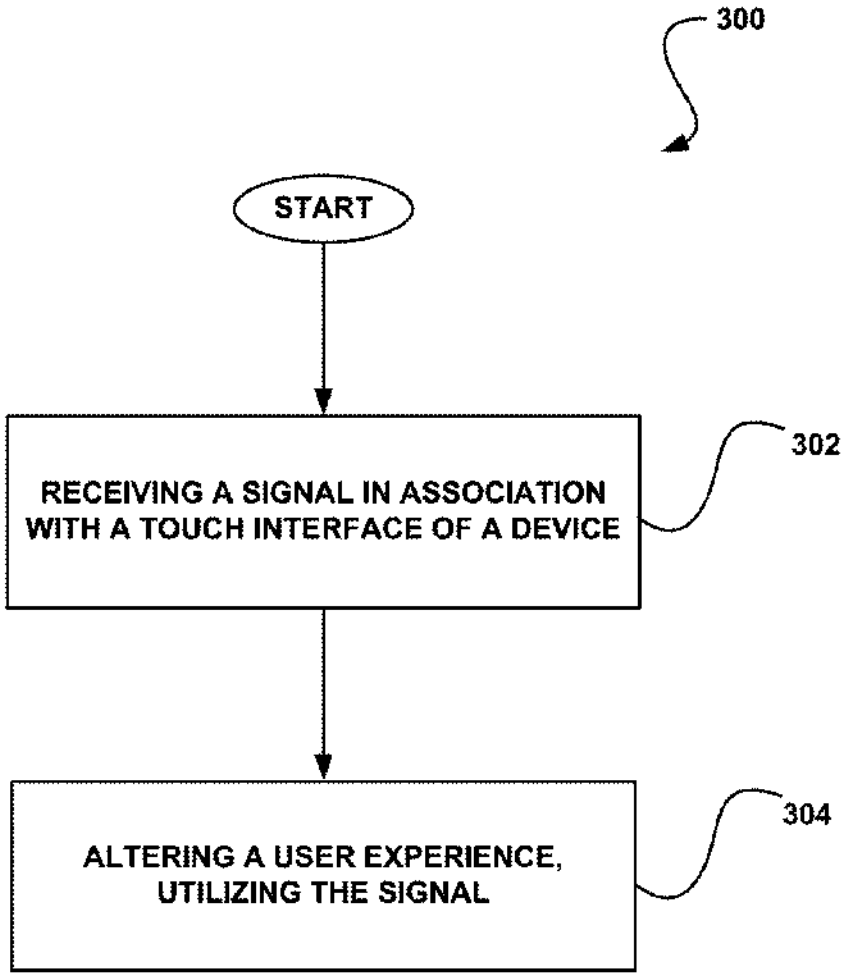


FIGURE 3

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

REPLACEMENT SHEET

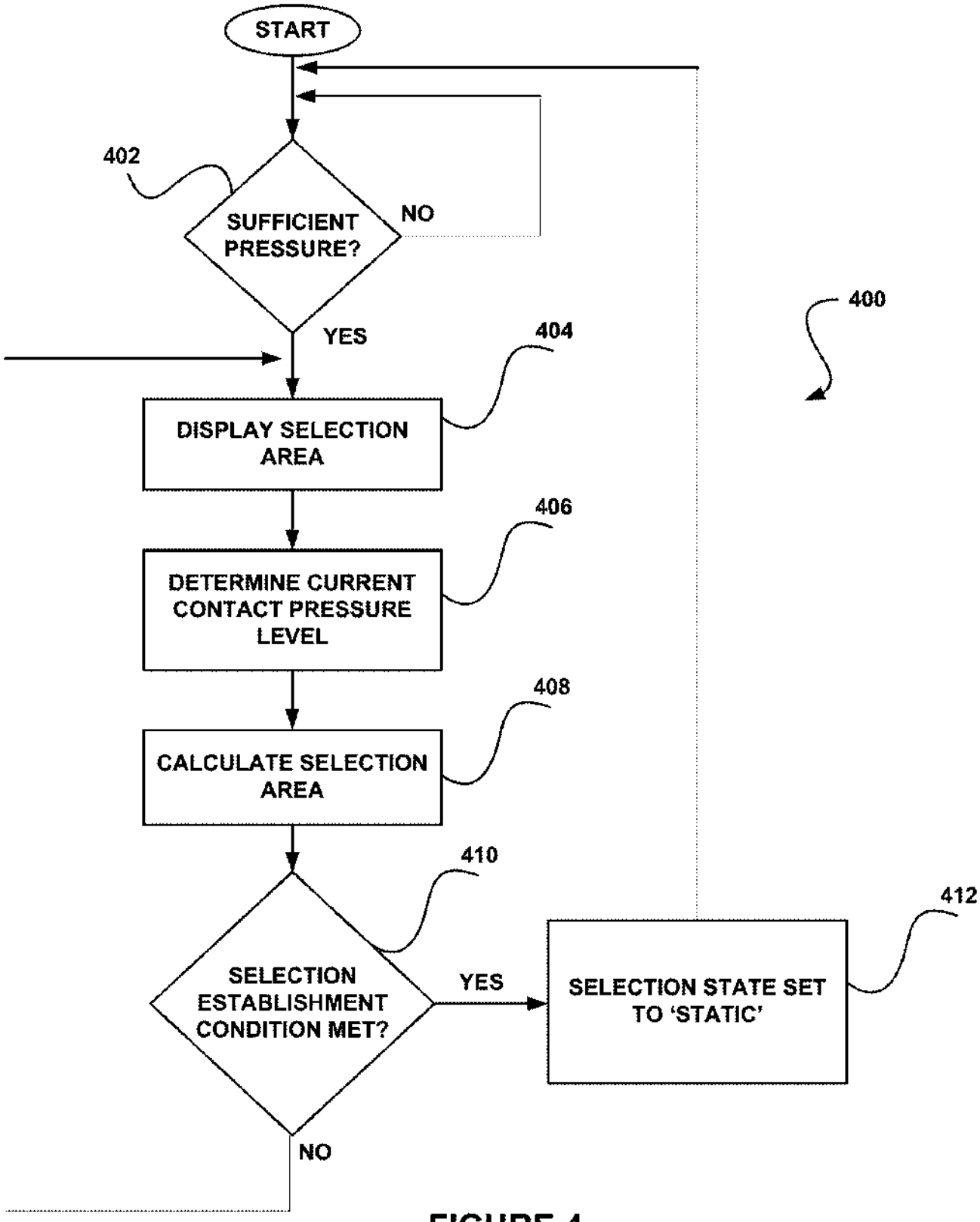


FIGURE 4

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

REPLACEMENT SHEET

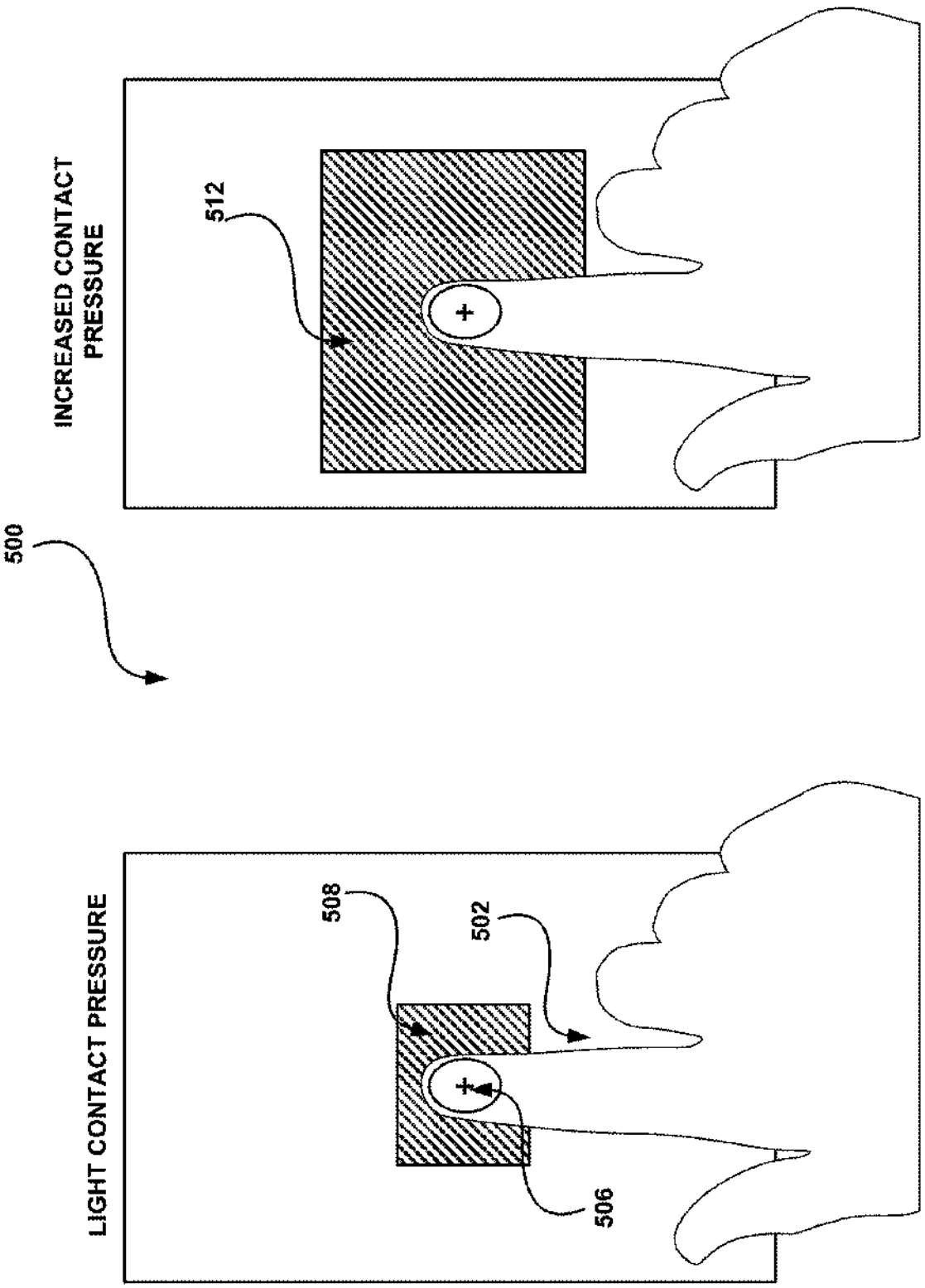


FIGURE 5

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

REPLACEMENT SHEET

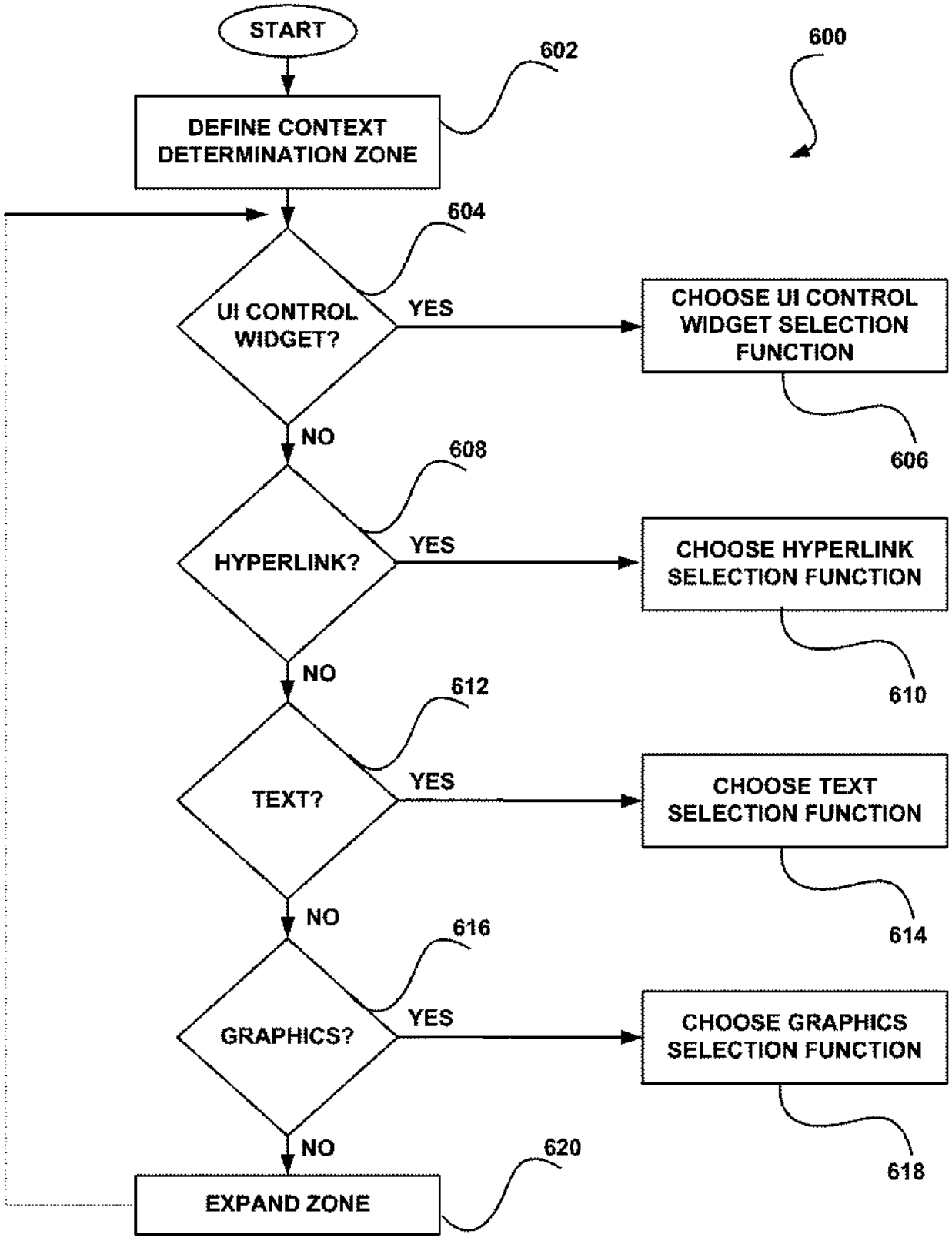


FIGURE 6

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

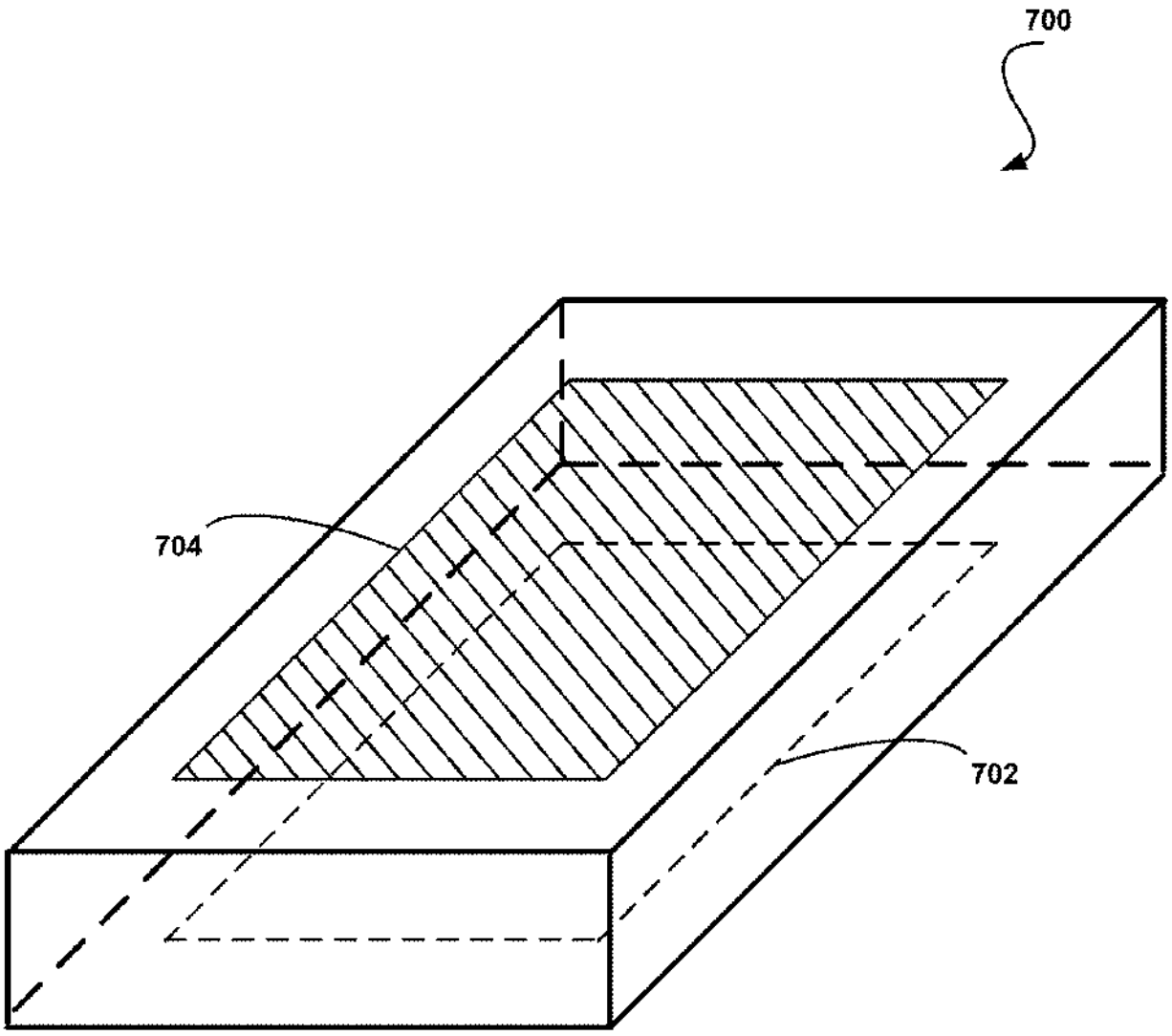


FIGURE 7

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

REPLACEMENT SHEET

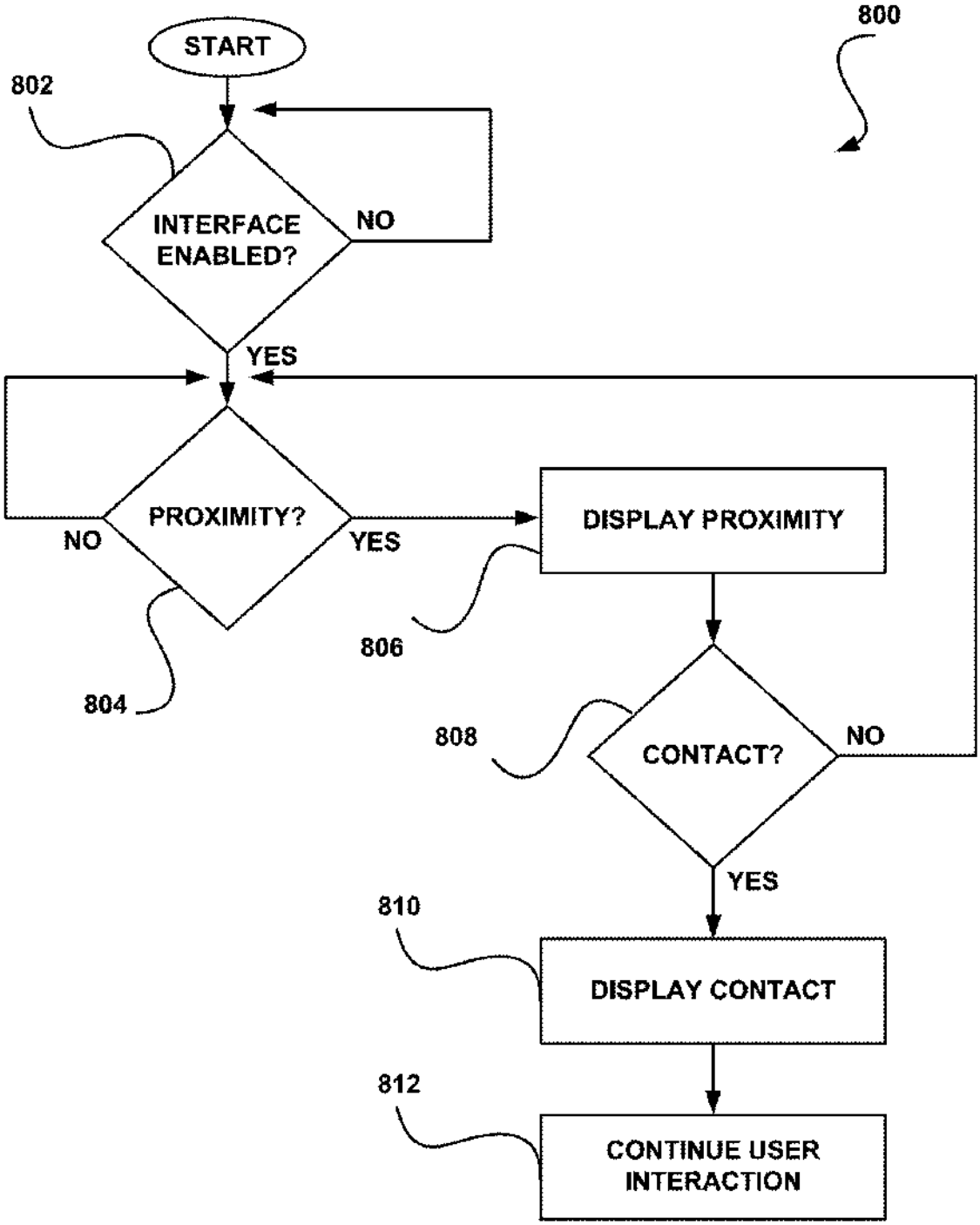


FIGURE 8

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

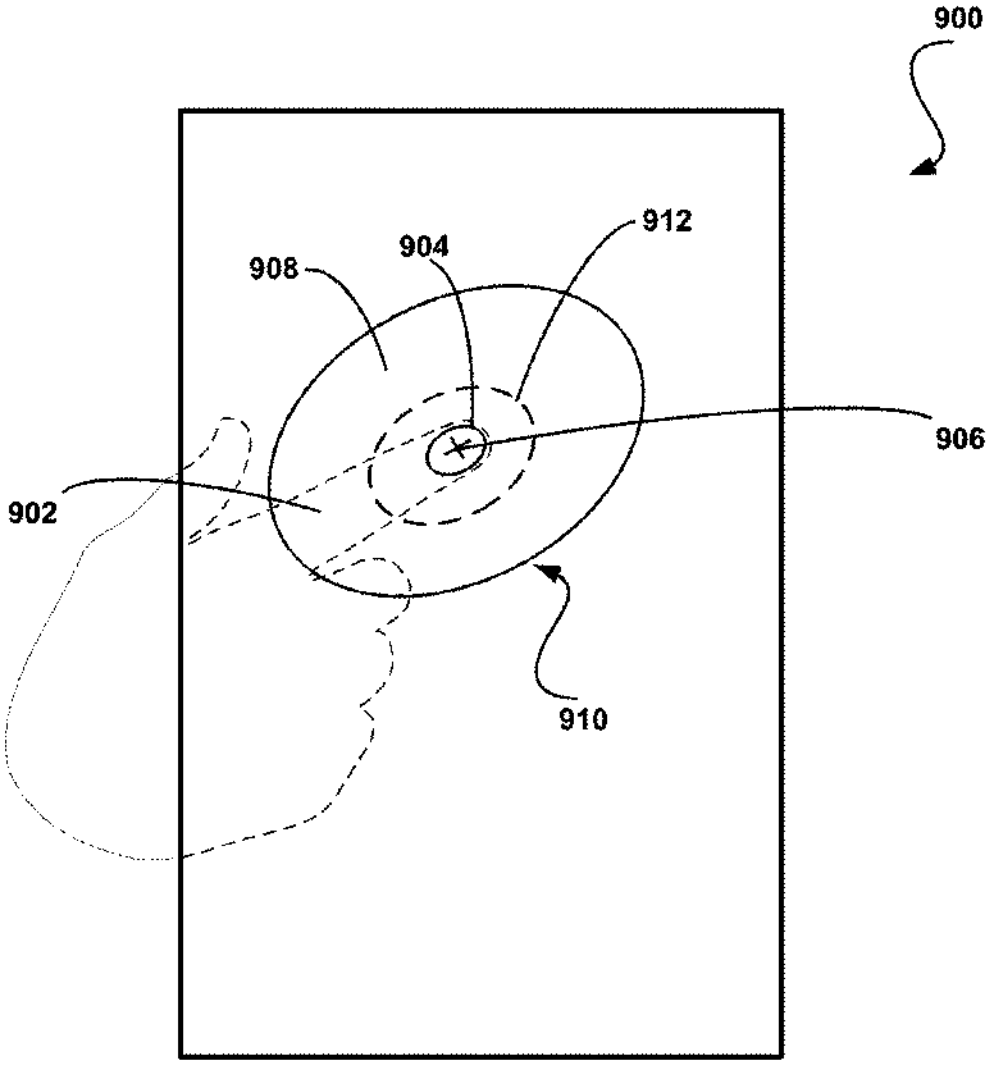


FIGURE 9

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

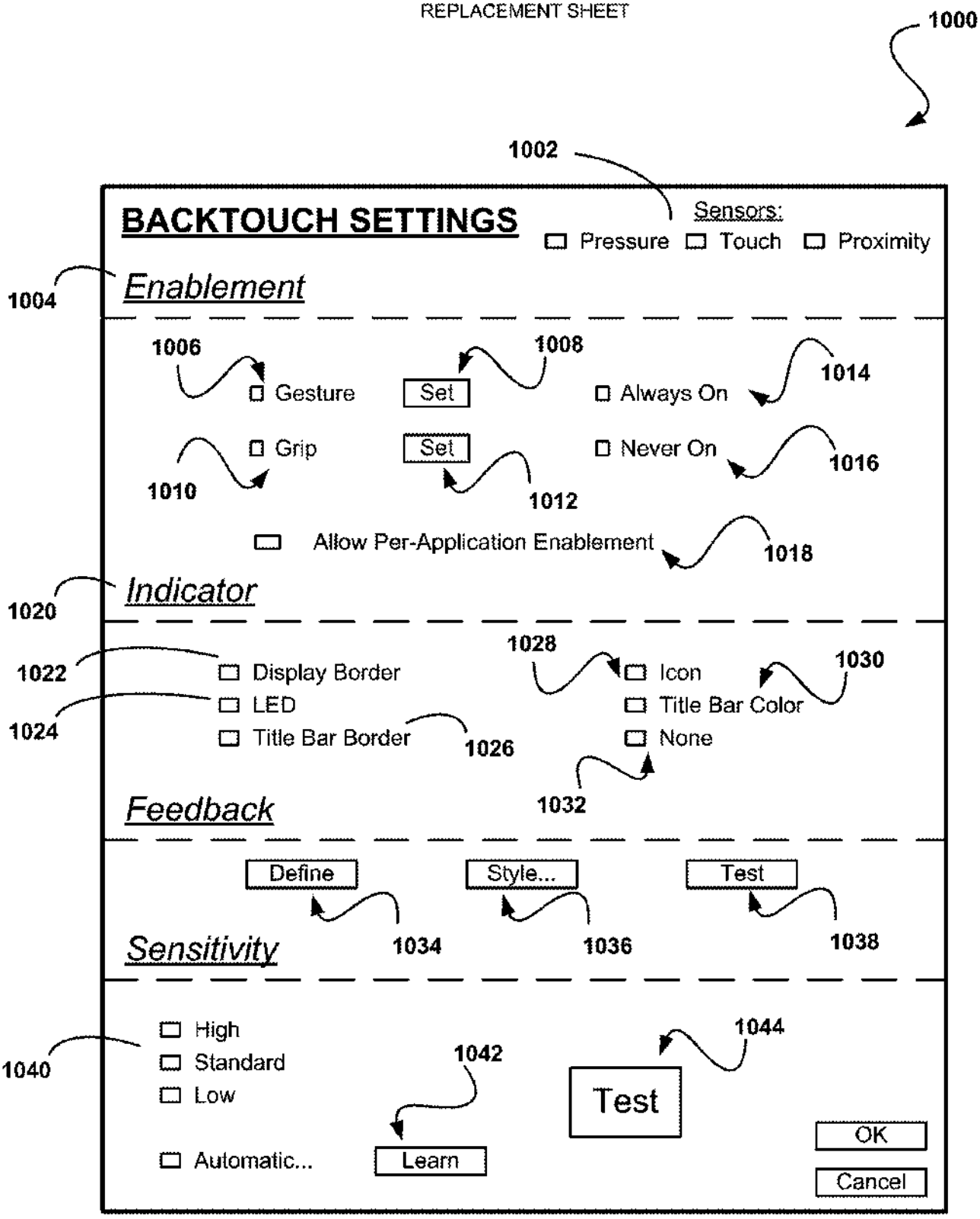


FIGURE 10

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

REPLACEMENT SHEET

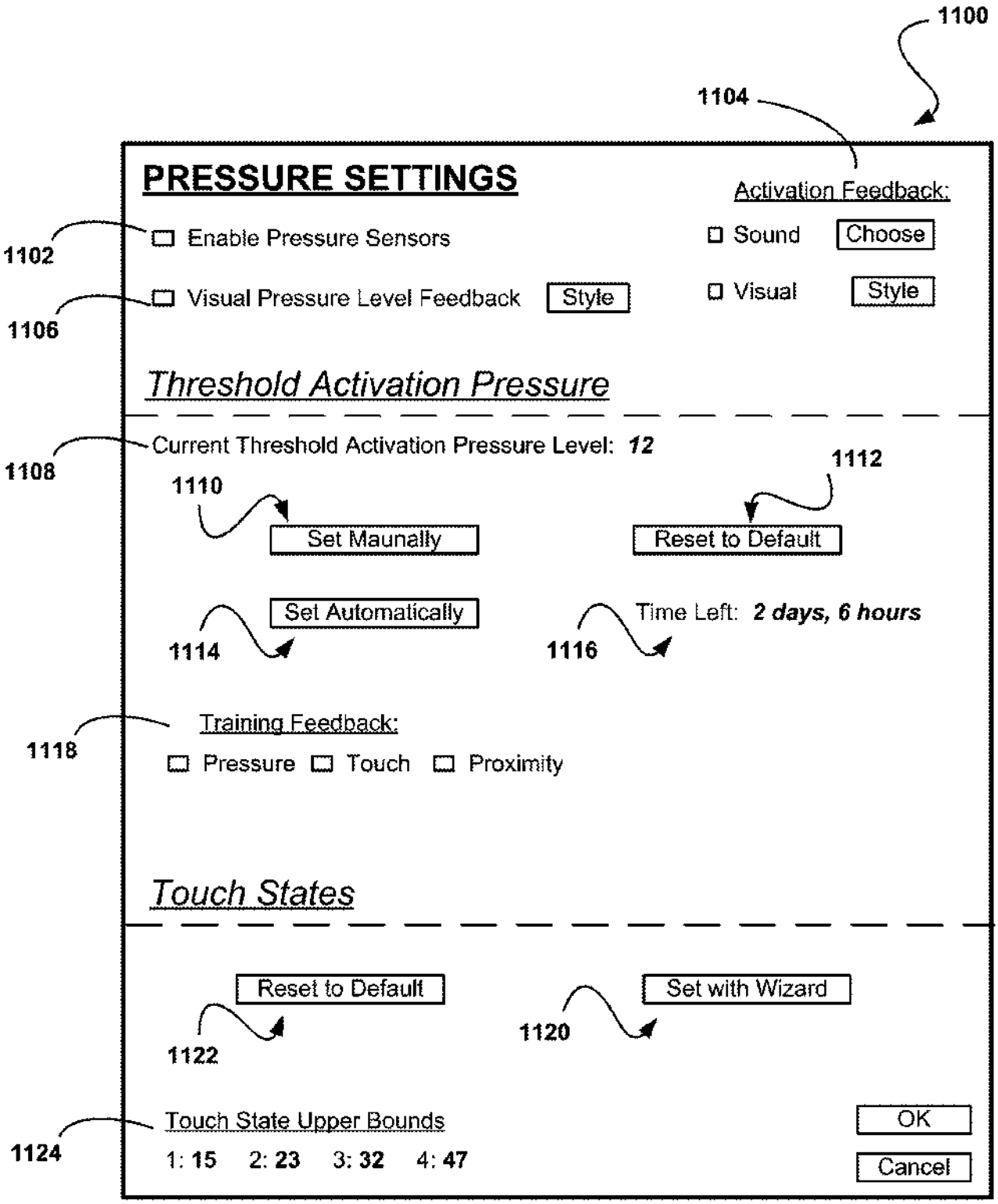


FIGURE 11

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

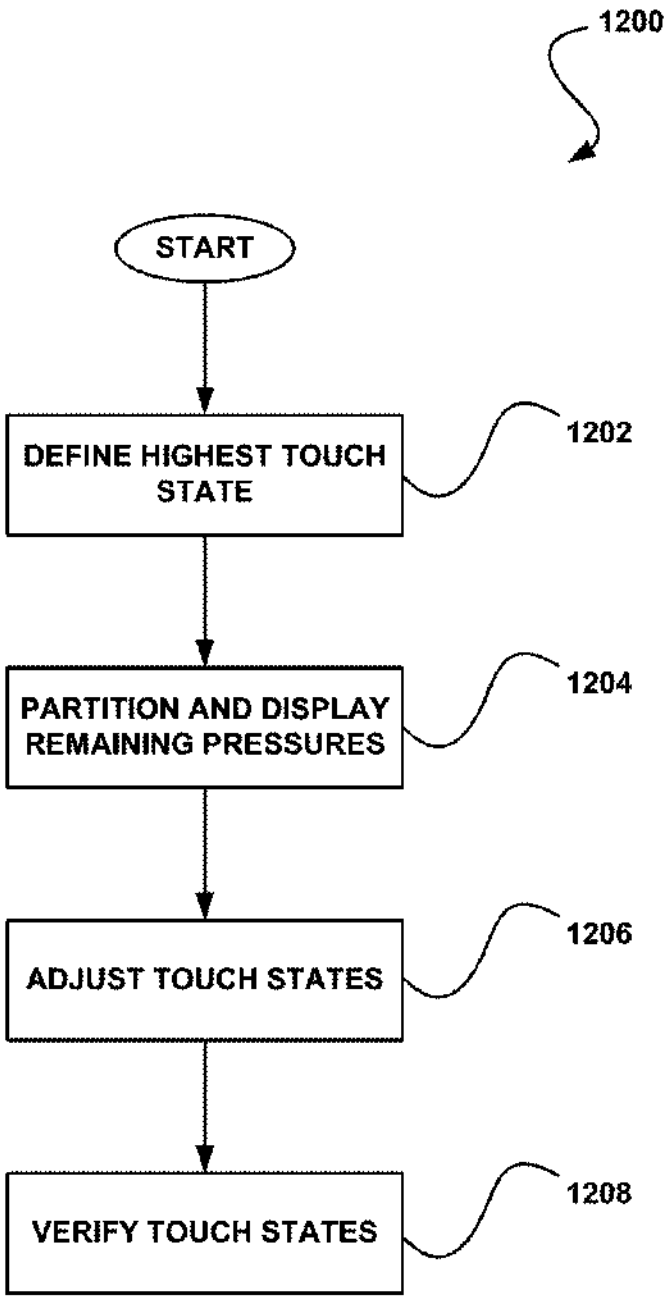


FIGURE 12

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

REPLACEMENT SHEET

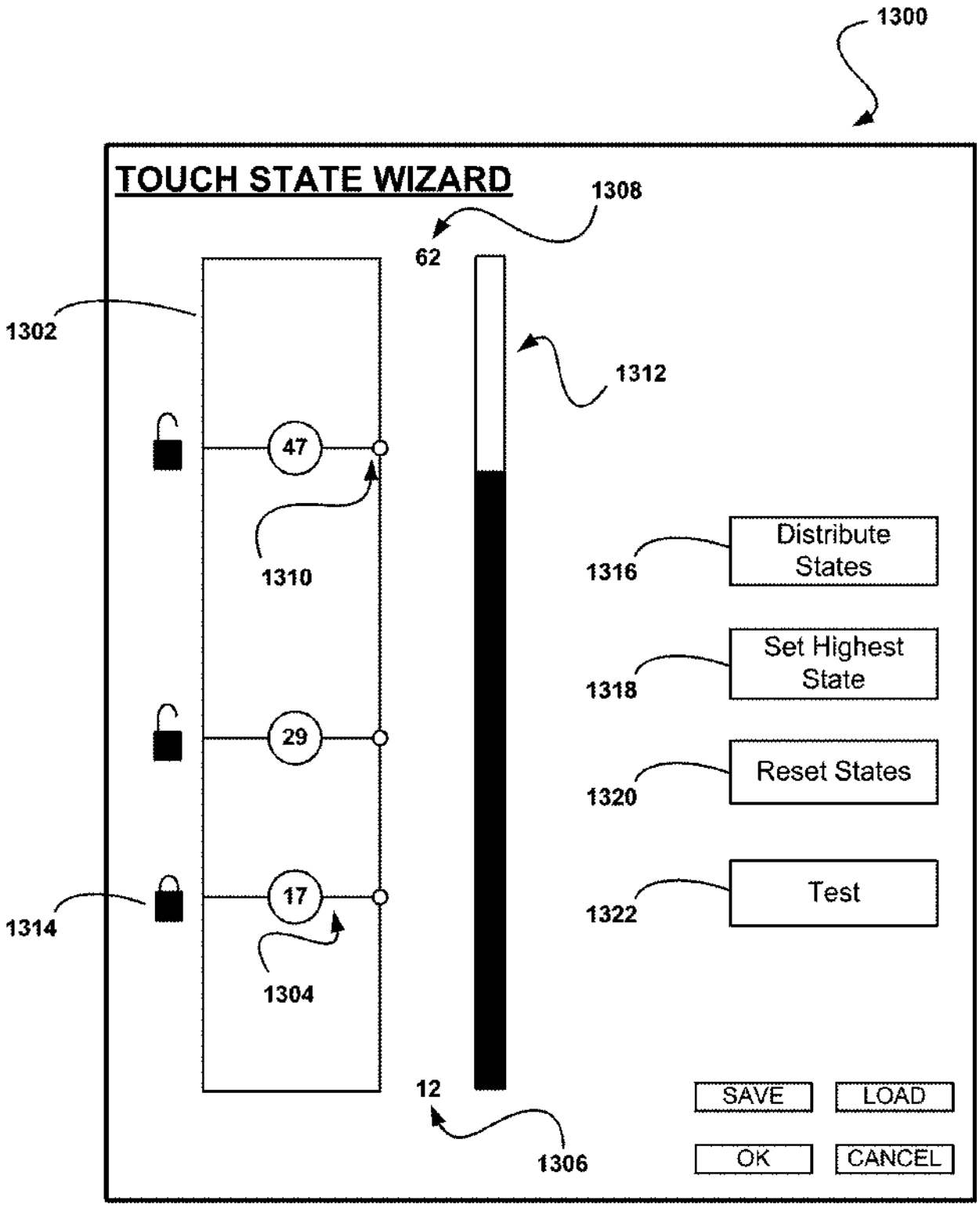


FIGURE 13

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

REPLACEMENT SHEET

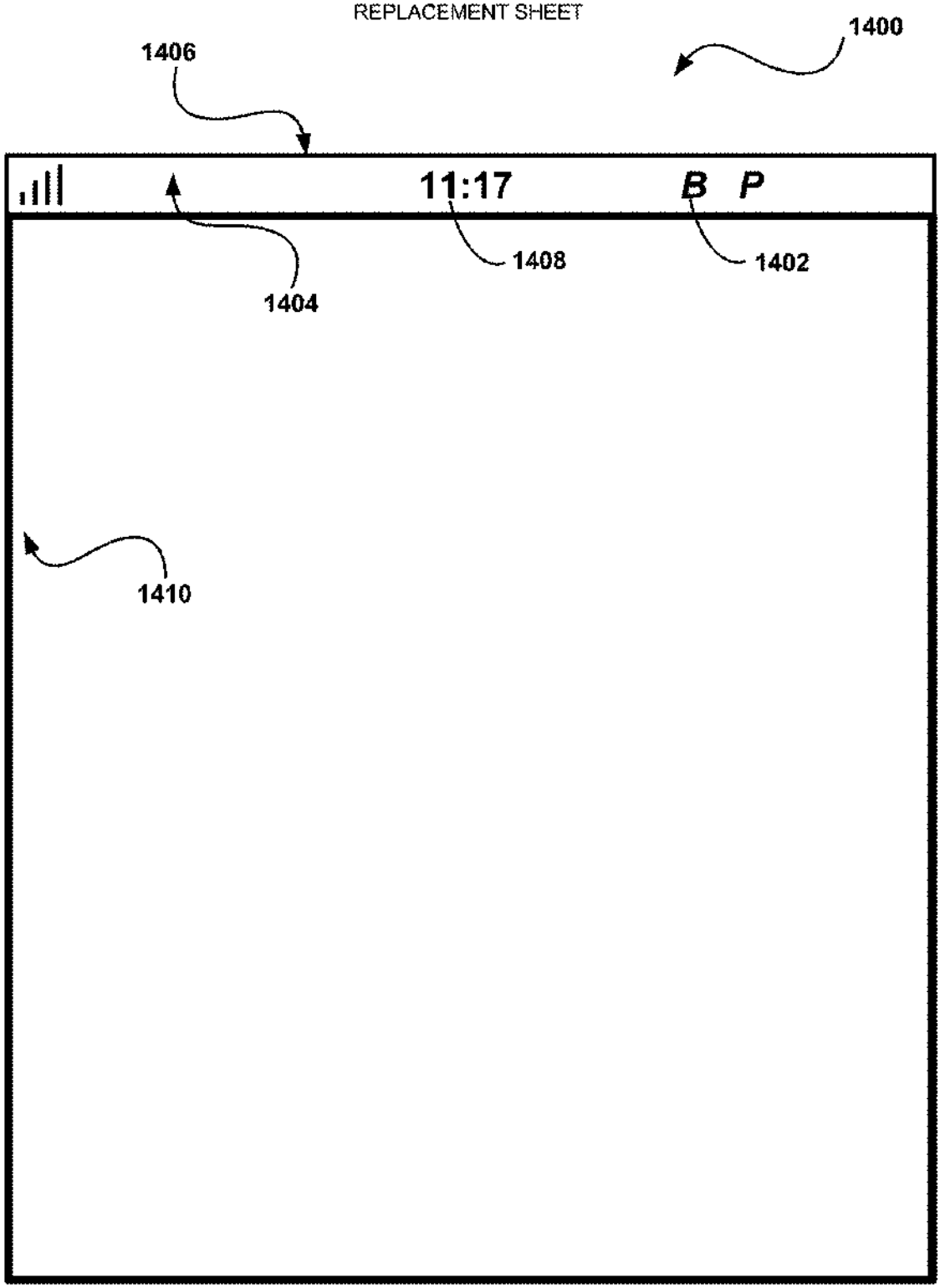


FIGURE 14

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

REPLACEMENT SHEET

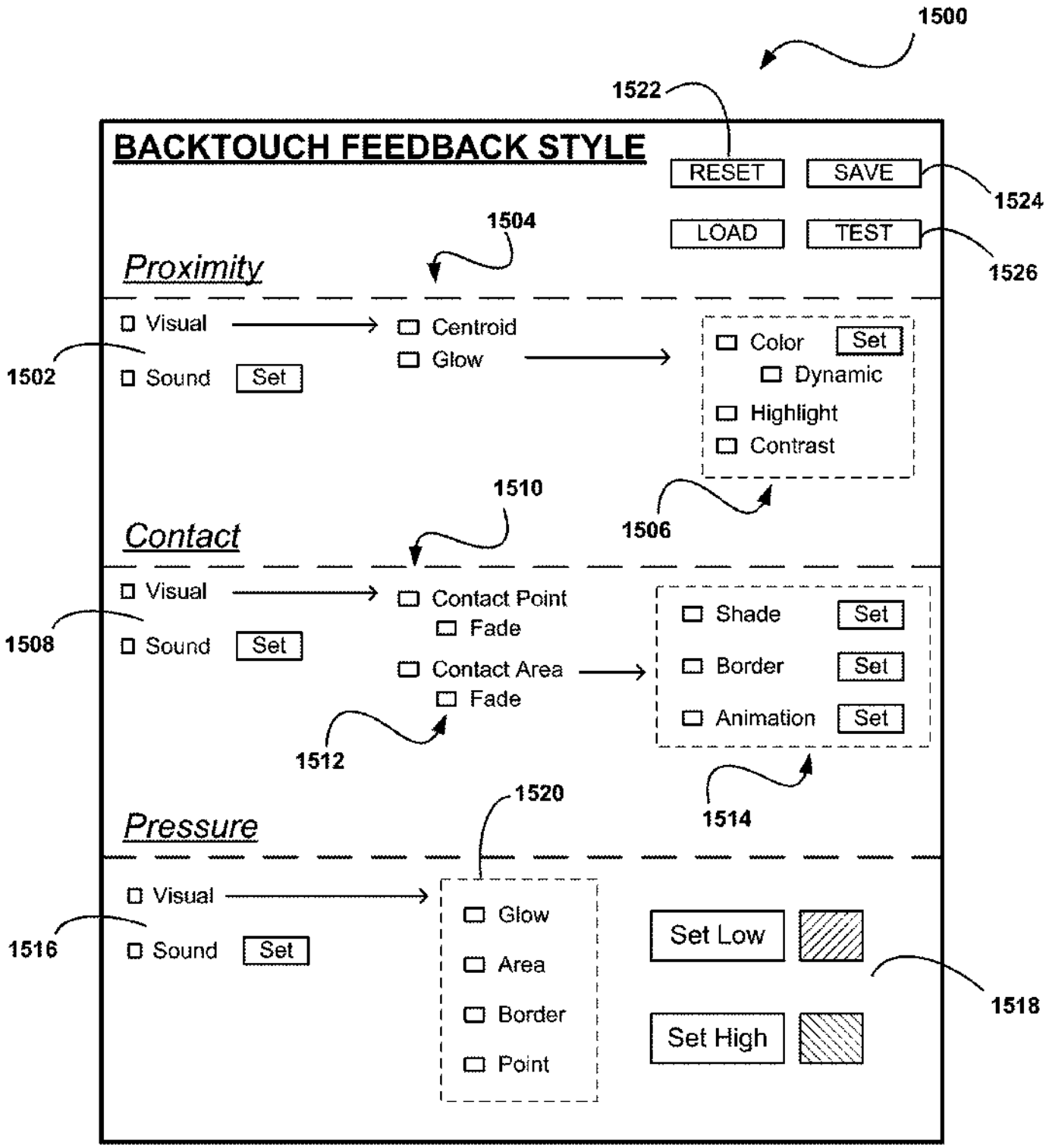


FIGURE 15

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

REPLACEMENT SHEET

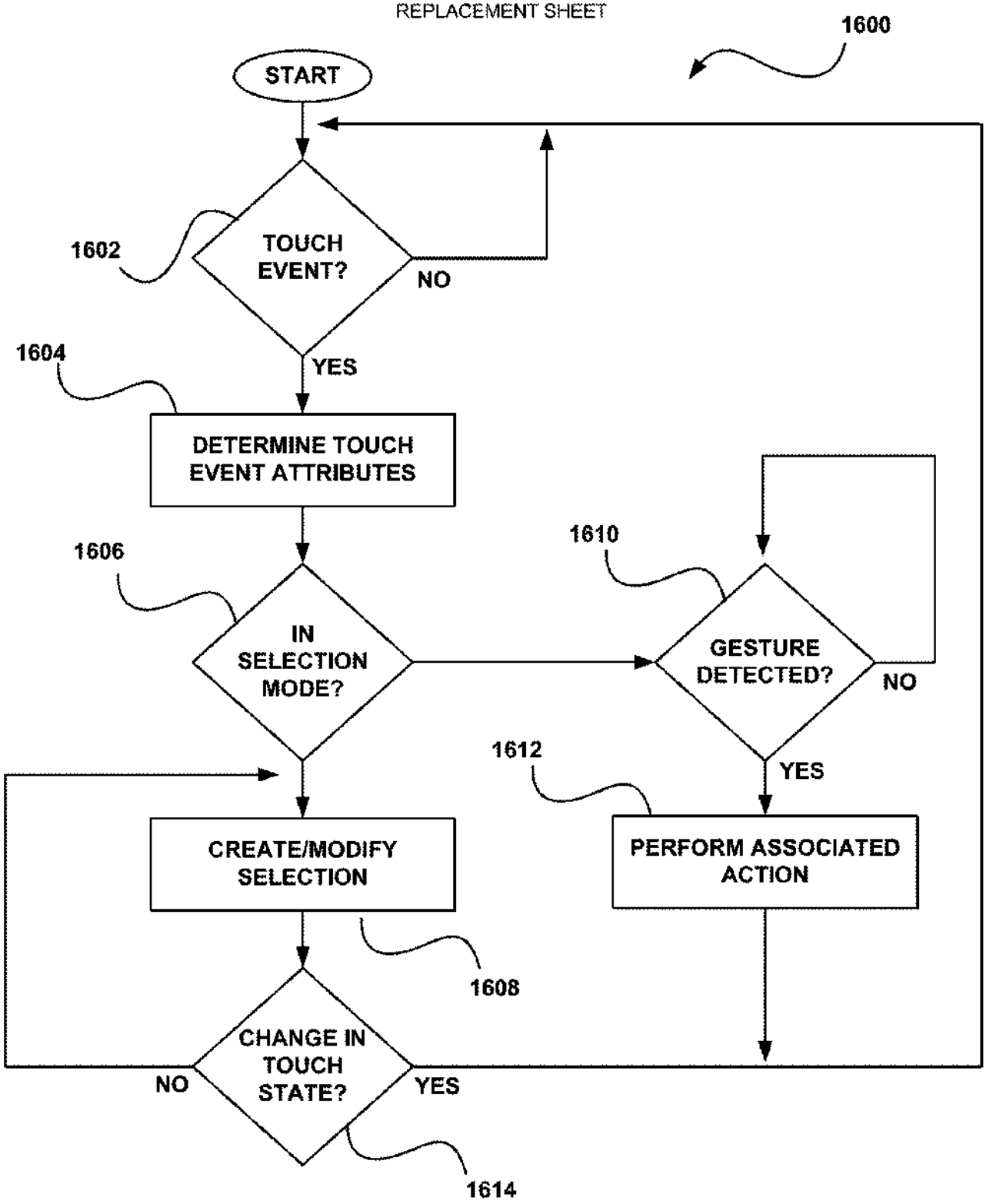


FIGURE 16

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

REPLACEMENT SHEET

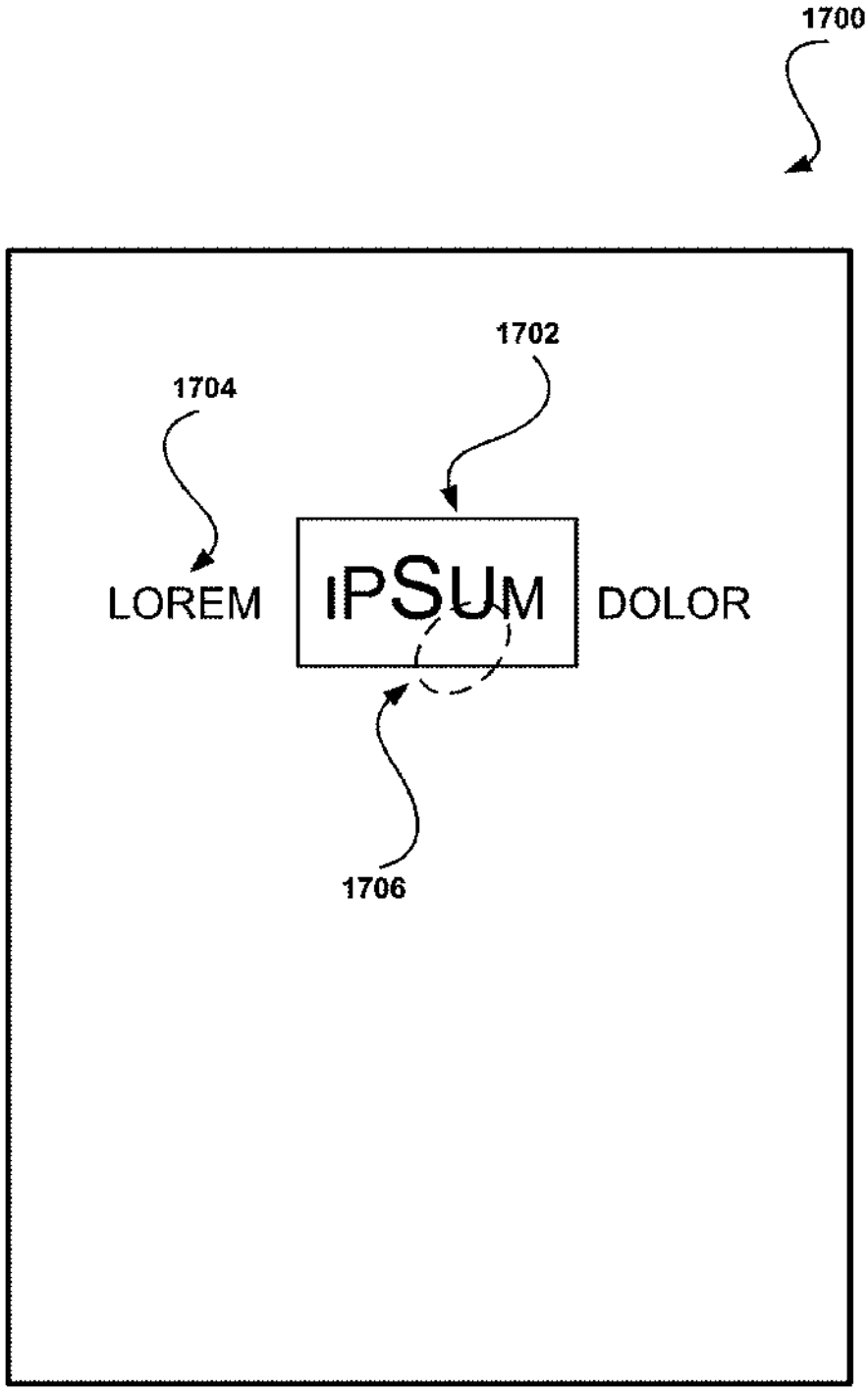


FIGURE 17

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

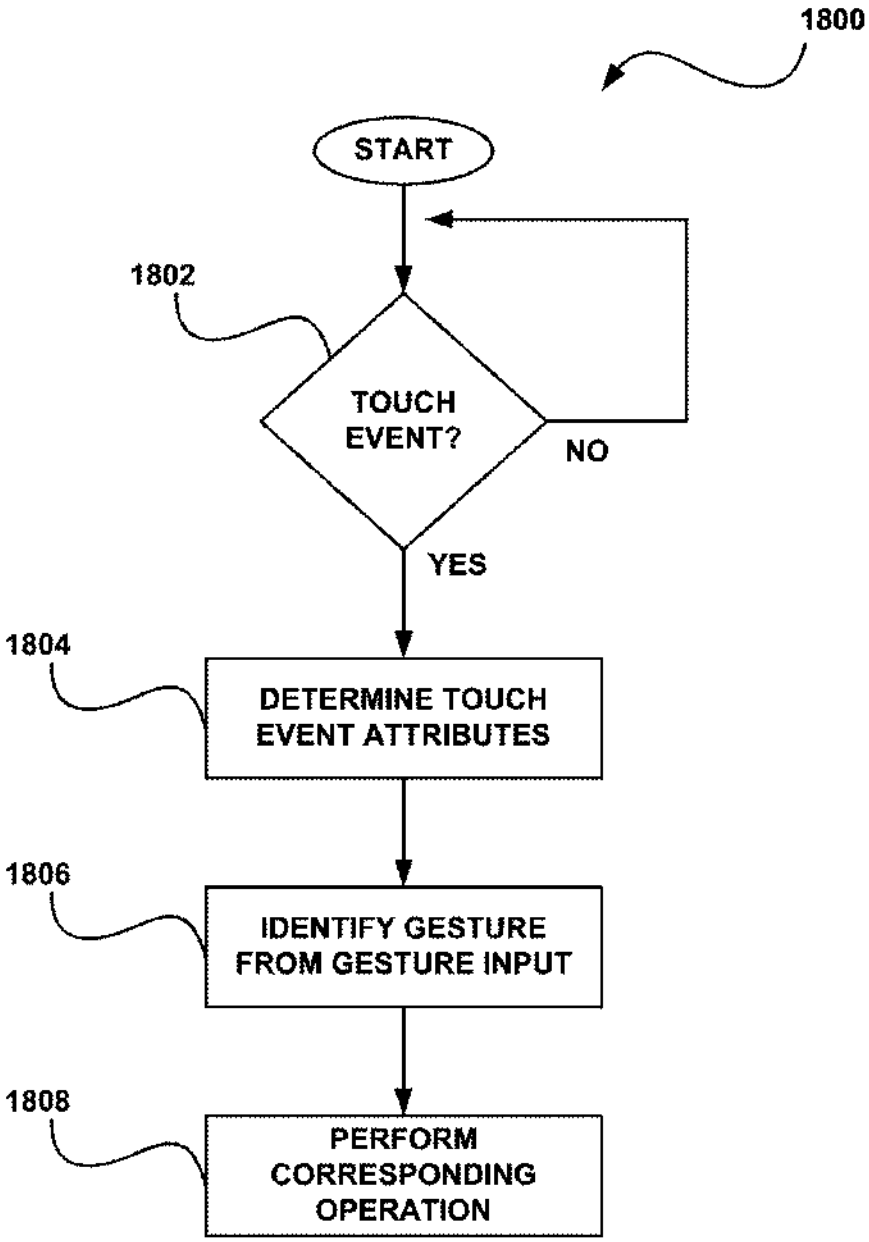


FIGURE 18

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

REPLACEMENT SHEET

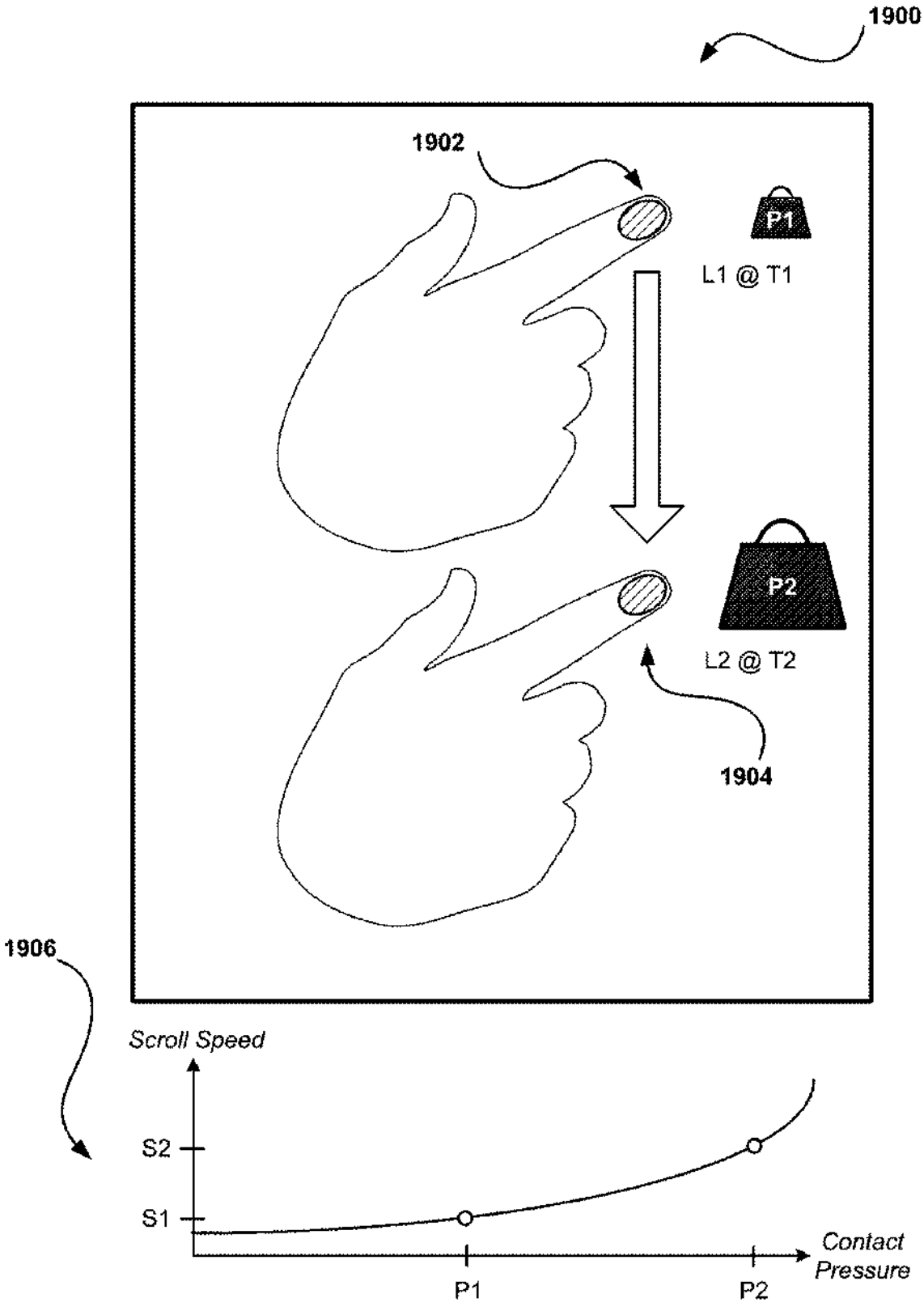


FIGURE 19

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

REPLACEMENT SHEET

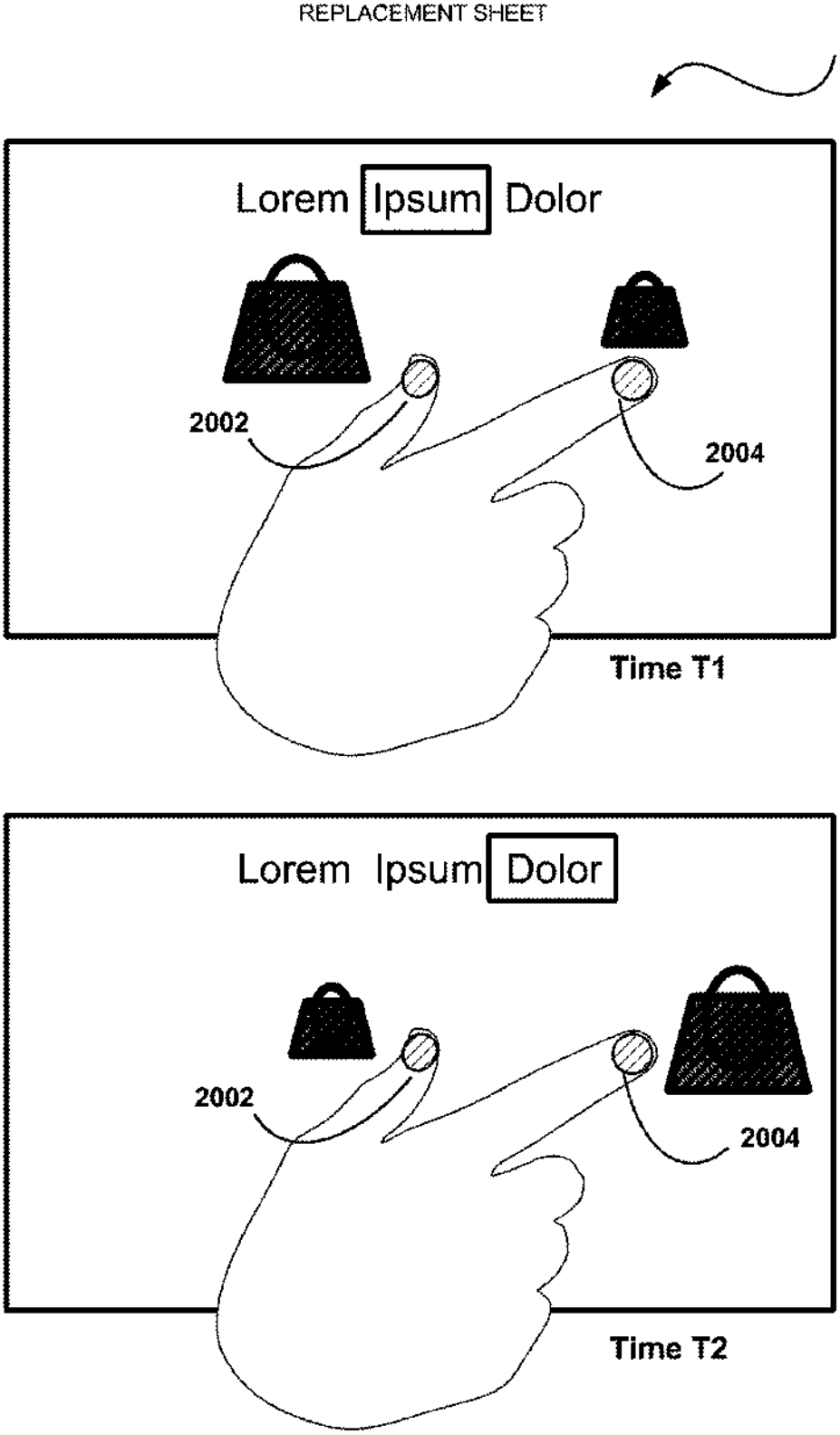


FIGURE 20

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

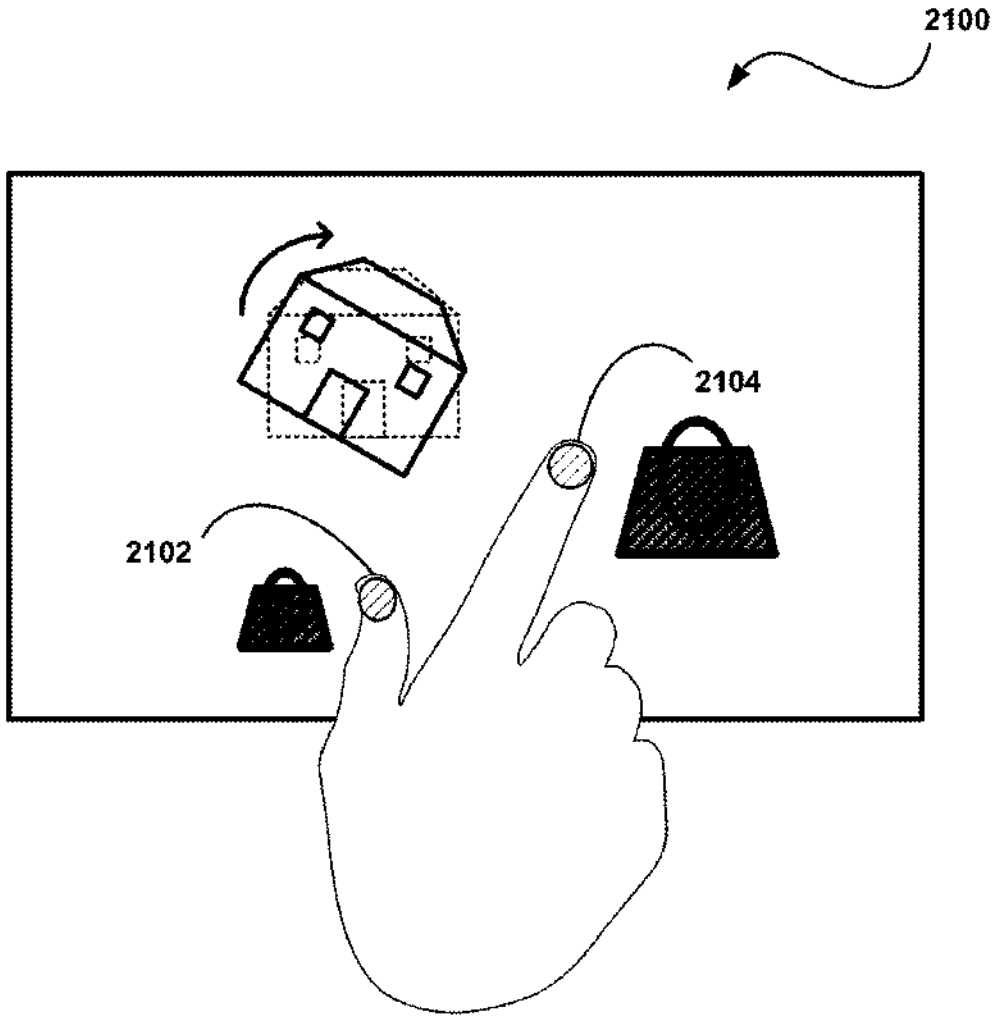


FIGURE 21

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

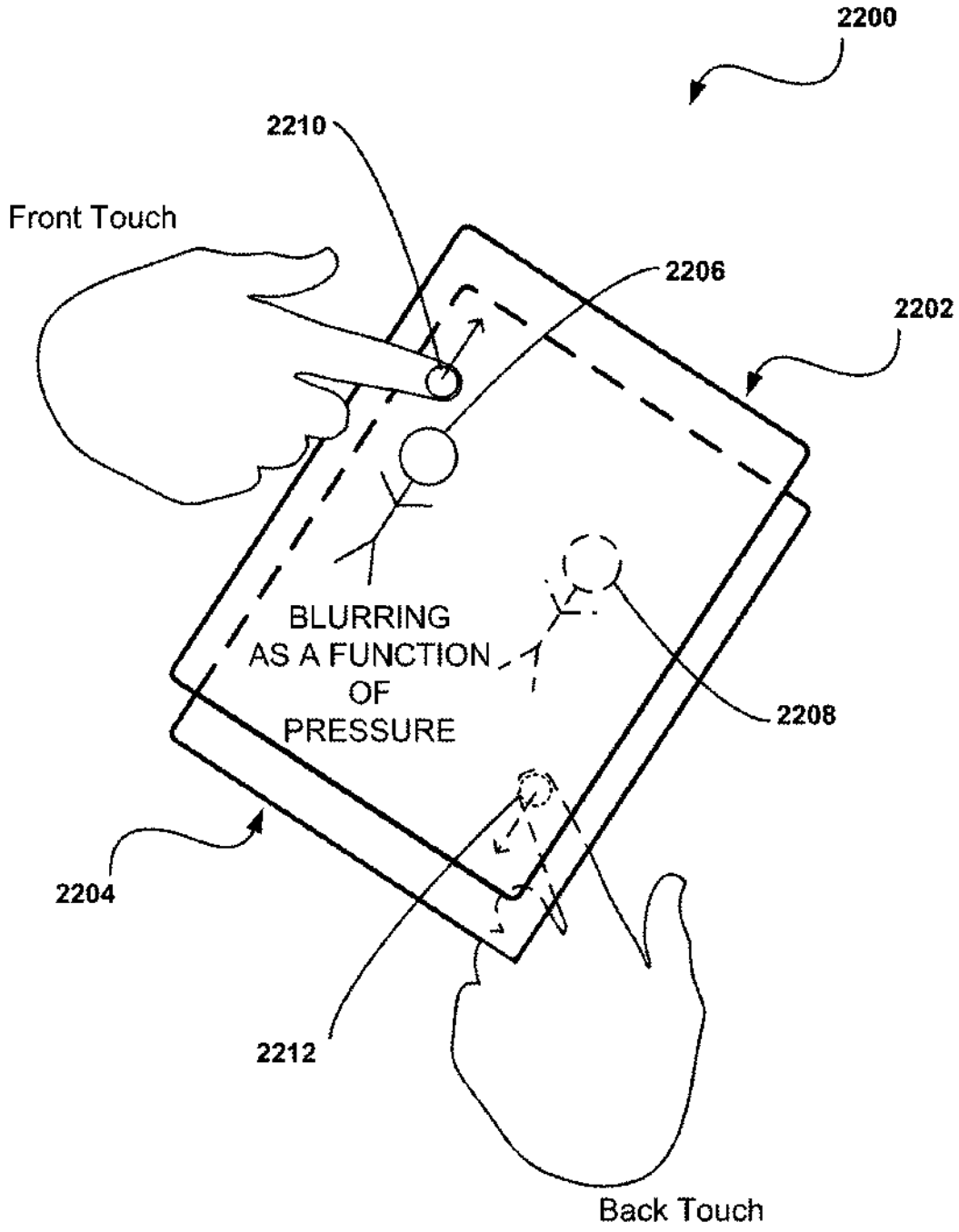


FIGURE 22

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

REPLACEMENT SHEET

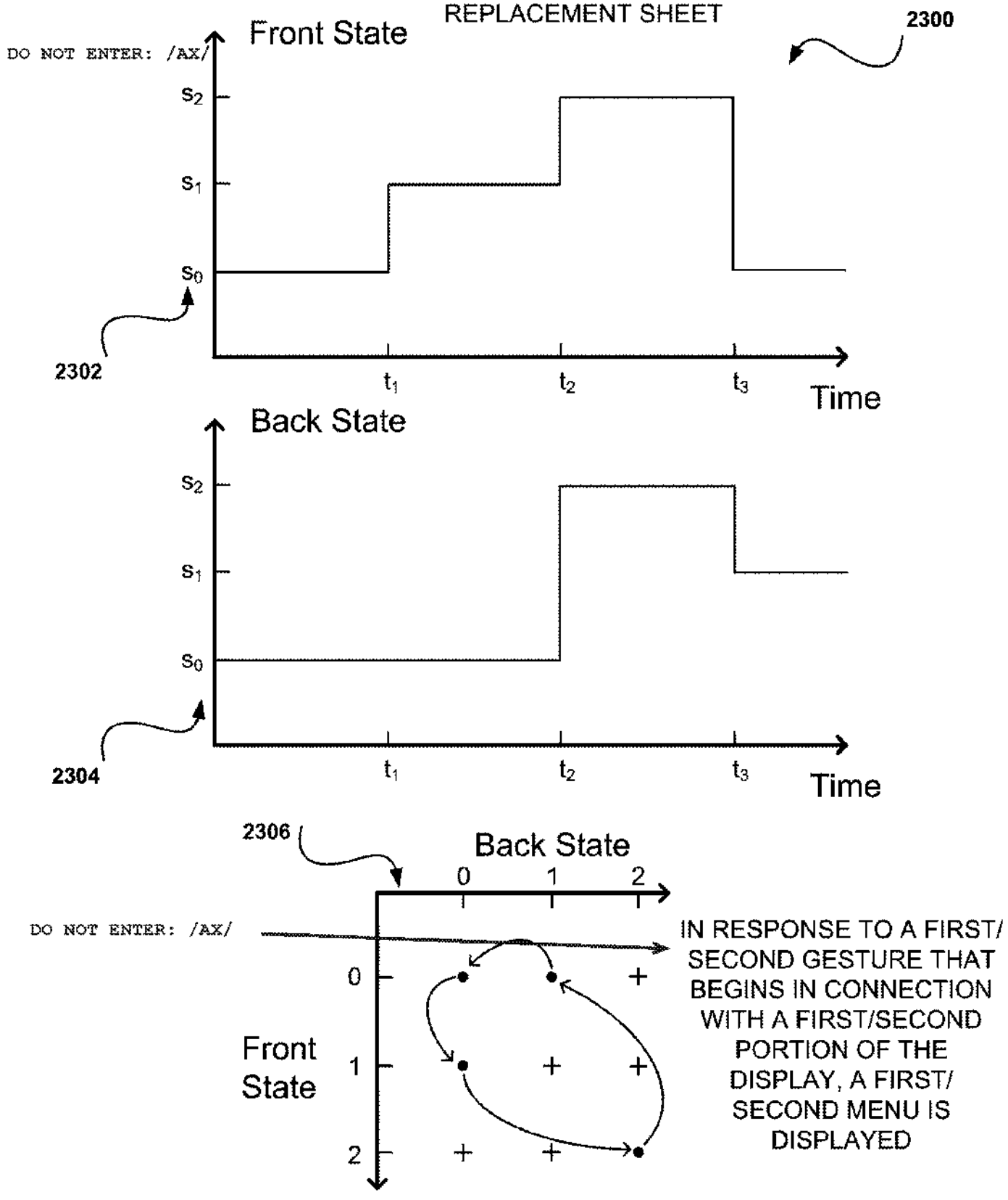


FIGURE 23

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

REPLACEMENT SHEET

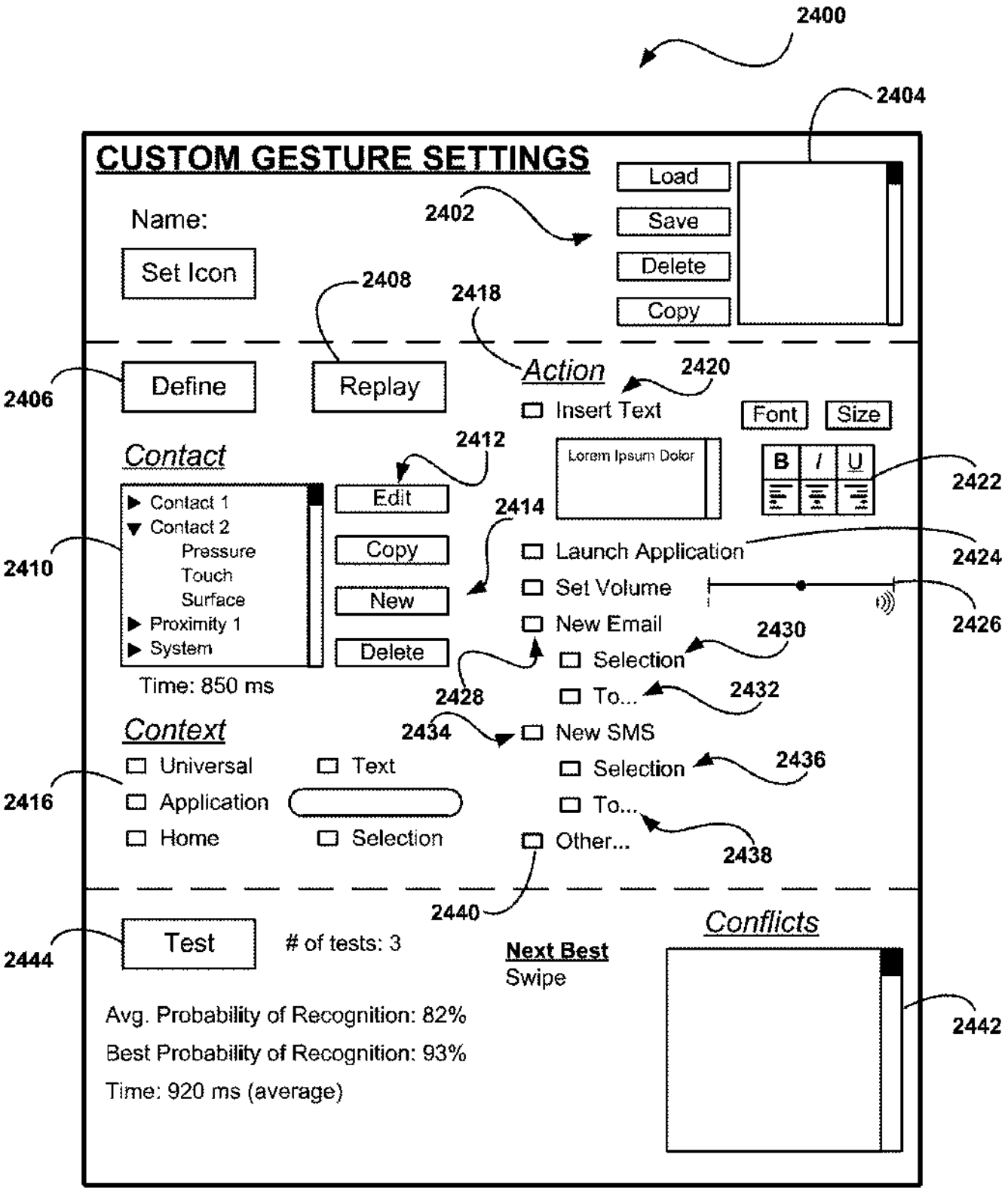


FIGURE 24

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	3358493	A	1967-12-19	Erich	Hydraulic press
	2	3524169	A	1970-08-11	K et al.	
	3	3633322	A	1972-01-11	Morcom	
	4	3659229	A	1972-04-25	Milton	
	5	3738166	A	1973-06-12	Fisher	
	6	3772685	A	1973-11-13	Masi	
	7	3777222	A	1973-12-04	Harris	
	8	3956986	A	1976-05-18	Wirz et al.	Inking system for printing machines

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	9	4067060	A	1978-01-03	Poussart et al.	
	10	4091418	A	1978-05-23	Ciciora	
	11	4152649	A	1979-05-01	Choquet	
	12	4293734	A	1981-10-06	William Pepper	
	13	4296756	A	1981-10-27	Dunning et al.	
	14	4302011	A	1981-11-24	William Pepper	
	15	4353552	A	1982-10-12	William Pepper	
	16	4524421	A	1985-06-18	Searby et al.	
	17	4554419	A	1985-11-19	King et al.	
	18	4636632	A	1987-01-13	Ando	
	19	4644101	A	1987-02-17	Jin et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	20	4694468	A	1987-09-15	Cullum	
	21	4731694	A	1988-03-15	Grabner et al.	
	22	4770281	A	1988-09-13	Hanks	
	23	5038142	A	1991-08-06	Flower et al.	
	24	5159159	A	1992-10-27	Asher	
	25	5205173	A	1993-04-27	Allen	
	26	5231381	A	1993-07-27	Duwaer	
	27	5241308	A	1993-08-31	Young	
	28	5247434	A	1993-09-21	Peterson et al.	
	29	5257413	A	1993-10-26	Warner et al.	
	30	5276787	A	1994-01-04	Searby	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	31	5285474	A	1994-02-08	Chow et al.	
	32	5305423	A	1994-04-19	Clynes	
	33	5309172	A	1994-05-03	Fox	
	34	5311302	A	1994-05-10	Berry et al.	
	35	5343650	A	1994-09-06	Swan	
	36	5371760	A	1994-12-06	Allen et al.	
	37	5386219	A	1995-01-31	Greanias et al.	
	38	5448263	A	1995-09-05	Martin	
	39	5463388	A	1995-10-31	Boie et al.	
	40	5483557	A	1996-01-09	Webb	
	41	5486286	A	1996-01-23	Peterson et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	42	5487827	A	1996-01-30	Peterson et al.	
	43	5510813	A	1996-04-23	Makinwa et al.	
	44	5557653	A	1996-09-17	Paterson et al.	
	45	5566096	A	1996-10-15	Wodlinger et al.	

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20120070973	A1	2012-03-22	Sandhu et al.	
	2	20120074584	A1	2012-03-29	Lee et al.	
	3	20120077314	A1	2012-03-29	Park et al.	
	4	2012007821	A1	2012-01-12	Zaliva	
	5	20120081290	A1	2012-04-05	Heo	Touch keyboard with phonetic character shortcuts

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	6	20120086670	A1	2012-04-12	Teil et al.	
	7	20120102401	A1	2012-04-26	Ijas et al.	Method and apparatus for providing text selection
	8	20120105358	A1	2012-05-03	Momeyer et al.	
	9	20120105367	A1	2012-05-03	Son et al.	Entire Document
	10	20120105370	A1	2012-05-03	Moore	
	11	20120106228	A1	2012-05-03	Lee	
	12	20120109037	A1	2012-05-03	Ellingboe et al.	
	13	20120109621	A1	2012-05-03	Rajan et al.	
	14	20120117507	A1	2012-05-10	Tseng et al.	Notification of Mobile Device Events
	15	20120124281	A1	2012-05-17	Rajan et al.	
	16	20120126883	A1	2012-05-24	Juengling	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	17	20120127685	A1	2012-05-24	Corisis et al.	
	18	20120135567	A1	2012-05-31	Akram et al.	
	19	20120135569	A1	2012-05-31	Corisis	
	20	2012013566	A1	2012-01-19	Chung	
	21	20120138927	A1	2012-06-07	KANG	
	22	20120140583	A1	2012-06-07	CHUNG	
	23	20120147684	A1	2012-06-14	Schakel et al.	
	24	20120154328	A1	2012-06-21	Kono	
	25	20120159387	A1	2012-06-21	OH et al.	Icon display method and apparatus in portable terminal
	26	20120162087	A1	2012-06-28	Hou	
	27	20120180043	A1	2012-07-12	Tsirkin et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	28	20120182249	A1	2012-07-19	Endo et al.	
	29	20120192108	A1	2012-07-26	Kolb	Gesture-based menu controls
	30	20120194461	A1	2012-08-02	Lim	
	31	20120194462	A1	2012-08-02	Lim	
	32	2012019448	A1	2012-01-26	Pitkanen et al.	
	33	20120201088	A1	2012-08-09	Rajan et al.	
	34	20120203958	A1	2012-08-09	Jones et al.	
	35	20120203993	A1	2012-08-09	Virgin et al.	
	36	20120204079	A1	2012-08-09	Takefman et al.	
	37	20120206165	A1	2012-08-16	Ferolito et al.	
	38	20120212420	A1	2012-08-23	Shin	Multi-touch input control system

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	39	20120223900	A1	2012-09-06	JIYAMA et al.	
	40	20120226924	A1	2012-09-06	Rajan et al.	
	41	20120229403	A1	2012-09-13	Jong et al.	
	42	20120229404	A1	2012-09-13	Jong et al.	
	43	20120229405	A1	2012-09-13	Jong et al.	
	44	20120231853	A1	2012-09-13	Takahashi et al.	
	45	2012023450	A1	2012-01-26	Noto et al.	
	46	20120239874	A1	2012-09-20	Lee et al.	
	47	20120240044	A1	2012-09-20	Johnson et al.	
	48	20120242610	A1	2012-09-27	Yasumatsu	
	49	20120244348	A1	2012-09-27	Park et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	50	20120250386	A1	2012-10-04	Lee et al.	
	51	20120252426	A1	2012-10-04	Nagaoka et al.	Electronic device and scheduling control computer program
	52	20120254519	A1	2012-10-04	Ellis	
	53	20120254747	A1	2012-10-04	Bocimea	
	54	20120266072	A1	2012-10-18	Karaoguz	
	55	20120268361	A1	2012-10-25	Shotel et al.	Hand-held electronic device and operation method applicable thereto
	56	20120271990	A1	2012-10-25	Chen et al.	
	57	20120274662	A1	2012-11-01	Kim et al.	
	58	20120289290	A1	2012-11-15	Chae et al.	Transferring objects between application windows displayed on mobile terminal
	59	20120290946	A1	2012-11-15	Schrock et al.	Multi-screen email client
	60	20120293449	A1	2012-11-22	Dietz	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	61	20120306764	A1	2012-12-06	Kamibeppu	
	62	20120306765	A1	2012-12-06	Moore	
	63	20120306766	A1	2012-12-06	Moore	
	64	20120306775	A1	2012-12-06	MIYACHI et al.	Computer-readable storage medium having stored thereon input processing program, input processing apparatus, input processing method, and input
	65	20120312806	A1	2012-12-13	Burt et al.	Demand supply management override options
	66	20120313888	A1	2012-12-13	Lee et al.	
	67	20120317433	A1	2012-12-13	Ellis et al.	
	68	2012032876	A1	2012-02-09	Tabe	
	69	2012034954	A1	2012-02-09	Tabe	
	70	2012044172	A1	2012-02-23	Ohki et al.	
	71	2012056846	A1	2012-03-08	Zaliva	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	72	2012060123	A1	2012-03-08	Smith	
	73	2012086670	A1	2012-04-12	Teil et al.	
	74	2012105367	A1	2012-05-03	Son et al.	
	75	2012105370	A1	2012-05-03	Moore	
	76	2012109037	A1	2012-05-03	Ellingboe et al.	
	77	2012154328	A1	2012-06-21	Kono et al.	
	78	2012162087	A1	2012-06-28	Hou	
	79	2012182249	A1	2012-07-19	Endo et al.	
	80	2012182296	A1	2012-07-19	Han	
	81	2012194461	A1	2012-08-02	Lim	
	82	2012194462	A1	2012-08-02	Lim	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	83	2012223900	A1	2012-09-06	Jiyama et al.	
	84	2012229403	A1	2012-09-13	De et al.	
	85	2012229404	A1	2012-09-13	De et al.	
	86	2012229405	A1	2012-09-13	De et al.	
	87	2012231853	A1	2012-09-13	Takahashi et al.	
	88	2012240044	A1	2012-09-20	Johnson et al.	
	89	2012242610	A1	2012-09-27	Yasumatsu	
	90	2012244348	A1	2012-09-27	Park et al.	
	91	2012254747	A1	2012-10-04	Bocimea	
	92	2012266072	A1	2012-10-18	Karaoguz et al.	
	93	2012274662	A1	2012-11-01	Kim et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	94	2012293449	A1	2012-11-22	Dietz	
	95	2012306764	A1	2012-12-06	Kamibeppu	
	96	2012306765	A1	2012-12-06	Moore	
	97	2012306766	A1	2012-12-06	Moore	
	98	2012306788	A1	2012-12-06	Chen et al.	
	99	2012313888	A1	2012-12-13	Lee et al.	
	100	20130002610	A1	2013-01-03	Ho et al.	
	101	20130007399	A1	2013-01-03	Smith et al.	
	102	20130009869	A1	2013-01-10	Wilensky	
	103	20130016586	A1	2013-01-17	Craig	Fish finder with simplified controls
	104	20130019076	A1	2013-01-17	Amidi et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	105	20130021285	A1	2013-01-24	Kimura et al.	
	106	20130021295	A1	2013-01-24	Kimura et al.	
	107	2013002610	A1	2013-01-03	Ho et al.	
	108	20130027350	A1	2013-01-31	Liaw et al.	
	109	20130027358	A1	2013-01-31	Liaw et al.	
	110	20130050122	A1	2013-02-28	KANG et al.	Controlling user equipment as touch pad for external device connected thereto
	111	20130050141	A1	2013-02-28	PARK et al.	Input device and method for terminal equipment having a touch module
	112	20130054881	A1	2013-02-28	Ellis et al.	
	113	20130055134	A1	2013-02-28	Knor	
	114	20130060994	A1	2013-03-07	Higgins et al.	
	115	20130061019	A1	2013-03-07	Fitzpatrick et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	116	20130061101	A1	2013-03-07	Fitzpatrick et al.	
	117	20130063364	A1	2013-03-14	Moore	
	118	20130063389	A1	2013-03-14	Moore	
	119	20130076941	A1	2013-03-28	Palanciuc et al.	
	120	20130082970	A1	2013-04-04	Frey et al.	
	121	20130082979	A1	2013-04-04	Rabu et al.	
	122	20130085215	A1	2013-04-04	SHITARA et al.	
	123	20130086309	A1	2013-04-04	Lee et al.	
	124	20130093687	A1	2013-04-18	Papakipos et al.	
	125	2013009869	A1	2013-01-10	Wilensky	
	126	20130100070	A1	2013-04-25	Zheng et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	127	20130100087	A1	2013-04-25	Liaw et al.	
	128	20130102371	A1	2013-04-25	Silva	
	129	20130103377	A1	2013-04-25	Rajan et al.	
	130	20130103897	A1	2013-04-25	Rajan et al.	
	131	20130106802	A1	2013-05-02	Liaw et al.	
	132	20130109928	A1	2013-05-02	Menzel	
	133	20130120284	A1	2013-05-16	Chen et al.	
	134	20130120302	A1	2013-05-16	Kang et al.	
	135	20130124993	A1	2013-05-16	Daisy	
	136	20130125322	A1	2013-05-23	Sakashita et al.	
	137	20130127765	A1	2013-05-23	Behdasht et al.	Entire Document

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	138	20130132661	A1	2013-05-23	Schakel et al.	
	139	20130132779	A1	2013-05-23	Smith et al.	
	140	20130132838	A1	2013-05-23	Daisy	
	141	20130141388	A1	2013-06-06	Ludwig et al.	
	142	20130154968	A1	2013-06-20	Tomimori	Portable terminal and display control method thereof
	143	20130154981	A1	2013-06-20	Park et al.	Method and apparatus for providing a shortcut number in a user device
	144	20130160514	A1	2013-06-27	Mitze	Bending-straightening machine for a long workpiece, device for feeding in and removing said workpiece and method for bend-straightening long workpieces
	145	20130178701	A1	2013-07-11	Pless et al.	Integrated Delivery and Visualization Tool for a Neuromodulation System
	146	20130181928	A1	2013-07-18	Li	
	147	20130181931	A1	2013-07-18	Kinoshita	
	148	20130188336	A1	2013-07-25	Yuan et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	149	20130188424	A1	2013-07-25	Rajan et al.	
	150	20130191585	A1	2013-07-25	Rajan et al.	
	151	20130205102	A1	2013-08-08	Jones et al.	
	152	2013021285	A1	2013-01-24	Kimura et al.	
	153	2013021295	A1	2013-01-24	Kimura et al.	
	154	20130215064	A1	2013-08-22	Cholewin et al.	
	155	20130238849	A1	2013-09-12	Amer et al.	
	156	20130254456	A1	2013-09-26	Chen et al.	
	157	20130254497	A1	2013-09-26	Chen et al.	
	158	20130268853	A1	2013-10-10	Gommier et al.	Mobile terminal comprising a man/ machine interface
	159	2013027350	A1	2013-01-31	Liaw et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	160	2013027358	A1	2013-01-31	Liaw et al.	
	161	20130275795	A1	2013-10-17	Ellis et al.	
	162	20130282962	A1	2013-10-24	Rub et al.	
	163	20130307809	A1	2013-11-21	Sudou	
	164	20130307827	A1	2013-11-21	Reisman et al.	
	165	20130321317	A1	2013-12-05	Hirukawa	
	166	20130332796	A1	2013-12-12	Ellis	
	167	20130332876	A1	2013-12-12	Johnson et al.	
	168	20130335357	A1	2013-12-19	Hou	
	169	2013044062	A1	2013-02-21	Bose et al.	
	170	2013055134	A1	2013-02-28	Knor	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	171	2013063364	A1	2013-03-14	Moore	
	172	2013063389	A1	2013-03-14	Moore	
	173	2013076649	A1	2013-03-28	Myers et al.	
	174	2013076941	A1	2013-03-28	Palanciuc et al.	
	175	2013082970	A1	2013-04-04	Frey et al.	
	176	2013082979	A1	2013-04-04	Rabu et al.	
	177	2013085215	A1	2013-04-04	Shitara et al.	
	178	2013100070	A1	2013-04-25	Zheng et al.	
	179	2013100087	A1	2013-04-25	Liaw et al.	
	180	2013102371	A1	2013-04-25	Silva et al.	
	181	2013106802	A1	2013-05-02	Liaw et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	182	2013109928	A1	2013-05-02	Menzel	
	183	2013120284	A1	2013-05-16	Chen et al.	
	184	2013120302	A1	2013-05-16	Kang et al.	
	185	2013124993	A1	2013-05-16	Daisy et al.	
	186	2013125322	A1	2013-05-23	Sakashita et al.	
	187	2013127765	A1	2013-05-23	Behdasht et al.	
	188	2013132838	A1	2013-05-23	Daisy et al.	
	189	2013141388	A1	2013-06-06	Ludwig et al.	
	190	2013181928	A1	2013-07-18	Li	
	191	2013181931	A1	2013-07-18	Kinoshita	
	192	2013188336	A1	2013-07-25	Yuan et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	193	2013215064	A1	2013-08-22	Cholewin et al.	
	194	2013307809	A1	2013-11-21	Sudou	
	195	2013307827	A1	2013-11-21	Reisman et al.	
	196	2013321317	A1	2013-12-05	Hirukawa	
	197	2013321340	A1	2013-12-05	Seo et al.	
	198	2013332876	A1	2013-12-12	Johnson et al.	
	199	2013335357	A1	2013-12-19	Hou	
	200	20140006948	A1	2014-01-02	Yang et al.	Method and mobile phone for capturing audio file or video file
	201	20140028601	A1	2014-01-30	Moore	
	202	20140040568	A1	2014-02-06	Lee et al.	
	203	20140040569	A1	2014-02-06	Solomon et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	204	20140057102	A1	2014-02-27	Park et al.	
	205	20140066139	A1	2014-03-06	Ure	
	206	20140095769	A1	2014-04-03	Borkenhagen	
	207	20140096092	A1	2014-04-03	Johnson	
	208	20140099235	A1	2014-04-10	Ellingboe et al.	
	209	20140104219	A1	2014-04-17	Ludwig	
	210	20140104220	A1	2014-04-17	Ludwig	
	211	20140132548	A1	2014-05-15	Ludwig	
	212	20140132549	A1	2014-05-15	Ludwig	
	213	20140134433	A1	2014-05-15	Park et al.	
	214	20140134434	A1	2014-05-15	Park et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	215	20140139473	A1	2014-05-22	Kang et al.	
	216	20140143659	A1	2014-05-22	Xue et al.	Method for Processing Documents by Terminal Having Touch Screen and Terminal Having Touch Screen
	217	20140156919	A1	2014-06-05	Chen et al.	
	218	20140156920	A1	2014-06-05	Chen et al.	
	219	20140168128	A1	2014-06-19	Reisman et al.	
	220	20140191962	A1	2014-07-10	Kim	
	221	20140208248	A1	2014-07-24	Davidson	
	222	20140210727	A1	2014-07-31	Wassingbo	Electronic device with touch-based deactivation of touch input signaling
	223	20140210786	A1	2014-07-31	Ludwig	
	224	20140247216	A1	2014-09-04	Fang	Trigger and control method and system of human-computer interaction operation command and laser emission device
	225	2014028601	A1	2014-01-30	Moore	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	226	20140340358	A1	2014-11-20	MARTINOLI	
	227	20140368455	A1	2014-12-18	Croisonnier et al.	
	228	2014057102	A1	2014-02-27	Park et al.	
	229	2014066139	A1	2014-03-06	Ure	
	230	2014096092	A1	2014-04-03	Johnson	
	231	2014099235	A1	2014-04-10	Ellingboe et al.	
	232	2014104219	A1	2014-04-17	Ludwig	
	233	2014104220	A1	2014-04-17	Ludwig	
	234	2014132548	A1	2014-05-15	Ludwig	
	235	2014132549	A1	2014-05-15	Ludwig	
	236	2014134433	A1	2014-05-15	Park et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	237	2014134434	A1	2014-05-15	Park et al.	
	238	2014139473	A1	2014-05-22	Kang et al.	
	239	2014168128	A1	2014-06-19	Reisman et al.	
	240	2014191962	A1	2014-07-10	Kim	
	241	2014208248	A1	2014-07-24	Davidson	
	242	2014210786	A1	2014-07-31	Ludwig	
	243	2014340358	A1	2014-11-20	Martinoli	
	244	2014368455	A1	2014-12-18	Croisonnier et al.	
	245	20150068526	A1	2015-03-12	Habashi	
	246	20150097791	A1	2015-04-09	Lisseman et al.	
	247	20150197670	A1	2015-07-16	SHITARA et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	248	20150212571	A1	2015-07-30	Kitada	
	249	20150234518	A1	2015-08-20	Teller et al.	
	250	20150253609	A1	2015-09-10	ZHOU et al.	
	251	2015068526	A1	2015-03-12	Habashi	
	252	2015197670	A1	2015-07-16	Shitara et al.	
	253	2015234518	A1	2015-08-20	Teller et al.	
	254	2015253609	A1	2015-09-10	Zhou et al.	
	255	20160226713	A1	2016-08-04	Dellinger et al.	Device, method, and graphical user interface for establishing a relationship and connection between two devices

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2]	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

NON-PATENT LITERATURE DOCUMENTS Remove			
Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T5
	1	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 1: Basic Architecture, Order Number: 253665-037US, January 2011, pp. 1-540 (2 of 8)	
	2	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 1: Basic Architecture, Order Number: 253665-037US, January 2011, pp. 1-540 (3 of 8)	
	3	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 1: Basic Architecture, Order Number: 253665-037US, January 2011, pp. 1-540 (4 of 8)	
	4	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 1: Basic Architecture, Order Number: 253665-037US, January 2011, pp. 1-540 (5 of 8)	
	5	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 1: Basic Architecture, Order Number: 253665-037US, January 2011, pp. 1-540 (6 of 8)	
	6	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 1: Basic Architecture, Order Number: 253665-037US, January 2011, pp. 1-540 (7 of 8)	
	7	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 1: Basic Architecture, Order Number: 253665-037US, January 2011, pp. 1-540 (8 of 8)	
	8	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 2A: Instruction Set Reference, A-M, Order Number: 253666-037US, January 2011, pp. 1-848 (1 of 10)	
	9	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 2A: Instruction Set Reference, A-M, Order Number: 253666-037US, January 2011, pp. 1-848 (2 of 10)	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	10	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 2A: Instruction Set Reference, A-M, Order Number: 253666-037US, January 2011, pp. 1-848 (3 of 10)	
	11	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 2A: Instruction Set Reference, A-M, Order Number: 253666-037US, January 2011, pp. 1-848 (4 of 10)	
	12	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 2A: Instruction Set Reference, A-M, Order Number: 253666-037US, January 2011, pp. 1-848 (5 of 10)	
	13	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 2A: Instruction Set Reference, A-M, Order Number: 253666-037US, January 2011, pp. 1-848 (6 of 10)	
	14	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 2A: Instruction Set Reference, A-M, Order Number: 253666-037US, January 2011, pp. 1-848 (7 of 10)	
	15	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 2A: Instruction Set Reference, A-M, Order Number: 253666-037US, January 2011, pp. 1-848 (8 of 10)	
	16	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 2A: Instruction Set Reference, A-M, Order Number: 253666-037US, January 2011, pp. 1-848 (9 of 10)	
	17	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 2A: Instruction Set Reference, A-M, Order Number: 253666-037US, January 2011, pp. 1-848 (10 of 10)	
	18	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 2A: Instruction Set Reference, A-M, Order Number: 253666-037US, January 2011, pp. 1-848	
	19	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3A: System Programming Guide, Part 1, Order Number: 253668-037US, January 2011, pp. 1-842	
	20	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3A: System Programming Guide, Part 1, Order Number: 253668-037US, January 2011, pp. 1-842 (1 of 12)	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	21	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3A: System Programming Guide, Part 1, Order Number: 253668-037US, January 2011, pp. 1-842 (2 of 12)	
	22	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3A: System Programming Guide, Part 1, Order Number: 253668-037US, January 2011, pp. 1-842 (3 of 12)	
	23	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3A: System Programming Guide, Part 1, Order Number: 253668-037US, January 2011, pp. 1-842 (4 of 12)	
	24	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3A: System Programming Guide, Part 1, Order Number: 253668-037US, January 2011, pp. 1-842 (5 of 12)	
	25	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3A: System Programming Guide, Part 1, Order Number: 253668-037US, January 2011, pp. 1-842 (6 of 12)	
	26	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3A: System Programming Guide, Part 1, Order Number: 253668-037US, January 2011, pp. 1-842 (7 of 12)	
	27	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3A: System Programming Guide, Part 1, Order Number: 253668-037US, January 2011, pp. 1-842 (8 of 12)	
	28	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3A: System Programming Guide, Part 1, Order Number: 253668-037US, January 2011, pp. 1-842 (9 of 12)	
	29	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3A: System Programming Guide, Part 1, Order Number: 253668-037US, January 2011, pp. 1-842 (10 of 12)	
	30	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3A: System Programming Guide, Part 1, Order Number: 253668-037US, January 2011, pp. 1-842 (11 of 12)	
	31	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3A: System Programming Guide, Part 1, Order Number: 253668-037US, January 2011, pp. 1-842 (12 of 12)	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	32	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3B: System Programming Guide, Part 2, Order Number: 253669-034US, March 2010, pp. 1-936 (1 of 13)	
	33	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3B: System Programming Guide, Part 2, Order Number: 253669-034US, March 2010, pp. 1-936 (2 of 13)	
	34	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3B: System Programming Guide, Part 2, Order Number: 253669-034US, March 2010, pp. 1-936 (3 of 13)	
	35	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3B: System Programming Guide, Part 2, Order Number: 253669-034US, March 2010, pp. 1-936 (4 of 13)	
	36	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3B: System Programming Guide, Part 2, Order Number: 253669-034US, March 2010, pp. 1-936 (5 of 13)	
	37	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3B: System Programming Guide, Part 2, Order Number: 253669-034US, March 2010, pp. 1-936 (6 of 13)	
	38	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3B: System Programming Guide, Part 2, Order Number: 253669-034US, March 2010, pp. 1-936 (7 of 13)	
	39	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3B: System Programming Guide, Part 2, Order Number: 253669-034US, March 2010, pp. 1-936 (8 of 13)	
	40	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3B: System Programming Guide, Part 2, Order Number: 253669-034US, March 2010, pp. 1-936 (9 of 13)	
	41	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3B: System Programming Guide, Part 2, Order Number: 253669-034US, March 2010, pp. 1-936 (10 of 13)	
	42	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3B: System Programming Guide, Part 2, Order Number: 253669-034US, March 2010, pp. 1-936 (11 of 13)	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	43	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3B: System Programming Guide, Part 2, Order Number: 253669-034US, March 2010, pp. 1-936 (12 of 13)
	44	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3B: System Programming Guide, Part 2, Order Number: 253669-034US, March 2010, pp. 1-936 (13 of 13)
	45	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3B: System Programming Guide, Part 2, Order Number: 253669-034US, March 2010, pp. 1-936
	46	INTEL, "Intel® GW80314 I/O Companion Chip," Datasheet, Order Number: 273757-003US, November 2004, pp. 1-88
	47	International Search Report and Written Opinion--PCTUS2012035992--ISAEPO--Oct 4 2012.
	48	International Search Report PCT Application No. PCTUS2009065741 dated Feb. 24 2010 3 pages.
	49	International Written Opinion PCT Application No. PCTUS2009065741 dated Feb. 24 2010 5 pages.
	50	IQBAL, Asif el al., "An Overview of Microkernel, Hypervisor and Microvisor Virtualization Approaches for Embedded Systems," Lund University, 2009, pp. 1-15

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature	/Antonio Xavier/	Date Considered	12/13/2019

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Patrick Caldwell/	Date (YYYY-MM-DD)	2019-10-02
Name/Print	Patrick Caldwell	Registration Number	44580

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L4	363	((edge or periphery) WITH (menu) WITH (swipe or drag or gesture))	US-PGPUB; USPAT	ADJ	ON	2019/12/13 11:01
S1	0	"15719406"	US-PGPUB; USPAT	ADJ	ON	2017/12/12 12:33
S2	0	"15072351"	US-PGPUB; USPAT	ADJ	ON	2017/12/12 12:36
S3	2	"13567004"	US-PGPUB; USPAT	ADJ	ON	2017/12/12 12:36
S4	3560	(("SMITH") near3 ("Michael")).INV.	US-PGPUB; USPAT; USOCR	ADJ	ON	2017/12/12 12:40
S5	19	(US-20090231290-$ or US-20070268261-$ or US-20060197750-$ or US-20060044281-$ or US-20030234768-$ or US-20080259046-$ or US-20110059777-$ or US-20080088602-$ or US-20110260984-$ or US-20100328230-$ or US-20070273671-$ or US-20070236470-$ or US-20110084921-$ or US-20110057889-$ or US-20110045813-$ or US-20100045621-$).did. or (US-6020878-$ or US-5729219-$ or US-8730199-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:21
S6	9	(US-20100058211-$ or US-20130076649-$ or US-20110261002-$ or US-20080146285-$ or US-20100035656-$ or US-20120060123-$ or US-20110059777-$ or US-20130321340-$ or US-20110291945-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:21
S7	27	S5 or S6	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:21
S8	990	touch screen AND (vibrate or vibrator) AND (pressure) AND (menu) AND ((launch$3 or open$3) WITH (program or application or software))	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:25
S9	782	S8 AND ((electronic$1mail or electronic mail or e$1mail) or (SMS or short message) or (social network))	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:26
S10	0	S4 AND S9	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:26
S11	0	S4 AND S8	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:27

S12	901	S4 AND touch	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:27
S13	508	S12 AND pressure	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:27
S14	36	S13 AND menu	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:27
S15	244	S4 AND menu	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:27
S16	133	S4 AND menu AND touch	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:27
S17	97	S16 NOT S14	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:41
S18	0	(back$1touch settings)	US-PGPUB; USPAT	ADJ	ON	2017/12/13 12:27
S19	2	(back$1touch near settings)	US-PGPUB; USPAT	ADJ	ON	2017/12/13 12:31
S20	3561	(("SMITH") near3 ("Michael")).INV.	US-PGPUB; USPAT; USOCR	ADJ	ON	2017/12/14 09:58
S21	82	S20 AND (touch$3 AND menu AND (social or sharing))	US-PGPUB; USPAT; USOCR	ADJ	ON	2017/12/14 09:58
S22	6	(US-20140053116-$ or US-20110302493-$ or US-20110153653-$ or US-20110096174-$ or US-20110025842-$ or US-20080177662-$).did.	US-PGPUB	ADJ	ON	2017/12/14 11:30
S23	0	S22 AND ((pressure or magnitude) WITH (touch))	US-PGPUB; USPAT	ADJ	ON	2017/12/14 11:30
S24	0	S22 AND ((pressure or magnitude))	US-PGPUB; USPAT	ADJ	ON	2017/12/14 11:30
S25	120	(menu) WITH (social media) WITH (shar$3)	US-PGPUB; USPAT	ADJ	ON	2017/12/14 13:58
S26	73418	(custom or programmable) WITH (gesture or input) WITH (application or program or function)	US-PGPUB; USPAT	ADJ	ON	2017/12/14 18:39
S27	3561	(("SMITH") near3 ("Michael")).INV.	US-PGPUB; USPAT; USOCR	ADJ	ON	2017/12/14 18:40
S28	69	S26 AND S27	US-PGPUB; USPAT	ADJ	ON	2017/12/14 18:40
S29	1879	touch WITH (pressure or magnitude) WITH thresholds	US-PGPUB;	ADJ	ON	2017/12/14 18:59

			USPAT			
S30	4	touch WITH (pressure or magnitude) WITH thresholds WITH (context)	US-PGPUB; USPAT	ADJ	ON	2017/12/14 18:59
S31	62	("5745719").URPN.	USPAT	ADJ	ON	2017/12/14 19:20
S32	5	"11038590"	USPAT	ADJ	ON	2017/12/14 19:21
S33	1	"20060161871".pn.	US-PGPUB; USPAT	ADJ	ON	2017/12/14 19:22
S34	1	"20060026535".pn.	US-PGPUB; USPAT	ADJ	ON	2017/12/14 19:24
S35	15	(US-20140053116-$ or US-20110302493-$ or US-20110153653-$ or US-20110096174-$ or US-20110025842-$ or US-20080177662-$ or US-20130291126-$ or US-20060161871-$ or US-20060026535-$ or US-20090058829-$ or US-20090085881-$ or US-20100090982-$ or US-20100188327-$).did. or (US-9524042-$ or US-5745719-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/12/14 19:51
S36	57422	(touch WITH pressure)	US-PGPUB; USPAT	ADJ	ON	2017/12/14 19:51
S37	5	S35 and S36	US-PGPUB; USPAT	ADJ	ON	2017/12/14 19:51
S38	45	(social network or social application) WITH (shar$3 object)	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:22
S39	9596	(social network or social application) WITH (post)	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:37
S40	2866	S39 AND (SMS and e$1mail)	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:37
S41	196	S40 AND (menu WITH GUI)	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:37
S42	18	S41 AND (touch WITH (pressure or magnitude))	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:38
S43	37	(GUI or menu) WITH (pressure or magnitude) WITH (context)	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:50
S44	3	"12597684"	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:52
S45	581	((context sensitive or context$1sensitive) WITH (icon))	US-PGPUB; USPAT	ADJ	ON	2017/12/16 16:13
S46	7	S45 AND (pressure WITH touch)	US-PGPUB; USPAT	ADJ	ON	2017/12/16 16:15
S47	13	menu WITH historical usage	US-	ADJ	ON	2017/12/18

			PGPUB; USPAT			13:40
S48	1	"8191015".pn.	US-PGPUB; USPAT	ADJ	ON	2017/12/18 13:44
S49	1	"20080065991".pn. AND (menu WITH usage)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 13:44
S50	6827	(social network or social media) WITH (shar$3 WITH (object or link or image or photo))	US-PGPUB; USPAT	ADJ	ON	2017/12/18 19:20
S51	6	S50 WITH (touch$3 WITH menu)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 19:21
S52	12	S50 SAME (touch$3 WITH menu)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 19:22
S53	233	S50 AND (touch$3 WITH menu)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 19:39
S54	165	S50 AND (touch WITH pressure)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 20:34
S55	8887	G06F3/04847.cpc.	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:43
S56	10393	G06F3/04817.cpc.	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:44
S57	23568	g06f3/0482.cpc.	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:44
S58	18904	g06f3/04883.cpc.	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:44
S59	46941	S55 or S56 or S57 or S58	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:44
S60	6344	S59 AND (pressure WITH touch)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:44
S61	2168	S60 AND (touch WITH menu)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:44
S62	141649	(pressure WITH (magnitude or threshold))	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:45
S63	465	S62 AND S61	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:45
S64	30	S63 AND S50	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:47
S65	100	(slide WITH gesture WITH menu)	US-PGPUB; USPAT	ADJ	ON	2017/12/22 21:32
S66	3	S65 AND (slide WITH pressure)	US-	ADJ	ON	2017/12/22

			PGPUB; USPAT			21:39
S67	6	S65 AND (slide SAME pressure)	US-PGPUB; USPAT	ADJ	ON	2017/12/22 21:41
S68	0	"15072354"	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:52
S69	3580	(("SMITH") near3 ("Michael")).INV.	US-PGPUB; USPAT; USOCR	ADJ	ON	2018/01/20 17:52
S70	11	S69 AND (intermediate state)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:52
S71	19	S69 AND (gesture WITH menu)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:54
S72	9007	G06F3/04847.cpc.	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:56
S73	10547	G06F3/04817.cpc.	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:56
S74	23888	g06f3/0482.cpc.	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:56
S75	19105	g06f3/04883.cpc.	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:56
S76	47534	(S72 or S73 or S74 or S75)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:56
S77	843	S76 AND (intermediate WITH (pressure or signal or state))	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:57
S78	15	S76 AND (intermediate WITH (pressure or signal or state) WITH menu)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:57
S79	208	("20010005692" | "20010043291" | "20020002629" | "20020005111" | "20020008691" | "20020033919" | "20020045854" | "20020085952" | "20020116952" | "20020116959" | "20020118180" | "20020130832" | "20020180763" | "20030117408" | "20030123328" | "20030147041" | "20030151589" | "20030217972" | "20030232192" | "20030235452" | "20040084372" | "20040108995" | "20040109788" | "20040121855" | "20040191509" | "20040207542" | "20040212598" | "20040239624" | "20040263488" | "20050045540" | "20050099403" | "20050231461" | "20050242034" | "20050264521" | "20050280746" | "20060001654" | "20060001800" | "20060033701" | "20060077186" | "20060107719" |	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:23

		"20060138983"	"20060146032"					
		"20060167400"	"20060179088"					
		"20060195064"	"20060197736"					
		"20060197737"	"20060209039"					
		"20060238495"	"20060260711"					
		"20060262099"	"20060284874"					
		"20070008064"	"20070035526"					
		"20070040814"	"20070070047"					
		"20070085837"	"20070103454"					
		"20070137901"	"20070146313"					
		"20070148371"	"20070153215"					
		"20070176902"	"20070182864"					
		"20070195029"	"20070229477"					
		"20070237170"	"20070262967"					
		"20080007675"	"20080018613"					
		"20080024459"	"20080024712"					
		"20080060854"	"20080062169"					
		"20080068343"	"20080094367"					
		"20080100584"	"20080105600"					
		"20080130910"	"20080136790"					
		"20080158171"	"20080204427"					
		"20080210843"	"20080211786"					
		"20080215192"	"20080252607"					
		"20080252616"	"20080259046"					
		"20080295839"	"20080304431"					
		"20090002312"	"20090022256"					
		"20090036176"	"20090046110"					
		"20090051659"	"20090066660"					
		"20090073138"	"20090086420"					
		"20090091536"	"20090143652"					
		"20090158152"	"20090160781"					
		"20090213066"	"20090225053"					
		"20090271731"	"20090289912"					
		"20090295747"	"20100005390"					
		"20100017872"	"20100020039"					
		"20100026640"	"20100035656"					
		"20100045612"	"20100053103"					
		"20100053532"	"20100077829"					
		"20100079398"	"20100085500"					
		"20100097347"	"20100134429"					
		"20100134448"	"20100149101"					
		"20100149124"	"20100164884"					
		"20100188365"	"20100194709"					
		"20100201651"	"20100206560"					
		"20100207900"	"20100214499"					
		"20100222735"	"20100225608"					
		"20100259490"	"20100277432"					
		"20110001706"	"20110007023"					
		"20110012921"	"20110025969"					
		"20110037726"	"20110044064"					
		"20110050591"	"20110050592"					
		"20110050593"	"20110050594"					
		"20110050608"	"20110051334"					
		"20110063248"	"20110088416"					
		"20110102336"	"20110102347"					
		"20110105446"	"20110109573"					
		"20110115738"	"20110118029"					
		"20110122084"	"20110152739"					
		"20110169775"	"20110175845"					
		"20110181552"	"20110210942"					
		"20110210943"	"20110227836"					
		"20110227877"	"20110239110"					
		"20110248941"	"20110254793"					
		"20110260994"	"20110273394"					

		"20110273396" | "20110291953" | "20120007821" | "20120013566" | "20120019448" | "20120023450" | "20120032876" | "20120034954" | "20120044172" | "20120056846" | "20120086670" | "20120105367" | "20120105370" | "20120109037" | "20120154328" | "20120162087" | "20120182249" | "20120194461" | "20120194462" | "20120223900" | "20120229403" | "20120229404" | "20120229405" | "20120231853" | "20120240044" | "20120242610" | "20120244348" | "20120254747" | "20120266072" | "20120274662" | "20120293449" | "20120306764" | "20120306765" | "20120306766" | "20120313888" | "20130002610" | "20130009869" | "20130021285" | "20130021295" | "20130027350".PN.				
S80	234	("20130124993" | "20130125322" | "20130127765" | "20130132838" | "20130141388" | "20130181928" | "20130181931" | "20130188336" | "20130215064" | "20130307809" | "20130307827" | "20130321317" | "20130332876" | "20130335357" | "20140028601" | "20140057102" | "20140066139" | "20140096092" | "20140099235" | "20140104219" | "20140104220" | "20140132548" | "20140132549" | "20140134433" | "20140134434" | "20140139473" | "20140168128" | "20140191962" | "20140208248" | "20140210786" | "20140340358" | "20140368455" | "20150068526" | "20150197670" | "20150234518" | "20150253609" | "3633322" | "3738166" | "3772685" | "3777222" | "4293734" | "4296756" | "4302011" | "4353552" | "4524421" | "4554419" | "4636632" | "4644101" | "4770281" | "5241308" | "5247434" | "5276787" | "5305423" | "5309172" | "5311302" | "5343650" | "5386219" | "5448263" | "5486286" | "5487827" | "5566096" | "5680160" | "5742894" | "5743859" | "5744027" | "5838244" | "5856822" | "5947334" | "5999892" | "6108064" | "6118435" | "6141000" | "6193152" | "6283763" | "6284131" | "6337681" | "6351271" | "6392638" | "6417845" | "6441807" | "6509847" | "6526315" | "6533757" | "6567102" | "6626013" | "6636203" | "6689947" | "6721019" | "6738514" | "6747636" | "6776546" | "6791640" | "6801211" | "6879318" | "6880998" | "6888537" | "6917282" | "6919927" | "6933991" | "6961015" | "6967903" | "7030854" | "7097903" | "7098776" | "7122149" | "7138984" | "7205983" | "7254973" | "7289113" | "7303680" | "7312784" | "7312791" | "7315336" | "7318892" |	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:24

		"7405779" | "7423557" | "7437221" | "7535463" | "7626579" | "7639239" | "7649577" | "7649605" | "7659885" | "7675580" | "7692627" | "7692637" | "7701329" | "7705824" | "7738068" | "7755612" | "7903096" | "7932893" | "7952566" | "7973777" | "7973778" | "7982721" | "8022933" | "8057419" | "8068021" | "8072430" | "8094134" | "8094673" | "8102496" | "8184228" | "8188982" | "8199116" | "8207945" | "8209628" | "8223799" | "8228309" | "8253699" | "8269731" | "8269733" | "8270148" | "8279361" | "8286102" | "8310452" | "8319743" | "8325143" | "8334835" | "8334850" | "8345018" | "8349228" | "8373675" | "8384674" | "8411039" | "8416210" | "8424590" | "8427434" | "8451238" | "8471824" | "8477111" | "8479110" | "8487900" | "8493384" | "8497884" | "8508494" | "8542193" | "8542209" | "8553012" | "8564559" | "8587542" | "8624851" | "8624867" | "8638311" | "8648839" | "8654104" | "8674947" | "8692815" | "8698777" | "8717303" | "8723826" | "8727557" | "8743076" | "8745514" | "8754862" | "8760408" | "8780089" | "8816993" | "8854317" | "8866785" | "8872798" | "8878809" | "8878810" | "8884913" | "8896575" | "8913031" | "8917262" | "8947381" | "8970540" | "8976128" | "8982081" | "8988364" | "9003591" | "9013414" | "9018030" | "9030427" | "9035897" | "9041679" | "9045670" | "9046999" | "9063597" | "9069204" | "9069416" | "9069460" | "9092129" | "9098193" | "9116609" | "9125630" | "9130651" | "9134880" | "9152258" | "9152288" | "RE41716").PN.				
S81	442	S79 or S80	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:24
S82	17	S81 AND (intermediate WITH (pressure or signal or state))	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:24
S83	297	S81 AND (second WITH (pressure or signal or state))	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:26
S84	58	S81 AND (second WITH (pressure or signal or state) WITH third)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:26
S85	1	S81 AND (second WITH (pressure or signal or state) WITH third) WITH menu	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:26
S86	1632	g06f2203/04105.cpc.	US-PGPUB; USPAT	ADJ	ON	2018/01/20 19:35
S87	302	S86 AND (second WITH (pressure or signal or state) WITH third)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 19:35

S88	302	S86 AND (second WITH (pressure or signal or state) WITH third)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 19:35
S89	1	S86 AND (second WITH (pressure or signal or state) WITH third) WITH menu	US-PGPUB; USPAT	ADJ	ON	2018/01/20 19:35
S90	50	S86 AND (intermediate WITH (pressure or signal or state))	US-PGPUB; USPAT	ADJ	ON	2018/01/20 19:36
S91	0	"15072354"	US-PGPUB; USPAT	ADJ	ON	2018/08/08 14:49
S92	14	(US-20130162667-$ or US-20110145764-$ or US-20100313166-$ or US-20080219493-$ or US-20040150644-$ or US-20120306788-$ or US-20110175805-$ or US-20100026640-$ or US-20080178126-$ or US-20110196935-$ or US-20090207175-$ or US-20120225413-$ or US-20080204427-$ or US-20080024459-$).did.	US-PGPUB; USPAT	ADJ	ON	2018/09/07 17:56
S97	1	"20110175805".pn.	US-PGPUB; USPAT	ADJ	ON	2019/01/19 15:58
S98	1	"3659229".pn.	US-PGPUB; USPAT	ADJ	ON	2019/01/19 15:59
S99	473	(cursor or icon) WITH (follow) WITH (gesture or touch)	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:02
S100	14	(cursor or icon) WITH (follow) WITH (gesture or touch) WITH (speed)	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:02
S101	0	"16153765"	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:02
S102	1	"15072354"	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:02
S103	2	(cursor or icon) WITH (follow) WITH (gesture or touch) WITH (gravity)	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:04
S104	51	(cursor or icon) WITH (gravity) WITH (gesture or touch) WITH (gravity)	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:05
S105	90	(cursor or icon) WITH (snap) WITH (gesture or touch)	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:08
S106	275	(icon) WITH (follow or trail) WITH (gesture or touch)	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:16
S107	14	(US-20130162667-$ or US-20120306788-$ or US-20120225413-$ or US-20110196935-$ or US-20110175805-$ or US-20110145764-$ or US-20100313166-$ or US-20100026640-$ or US-20090207175-$ or US-20080219493-$ or US-20080204427-$ or US-20080178126-$ or US-	US-PGPUB	ADJ	ON	2019/02/27 07:26

		20080024459-$ or US-20040150644-$).did.				
S108	18	(US-20110302493-$ or US-20080177662-$ or US-20060161871-$ or US-20060026535-$ or US-20090058829-$ or US-20090085881-$ or US-20100090982-$ or US-20100188327-$ or US-20100251119-$ or US-20100127983-$ or US-20100241989-$ or US-20100088654-$ or US-20050114794-$ or US-20110061021-$ or US-20120054691-$ or US-20120306788-$ or US-20120182296-$).did. or (US-9524042-$).did.	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:26
S109	31	S107 or S108	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:26
S110	0	S109 AND (virtual layer)	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:26
S111	3	S109 AND (fog or blur)	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:26
S112	2	S109 AND (fore$1ground AND back$1ground)	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:29
S113	1005	(menu WITH (fore$1ground AND back$1ground))	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:30
S114	0	(menu WITH (fore$1ground AND back$1ground)) WITH virtual layer	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:30
S115	23	(menu WITH (fore$1ground AND back$1ground)) WITH layer	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:30
S116	5542	(fore$1ground or back$1ground) WITH (fog or blur)	US-PGPUB; USPAT	ADJ	ON	2019/02/27 13:12
S117	4	(fore$1ground or back$1ground) WITH (fog or blur) WITH menu	US-PGPUB; USPAT	ADJ	ON	2019/02/27 13:12
S118	1	S116 AND (menu WITH transparent)	US-PGPUB; USPAT	ADJ	ON	2019/02/27 13:13
S119	29	(edge WITH inward WITH menu)	US-PGPUB; USPAT	ADJ	ON	2019/05/16 23:00
S120	0	((slide or drag) near (in or inward)) WITH (edge or periphery) WITH (menu)	US-PGPUB; USPAT	ADJ	ON	2019/09/15 18:39
S121	773	((slide or drag) near (in or inward)) WITH (edge or periphery)	US-PGPUB; USPAT	ADJ	ON	2019/09/15 18:40
S122	9	S121 AND ((edge or periphery) WITH (menu))	US-PGPUB; USPAT	ADJ	ON	2019/09/15 18:41
S123	85	S121 AND (phone)	US-PGPUB; USPAT	ADJ	ON	2019/09/15 18:41

S124	25	((swipe) near (in or inward)) WITH (edge or periphery)	US-PGPUB; USPAT	ADJ	ON	2019/09/15 18:45
S125	24	((swipe) WITH (inward)) WITH (edge or periphery)	US-PGPUB; USPAT	ADJ	ON	2019/09/15 18:46
S126	180	((drag) WITH (inward)) WITH (edge or periphery)	US-PGPUB; USPAT	ADJ	ON	2019/09/15 18:46

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S93	3480	G06F3/04847.cpc.	USPAT	ADJ	ON	2018/09/07 17:58
S94	4153	G06F3/04817.cpc.	USPAT	ADJ	ON	2018/09/07 17:58
S95	9279	g06f3/0482.cpc.	USPAT	ADJ	ON	2018/09/07 17:58
S96	7394	g06f3/04883.cpc.	USPAT	ADJ	ON	2018/09/07 17:58

12/ 13/ 2019 12:18:33 PM
C:\ Users\ axavier\ Desktop\ axavier data files\ EAST workspaces\ 16169961-CON of 15072354-CON of 13567004.wsp

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S Patent and Trademark Office; U.S DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	10101898	B2	2018-10-16	AMELINE	Multi-touch graphical user interface for interacting with menus on a handheld device
	2	10222891	B1	2019-03-05	Smith	Selling interface system, method, and computer program product for a multi-pressure selection touch screen

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20010005692	A1	2001-06-28	Song	
	2	20010043291	A1	2001-11-22	Kono et al.	
	3	2001005692	A1	2001-06-28	Shik	
	4	20010175805 *20110175805		2011-07-21	Benjamin A. Rottler et al.	/AX/

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	5	2001043291	A1	2001-11-22	Kono et al.	
	6	20020002629	A1	2002-01-03	Fukushima	
	7	20020002662	A1	2002-01-03	Olarig et al.	
	8	20020005111	A1	2002-01-17	Ludwig	
	9	20020008691	A1	2002-01-24	Hanajima et al.	
	10	2002002629	A1	2002-01-03	Fukushima	
	11	20020033919	A1	2002-03-21	Sanelle et al.	
	12	20020045854	A1	2002-04-18	Royo et al.	
	13	2002005111	A1	2002-01-17	Ludwig	
	14	20020085952	A1	2002-07-04	Ellingboe et al.	
	15	20020086711	A1	2002-07-04	Flannery	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	16	2002008691	A1	2002-01-24	Hanajima et al.	
	17	20020116959	A1	2002-08-29	Ohta et al.	
	18	20020118180	A1	2002-08-29	Martin	
	19	20020129315	A1	2002-09-12	Onvural et al.	
	20	20020130832	A1	2002-09-19	Baucom et al.	
	21	20020180763	A1	2002-12-05	Kung	
	22	2002033919	A1	2002-03-21	Sanelle et al.	
	23	2002045854	A1	2002-04-18	Royo et al.	
	24	2002082068	A1	2002-06-27	Singhal	
	25	2002085952	A1	2002-07-04	Ellingboe et al.	
	26	2002116959	A1	2002-08-29	Ohta et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	27	2002118180	A1	2002-08-29	Martin	
	28	2002130832	A1	2002-09-19	Baucom et al.	
	29	2002180763	A1	2002-12-05	Kung	
	30	20030117408	A1	2003-06-26	Forsline et al.	
	31	20030123328	A1	2003-07-03	Guanter	
	32	20030147041	A1	2003-08-07	Oh et al.	
	33	20030151589	A1	2003-08-14	Bensen et al.	
	34	20030179190	A1	2003-09-25	Franzen	
	35	20030217972	A1	2003-11-27	Connell et al.	
	36	20030232192	A1	2003-12-18	Kishioka et al.	
	37	20030235452	A1	2003-12-25	Kraus et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	38	2003117408	A1	2003-06-26	Forsline et al.	
	39	2003123328	A1	2003-07-03	Guanter	
	40	2003147041	A1	2003-08-07	Oh et al.	
	41	2003151589	A1	2003-08-14	Bensen et al.	
	42	2003217972	A1	2003-11-27	Connell et al.	
	43	2003232192	A1	2003-12-18	Kishioka et al.	
	44	2003234768	A1	2003-12-25	Rekimoto et al.	
	45	2003235452	A1	2003-12-25	Kraus et al.	
	46	20040084372	A1	2004-05-06	Connell et al.	
	47	20040108995	A1	2004-06-10	Hoshino et al.	
	48	20040109788	A1	2004-06-10	Li et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	49	20040121855	A1	2004-06-24	Giegerich	
	50	20040191509	A1	2004-09-30	Kishioka et al.	
	51	20040207542	A1	2004-10-21	Chang et al.	
	52	20040212598	A1	2004-10-28	Kraus et al.	
	53	20040212599	A1	2004-10-28	Cok et al.	
	54	20040239624	A1	2004-12-02	Ramian	
	55	20040263488	A1	2004-12-30	Martin	
	56	2004084372	A1	2004-05-06	Connell et al.	
	57	2004108995	A1	2004-06-10	Hoshino et al.	
	58	2004109788	A1	2004-06-10	Li et al.	
	59	2004121855	A1	2004-06-24	Giegerich	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	60	2004191509	A1	2004-09-30	Kishioka et al.	
	61	2004207542	A1	2004-10-21	Chang et al.	
	62	2004212598	A1	2004-10-28	Kraus et al.	
	63	2004239624	A1	2004-12-02	Ramian	
	64	2004263488	A1	2004-12-30	Martin	
	65	20050018495	A1	2005-01-27	Bhakta et al.	
	66	20050021190	A1	2005-01-27	Worrell et al.	
	67	20050027928	A1	2005-02-03	Avraham et al.	
	68	20050045540	A1	2005-03-03	Connell et al.	
	69	20050052425	A1	2005-03-10	Zadesky et al.	
	70	20050094465	A1	2005-05-05	Gervasi et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	71	20050099403	A1	2005-05-12	Kraus et al.	
	72	20050102444	A1	2005-05-12	Cruz	
	73	20050128853	A1	2005-06-16	Ayukawa et al.	
	74	20050156892	A1	2005-07-21	Grant	
	75	20050182893	A1	2005-08-18	Suh	
	76	20050204091	A1	2005-09-15	Kilbuck et al.	
	77	20050231461	A1	2005-10-20	Raap et al.	
	78	20050242034	A1	2005-11-03	Connell et al.	
	79	20050251617	A1	2005-11-10	Sinclair et al.	
	80	20050264521	A1	2005-12-01	Liu et al.	
	81	20050270037	A1	2005-12-08	Haynes et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	82	20050280746	A1	2005-12-22	North et al.	
	83	2005045540	A1	2005-03-03	Connell et al.	
	84	2005099403	A1	2005-05-12	Kraus et al.	
	85	2005231461	A1	2005-10-20	Raap et al.	
	86	2005242034	A1	2005-11-03	Connell et al.	
	87	2005264521	A1	2005-12-01	Liu et al.	
	88	2005280746	A1	2005-12-22	North et al.	
	89	20060001654	A1	2006-01-05	Smits	
	90	20060001800	A1	2006-01-05	Sanelle et al.	
	91	20060007222	A1	2006-01-12	Uy	
	92	2006001654	A1	2006-01-05	Smits	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	93	20060001800	A1	2006-01-05	Sanelle et al.	
	94	20060022952	A1	2006-02-02	Ryynanen	
	95	20060022955	A1	2006-02-02	Kennedy	
	96	20060026521	A1	2006-02-02	Hotelling et al.	
	97	20060026536	A1	2006-02-02	Hotelling et al.	
	98	20060033701	A1	2006-02-16	Wilson	
	99	20060066590	A1	2006-03-30	Ozawa et al.	
	100	20060075402	A1	2006-04-06	Neiger et al.	
	101	20060077186	A1	2006-04-13	Park et al.	
	102	20060078295	A1	2006-04-13	Yamashita	Recording medium reproducing apparatus, repeated reproduction method, and method of moving repeated reproduction section
	103	20060085757	A1	2006-04-20	Andre et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	104	20060107719	A1	2006-05-25	Campian	
	105	20060114646	A1	2006-06-01	Koibuchi et al.	
	106	20060119586	A1	2006-06-08	Grant et al.	
	107	20060138630	A1	2006-06-29	Bhakta	
	108	20060138983	A1	2006-06-29	Lee et al.	
	109	20060139340	A1	2006-06-29	Geaghan	
	110	20060146014	A1	2006-07-06	Lehtonen	
	111	20060146032	A1	2006-07-06	Kajimoto et al.	
	112	20060167400	A1	2006-07-27	Ellingboe et al.	
	113	20060179088	A1	2006-08-10	Kang	
	114	20060195064	A1	2006-08-31	Plahey et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	115	20060197736	A1	2006-09-07	Baucom et al.	
	116	20060197737	A1	2006-09-07	Baucom et al.	
	117	20060203899	A1	2006-09-14	Gee	
	118	20060209039	A1	2006-09-21	Destura et al.	
	119	20060238495	A1	2006-10-26	Davis	
	120	20060244733	A1	2006-11-02	Geaghan	
	121	20060250377	A1	2006-11-09	Zadesky et al.	
	122	20060260711	A1	2006-11-23	Fry et al.	
	123	20060262099	A1	2006-11-23	Destura et al.	
	124	2006026535	A1	2006-02-02	Hotelling et al.	
	125	20060274050	A1	2006-12-07	Lii	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	126	20060284874	A1	2006-12-21	Wilson	
	127	20060294295	A1	2006-12-28	Fukuzo	
	128	2006033701	A1	2006-02-16	Wilson	
	129	2006044281	A1	2006-03-02	Lai et al.	
	130	2006077186	A1	2006-04-13	Park et al.	
	131	2006107719	A1	2006-05-25	Campian et al.	
	132	2006138983	A1	2006-06-29	Lee et al.	
	133	2006146032	A1	2006-07-06	Kajimoto et al.	
	134	2006161871	A1	2006-07-20	Hotelling et al.	
	135	2006167400	A1	2006-07-27	Ellingboe et al.	
	136	2006179088	A1	2006-08-10	Kang	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	137	2006195064	A1	2006-08-31	Plahey et al.	
	138	2006197736	A1	2006-09-07	Baucom et al.	
	139	2006197737	A1	2006-09-07	Baucom et al.	
	140	2006197750	A1	2006-09-07	Kerr et al.	
	141	2006209039	A1	2006-09-21	Destura Galileo et al.	
	142	2006238495	A1	2006-10-26	Davis	
	143	2006260711	A1	2006-11-23	Fry et al.	
	144	2006262099	A1	2006-11-23	Destura Galileo et al.	
	145	2006284874	A1	2006-12-21	Wilson	
	146	20070008064	A1	2007-01-11	Donohue	
	147	20070035526	A1	2007-02-15	Takenaka et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	148	20070040814	A1	2007-02-22	Lee et al.	
	149	20070066310	A1	2007-03-22	Haar et al.	Mobile communication terminal and method
	150	20070070047	A1	2007-03-29	Jeon et al.	
	151	2007008064	A1	2007-01-11	Donohue	
	152	20070085837	A1	2007-04-19	Ricks et al.	
	153	20070097073	A1	2007-05-03	Takashima et al.	
	154	20070097151	A1	2007-05-03	Rosenberg	
	155	20070103449	A1	2007-05-10	Laitinen et al.	
	156	20070103454	A1	2007-05-10	Elias	
	157	20070113681	A1	2007-05-24	Nishimura et al.	
	158	20070137901	A1	2007-06-21	Chen	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	159	20070146313	A1	2007-06-28	Newman et al.	
	160	20070146343	A1	2007-06-28	Prados	
	161	20070148371	A1	2007-06-28	Kazama	
	162	20070153215	A1	2007-07-05	Lee	
	163	20070176902	A1	2007-08-02	Newman et al.	
	164	20070182864	A1	2007-08-09	Stoneham et al.	
	165	20070192563	A1	2007-08-16	Rajan et al.	
	166	20070195029	A1	2007-08-23	Jeon et al.	
	167	20070204075	A1	2007-08-30	Rajan et al.	
	168	20070204079	A1	2007-08-30	Wu	
	169	20070229477	A1	2007-10-04	Ludwig	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	170	20070237170	A1	2007-10-11	Proctor et al.	
	171	20070246494	A1	2007-10-25	Kim et al.	
	172	20070262967	A1	2007-11-15	RHO	
	173	20070271513	A1	2007-11-22	Andren	User Interface for Remotely Controlling a Digital Music Player
	174	20070291009	A1	2007-12-20	Wright et al.	
	175	2007035526	A1	2007-02-15	Takenaka et al.	
	176	2007040814	A1	2007-02-22	Lee et al.	
	177	2007070047	A1	2007-03-29	Jeon et al.	
	178	2007085837	A1	2007-04-19	Ricks et al.	
	179	2007103454	A1	2007-05-10	Elias et al.	
	180	2007137901	A1	2007-06-21	Chen	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	181	2007146313	A1	2007-06-28	Newman et al.	
	182	2007148371	A1	2007-06-28	Kazama	
	183	2007153215	A1	2007-07-05	Lee	
	184	2007176902	A1	2007-08-02	Newman et al.	
	185	2007182864	A1	2007-08-09	Stoneham et al.	
	186	2007195029	A1	2007-08-23	Jeon et al.	
	187	2007229477	A1	2007-10-04	Ludwig	
	188	2007236470	A1	2007-10-11	Abanami et al.	
	189	2007237170	A1	2007-10-11	Proctor et al.	
	190	2007262967	A1	2007-11-15	Rho	
	191	2007268261	A1	2007-11-22	Lipson	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	192	2007273671	A1	2007-11-29	Zadesky et al.	
	193	20080007675	A1	2008-01-10	Sanelle et al.	
	194	20080010435	A1	2008-01-10	Smith et al.	
	195	20080018613	A1	2008-01-24	Kim et al.	
	196	20080024459	A1	2008-01-31	Poupyrev et al.	
	197	20080024712	A1	2008-01-31	Kim	
	198	20080025108	A1	2008-01-31	Rajan et al.	
	199	20080025122	A1	2008-01-31	Schakel et al.	
	200	20080025123	A1	2008-01-31	Rajan et al.	
	201	20080025124	A1	2008-01-31	Rajan et al.	
	202	20080025136	A1	2008-01-31	Rajan et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	203	20080025137	A1	2008-01-31	Rajan et al.	
	204	20080026803	A1	2008-01-31	Demuynck	
	205	20080027697	A1	2008-01-31	Rajan et al.	
	206	20080027702	A1	2008-01-31	Rajan et al.	
	207	20080027703	A1	2008-01-31	Rajan et al.	
	208	20080028135	A1	2008-01-31	Rajan et al.	
	209	20080028136	A1	2008-01-31	Schakel et al.	
	210	20080028137	A1	2008-01-31	Schakel et al.	
	211	20080031030	A1	2008-02-07	Rajan et al.	
	212	20080031072	A1	2008-02-07	Rajan et al.	
	213	20080037353	A1	2008-02-14	Rajan et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	214	20080056014	A1	2008-03-06	Rajan et al.	
	215	20080060854	A1	2008-03-13	Perlin	
	216	20080062169	A1	2008-03-13	Heesemans et al.	
	217	20080062773	A1	2008-03-13	Rajan et al.	
	218	20080068343	A1	2008-03-20	Hoshino et al.	
	219	2008007675	A1	2008-01-10	Sanelle et al.	
	220	20080082763	A1	2008-04-03	Rajan et al.	
	221	20080088600	A1	2008-04-17	Prest et al.	
	222	20080094367	A1	2008-04-24	Ven et al.	
	223	20080094367	A1	2008-04-24	De et al.	
	224	20080098331	A1	2008-04-24	Novick et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	225	20080100568	A1	2008-05-01	Koch et al.	
	226	20080100584	A1	2008-05-01	Hague et al.	
	227	20080100590	A1	2008-05-01	Hur et al.	
	228	20080103753	A1	2008-05-01	Rajan et al.	
	229	20080104314	A1	2008-05-01	Rajan et al.	
	230	20080104344	A1	2008-05-01	Shimozono et al.	
	231	20080105600	A1	2008-05-08	Connell et al.	
	232	20080109206	A1	2008-05-08	Rajan et al.	
	233	20080109595	A1	2008-05-08	Rajan et al.	
	234	20080109597	A1	2008-05-08	Schakel et al.	
	235	20080109598	A1	2008-05-08	Schakel et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	236	20080109629	A1	2008-05-08	Karamcheli et al.	
	237	20080115006	A1	2008-05-15	Smith et al.	
	238	20080117573	A1	2008-05-22	Im et al.	
	239	20080120443	A1	2008-05-22	Rajan et al.	
	240	20080122315	A1	2008-05-29	Maruyama et al.	
	241	20080123459	A1	2008-05-29	Rajan et al.	
	242	20080126687	A1	2008-05-29	Rajan et al.	
	243	20080126688	A1	2008-05-29	Rajan et al.	
	244	20080126689	A1	2008-05-29	Rajan et al.	
	245	20080126692	A1	2008-05-29	Rajan et al.	
	246	20080130910	A1	2008-06-05	Jobling et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	247	20080133825	A1	2008-06-05	Rajan et al.	
	248	20080136790	A1	2008-06-12	Hio	
	249	20080146297	A1	2008-06-19	Ho	
	250	20080150911	A1	2008-06-26	Harrison	
	251	20080158171	A1	2008-07-03	Wong et al.	
	252	20080165255	A1	2008-07-10	Christie et al.	Entire Document
	253	20080169960	A1	2008-07-17	Rosenbury	Handheld System for Radar Detection
	254	20080174570	A1	2008-07-24	Jobs et al.	
	255	2008018613	A1	2008-01-24	Kim et al.	
	256	20080204427	A1	2008-08-28	Heesemans et al.	
	257	20080210843	A1	2008-09-04	Han et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	258	20080211786	A1	2008-09-04	Park et al.	
	259	20080215192	A1	2008-09-04	Hardman et al.	
	260	20080231605	A1	2008-09-25	Yang	
	261	20080238884	A1	2008-10-02	Harish	
	262	20080239857	A1	2008-10-02	Rajan et al.	
	263	20080239858	A1	2008-10-02	Rajan et al.	
	264	20080240223	A1	2008-10-02	Badalone	
	265	2008024459	A1	2008-01-31	Poupyrev et al.	
	266	2008024712	A1	2008-01-31	Kim	
	267	20080250408	A1	2008-10-09	Tsui et al.	
	268	20080252607	A1	2008-10-16	Jong et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	269	20080252616	A1	2008-10-16	Chen	
	270	20080259046	A1	2008-10-23	Carsanaro	
	271	20080272478	A1	2008-11-06	Anderson et al.	
	272	20080290435	A1	2008-11-27	Oliver et al.	
	273	20080295839	A1	2008-12-04	Habashi	
	274	20080297487	A1	2008-12-04	Hotelling et al.	
	275	20080298113	A1	2008-12-04	Liu et al.	
	276	20080304431	A1	2008-12-11	Karaoguz	
	277	20080308946	A1	2008-12-18	Pratt	
	278	2008060854	A1	2008-03-13	Perlin	
	279	2008062169	A1	2008-03-13	Heesemans et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	280	2008066010	A1	2008-03-13	Brodersen et al.	
	281	2008068343	A1	2008-03-20	Hoshino et al.	
	282	2008088602	A1	2008-04-17	Hotelling	
	283	2008100584	A1	2008-05-01	Hague et al.	
	284	2008105600	A1	2008-05-08	Connell et al.	
	285	2008130910	A1	2008-06-05	Jobling et al.	
	286	2008136790	A1	2008-06-12	Hio	
	287	2008146285	A1	2008-06-19	Lee et al.	
	288	2008158171	A1	2008-07-03	Wong et al.	
	289	2008177662	A1	2008-07-24	Smith et al.	
	290	2008204427	A1	2008-08-28	Heesemans et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	291	2008210843	A1	2008-09-04	Han et al.	
	292	2008211786	A1	2008-09-04	Park et al.	
	293	2008215192	A1	2008-09-04	Hardman et al.	
	294	2008252607	A1	2008-10-16	De et al.	
	295	2008252616	A1	2008-10-16	Chen	
	296	2008259046	A1	2008-10-23	Carsanaro	
	297	2008295839	A1	2008-12-04	Habashi	
	298	2008304431	A1	2008-12-11	Karaoguz	

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1	2008033739A	JP	A	2008-02-14	Iwan et al.		

EFS Web 2.1.18

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	2	2011034216A	JP	A	2011-02-17	Murata et al.		
	3	1020110004203A	KR		2011-01-13	JUNG JAE GYU		
	4	1020110049431	KR	A	2011-05-12	JEONG, WOOKYUNG | 정우경		
	5	2005114369	WO	A2	2005-12-01	Hotelling et al.		
	6	2008012491	WO	A1	2008-01-31	Kreit et al.		
	7	2008037275	WO	A1	2008-04-03	Laitinen		
	8	2008125130	WO	A1	2008-10-23	Laitinen et al.		
	9	2008131058	WO	A2	2008-10-30	Best		
	10	2008131058	WO	A2	2008-10-30	Best		
	11	2010073731	WO	A1	2010-07-01	Aono et al.		
	12	2011100444	WO	A2	2011-08-18	Nakanishi et al.		

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	13	2011126893	WO	A2	2011-10-13	Keeth et al.		
	14	2012149911	WO	A1	2012-11-08	Hou		

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T5
	1	"Cellphone Hardware Applications," pages 1-24. Source unknown. Released prior to Q4 of 2010.	
	2	"Interfacing 4-wire and 5-wire resistive touchscreens to the LPC247x," Nov. 13, 2008.	
	3	"INTERNATIONAL TECHNOLOGY ROADMAP FOR SEMICONDUCTORS," 2009 Edition, ASSEMBLY AND PACKAGING, pp. 1-70	
	4	3D Packing Newsletter on 3D IS, TSV, WLP & Embedded Technologies, December 2009, pp. 1-16	
	5	3D-IC Alliance, "IMIS™ - Intimate Memory Interface Specification," Revision 1.0, June 1, 2008, pp. 1-33	
	6	AKHSHABI, SAAMER et al., "An Experimental Evaluation of Rate-Adaptation Algorithms in Adaptive Streaming over HTTP," Feb. 23, 2011, pp. 1-12	
	7	ALTERA, "Using Pre-Emphasis and Equalization with Stratix GX," White Paper, September 2003, ver. 1.0, pp. 1-11	

EFS Web 2.1.18

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	8	AMD, "BIOS and Kernel Developer's Guide (BKDG) for AMD Family 14h Models OOh-OFh Processors," BKDG for AMD Family 14h Models OOh-OFh Processors, February 16, 2011, Rev. 3.04, pp. 1-403	
	9	AMP, "DDR2 DIMM 25 Degree Imm CL 240 position," DDR2 DIMM 25 Degree 240 -Solder tail, 2005, p. 1	
	10	AMP, "DDR2 DIMM Socket Imm CL 240 position," DDR2 DIMM 240 -Solder tail, 1998, p. 1	
	11	ANALUI, B., "Signal Integrity Issues in High-Speed Wireline Links: Analysis and Integrated System Solutions," Thesis, 2005, pp. 1-194	
	12	ARM, "The ARM Architecture," 2010, pp. 1-43	
	13	ARORA, A., "Sensing by the people, for the people & of the people," April 21, 2008, 48 pages	
	14	AVISSAR, O. et al., "Heterogeneous Memory Management for Embedded Systems," CASES 'O1, November 16-17, 2001, pp. 1-10	
	15	BAHAR, BARUS et al., "Mobile-Phone Based Gesture Recognition," Proceedings of the Enterface, 2007, pp. 1-8	
	16	BAKER, BONNIE C. et al., "The Power Behind Resistive Touch Screens," Texas Instruments, 2007, pp. 1-9	
	17	BALAKRISHNAN, H., "Background: Single-Link Communication," Fall 2001, September 5, 2001, pp. 1-6	
	18	BALASUBRAMANIAN, NIRANJAN et al., "Energy Consumption in Mobile Phones: A Measurement Study and Implications for Network Applications," University of Massachusetts Amherst, November 4, 2009, pp. 1-14	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	19	BAR-NIV, A., "Balanced equalization: The 10GBASE-KX4 formula for error-free transmission over backplanes," Networking Solutions, March 2005, pp. 1-4	
	20	BARR, T. W. et al., "Translation Caching: Skip, Don't Walk (the Page Table)," ISCA '10, June 19-23, 2010, pp. 1-12	
	21	BEN-YEHUDA, MULI, et al., "The Turtles Project: Design and Implementation of Nested Virtualization," IBM Research, October 2010, slides 1-92	
	22	BHARDWAJ, RISHI, et al., "A Choices Hypervisor on the ARM Architecture," University of Illinois, Apr. 2006, pp. 1-5	
	23	BICKFORD, JEFFREY, et al., "Rootkits on Smart Phones: Attacks, Implication and Opportunities," Jun. 10, 2010, pp. 1-6	
	24	BIEN, F., "Reconfigurable Equalization for 10-Gb/sec Serial Data Links in a 0.18-?m CMOS Technology," Dissertation, December 2006, pp. 1-121	
	25	BIHLMAYR, Wolfgang et al., "OLED Display Driver for the HCS08 Family," Freescale Semiconductor Application Note, Mar. 2007, pp. 1-42.	
	26	BORNSTEIN, DAN, "Android Dalvik VM Internals," May 29, 2008, slides 1-58	
	27	BRASH, DAVID, "Extensions to the ARMv7-A Architecture," Aug. 2010, pp. 1-21	
	28	BRUECK, et al., "Certificate of Correction," U.S. Pat. No. 7,818,444 B2, Oct. 19, 2010	
	29	BUCHALI, F. et al., "Fast Eye Monitor for 10 Gbit/s and its Application for Optical PMD Compensation," 2000 Optical Society of America, pp. 1-4	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	30	BUCKWALTER, J. F., "Deterministic Jitter in Broadband Communication," Thesis, 2006, pp. 1-220	
	31	BUNGALE, PARASHANTH, "ARM Virtualization: CPU & MMU Issues," VMware, 2010, slides 1-16	
	32	BURDACH, M., "Physical Memory Forensics," 53 slides, Black Hat USA (2006), 1 August 2006	
	33	CARROLL, AARON et al., "An Analysis of Power consumption in a Smartphone," 2010 USENIX Conference, 2010, pp. 1-14	
	34	CASIEZ, G., et al., "RubberEdge: Improved Interaction with Mobile Devices via Elastic-Edged Touchpads," Apr. 2008, pp. 1-1	
	35	CHANDRAMOULI, S., "A BROADBAND PASSIVE DELAY LINE STRUCTURE IN 0.18 MICRON CMOS FOR A GIGABIT FEED FORWARD EQUALIZER," Thesis, 2004, pp. 1-52	
	36	CHANDRASEKARAN, DINESH et al., "Hardware-assisted Secure Virtualization," 2009, pp. 1-8	
	37	CHAPMAN, MATTHEW, et al., "MagiXen: Combining Binary Translation and Virtualization," HP Enterprise Systems and Software Laboratory, May 4, 2007, pp. 1-15	
	38	CHAUDHARY, VIPIN et al., "TECHNIQUES FOR MIGRATING COMPUTATIONS ON THE GRID," 2006, pp. 1-19	
	39	CHEN, J. et al., "High Speed Signaling Design: from 1 Gbps to 10 Gbps," DesignCon East 2004, pp. 1-17	
	40	CHEN, J., et al., "On Static Binary Translation and Optimization for ARM based Applications," Apr. 6, 2008, pp. 1-10	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	41	CHEN, WEI et al., "An Emulator for Executing IA-32 Application on ARM-Based Systems," Journal of Computers, vol. 5, Jul. 7, 2010, pp. 1133-1141	
	42	CHEN, Y.-H., "Ad-ST AC & 3DIC Technology of ITRI," 2010, pp. 1-14	
	43	CHIPOUNOV, VITALY et al., "Dynamically Translating x86 to LLVM using QEMU," 2010, pp. 1-5	
	44	CHUN, B., et al., "Augmented Smartphone Applications Through Clone Cloud Execution," Intel Research Berkeley, May 18, 2009, pp. 1-5	
	45	CHUN, B., et al., "CloneCloud: Elastic Execution between Mobile Device and Cloud," 2011, pp. 1-14	
	46	CIS 501: Introduction to Computer Architecture, Unit 4: Memory Hierarchy II: Main Memory, CIS 501 (Martin/Roth): Main Memory, Fall 2004, pp, 1-12	
	47	CITRIX, "The 'Nirvana Phone,' Concept Specification and Draft Reference Architecture," 2010, pp. 1-10	
	48	CLARK, CHRISTOPHER, "Live Migration of Virtual Machines," 2005, pp. 1-14	
	49	COOK, H. et al., "Virtual Local Stores: Enabling Software-Managed Memory Hierarchies in Mainstream Computing Environments," Technical Report No. UCB/EECS-2009-131, September 24, 2009, pp. 1-24	
	50	COX, LANDON P. et al., "Pocket Hypervisors: Opportunities and Challenges," Mar. 8, 2007, pp. 1-6.	

If you wish to add additional non-patent literature document citation information please click the Add button Add

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

EXAMINER SIGNATURE			
Examiner Signature	/Antonio Xavier/	Date Considered	12/13/2019

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Patrick Caldwell/	Date (YYYY-MM-DD)	2019-10-02
Name/Print	Patrick Caldwell	Registration Number	44580

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20090002312	A1	2009-01-01	Son	
	2	20090007684	A1	2009-01-08	Kurtz et al.	
	3	20090014876	A1	2009-01-15	Youn et al.	
	4	20090022256	A1	2009-01-22	Fitzgerald	
	5	2009002312	A1	2009-01-01	Son	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	6	20090024789	A1	2009-01-22	Rajan et al.	
	7	20090026600	A1	2009-01-29	Koon et al.	
	8	20090027836	A1	2009-01-29	Wakihara	
	9	20090036111	A1	2009-02-05	Danford et al.	
	10	20090036176	A1	2009-02-05	Ure	
	11	20090039492	A1	2009-02-12	KANG et al.	
	12	20090045489	A1	2009-02-19	Koon et al.	
	13	20090046110	A1	2009-02-19	Sadler et al.	
	14	20090051659	A1	2009-02-26	Mickelborough	
	15	20090052218	A1	2009-02-26	KANG	
	16	20090061823	A1	2009-03-05	Chu	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	17	20090065948	A1	2009-03-12	Wang	
	18	20090066660	A1	2009-03-12	Ure	
	19	20090067256	A1	2009-03-12	Bhattacharyya et al.	
	20	20090072662	A1	2009-03-19	Sadler et al.	
	21	20090073138	A1	2009-03-19	Lee et al.	
	22	20090085225	A1	2009-04-02	Park	
	23	20090085608	A1	2009-04-02	Alzheimer	
	24	20090086420	A1	2009-04-02	Stockham et al.	
	25	20090090950	A1	2009-04-09	Forbes et al.	
	26	20090091536	A1	2009-04-09	Callaghan	
	27	20090091962	A1	2009-04-09	Chung et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	28	20090103675	A1	2009-04-23	Moghaddam et al.	
	29	20090127668	A1	2009-05-21	Choi	
	30	20090128991	A1	2009-05-21	Mauritzson	
	31	20090140985	A1	2009-06-04	Liu	
	32	20090143652	A1	2009-06-04	Warburton et al.	
	33	20090153340	A1	2009-06-18	Pinder et al.	
	34	20090158152	A1	2009-06-18	Kodimer et al.	
	35	20090160781	A1	2009-06-25	Henderson et al.	
	36	20090166846	A1	2009-07-02	Pratt et al.	
	37	20090179780	A1	2009-07-16	Tambe	Hand-held thumb touch typable ascii/ unicode keypad for a remote, mobile telephone or a pda
	38	20090180257	A1	2009-07-16	Park et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	39	20090184921	A1	2009-07-23	Scott et al.	
	40	20090197394	A1	2009-08-06	Parekh	
	41	20090206431	A1	2009-08-20	Bolken et al.	
	42	20090213066	A1	2009-08-27	Hardacker et al.	
	43	2009022256	A1	2009-01-22	Fitzgerald	
	44	20090224822	A1	2009-09-10	Alzheimer et al.	
	45	20090225053	A1	2009-09-10	HU	
	46	20090237970	A1	2009-09-24	Chung	
	47	20090255705	A1	2009-10-15	Pratt	
	48	20090256807	A1	2009-10-15	Nurmi	
	49	20090259806	A1	2009-10-15	Kilzer et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	50	20090261457	A1	2009-10-22	Pratt	
	51	20090271731	A1	2009-10-29	Lin et al.	
	52	20090285031	A1	2009-11-19	Rajan et al.	
	53	20090289912	A1	2009-11-26	Chen et al.	
	54	20090295747	A1	2009-12-03	Hsieh et al.	
	55	20090296341	A1	2009-12-03	ELDERSHAW	
	56	20090300314	A1	2009-12-03	LaBerge et al.	
	57	20090300444	A1	2009-12-03	Jeddeloh	
	58	20090302484	A1	2009-12-10	Lee et al.	
	59	20090309142	A1	2009-12-17	Akram	
	60	20090315741	A1	2009-12-24	Kim	Method of providing more bigger effect of button

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	61	20090319703	A1	2009-12-24	Chung	
	62	20090321861	A1	2009-12-31	Oliver et al.	
	63	20090321947	A1	2009-12-31	Pratt	
	64	20090323206	A1	2009-12-31	Oliver et al.	
	65	20090327979	A1	2009-12-31	Haverinen et al.	User interface for a peripheral device
	66	2009036176	A1	2009-02-05	Ure	
	67	2009046110	A1	2009-02-19	Sadler et al.	
	68	2009051659	A1	2009-02-26	Mickelborough	
	69	2009058829	A1	2009-03-05	Kim et al.	
	70	2009066660	A1	2009-03-12	Ure	
	71	2009073138	A1	2009-03-19	Lee et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	72	2009083665	A1	2009-03-26	Anttila et al.	
	73	2009085881	A1	2009-04-02	Keam	
	74	2009086420	A1	2009-04-02	Stockham et al.	
	75	2009091536	A1	2009-04-09	Callaghan	
	76	2009143652	A1	2009-06-04	Warburton et al.	
	77	2009158152	A1	2009-06-18	Kodimer et al.	
	78	2009160781	A1	2009-06-25	Henderson et al.	
	79	2009213066	A1	2009-08-27	Hardacker et al.	
	80	2009225053	A1	2009-09-10	Hu	
	81	2009231290	A1	2009-09-17	Chen	
	82	2009271731	A1	2009-10-29	Lin et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	83	2009289912	A1	2009-11-26	Chen et al.	
	84	2009295747	A1	2009-12-03	Hsieh et al.	
	85	20100005390	A1	2010-01-07	Bong	
	86	20100017872	A1	2010-01-21	Goertz et al.	
	87	20100020039	A1	2010-01-28	Ricks et al.	
	88	20100026640	A1	2010-02-04	Kim et al.	
	89	20100035656	A1	2010-02-11	Pan	
	90	20100039393	A1	2010-02-18	Pratt et al.	
	91	20100045612	A1	2010-02-25	Mölne	
	92	20100052880	A1	2010-03-04	Laitinen et al.	
	93	20100053103	A1	2010-03-04	NO et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	94	20100053116	A1	2010-03-04	Daverman et al.	
	95	20100053532	A1	2010-03-04	LAI	
	96	2010005390	A1	2010-01-07	Bong	
	97	20100066764	A1	2010-03-18	Refai	
	98	20100077829	A1	2010-04-01	Batista et al.	
	99	20100079398	A1	2010-04-01	Shen et al.	
	100	20100085500	A1	2010-04-08	Kim	
	101	20100090973	A1	2010-04-15	Algreatly	
	102	20100097347	A1	2010-04-22	Lin	
	103	20100110748	A1	2010-05-06	Best	
	104	20100117959	A1	2010-05-13	Hong et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	105	20100134429	A1	2010-06-03	You et al.	
	106	20100134448	A1	2010-06-03	Park et al.	
	107	20100149101	A1	2010-06-17	Guo et al.	
	108	20100149124	A1	2010-06-17	Kim et al.	
	109	20100149129	A1	2010-06-17	Homma et al.	
	110	20100156814	A1	2010-06-24	Weber et al.	
	111	20100156818	A1	2010-06-24	Burrough et al.	
	112	20100156823	A1	2010-06-24	Paleczny et al.	
	113	20100164745	A1	2010-07-01	Migos et al.	
	114	20100164884	A1	2010-07-01	Chiu et al.	
	115	20100171711	A1	2010-07-08	Mak-Fan et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	116	20100177057	A1	2010-07-15	Flint et al.	
	117	2010017872	A1	2010-01-21	Goertz et al.	
	118	20100188353	A1	2010-07-29	Yoon et al.	
	119	20100188365	A1	2010-07-29	Tamaki et al.	
	120	20100194709	A1	2010-08-05	Tamaki et al.	
	121	2010020039	A1	2010-01-28	Ricks et al.	
	122	20100201651	A1	2010-08-12	Baucom et al.	
	123	20100206560	A1	2010-08-19	Atencio	
	124	20100207900	A1	2010-08-19	Kung et al.	
	125	20100208082	A1	2010-08-19	Buchner et al.	
	126	20100214239	A1	2010-08-26	Wu	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	127	20100214499	A1	2010-08-26	Sanelle et al.	
	128	20100220065	A1	2010-09-02	Ma	
	129	20100222735	A1	2010-09-02	Plahey et al.	
	130	20100225608	A1	2010-09-09	ZHOU et al.	
	131	20100240390	A1	2010-09-23	Russ et al.	
	132	20100241984	A1	2010-09-23	Nurmi et al.	Method and apparatus for displaying the non alphanumeric character based on a user input
	133	20100245282	A1	2010-09-30	Lai	Touch-screen based input method and system, and electronic device using same
	134	20100257304	A1	2010-10-07	Rajan et al.	
	135	20100259490	A1	2010-10-14	Lee	
	136	2010026640	A1	2010-02-04	Kim et al.	
	137	20100271888	A1	2010-10-28	Rajan et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	138	20100277432	A1	2010-11-04	Tsai	
	139	20100281280	A1	2010-11-04	Rajan et al.	
	140	20100293460	A1	2010-11-18	Budelli	
	141	20100302281	A1	2010-12-02	Kim	Mobile device capable of touch-based zooming and control method thereof
	142	20100332635	A1	2010-12-30	ROGEL et al.	
	143	2010035656	A1	2010-02-11	Pan	
	144	2010045612	A1	2010-02-25	Moelne	
	145	2010045621	A1	2010-02-25	Kang et al.	
	146	2010053103	A1	2010-03-04	No et al.	
	147	2010053532	A1	2010-03-04	Lai	
	148	2010058211	A1	2010-03-04	Lee et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	149	2010077829	A1	2010-04-01	Balista et al.	
	150	2010079398	A1	2010-04-01	Shen et al.	
	151	2010085500	A1	2010-04-08	Kim	
	152	2010088654	A1	2010-04-08	Henhoeffer	
	153	2010090982	A1	2010-04-15	Oba et al.	
	154	2010097347	A1	2010-04-22	Lin	
	155	2010127983	A1	2010-05-27	Irani et al.	
	156	2010134429	A1	2010-06-03	You et al.	
	157	2010134448	A1	2010-06-03	Park et al.	
	158	2010149101	A1	2010-06-17	Guo et al.	
	159	2010149124	A1	2010-06-17	Kim et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	160	2010164884	A1	2010-07-01	Chiu et al.	
	161	2010188327	A1	2010-07-29	Frid et al.	
	162	2010188365	A1	2010-07-29	Tamaki et al.	
	163	2010194709	A1	2010-08-05	Tamaki et al.	
	164	2010201651	A1	2010-08-12	Baucom et al.	
	165	2010206560	A1	2010-08-19	Atencio	
	166	2010207900	A1	2010-08-19	Kung et al.	
	167	2010214499	A1	2010-08-26	Sanelle et al.	
	168	2010222735	A1	2010-09-02	Plahey et al.	
	169	2010225608	A1	2010-09-09	Zhou et al.	
	170	2010241989	A1	2010-09-23	Wen et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	171	2010251119	A1	2010-09-30	Geppert et al.	
	172	2010259490	A1	2010-10-14	Lee	
	173	2010277432	A1	2010-11-04	Tsai	
	174	2010328230	A1	2010-12-30	Faubert et al.	
	175	20110001706	A1	2011-01-06	Sanford et al.	
	176	20110007023	A1	2011-01-13	Abrahamsson et al.	
	177	20110012921	A1	2011-01-20	Cholewin et al.	
	178	20110016250	A1	2011-01-20	Lee et al.	
	179	2011001706	A1	2011-01-06	Sanford et al.	
	180	20110018695	A1	2011-01-27	Bells et al.	
	181	20110025969	A1	2011-02-03	Chen et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	182	20110029868	A1	2011-02-03	Moran et al.	User interfaces for small electronic devices
	183	20110035540	A1	2011-02-10	Fitzgerald et al.	
	184	20110037609	A1	2011-02-17	KIM et al.	
	185	20110037726	A1	2011-02-17	Lee	
	186	20110044064	A1	2011-02-24	Hu et al.	
	187	20110050576	A1	2011-03-03	Forutanpour et al.	Entire Document
	188	20110050588	A1	2011-03-03	Li et al.	Entire Document
	189	20110050591	A1	2011-03-03	Kim et al.	
	190	20110050592	A1	2011-03-03	Kim et al.	
	191	20110050593	A1	2011-03-03	Kim et al.	
	192	20110050594	A1	2011-03-03	Kim et al.	Entire Document

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	193	20110050608	A1	2011-03-03	Homma et al.	
	194	20110050653	A1	2011-03-03	MIYAZAWA et al.	
	195	20110051334	A1	2011-03-03	Griffith et al.	
	196	20110057613	A1	2011-03-10	Taguchi et al.	Charge status display apparatus and electric power supply control apparatus
	197	20110063248	A1	2011-03-17	YOON	
	198	20110066790	A1	2011-03-17	Mogul et al.	
	199	2011007023	A1	2011-01-13	Abrahamsson et al.	
	200	20110080417	A1	2011-04-07	Lin et al.	
	201	20110088416	A1	2011-04-21	Koethler	
	202	20110095783	A1	2011-04-28	Ferolito et al.	
	203	20110102336	A1	2011-05-05	SEOK et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	204	20110102347	A1	2011-05-05	LIM et al.	
	205	20110107212	A1	2011-05-05	JEONG	
	206	20110109573	A1	2011-05-12	Deslippe et al.	
	207	20110109829	A1	2011-05-12	Mathew et al.	
	208	20110110047	A1	2011-05-12	Pauley et al.	
	209	20110113208	A1	2011-05-12	Jouppi et al.	
	210	20110115738	A1	2011-05-19	Suzuki et al.	
	211	20110117968	A1	2011-05-19	Eromaki	
	212	20110118029	A1	2011-05-19	Lukas et al.	
	213	20110122084	A1	2011-05-26	Jeon et al.	
	214	2011012921	A1	2011-01-20	Cholewin et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	215	20110141052	A1	2011-06-16	Bernstein et al.	
	216	20110152739	A1	2011-06-23	Roncadi et al.	
	217	20110164047	A1	2011-07-07	Pance	
	218	20110169745	A1	2011-07-14	Fang et al.	
	219	20110169775	A1	2011-07-14	Liaw et al.	
	220	20110175844	A1	2011-07-21	Berggren	
	221	20110175845	A1	2011-07-21	Honda et al.	
	222	20110175902	A1	2011-07-21	Mahowald	
	223	20110181552	A1	2011-07-28	Goertz et al.	
	224	20110205446	A1	2011-08-25	Hardacker et al.	
	225	20110210942	A1	2011-09-01	Kitamori et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	226	20110210943	A1	2011-09-01	Zaliva	
	227	20110227830	A1	2011-09-22	Chun	Method and apparatus for safe disconnection of external devices from a computer
	228	20110227836	A1	2011-09-22	Li et al.	
	229	20110227877	A1	2011-09-22	Chen	
	230	20110239110	A1	2011-09-29	Garrett et al.	
	231	20110248941	A1	2011-10-13	Abdo et al.	
	232	20110254793	A1	2011-10-20	Ban et al.	
	233	2011025969	A1	2011-02-03	Chen et al.	
	234	20110260994	A1	2011-10-27	Saynac et al.	
	235	20110273394	A1	2011-11-10	Young et al.	
	236	20110273396	A1	2011-11-10	CHUNG	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	237	20110291945	A1	2011-12-01	Richard Alan Ewing et al.	
	238	20110291953	A1	2011-12-01	Cheok et al.	
	239	20110310537	A1	2011-12-22	Imamura et al.	Electronic device and computer program product
	240	20110314423	A1	2011-12-22	Ohmiya et al.	Image display device and image display method
	241	2011037726	A1	2011-02-17	Lee	
	242	2011044064	A1	2011-02-24	Hu et al.	
	243	2011045813	A1	2011-02-24	Choi	
	244	2011050591	A1	2011-03-03	Kim et al.	
	245	2011050592	A1	2011-03-03	Kim et al.	
	246	2011050593	A1	2011-03-03	Kim et al.	
	247	2011050594	A1	2011-03-03	Kim et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	248	2011050608	A1	2011-03-03	Homma et al.	
	249	2011051334	A1	2011-03-03	Griffith et al.	
	250	2011057889	A1	2011-03-10	Sakatsume	
	251	2011059777	A1	2011-03-10	Rao	
	252	2011061021	A1	2011-03-10	Kang et al.	
	253	2011063248	A1	2011-03-17	Yoon	
	254	2011084921	A1	2011-04-14	Kang et al.	
	255	2011088416	A1	2011-04-21	Koethler	
	256	2011102336	A1	2011-05-05	Seok et al.	
	257	2011102347	A1	2011-05-05	Lim et al.	
	258	2011109573	A1	2011-05-12	Deslippe et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	259	2011115738	A1	2011-05-19	Suzuki et al.	
	260	2011118029	A1	2011-05-19	Lukas et al.	
	261	2011122084	A1	2011-05-26	Jeon et al.	
	262	2011152739	A1	2011-06-23	Roncadi et al.	
	263	2011169775	A1	2011-07-14	Liaw et al.	
	264	2011175845	A1	2011-07-21	Honda et al.	
	265	2011181552	A1	2011-07-28	Goertz et al.	
	266	2011205446	A1	2011-08-25	Hardacker et al.	
	267	2011210942	A1	2011-09-01	Kitamori et al.	
	268	2011210943	A1	2011-09-01	Zaliva	
	269	2011227836	A1	2011-09-22	Li et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	270	2011227877	A1	2011-09-22	Chen	
	271	2011239110	A1	2011-09-29	Garrett et al.	
	272	2011248941	A1	2011-10-13	Abdo et al.	
	273	2011254793	A1	2011-10-20	Ban et al.	
	274	2011260984	A1	2011-10-27	Paleczny	
	275	2011260994	A1	2011-10-27	Saynac et al.	
	276	2011261002	A1	2011-10-27	Verthein	
	277	2011273394	A1	2011-11-10	Young et al.	
	278	2011273396	A1	2011-11-10	Chung	
	279	2011291945	A1	2011-12-01	Ewing Jr et al.	
	280	2011291953	A1	2011-12-01	Cheok et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	281	2011302493	A1	2011-12-08	Runstedler et al.	
	282	20120007821	A1	2012-01-12	Zaliva	
	283	20120008436	A1	2012-01-12	Rajan et al.	
	284	20120011310	A1	2012-01-12	Rajan et al.	
	285	20120011386	A1	2012-01-12	Rajan et al.	
	286	20120013566	A1	2012-01-19	CHUNG	
	287	20120018871	A1	2012-01-26	Lee et al.	
	288	20120019448	A1	2012-01-26	Pitkanen et al.	
	289	20120023450	A1	2012-01-26	Noto et al.	
	290	20120032876	A1	2012-02-09	Tabe	
	291	20120034954	A1	2012-02-09	Tabe	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	292	20120037878	A1	2012-02-16	Liu	
	293	20120038045	A1	2012-02-16	Lee	
	294	20120042204	A1	2012-02-16	Smith et al.	
	295	20120044172	A1	2012-02-23	Ohki et al.	
	296	20120056846	A1	2012-03-08	Zaliva	
	297	20120059976	A1	2012-03-08	Rosenband et al.	
	298	20120059978	A1	2012-03-08	Rosenband et al.	
	299	20120063194	A1	2012-03-15	Baek et al.	
	300	20120069647	A1	2012-03-22	Kramer et al.	

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] j	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T5
	1	DALL, C., et al., "KVM for ARM," Columbia University, 12th annual Linux Symposium, 2010, pp. 1-12	
	2	D'AMBROSIA, J. et al. "40 Gigabit Ethernet and 100 Gigabit Ethernet Technology Overview," November 2008, pp. 1-16	
	3	DATE, M., et al., "Small-Depth-Error Display Using Depth Fused 3D (DFD)," Feb. 2009, pp. 1-4	
	4	DEERING, MICHAEL F., "The Limits of Human Vision," Sun Microsystems, 1998, pp. 1-6	
	5	DESHANE, TODD, "An Attack-Resistant and Rapid Recovery Desktop System," Clarkson University, Dissertation, Aug. 2010, pp. 1-130	
	6	DESHANE, TODD, et al., "Xen Hypervisor Deployment, Management, and Cloud Computing Tools," Clarkson University, 2010, slides 1-151	
	7	DHIMAN, G. et al., "PDRAM: A Hybrid PRAM and DRAM Main Memory System," DAC '09, July 26-31, 2009, pp. 1-6	
	8	DOUDALIS, IOANNIS, et al., "HARE++: Hardware Assisted Reverse Execution Revisited," Georgia Institute of Technology, Mar. 2011, pp. 1-8	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	9	DOWNS, RICK, "Using Resistive touch screens for human/machine interface," 2005, pp. 1-6	
	10	EBCIOGLU, KERNAL, et al., "A JAVA ILP Machine Based on Fast Dynamic Compilation," IBM T.J. Watson Research Center, 1997, pp. 1-13	
	11	ENCODING- 116 slides, University of Illinois, Urbana Champaign, COURSE CS 438, March 2008	
	12	ERICSON, FINN, "Interactive Handheld Phantograms," KTH Computer Science and Communication, Thesis, 2010, pp. 1-38	
	13	File Wrapper from U.S. Application No. 11/226,061, filed 09-13-2005	
	14	File Wrapper from U.S. Application No. 11/449,435, filed 06-07-2006	
	15	FITZROY-DALE, Nicholas, "Architecture Optimization," University of new South Wales, Mar. 2010, pp. 1-152	
	16	FOSTER, G., "Measurements of Pre-Emphasis on Altera® Stratix® GX with the BERTScope 12500A," Ver. 1, June 2005, pp. 1-7	
	17	FUJITSU, "125Gbps Parallel CDR Transceiver (0.18um)," 2002, pp. 1-2	
	18	GALLOWAY, P. et al., "Using Creative Silicon Technology to Extend the Useful Life of Backplane and Card Substrates at 3.125 Gbps and Beyond," DesignCon 2001, 2001 High-Performance System Design Conference, pp. 1-7	
	19	GARLAN, DAVID, et al., "Project Aura: Toward Distraction-Free Pervasive Computing," IEEE, 2002, pp. 1-10	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	20	GARLEPP, B. W. et al., "A Portable Digital DLL for High-Speed CMOS Interface Circuits," IEEE Journal Of Solid-State Circuits, Vol. 34, No. 5, May 1999, pp. 632-644	
	21	GESLER, WILSON S., "Physical Limits of Acuity and Hyperacuity," University of Texas, Oct. 26, 1983, pp. 1-8	
	22	GILBERT, BENJAMIN, et al., "Pocket ISR: Virtual Machines Anywhere," Carnegie Mellon University, Mar. 2010, pp. 1-19	
	23	GONDI, S. et al., "A 10-Gb/s CMOS Merged Adaptive Equalizer/CDR Circuit for Serial-Link Receivers," 2006 Symposium on VLSI Circuits Digest ofTechnical Papers, IEEE, 2006, pp. 1-2	
	24	GONDI, S. et al., "A IOGb/s CMOS Adaptive Equalizer for Backplane Applications," 2005 IEEE International Solid-State Circuits Conference, 2005, pp. 1-3	
	25	GOODACRE, JOHN et al., "Virtualization Across the ARM Ecosystem," ARM, September 9, 2009, pp. 1-9	
	26	GROZING, M. et al., "Sampling Receive Equalizer with Bit-Rate Flexible Operation up to 10 Gbit/s," IEEE, 2006, pp. 516-519	
	27	GRUNDY, K. et al., "Designing Scalable IOG Backplane Interconnect Systems Ulilizing Advanced Verification Methodologies," DesignCon 2006, pp. 1-20	
	28	GUSTLIN, M., "40 and 100 Gigabit Ethernet PCS and PMA Overview," Ethernet Summit, February 2010, pp. 1-15	
	29	HARTIG, HERMANN, "The L4 Microkernel," ARTIST Summer School in Europe, September 2010, slides 1-99	
	30	HEISER, GERNOT et al., "The OKL4 Microvisor: convergence Point of Microkernels and Hypervisors," August 30, 2010, pp. 1-5	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	31	HEISER, GERNOT, "Hypervisors for Consumer Electronics," University of New South Wales, 2009, pp. 1-5	
	32	HERTZUM, MORTEN et al., "TouchGrid: Touchpad pointing by recursively mapping taps to smaller display regions," Behaviour and Information Technology, vol, 24, no. 5, 2005, pp. 1-18	
	33	HIRAISHI, A. et al., "Preferable Improvements and Changes to FB-DiMM High-Speed Channel for 9.6Gbps Operation," ELPIDA, January 26, 2007, pp. 1-35	
	34	HOE, J.C., "18-447 Lecture 21: Virtual Memory: Page Tables and TLBs," April 13, 2009, pp. 1-11	
	35	HOFER, HEIDI, et al., "Organization of the Human Trichromatic Cone Mosaic," Oct. 19, 2005, pp. 1-11	
	36	HOLLIS, T. et al., "Reduction of Duty Cycle Distortion through Band- Pass Filtering," 2005, pp. 1-4	
	37	HOLLIS, T. M. et al., "Mitigating ISi Through Self-Calibrating Continuous-Time Equalization," IEEE Transactions On Circuits And Systems-I: Regular Papers, Vol. 53, No. 10, October 2006, pp. 2234-2245	
	38	HOLLIS, T. M. et al., "Self-Calibrating Continuous-Time Equalization Targeting Inter-symbol Interference," 2006, pp. 1-4	
	39	HOLLIS, T. M., "CIRCUIT AND MODELING SOLUTIONS FOR HIGH-SPEED CHIP-TO-CHIP COMMUNICATION," Dissertation, April 2007, pp. 1-225	
	40	HOLLIS, T. M., "Inter-symbol Interference in Manchester Encoded Data," pp. 1-7, Oct 2006	
	41	HONG, S., "NAND Flash-based Disk Cache Using SLC/MLC Combined Flash Memory," SNAPI 2010, 25 pages	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	42	HowStuffWorks, "How the iPhone works," 2007, pp. 1-4	
	43	HUANG, H. et al., "Design and Implementation of Power-Aware Virtual Memory," 2003, pp. 1-14	
	44	HUNG, PERRY L., "Varmosa: Just-in-time Binary Translation of Operating System Kernels," June, 2009, pp. 1-58	
	45	HUR, Y. S. et al., "Equalization and Near-End Crosstalk (NEXT) Noise Cancellation for 20- Gbit/sec 4 PAM Backplane Serial 1/0 Interconnections," Dissertation, December 2005, pp. 1-143	
	46	HYNIX, "I/0 INTERFACE DESIGN TECHNOLOGY USING ADS," 2005, 41 slides	
	47	HYSER, Chris et al., "Autonomic Virtual Machine Placement in the Data Center," Feb. 26, 2008, pp. 1-11	
	48	IMMERSION, "Creating the HD Haptic Experience in Mobile Devices," 2011, pp. 1-3	
	49	INTEL, "Intel PXA27x Processor Family," Memory Subsystem, July 2004, pp. 1-138	
	50	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 1: Basic Architecture, Order Number: 253665-037US, January 2011, pp. 1-540 (1 of 8)	

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature	/Antonio Xavier/	Date Considered	12/13/2019

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

EFS Web 2.1.18

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Patrick Caldwell/	Date (YYYY-MM-DD)	2019-10-02
Name/Print	Patrick Caldwell	Registration Number	44580

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S Patent and Trademark Office; U.S DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	1	STOJANOVIC, V. et al., "Modeling and Analysis of High-Speed Links," pp. 1-49, March 2003	
	2	STOJANOVIC, V., "CHANNEL-LIMITED HIGH-SPEED LINKS: MODELING, ANALYSIS AND DESIGN," Dissertation, September 2004, pp. 1-180	
	3	SUCHITHA V, "Simulation methodology using SigXp 15.1 (SPB) for enabling DDR2-533 memory interface based on Intel® 945GMS design," Session Number: 6.10, Intel, Sept 13, 2006, pp. 1-36	
	4	SUD, SHIVANI, et al., "Dynamic Migration of Computation through virtualization of the mobile platform," Intel Labs, Oct. 26, 2009, slides 1-16	
	5	SUDAN, K. et al., "Micro-Pages: Increasing DRAM Efficiency with Locality-Aware Data Placement," ASPLOS'IO, March 13-17, 2010, pp. 1-12	
	6	SUN, R. et al., "A Low-Power 20-Gb/s Continuous-Time Adaptive Passive Equalizer," Thesis, 2005, pp. 1-71	
	7	TAKEFMAN, M. L. et al., U.S. Provisional Application No. 61/457,233, filed February 8, 2011	
	8	Texas Instruments, "DC TO 4-GBPS DUAL 1:2 MULTIPLEXER/REPEATER/EQUALIZER," SN65LVCP40, SLLS623D-SEPTEMBER 2004-REVISED FEBRUARY 2006, pp. 1-22	
	9	TIRUVURU, R. et al., "Transmission Line based FIR Structures for High Speed Adaptive Equalization," ISCAS 2006, IEEE, 2006, pp. 1051-1054	
	10	TOMS, T. R., QUALCOMM, CDMA Technologies,"An Assessment of 3D Interconnect, Equipment Readiness and ITRS 3D," July 16, 2008, pp. 1-23	
	11	TURUDIC, A. et al., "Pre-Emphasis and Equalization Parameter Optimization with Fast, Worst- Case/Multibillion-Bit Verification," DesignCon 2007, January 2007, pp. 1-28	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	12	Understanding the Linux Virtual Memory Manager, Chapter 3: Page Table Management, pp. 33-52, Mel Gorman, April 2004	
	13	USER'S GUIDE, "Motorola Backflip with Motoblur," 2010, pp. 1-67	
	14	VAN SCHAIK, CARL et al., "High-Performance Microkernels and Virtualization on ARM and Segmented Architectures," 2007, pp. 1-11	
	15	VARANASI, PRASHANT, "Implementing Hardware-Supported Virtualization in OKL4 on ARM," Nov. 30, 2010, pp. 1-51 (1 of 2)	
	16	VARANASI, PRASHANT, "Implementing Hardware-Supported Virtualization in OKL4 on ARM," Nov. 30, 2010, pp. 52-86 (2 of 2)	
	17	VMware, "Understanding Full virtualization, Paravirutalization, and Hardware Assist," September 11, 2007, pp. 1-17	
	18	VRAZEL, M. G. et al., "Overcoming Signal Integrity Issues with Wideband Crosstalk Cancellation Technology," DesignCon 2006, pp. 1-25	
	19	WANG, B. et al., "6b9b Encoding Scheme for Improving Single-Ended Interface Bandwidth and Reducing Power Consumption without Pin Count Increase," IEEE, 2007, pp. 25-28	
	20	WANG, Z. et al., "Exploiting Smart-Phone USB Connectivity For Fun And Profit," ACSAC '10, December 6-10, 2010, 10 pages	
	21	WELTE, H., "Anatomy of contemporary GSM cellphone hardware," April 16, 2010, pages 1-11	
	22	WIJERING, JEROEN, "What is Video Streaming?," LongTail Community Blog, April 27, 2011, pp. 1-6	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	23	WILTON, S. J. E., "Implementing Logic in FPGA Memory Arrays: Heterogeneous Memory Architectures," 2002, pp. 1-6	
	24	Wintek, "Specifications for LCD Module," 2010, pp. 1-28	
	25	WITT, K. et al., "Test & Simulation Results in Support of SAS-2," Vitesse, 17 slides, January 2006	
	26	WOLBACK, ADAM et al., "Transient customization of Mobile Computing Infrastructure," Carnegie Mellon University, April 20, 2008, pp. 1-5	
	27	WOLF, CHRIS, "Let's Get Virtual: A Look at Today's Server Virtualization Architectures," Burton Group Data center Strategies, May 14, 2007, pp. 1-42	
	28	XIAO, FENG et al., "Mobile Imaging: The Big Challenge of the Small Pixel," SPIE-IS&T vol. 7250, 2009, pp. 1-9	
	29	XU, FAN et al., "A Dynamic Binary Translation Framework Based on Page Fault Mechanism in Linux Kernel," IEEE International Conference on Computer and Information Technology, 2010, pp. 1-6	
	30	YE, D. et al., "Prototyping a Hybrid Main Memory Using a Virtual Machine Monitor," October 2008, 15 slides	
	31	Youtube video, "iPhone X swipe gestures introduced 2010 by webOS (Apple Keynote 2017 Snippets)," 09/13/2017, uploaded by Nafetz, available at https://www.youtube.com/watch?v=gEhkQRP2zDk&vl=en	
	32	Youtube video, "Palm Pre Revisited: The Best Don't Always Succeed," uploaded by Jon Rettinger, 11/05/2016, available at https://www.youtube.com/watch?v=9pAgJ9x-2IA&feature=youtu.be&t=38	
	33	YUEN, R. et al., "A 5Gb/s Transmitter with Reflection Cancellation for Backplane Transceivers," 2006, pp. 1-4	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	34	ZCTOAK, CODEN, "Special Topic: Mobile Cloud Computing and Applications," ZTE Communications, vol. 9, Mar. 2011, pp. 1-70
	35	ZHOU, HONBO et al., "Receiver Makes Right Data Conversion in PVM," Oak Ridge National Laboratory, 1995, pp. 1-8
	36	ZWICKER, M. et al., "Antialiasing for Automultiscopic 3D displays," 2006, pp. 1

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature	/Antonio Xavier/	Date Considered	12/13/2019

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Patrick Caldwell/	Date (YYYY-MM-DD)	2019-10-02
Name/Print	Patrick Caldwell	Registration Number	44580

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S Patent and Trademark Office; U.S DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	8055833	B2	2011-11-08	Danilak et al.	
	2	8057419	B2	2011-11-15	Ellingboe et al.	
	3	8060774	B2	2011-11-15	Smith et al.	
	4	8068021	B1	2011-11-29	Donohue	
	5	8072430	B2	2011-12-06	Kim et al.	
	6	8072837	B1	2011-12-06	Solomon et al.	
	7	8077535	B2	2011-12-13	Schakel et al.	
	8	8081474	B1	2011-12-20	Zohni et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	9	8081535	B2	2011-12-20	Bhakta et al.	
	10	8081536	B1	2011-12-20	Solomon et al.	
	11	8081537	B1	2011-12-20	Bhakta et al.	
	12	8081677	B2	2011-12-20	Badalone	
	13	8082523	B2	2011-12-20	Forstall et al.	Entire Document
	14	8089795	B2	2012-01-03	Rajan et al.	
	15	8090897	B2	2012-01-03	Rajan et al.	
	16	8093702	B2	2012-01-10	Lua et al.	
	17	8094134	B2	2012-01-10	Suzuki et al.	
	18	8094673	B2	2012-01-10	Proctor et al.	
	19	8102496	B2	2012-01-24	Kim	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	20	8103215	B2	2012-01-24	Rek	Method of establishing a direct communication between a first wireless phone and a second wireless phone
	21	8103928	B2	2012-01-24	Hargan	
	22	8106491	B2	2012-01-31	Corisis et al.	
	23	8106520	B2	2012-01-31	Keeth et al.	
	24	8111534	B2	2012-02-07	Walker	
	25	8111566	B1	2012-02-07	Wang et al.	
	26	8112266	B2	2012-02-07	Rajan et al.	
	27	8115291	B2	2012-02-14	Baek et al.	
	28	8120044	B2	2012-02-21	Cho et al.	
	29	8122207	B2	2012-02-21	Rajan et al.	
	30	8127185	B2	2012-02-28	Jeddeloh	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	31	8127204	B2	2012-02-28	Hargan	
	32	8130527	B2	2012-03-06	Keeth	
	33	8130560	B1	2012-03-06	Rajan et al.	
	34	8134378	B2	2012-03-13	Keeth	
	35	8135900	B2	2012-03-13	Kunimatsu et al.	
	36	8143710	B2	2012-03-27	Cho	
	37	8144453	B2	2012-03-27	Brown et al.	
	38	8148763	B2	2012-04-03	Kim et al.	
	39	8148807	B2	2012-04-03	Lee et al.	
	40	8154901	B1	2012-04-10	Lee et al.	
	41	8154935	B2	2012-04-10	Rajan et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	42	8158967	B2	2012-04-17	Tang et al.	
	43	8169233	B2	2012-05-01	Ferolito et al.	
	44	8169841	B2	2012-05-01	Johnson et al.	
	45	8173507	B2	2012-05-08	Lim et al.	
	46	8174105	B2	2012-05-08	Kwang et al.	
	47	8174115	B2	2012-05-08	Chung	
	48	8180954	B2	2012-05-15	Kilzer et al.	
	49	8181048	B2	2012-05-15	Rajan et al.	
	50	8184228	B2	2012-05-22	Han et al.	
	51	8185778	B2	2012-05-22	Kilzer et al.	
	52	8187901	B2	2012-05-29	Sheen	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	53	8188982	B2	2012-05-29	You et al.	
	54	8189328	B2	2012-05-29	Kanapathippillai et al.	
	55	8193646	B2	2012-06-05	Wood et al.	
	56	8199116	B2	2012-06-12	Jeon et al.	
	57	8207945	B2	2012-06-26	Jong et al.	
	58	8209479	B2	2012-06-26	Rajan et al.	
	59	8209628	B1	2012-06-26	Davidson	
	60	8218705	B2	2012-07-10	Moghaddam et al.	
	61	8223799	B2	2012-07-17	Karaoguz	
	62	8228309	B2	2012-07-24	Tamaki et al.	
	63	8244971	B2	2012-08-14	Rajan et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	64	8248255	B2	2012-08-21	Tzidon et al.	Optical fluid tester
	65	8253699	B2	2012-08-28	Son	
	66	8261041	B2	2012-09-04	Kunimatsu	
	67	8264903	B1	2012-09-11	Lee et al.	
	68	8265709	B2	2012-09-11	Forstall	Single user input mechanism for controlling electronic device operations
	69	8265822	B2	2012-09-11	Nakashima et al.	In-vehicle equipment control device and in-vehicle equipment setting method using the device
	70	8269731	B2	2012-09-18	Molne	
	71	8269733	B2	2012-09-18	HU	
	72	8270148	B2	2012-09-18	Griffith et al.	
	73	8279361	B2	2012-10-02	Chen et al.	
	74	8279690	B1	2012-10-02	Wang et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	75	8280714	B2	2012-10-02	Rajan et al.	
	76	8286102	B1	2012-10-09	Wilensky	
	77	8287291	B1	2012-10-16	Bhakta et al.	
	78	8291341	B2	2012-10-16	Tseng et al.	Accelerated panning user interface interactions
	79	8291344	B2	2012-10-16	Chaudhri	Entire Document
	80	8296496	B2	2012-10-23	Mogul et al.	
	81	8300016	B2	2012-10-30	Lu et al.	Electronic device system utilizing a character input method
	82	8301833	B1	2012-10-30	Chen et al.	
	83	8310452	B2	2012-11-13	Takenaka et al.	
	84	8315349	B2	2012-11-20	Badalone	
	85	8319743	B2	2012-11-27	NO et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	86	8325143	B2	2012-12-04	Destura et al.	
	87	8327104	B2	2012-12-04	Smith et al.	
	88	8331579	B2	2012-12-11	Kato	Reproducing apparatus and headphone apparatus
	89	8334835	B2	2012-12-18	Shen et al.	
	90	8334850	B2	2012-12-18	Tsai	
	91	8340953	B2	2012-12-25	Rajan et al.	
	92	8345018	B2	2013-01-01	Jong et al.	
	93	8345427	B2	2013-01-01	Pauley et al.	
	94	8349228	B2	2013-01-08	Kazama	
	95	8355700	B2	2013-01-15	Lee	Method and mobile terminal for rapidly searching for messages received from or sent to same phone number
	96	8359187	B2	2013-01-22	Rajan et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	97	8359501	B1	2013-01-22	Lee et al.	
	98	8359600	B2	2013-01-22	KANG et al.	
	99	8370566	B2	2013-02-05	Danilak et al.	
	100	8373675	B2	2013-02-12	Jeon et al.	
	101	8380263	B2	2013-02-19	Murakami et al.	
	102	8384674	B1	2013-02-26	Slothower et al.	
	103	8386833	B2	2013-02-26	Smith et al.	
	104	8387045	B2	2013-02-26	Yasutaka et al.	
	105	8397013	B1	2013-03-12	Rosenband et al.	
	106	8405528	B2	2013-03-26	Aghaei et al.	Gesture based smart headphone
	107	8407412	B2	2013-03-26	Rajan et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	108	8411039	B2	2013-04-02	Guo et al.	
	109	8416210	B2	2013-04-09	Jong et al.	
	110	8417870	B2	2013-04-09	Lee et al.	
	111	8424599	B2	2013-04-23	Atencio	
	112	8427434	B1	2013-04-23	Merolla	
	113	8441377	B2	2013-05-14	Liu	Method of dynamically adjusting long-press delay time, electronic device, and computer-readable medium
	114	8446781	B1	2013-05-21	Rajan et al.	
	115	8451238	B2	2013-05-28	Kim et al.	
	116	8452917	B2	2013-05-28	Amer et al.	
	117	8458436	B2	2013-06-04	Kunimatsu et al.	
	118	8468469	B1	2013-06-18	Mendis et al.	Zooming user interface interactions

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	119	8471824	B2	2013-06-25	Kim et al.	
	120	8473670	B2	2013-06-25	Sareen et al.	
	121	8477111	B2	2013-07-02	Lim	
	122	8479110	B2	2013-07-02	Johnson et al.	
	123	8487900	B2	2013-07-16	Chiu et al.	
	124	8488325	B1	2013-07-16	Yu	
	125	8489837	B1	2013-07-16	Lee	
	126	8493384	B1	2013-07-23	Reisman et al.	
	127	8497884	B2	2013-07-30	Cholewin et al.	
	128	8508494	B2	2013-08-13	Moore	Entire Document
	129	8516185	B2	2013-08-20	Lee et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	130	8516187	B2	2013-08-20	Chen et al.	
	131	8516188	B1	2013-08-20	Solomon et al.	
	132	8534318	B2	2013-09-17	Kanemaru et al.	Water faucet device
	133	8542193	B2	2013-09-24	Hardacker et al.	
	134	8542209	B2	2013-09-24	Lim	
	135	8553012	B2	2013-10-08	Baucom et al.	
	136	8564559	B2	2013-10-22	Hou	
	137	8566505	B2	2013-10-22	Kilzer et al.	
	138	8566516	B2	2013-10-22	Schakel et al.	
	139	8566556	B2	2013-10-22	Rajan et al.	
	140	8566923	B2	2013-10-22	Fredette et al.	Enhanced organization and automatic navigation of display screens facilitating automation control

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	141	8581870	B2	2013-11-12	Bokma et al.	
	142	8587542	B2	2013-11-19	Moore	
	143	8589639	B2	2013-11-19	Nakai et al.	
	144	8591028	B2	2013-11-26	Dobashi	Ophthalmologic photographing apparatus and photographing method therefor
	145	8595419	B2	2013-11-26	Rajan et al.	
	146	8599634	B1	2013-12-03	Lee et al.	
	147	8601204	B2	2013-12-03	Rajan et al.	
	148	8606968	B2	2013-12-10	Blewett et al.	Apparatus and a method for predicting commands
	149	8607003	B2	2013-12-10	Bland et al.	
	150	8611123	B2	2013-12-17	Koh	
	151	8615679	B2	2013-12-24	Smith et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	152	8619452	B2	2013-12-31	Rajan et al.	
	153	8624851	B2	2014-01-07	Kim et al.	
	154	8624867	B2	2014-01-07	Tamaki et al.	
	155	8631193	B2	2014-01-14	Smith et al.	
	156	8631220	B2	2014-01-14	Smith et al.	
	157	8638311	B2	2014-01-28	Kang et al.	
	158	8648839	B2	2014-02-11	Liaw et al.	
	159	8654104	B2	2014-02-18	Reisman et al.	
	160	8667312	B2	2014-03-04	Rajan et al.	
	161	8671243	B2	2014-03-11	Chen et al.	
	162	8671244	B2	2014-03-11	Rajan et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	163	8674947	B2	2014-03-18	Henderson et al.	
	164	8675429	B1	2014-03-18	Wang et al.	
	165	8677060	B2	2014-03-18	Chen et al.	
	166	8683362	B2	2014-03-25	Shiplacoff et al.	Entire Document
	167	8689064	B1	2014-04-01	Lee et al.	
	168	8692815	B2	2014-04-08	Deslippe et al.	
	169	8698777	B2	2014-04-15	Endo et al.	
	170	8700834	B2	2014-04-15	Horn et al.	
	171	8705239	B1	2014-04-22	Yu et al.	
	172	8707104	B1	2014-04-22	Jean	
	173	8710862	B2	2014-04-29	Ferolito et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	174	8711116	B2	2014-04-29	Papakipos et al.	
	175	8712477	B2	2014-04-29	Yu et al.	Mobile terminal and method for changing page thereof
	176	8713357	B1	2014-04-29	Jean et al.	
	177	8713379	B2	2014-04-29	Takefman et al.	
	178	8717303	B2	2014-05-06	Ludwig	
	179	8723826	B2	2014-05-13	Chen et al.	
	180	8727557	B2	2014-05-20	Yuan et al.	
	181	8730199	B2	2014-05-20	Sleeman et al.	
	182	8738851	B2	2014-05-27	Kunimatsu et al.	
	183	8738853	B2	2014-05-27	Amer et al.	
	184	8743076	B1	2014-06-03	Ludwig	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	185	8745321	B2	2014-06-03	Rajan et al.	
	186	8745514	B1	2014-06-03	Davidson	
	187	8751732	B2	2014-06-10	Danilak et al.	
	188	8754862	B2	2014-06-17	Zaliva	
	189	8756364	B1	2014-06-17	Bhakta et al.	
	190	8757198	B2	2014-06-24	Santamaria et al.	Spring retaining sleeve
	191	8760408	B2	2014-06-24	Heesemans et al.	
	192	8760936	B1	2014-06-24	Rajan et al.	
	193	8763545	B2	2014-07-01	Tseng	Method and device for controlling sewing patterns of a sewing machine
	194	8773937	B2	2014-07-08	Schakel et al.	
	195	8780089	B2	2014-07-15	Yuan et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	196	8782350	B2	2014-07-15	Lee et al.	
	197	8787060	B2	2014-07-22	Lee	
	198	8793608	B2	2014-07-29	Sirpal et al.	Launched application inserted into the stack
	199	8816993	B2	2014-08-26	Yuan et al.	
	200	8831687	B1	2014-09-09	Kotab	
	201	8832577	B2	2014-09-09	Sirpal et al.	Universal clipboard
	202	8836648	B2	2014-09-16	Wilairat	Entire Document
	203	8838076	B2	2014-09-16	Lee	Method and device for storing and displaying music file list in mobile communication terminal using hot keys
	204	8854317	B2	2014-10-07	Homma et al.	
	205	8866785	B2	2014-10-21	Ludwig	
	206	8872728	B2	2014-10-28	Fujiwaka	Terminal device and illumination control method

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	207	8872798	B2	2014-10-28	Rabu et al.	
	208	8878809	B1	2014-11-04	Kim et al.	
	209	8878810	B2	2014-11-04	Ludwig	
	210	8884913	B2	2014-11-11	Saynac et al.	
	211	8896575	B2	2014-11-25	Goertz et al.	
	212	8913031	B2	2014-12-16	Honda et al.	
	213	8917262	B2	2014-12-23	Liaw et al.	
	214	8941879	B2	2015-01-27	Takahashi	Input display apparatus, control method thereof and storage medium
	215	8947381	B2	2015-02-03	JIYAMA et al.	
	216	8952987	B2	2015-02-10	Momeyer et al.	
	217	8954887	B1	2015-02-10	Tseng et al.	Long press interface interactions

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	218	8970540	B1	2015-03-03	Hebenstreil et al.	
	219	8976128	B2	2015-03-10	Moore	
	220	8982081	B2	2015-03-17	Li	
	221	8988353	B2	2015-03-24	Shin et al.	Mobile device and method for editing pages used for a home screen
	222	8988364	B2	2015-03-24	Lee	
	223	9003515	B2	2015-04-07	Ganem	Authenticating human interface device
	224	9003591	B2	2015-04-14	Sakashita et al.	
	225	9013414	B2	2015-04-21	Kung et al.	
	226	9018030	B2	2015-04-28	Li et al.	
	227	9030427	B2	2015-05-12	Yasumatsu	
	228	9035897	B2	2015-05-19	Kinoshita	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

	229	9041679	B2	2015-05-26	Reisman et al.	
	230	9045670	B2	2015-06-02	SHITARA et al.	
	231	9046999	B1	2015-06-02	Teller et al.	Entire Document
	232	9047005	B2	2015-06-02	Hill et al.	Substituting touch gestures for GUI or hardware keys to control audio video play
	233	9052761	B2	2015-06-09	Zhou	Methods and devices for user touch operation
	234	9058061	B2	2015-06-16	Aono et al.	Mobile terminal
	235	9058102	B2	2015-06-16	Miyamoto	Symbol input device, image forming apparatus including the symbol input device, and method for inputting symbols
	236	9063597	B2	2015-06-23	Liaw et al.	
	237	9069204	B2	2015-06-30	ZHOU et al.	
	238	9069416	B2	2015-06-30	Garrett et al.	
	239	9069460	B2	2015-06-30	Moore	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	240	9092057	B2	2015-07-28	Varela et al.	
	241	9092129	B2	2015-07-28	Abdo et al.	
	242	9098193	B2	2015-08-04	Stoneham et al.	
	243	9103691	B2	2015-08-11	Wäller et al.	Multimode user interface of a driver assistance system for inputting and presentation of information
	244	9116569	B2	2015-08-25	Stacy et al.	
	245	9116609	B2	2015-08-25	Bocirnea	
	246	9125630	B2	2015-09-08	Menzel	
	247	9130651	B2	2015-09-08	Tabe	
	248	9134880	B2	2015-09-15	Johnson et al.	
	249	9152240	B2	2015-10-06	Yeh	Method for previewing output character and electronic device
	250	9152258	B2	2015-10-06	Behdasht et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	251	9152288	B2	2015-10-06	Dietz	
	252	9195389	B2	2015-11-24	Park et al.	Menu executing method and apparatus in portable terminal
	253	9305531	B2	2016-04-05	Miwa	Online real-time session control method for electronic music device
	254	9405466	B2	2016-08-02	Suraqui	Reduced keyboard with prediction solutions when input is a partial sliding trajectory
	255	9430122	B2	2016-08-30	Cassar	Secondary single screen mode activation through off-screen gesture area activation
	256	9495805	B2	2016-11-15	Shim et al.	Three dimensional (3D) display terminal apparatus and operating method thereof
	257	9524042	B1	2016-12-20	Khafizov et al.	
	258	9538346	B2	2017-01-03	Kim et al.	Message service support method and portable device using the same
	259	9619141	B2	2017-04-11	Konami	Information processing terminal and method, program, and recording medium
	260	9684521	B2	2017-06-20	Shaffer et al.	Systems having discrete and continuous gesture recognizers
	261	9690474	B2	2017-06-27	Chen et al.	User interface, device and method for providing an improved text input

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	262	9881608	B2	2018-01-30	Lebeau et al.	Word-level correction of speech input
	263	9972297	B2	2018-05-15	Xu et al.	Sound processing device, sound data selecting method and sound data selecting program
	264	RE41716	E1	2010-09-21	Fernando et al.	

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1	NATIONAL SEMICONDUCTOR, "EQ50F100- 2.5 to 6.125 Gbps fixed equalizer; For 10 Gigabit Ethernet, storage and telecom backplanes," 2004, pp. 1-2	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	2	Office Action mailed Jul. 15 2013 in corresponding Canadian patent application No. 2731708.	
	3	ON, CALVIN, "ANA: A Method for ARM-on-ARM Execution," Sep. 2007, MIT, pp. 1-62.	
	4	ONOUE, KOICHI et al., "A Virtual Machine Migration System Based on a SPU Emulator," Virtualization Technology in Distributed Computing, Nov. 17, 2006, pp. 1-8	
	5	OPDENACKER, M., "Linux USB drivers," September 15, 2009, pages 1-95	
	6	OSMAN, STEVEN et al., "The Design and Implementation of Zap: A System for Migrating Computing Environments," OSOi, December 2002, pp. 1-16	
	7	OUSTERHOUT, J. et al., "The Case for RAMClouds: Scalable High-Performance Storage Entirely in DRAM," SIGOPS Operating Systems Review, Vol. 43, No. 4, December 2009, pp. 92-105	
	8	PAI, ANKUR et al., "Customizable Multimedia Devices in Virtual Environments," Georgia Institute of Technology, 2008, pp. 1-18	
	9	PARK, H.-J., "Signal Integrity for High Speed Circuit Design," Tutorial 9 (ISSCC 2006), pp. 1-91	
	10	PARK, MIRI et al., "Real-time Operating System Virtualization for Xen-Arm," 2009, pp. 1-2	
	11	Partial International Search Report–PCTUS2012035992–ISAEPO–Jul. 17 2012.	
	12	PASRICHA, SUDEEP et al., "Reducing Backlight Power Consumption for Streaming Video Application on Mobile Handheld Devices," University of California, Nov. 2, 2003, pp. 1-7	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	13	PATTERSON, ROBERT, "Human Factors of Stereoscopic Displays," Washington State University, Jul. 5, 2009, pp. 1-14	
	14	PCI-SIG et al., "Single Root I/0 Virtualization and Sharing Specification Revision 1.0," September 11, 2007, pp. 1-84	
	15	PELZL, JAN et al., "Virtualization Technologies for Cars, Solutions to increase safety and security of vehicular ECUs," 2008, pp. 1-10	
	16	PERING, T. et al., "The PSI Board: Realizing a Phone-Centric Body Sensor Network," 4th International Workshop on Wearable and Implantable Body Sensor Networks, March 2007, pages 1-6	
	17	PERING, T., "Intel and Personal Wellness," 22 pages, August 2009	
	18	PHADKE, S. et al., "MLP Aware Heterogeneous Memory System," 2011 EDAA, pp. 1-6	
	19	POTTER, SHAYA, "Virtualization Mechanisms for Mobility, Security and system Administration," Columbia University, 2010, pp. 1-241	
	20	PROBST, MARK et al., "Register Liveness Analysis for Optimizing Dynamic Binary Translation," 2002, pp. 1-10	
	21	RAMESH, G., "Design of De-Emphasis and Equalization Circuits for Gigabit Serial Interconnects," An Applications Workshop for High-Performance Design, September 2005, pp. 1-28	
	22	Red Hat, "Virtualization Guide: Red Hat Virtualization," Red Hat Inc., 2007, pp. 1-104	
	23	REFAI, WAIL MOHSEN, "Office Communication," U.S. Appl. No. 12/233,386, May 27, 2011	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	24	RIECKE, BERNHARD E. et al., "Selected Technical and Perceptual Aspects of Virtual reality Displays," Technical Report No. 154, Oct. 2006, pp. 1-17	
	25	ROSS, ARUN et al., "A Calibration Model for Fingerprint Sensor Interoperability," SPIE Conference on Biometric Technology for Human Identification, Apr. 2006, pp. 1-12	
	26	RUDOLPH, LARRY, "A Virtualization Infrastructure that Supports Pervasive Computing," VMware, IEEE CS, 2009, pp. 1-6	
	27	RYU, W. H. et al., "High-Frequency Simultaneous Switching Output Noise (SSO) Simulation Methodology For a DDR333/400 Data Interface," Jun. 27, 2002, pp. 1-6	
	28	SAHAMI, ALIREZA et al., "Rich Tactile Output on Mobile Devices," Nov. 2008, pp. 1-12	
	29	SANGORRIN, DANIEL et al., "Dual operation System Architecture for Real-Time Embedded Systems," Jul. 6, 2010, slides 1-24	
	30	SATYANARAYANAN, M et al., "Bringing the Cloud Down to Earth: Transient PCs Everywhere," Carnegie Mellon University, Sep. 2010, pp. 1-11	
	31	SATYANARAYANAN, M. et al., "Pervasive Personal Computing in an Internet Suspend/Resume System," IEEE Computer Society, Mar. 2007, pp. 1-10	
	32	SATYANARAYANAN, M. et al., "Towards seamless mobility on pervasive hardware," March 1, 2005, pp. 1-33	
	33	SCHRADER, BERNHARD, "Multi Root I/O Virtualization," FCS TEC-Team, Fujitsu Siemens, Nov. 2, 2008, slides 1-9.	
	34	SCHRADER, J. H. R., "Wireline Equalization using Pulse-Width Modulation," 2007, pp. 1-152	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	35	SCHRADER, J. H. R., "Wireline Equalization using Pulse-Width Modulation," IEEE 2006 Custom Intergrated Circuits Conference (CICC), 2006, pp. 591-598	
	36	SCHRADER, J.H.R et al., "CMOS Transmitter using Pulse-Width Modulation Pre-Emphasis achieving 33dB Loss Compensation at 5-Gb/s," 2005 Symposium on VLSI Circuits Digest of Technical Papers, pp. 388-391	
	37	SCHRADER, J.H.R et al., "Pulse-Width Modulation Pre-Emphasis Applied in a Wireline Transmitter, Achieving 33 dB Loss Compensation at 5-Gb/s in 0.13- ?m CMOS, IEEE Journal Of Solid-State Circuits, Vol. 41, No. 4, April 2006, pp. 990-999	
	38	SEMTECH, "Advanced Communications and Sensing," 25 July, 2011, pp. 1-61	
	39	SEO, SANGWON, "Research on System Virtualization using Xen Hypervisor for ARM based secure mobile phones," Seminar Security in Telecommunications, Jan. 14, 2010, pp. 1-11	
	40	SHAFER, M. et al., "Connector and Chip Vendors Unite to Produce a High-Performance 10 Gb/s NRZ-Capable Serial Backplane," DesignCon 2003; High-Performance System Design Conference, 2003, pp. 1-19	
	41	SHAO, J. et al., "The Bit-reversal SDRAM Address Mapping," 2005, pp. 1-8	
	42	SIDIROPOULOS, S., "HIGH PERFORMANCE INTER-CHIP SIGNALLING," Technical Report No. CSL-TR-98-760, April 1998, pp. 1-139	
	43	SILVIA, "Adaptive HTTP Streaming for open Codecs," Oct. 9, 2010, pp. 1-6	
	44	SMALDONE, STEPHEN, "Leveraging Smart Phones to Reduce Mobility Footprints," 2009, 14 pages	
	45	SMITH, J. E. et al., "Achieving High Performance via Co-Designed Virtual Machines," Oct. 1998, pp. 1-6	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	46	SOUSA, JOAO PEDRO et al., "Aura: An Architectural Framework for User Mobility in Ubiquitous Computing Environments," Carnegie Mellon University Research Showcase, Aug. 1, 2002, pp. 1-15
	47	SOUSA, JOAO PEDRO, et al., "The Aura Software Architecture: an Infrastructure for Ubiquitous Computing," Carnegie Mellon University Research Showcase, August 1, 2003, pp. 1-48
	48	STACKHOUSE, B. et al., "A 65 nm 2-Billion Transistor Quad-Core Itanium Processor," IEEE Journal Of Solid-State Circuits, Vol. 44, No. 1, January 2009, pp. 18-31
	49	STOCKHAMMER, THOMAS, "Dynamic Adaptive Streaming Over HTTP-Design Principles and Standards," Qualcomm Incorporated, February 23, 2011, pp. 1-3
	50	STOJANOVIC, V. et al., "Adaptive Equalization and Data Recovery in a Dual-Mode (PAM2/4) Serial Link Transceiver," 2004, pp. 1-4

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature	/Antonio Xavier/	Date Considered	12/13/2019

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

EFS Web 2.1.18

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Patrick Caldwell/	Date (YYYY-MM-DD)	2019-10-02
Name/Print	Patrick Caldwell	Registration Number	44580

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	10101898	B2	2018-10-16	AMELINE	
	2	10222891	B1	2019-03-05	Smith	
	3	10425284	B2	2019-09-24	Dellinger et al.	
	4	3358493	A	1967-12-19	Erich	
	5	3956986	A	1976-05-18	Wirz et al.	
	6	6030499	A	2000-02-29	Soderholm	
	7	6105600	A	2000-08-22	Wang	
	8	6526133	B1	2003-02-25	Izaki et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	9	7551899	B1	2009-06-23	Nicolas et al.	
	10	7555311	B2	2009-06-30	Kangas et al.	
	11	7721227	B2	2010-05-18	Ronkainen	
	12	7821506	B2	2010-10-26	Sato et al.	
	13	7930002	B2	2011-04-19	Gong	
	14	8103215	B2	2012-01-24	Rek	
	15	8248255	B2	2012-08-21	Tzidon et al.	
	16	8265709	B2	2012-09-11	Forstall	
	17	8265822	B2	2012-09-11	Nakashima et al.	
	18	8300016	B2	2012-10-30	Lu et al.	
	19	8331579	B2	2012-12-11	Kato	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	20	8355700	B2	2013-01-15	Lee	
	21	8400107	B2	2013-03-19	Taguchi et al.	
	22	8405528	B2	2013-03-26	Aghaei et al.	
	23	8441377	B2	2013-05-14	Liu	
	24	8468469	B1	2013-06-18	Mendis et al.	
	25	8534318	B2	2013-09-17	Kanemaru et al.	
	26	8566923	B2	2013-10-22	Fredette et al.	
	27	8591028	B2	2013-11-26	Dobashi	
	28	8606968	B2	2013-12-10	Blewett et al.	
	29	8712477	B2	2014-04-29	Yu et al.	
	30	8757198	B2	2014-06-24	Santamaria et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	31	8832577	B2	2014-09-09	Sirpal et al.	
	32	8838076	B2	2014-09-16	Lee	
	33	8954887	B1	2015-02-10	Tseng et al.	
	34	8988353	B2	2015-03-24	Shin et al.	
	35	9003515	B2	2015-04-07	Ganem	
	36	9047005	B2	2015-06-02	Hill et al.	
	37	9058061	B2	2015-06-16	Aono et al.	
	38	9058102	B2	2015-06-16	Miyamoto	
	39	9103691	B2	2015-08-11	Wäller et al.	
	40	9152240	B2	2015-10-06	Yeh	
	41	9195389	B2	2015-11-24	Park et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	42	9305531	B2	2016-04-05	Miwa	
	43	9405466	B2	2016-08-02	Suraqui	
	44	9430122	B2	2016-08-30	Cassar	
	45	9538346	B2	2017-01-03	Kim et al.	
	46	9619141	B2	2017-04-11	Konami	
	47	9684521	B2	2017-06-20	Shaffer et al.	
	48	9690474	B2	2017-06-27	Chen et al.	
	49	9881608	B2	2018-01-30	Lebeau et al.	
	50	9972297	B2	2018-05-15	Xu et al.	

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear

EFS Web 2.1.18

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	1	20040244554	A1	2004-12-09	Rodriguez	
	2	20060078295	A1	2006-04-13	Yamashita	
	3	20070066310	A1	2007-03-22	Haar et al.	
	4	20070270179	A1	2007-11-22	Lee et al.	
	5	20070271513	A1	2007-11-22	Andren	
	6	20080169960	A1	2008-07-17	Rosenbury	
	7	20090179780	A1	2009-07-16	Tambe	
	8	20090315741	A1	2009-12-24	Kim	
	9	20090327979	A1	2009-12-31	Haverinen et al.	
	10	20100031186	A1	2010-02-04	Tseng et al.	
	11	20100241984	A1	2010-09-23	Nurmi et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	12	20100245282	A1	2010-09-30	Lai	
	13	20100302281	A1	2010-12-02	Kim	
	14	20110029868	A1	2011-02-03	Moran et al.	
	15	20110227830	A1	2011-09-22	Chun	
	16	20110310537	A1	2011-12-22	Imamura et al.	
	17	20110314423	A1	2011-12-22	Ohmiya et al.	
	18	20120081290	A1	2012-04-05	Heo	
	19	20120102401	A1	2012-04-26	Ijas et al.	
	20	20120117507	A1	2012-05-10	Tseng et al.	
	21	20120159387	A1	2012-06-21	OH et al.	
	22	20120162213	A1	2012-06-28	Shim et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	23	20120192108	A1	2012-07-26	Kolb	
	24	20120212420	A1	2012-08-23	Shin	
	25	20120252426	A1	2012-10-04	Nagaoka et al.	
	26	20120268361	A1	2012-10-25	Shotel et al.	
	27	20120289290	A1	2012-11-15	Chae et al.	
	28	20120290946	A1	2012-11-15	Schrock et al.	
	29	20120299980	A1	2012-11-29	Fujikawa	
	30	20120306775	A1	2012-12-06	MIYACHI et al.	
	31	20120312806	A1	2012-12-13	Burt et al.	
	32	20130016586	A1	2013-01-17	Craig	
	33	20130044062	A1	2013-02-21	Bose et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	34	20130050122	A1	2013-02-28	KANG et al.	
	35	20130050141	A1	2013-02-28	PARK et al.	
	36	20130120298	A1	2013-05-16	Zhou	
	37	20130125803	A1	2013-05-23	Tseng	
	38	20130154968	A1	2013-06-20	Tomimori	
	39	20130154981	A1	2013-06-20	Park et al.	
	40	20130160514	A1	2013-06-27	Mitze	
	41	20130169981	A1	2013-07-04	Takahashi	
	42	20130268853	A1	2013-10-10	Gommier et al.	
	43	20140006948	A1	2014-01-02	Yang et al.	
	44	20140143659	A1	2014-05-22	Xue et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	45	20140210727	A1	2014-07-31	Wassingbo	
	46	20140247216	A1	2014-09-04	Fang	
	47	20140303436	A1	2014-10-09	Pless et al.	
	48	20160041715	A1	2016-02-11	Sirpal et al.	

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2]	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1		

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

EFS Web 2.1.18

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Patrick Caldwell/	Date (YYYY-MM-DD)	2019-11-19
Name/Print	Patrick Caldwell	Registration Number	44580

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Patent Application Fee Transmittal	
Application Number:	16169961
Filing Date:	24-Oct-2018
Title of Invention:	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT
First Named Inventor/Applicant Name:	Michael S. Smith
Filer:	Patrick Edgar Caldwell
Attorney Docket Number:	SMITH070AG
Filed as Small Entity	
Filing Fees for Utility under 35 USC 111(a)	

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
SUBMISSION- INFORMATION DISCLOSURE STMT	2806	1	120	120
		Total in USD ($)		**120**

Electronic Acknowledgement Receipt	
EFS ID:	37800066
Application Number:	16169961
International Application Number:	
Confirmation Number:	7650
Title of Invention:	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT
First Named Inventor/Applicant Name:	Michael S. Smith
Customer Number:	92045
Filer:	Patrick Edgar Caldwell
Filer Authorized By:	
Attorney Docket Number:	SMITH070AG
Receipt Date:	19-NOV-2019
Filing Date:	24-OCT-2018
Time Stamp:	19:01:05
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$120
RAM confirmation Number	E2019AIJ01470291
Deposit Account	
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Information Disclosure Statement (IDS) Form (SB08)	SMITH070AG_IDS_20191119_vF.pdf	1055226 6878f5021e763af9b45e8023f1fe9cad305dcd30	no	13
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30429 38b492427f97d98cddcdad07b43658ceee169200	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	1085655		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.
National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.
New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	1	STOJANOVIC, V. et al., "Modeling and Analysis of High-Speed Links," pp. 1-49, March 2003	
	2	STOJANOVIC, V., "CHANNEL-LIMITED HIGH-SPEED LINKS: MODELING, ANALYSIS AND DESIGN," Dissertation, September 2004, pp. 1-180	
	3	SUCHITHA V, "Simulation methodology using SigXp 15.1 (SPB) for enabling DDR2-533 memory interface based on Intel® 945GMS design," Session Number: 6.10, Intel, Sept 13, 2006, pp. 1-36	
	4	SUD, SHIVANI, et al., "Dynamic Migration of Computation through virtualization of the mobile platform," Intel Labs, Oct. 26, 2009, slides 1-16	
	5	SUDAN, K. et al., "Micro-Pages: Increasing DRAM Efficiency with Locality-Aware Data Placement," ASPLOS'IO, March 13-17, 2010, pp. 1-12	
	6	SUN, R. et al., "A Low-Power 20-Gb/s Continuous-Time Adaptive Passive Equalizer," Thesis, 2005, pp. 1-71	
	7	TAKEFMAN, M. L. et al., U.S. Provisional Application No. 61/457,233, filed February 8, 2011	
	8	Texas Instruments, "DC TO 4-GBPS DUAL 1:2 MULTIPLEXER/REPEATER/EQUALIZER," SN65LVCP40, SLLS623D–SEPTEMBER 2004-REVISED FEBRUARY 2006, pp. 1-22	
	9	TIRUVURU, R. et al., "Transmission Line based FIR Structures for High Speed Adaptive Equalization," ISCAS 2006, IEEE, 2006, pp. 1051-1054	
	10	TOMS, T. R., QUALCOMM, CDMA Technologies,"An Assessment of 3D Interconnect, Equipment Readiness and ITRS 3D," July 16, 2008, pp. 1-23	
	11	TURUDIC, A. et al., "Pre-Emphasis and Equalization Parameter Optimization with Fast, Worst- Case/Multibillion-Bit Verification," DesignCon 2007, January 2007, pp. 1-28	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	12	Understanding the Linux Virtual Memory Manager, Chapter 3: Page Table Management, pp. 33-52, Mel Gorman, April 2004	
	13	USER'S GUIDE, "Motorola Backflip with Motoblur," 2010, pp. 1-67	
	14	VAN SCHAIK, CARL et al., "High-Performance Microkernels and Virtualization on ARM and Segmented Architectures," 2007, pp. 1-11	
	15	VARANASI, PRASHANT, "Implementing Hardware-Supported Virtualization in OKL4 on ARM," Nov. 30, 2010, pp. 1-51 (1 of 2)	
	16	VARANASI, PRASHANT, "Implementing Hardware-Supported Virtualization in OKL4 on ARM," Nov. 30, 2010, pp. 52-86 (2 of 2)	
	17	VMware, "Understanding Full virtualization, Paravirutalization, and Hardware Assist," September 11, 2007, pp. 1-17	
	18	VRAZEL, M. G. et al., "Overcoming Signal Integrity Issues with Wideband Crosstalk Cancellation Technology," DesignCon 2006, pp. 1-25	
	19	WANG, B. et al., "6b9b Encoding Scheme for Improving Single-Ended Interface Bandwidth and Reducing Power Consumption without Pin Count Increase," IEEE, 2007, pp. 25-28	
	20	WANG, Z. et al., "Exploiting Smart-Phone USB Connectivity For Fun And Profit," ACSAC '10, December 6-10, 2010, 10 pages	
	21	WELTE, H., "Anatomy of contemporary GSM cellphone hardware," April 16, 2010, pages 1-11	
	22	WIJERING, JEROEN, "What is Video Streaming?," LongTail Community Blog, April 27, 2011, pp. 1-6	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	23	WILTON, S. J. E., "Implementing Logic in FPGA Memory Arrays: Heterogeneous Memory Architectures," 2002, pp. 1-6	
	24	Wintek, "Specifications for LCD Module," 2010, pp. 1-28	
	25	WITT, K. et al., "Test & Simulation Results in Support of SAS-2," Vitesse, 17 slides, January 2006	
	26	WOLBACK, ADAM et al., "Transient customization of Mobile Computing Infrastructure," Carnegie Mellon University, April 20, 2008, pp. 1-5	
	27	WOLF, CHRIS, "Let's Get Virtual: A Look at Today's Server Virtualization Architectures," Burton Group Data center Strategies, May 14, 2007, pp. 1-42	
	28	XIAO, FENG et al., "Mobile Imaging: The Big Challenge of the Small Pixel," SPIE-IS&T vol. 7250, 2009, pp. 1-9	
	29	XU, FAN et al., "A Dynamic Binary Translation Framework Based on Page Fault Mechanism in Linux Kernel," IEEE International Conference on Computer and Information Technology, 2010, pp. 1-6	
	30	YE, D. et al., "Prototyping a Hybrid Main Memory Using a Virtual Machine Monitor," October 2008, 15 slides	
	31	Youtube video, "iPhone X swipe gestures introduced 2010 by webOS (Apple Keynote 2017 Snippets)," 09/13/2017, uploaded by Nafetz, available at https://www.youtube.com/watch?v=gEhkQRP2zDk&vl=en	
	32	Youtube video, "Palm Pre Revisited: The Best Don't Always Succeed," uploaded by Jon Rettinger, 11/05/2016, available at https://www.youtube.com/watch?v=9pAgJ9x-2lA&feature=youtu.be&t=38	
	33	YUEN, R. et al., "A 5Gb/s Transmitter with Reflection Cancellation for Backplane Transceivers," 2006, pp. 1-4	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	34	ZCTOAK, CODEN, "Special Topic: Mobile Cloud Computing and Applications," ZTE Communications, vol. 9, Mar. 2011, pp. 1-70
	35	ZHOU, HONBO et al., "Receiver Makes Right Data Conversion in PVM," Oak Ridge National Laboratory, 1995, pp. 1-8
	36	ZWICKER, M. et al., "Antialiasing for Automultiscopic 3D displays," 2006, pp. 1

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Patrick Caldwell/	Date (YYYY-MM-DD)	2019-10-02
Name/Print	Patrick Caldwell	Registration Number	44580

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Patent Application Fee Transmittal

Application Number:	16169961
Filing Date:	24-Oct-2018
Title of Invention:	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT
First Named Inventor/Applicant Name:	Michael S. Smith
Filer:	Patrick Edgar Caldwell
Attorney Docket Number:	SMITH070AG

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
SUBMISSION- INFORMATION DISCLOSURE STMT	2806	1	120	120
		Total in USD ($)		**120**

Electronic Acknowledgement Receipt	
EFS ID:	37351595
Application Number:	16169961
International Application Number:	
Confirmation Number:	7650
Title of Invention:	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT
First Named Inventor/Applicant Name:	Michael S. Smith
Customer Number:	92045
Filer:	Patrick Edgar Caldwell
Filer Authorized By:	
Attorney Docket Number:	SMITH070AG
Receipt Date:	02-OCT-2019
Filing Date:	24-OCT-2018
Time Stamp:	22:36:41
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$120
RAM confirmation Number	E201902M37004776
Deposit Account	
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Information Disclosure Statement (IDS) Form (SB08)	SMITH070AG_IDS_20191002_1_OF_6_vF.pdf	1063308 8a26708e40c0b33ef0451d17629f256c532 5f2e	no	37
Warnings:					
Information:					
2	Information Disclosure Statement (IDS) Form (SB08)	SMITH070AG_IDS_20191002_2_OF_6_vF.pdf	1062384 b50ab637ae007833b814077a9f23c6c7c17 23aee	no	36
Warnings:					
Information:					
3	Information Disclosure Statement (IDS) Form (SB08)	SMITH070AG_IDS_20191002_3_OF_6_vF.pdf	1060664 3e5c4f8168b46c0147d46e4e5d88cb188d28 cb07d	no	35
Warnings:					
Information:					
4	Information Disclosure Statement (IDS) Form (SB08)	SMITH070AG_IDS_20191002_4_OF_6_vF.pdf	1063167 91c0a0c9e8346e4f1ecx62065dcc803f8bf0cc 6fb9	no	36
Warnings:					
Information:					
5	Information Disclosure Statement (IDS) Form (SB08)	SMITH070AG_IDS_20191002_5_OF_6_vF.pdf	1063261 cf5dc2069ddff73d91d5ee27e0ef0c457417 1761	no	32
Warnings:					
Information:					
6	Information Disclosure Statement (IDS) Form (SB08)	SMITH070AG_IDS_20191002_6_OF_6_vF.pdf	1055708 d1c4aed0686dbcee3251 96ef567f834163a e4d6d	no	7
Warnings:					
Information:					

A U.S. Patent Number Citation or a U.S. Publication Number Citation is required in the Information Disclosure Statement (IDS) form for autoloading of data into USPTO systems. You may remove the form to add the required data in order to correct the Informational Message if you are citing U.S. References. If you chose not to include U.S. References, the image of the form will be processed and be made available within the Image File Wrapper (IFW) system. However, no data will be extracted from this form. Any additional data such as Foreign Patent Documents or Non Patent Literature will be manually reviewed and keyed into USPTO systems.

7	Fee Worksheet (SB06)	fee-info.pdf	30430 e0f697f53cca0117cb17e0ccc7817890057c99320	no	2

Warnings:

Information:

Total Files Size (in bytes):	6398922

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/08a (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	8055833	B2	2011-11-08	Danilak et al.	
	2	8057419	B2	2011-11-15	Ellingboe et al.	
	3	8060774	B2	2011-11-15	Smith et al.	
	4	8068021	B1	2011-11-29	Donohue	
	5	8072430	B2	2011-12-06	Kim et al.	
	6	8072837	B1	2011-12-06	Solomon et al.	
	7	8077535	B2	2011-12-13	Schakel et al.	
	8	8081474	B1	2011-12-20	Zohni et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	9	8081535	B2	2011-12-20	Bhakta et al.	
	10	8081536	B1	2011-12-20	Solomon et al.	
	11	8081537	B1	2011-12-20	Bhakta et al.	
	12	8081677	B2	2011-12-20	Badalone	
	13	8082523	B2	2011-12-20	Forstall et al.	Entire Document
	14	8089795	B2	2012-01-03	Rajan et al.	
	15	8090897	B2	2012-01-03	Rajan et al.	
	16	8093702	B2	2012-01-10	Lua et al.	
	17	8094134	B2	2012-01-10	Suzuki et al.	
	18	8094673	B2	2012-01-10	Proctor et al.	
	19	8102496	B2	2012-01-24	Kim	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	20	8103215	B2	2012-01-24	Rek	Method of establishing a direct communication between a first wireless phone and a second wireless phone
	21	8103928	B2	2012-01-24	Hargan	
	22	8106491	B2	2012-01-31	Corisis et al.	
	23	8106520	B2	2012-01-31	Keeth et al.	
	24	8111534	B2	2012-02-07	Walker	
	25	8111566	B1	2012-02-07	Wang et al.	
	26	8112266	B2	2012-02-07	Rajan et al.	
	27	8115291	B2	2012-02-14	Baek et al.	
	28	8120044	B2	2012-02-21	Cho et al.	
	29	8122207	B2	2012-02-21	Rajan et al.	
	30	8127185	B2	2012-02-28	Jeddeloh	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	31	8127204	B2	2012-02-28	Hargan	
	32	8130527	B2	2012-03-06	Keeth	
	33	8130560	B1	2012-03-06	Rajan et al.	
	34	8134378	B2	2012-03-13	Keeth	
	35	8135900	B2	2012-03-13	Kunimatsu et al.	
	36	8143710	B2	2012-03-27	Cho	
	37	8144453	B2	2012-03-27	Brown et al.	
	38	8148763	B2	2012-04-03	Kim et al.	
	39	8148807	B2	2012-04-03	Lee et al.	
	40	8154901	B1	2012-04-10	Lee et al.	
	41	8154935	B2	2012-04-10	Rajan et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	42	8158967	B2	2012-04-17	Tang et al.	
	43	8169233	B2	2012-05-01	Ferolito et al.	
	44	8169841	B2	2012-05-01	Johnson et al.	
	45	8173507	B2	2012-05-08	Lim et al.	
	46	8174105	B2	2012-05-08	Kwang et al.	
	47	8174115	B2	2012-05-08	Chung	
	48	8180954	B2	2012-05-15	Kilzer et al.	
	49	8181048	B2	2012-05-15	Rajan et al.	
	50	8184228	B2	2012-05-22	Han et al.	
	51	8185778	B2	2012-05-22	Kilzer et al.	
	52	8187901	B2	2012-05-29	Sheen	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	53	8188982	B2	2012-05-29	You et al.	
	54	8189328	B2	2012-05-29	Kanapathippillai et al.	
	55	8193646	B2	2012-06-05	Wood et al.	
	56	8199116	B2	2012-06-12	Jeon et al.	
	57	8207945	B2	2012-06-26	Jong et al.	
	58	8209479	B2	2012-06-26	Rajan et al.	
	59	8209628	B1	2012-06-26	Davidson	
	60	8218705	B2	2012-07-10	Moghaddam et al.	
	61	8223799	B2	2012-07-17	Karaoguz	
	62	8228309	B2	2012-07-24	Tamaki et al.	
	63	8244971	B2	2012-08-14	Rajan et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	64	8248255	B2	2012-08-21	Tzidon et al.	Optical fluid tester
	65	8253699	B2	2012-08-28	Son	
	66	8261041	B2	2012-09-04	Kunimatsu	
	67	8264903	B1	2012-09-11	Lee et al.	
	68	8265709	B2	2012-09-11	Forstall	Single user input mechanism for controlling electronic device operations
	69	8265822	B2	2012-09-11	Nakashima et al.	In-vehicle equipment control device and in-vehicle equipment setting method using the device
	70	8269731	B2	2012-09-18	Mölne	
	71	8269733	B2	2012-09-18	HU	
	72	8270148	B2	2012-09-18	Griffith et al.	
	73	8279361	B2	2012-10-02	Chen et al.	
	74	8279690	B1	2012-10-02	Wang et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	75	8280714	B2	2012-10-02	Rajan et al.	
	76	8286102	B1	2012-10-09	Wilensky	
	77	8287291	B1	2012-10-16	Bhakta et al.	
	78	8291341	B2	2012-10-16	Tseng et al.	Accelerated panning user interface interactions
	79	8291344	B2	2012-10-16	Chaudhri	Entire Document
	80	8296496	B2	2012-10-23	Mogul et al.	
	81	8300016	B2	2012-10-30	Lu et al.	Electronic device system utilizing a character input method
	82	8301833	B1	2012-10-30	Chen et al.	
	83	8310452	B2	2012-11-13	Takenaka et al.	
	84	8315349	B2	2012-11-20	Badalone	
	85	8319743	B2	2012-11-27	NO et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	86	8325143	B2	2012-12-04	Destura et al.	
	87	8327104	B2	2012-12-04	Smith et al.	
	88	8331579	B2	2012-12-11	Kato	Reproducing apparatus and headphone apparatus
	89	8334835	B2	2012-12-18	Shen et al.	
	90	8334850	B2	2012-12-18	Tsai	
	91	8340953	B2	2012-12-25	Rajan et al.	
	92	8345018	B2	2013-01-01	Jong et al.	
	93	8345427	B2	2013-01-01	Pauley et al.	
	94	8349228	B2	2013-01-08	Kazama	
	95	8355700	B2	2013-01-15	Lee	Method and mobile terminal for rapidly searching for messages received from or sent to same phone number
	96	8359187	B2	2013-01-22	Rajan et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	97	8359501	B1	2013-01-22	Lee et al.	
	98	8359600	B2	2013-01-22	KANG et al.	
	99	8370566	B2	2013-02-05	Danilak et al.	
	100	8373675	B2	2013-02-12	Jeon et al.	
	101	8380263	B2	2013-02-19	Murakami et al.	
	102	8384674	B1	2013-02-26	Slothower et al.	
	103	8386833	B2	2013-02-26	Smith et al.	
	104	8387045	B2	2013-02-26	Yasutaka et al.	
	105	8397013	B1	2013-03-12	Rosenband et al.	
	106	8405528	B2	2013-03-26	Aghaei et al.	Gesture based smart headphone
	107	8407412	B2	2013-03-26	Rajan et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	108	8411039	B2	2013-04-02	Guo et al.	
	109	8416210	B2	2013-04-09	Jong et al.	
	110	8417870	B2	2013-04-09	Lee et al.	
	111	8424599	B2	2013-04-23	Atencio	
	112	8427434	B1	2013-04-23	Merolla	
	113	8441377	B2	2013-05-14	Liu	Method of dynamically adjusting long-press delay time, electronic device, and computer-readable medium
	114	8446781	B1	2013-05-21	Rajan et al.	
	115	8451238	B2	2013-05-28	Kim et al.	
	116	8452917	B2	2013-05-28	Amer et al.	
	117	8458436	B2	2013-06-04	Kunimatsu et al.	
	118	8468469	B1	2013-06-18	Mendis et al.	Zooming user interface interactions

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	119	8471824	B2	2013-06-25	Kim et al.	
	120	8473670	B2	2013-06-25	Sareen et al.	
	121	8477111	B2	2013-07-02	Lim	
	122	8479110	B2	2013-07-02	Johnson et al.	
	123	8487900	B2	2013-07-16	Chiu et al.	
	124	8488325	B1	2013-07-16	Yu	
	125	8489837	B1	2013-07-16	Lee	
	126	8493384	B1	2013-07-23	Reisman et al.	
	127	8497884	B2	2013-07-30	Cholewin et al.	
	128	8508494	B2	2013-08-13	Moore	Entire Document
	129	8516185	B2	2013-08-20	Lee et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	130	8516187	B2	2013-08-20	Chen et al.	
	131	8516188	B1	2013-08-20	Solomon et al.	
	132	8534318	B2	2013-09-17	Kanemaru et al.	Water faucet device
	133	8542193	B2	2013-09-24	Hardacker et al.	
	134	8542209	B2	2013-09-24	Lim	
	135	8553012	B2	2013-10-08	Baucom et al.	
	136	8564559	B2	2013-10-22	Hou	
	137	8566505	B2	2013-10-22	Kilzer et al.	
	138	8566516	B2	2013-10-22	Schakel et al.	
	139	8566556	B2	2013-10-22	Rajan et al.	
	140	8566923	B2	2013-10-22	Fredette et al.	Enhanced organization and automatic navigation of display screens facilitating automation control

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	141	8581870	B2	2013-11-12	Bokma et al.	
	142	8587542	B2	2013-11-19	Moore	
	143	8589639	B2	2013-11-19	Nakai et al.	
	144	8591028	B2	2013-11-26	Dobashi	Ophthalmologic photographing apparatus and photographing method therefor
	145	8595419	B2	2013-11-26	Rajan et al.	
	146	8599634	B1	2013-12-03	Lee et al.	
	147	8601204	B2	2013-12-03	Rajan et al.	
	148	8606968	B2	2013-12-10	Blewett et al.	Apparatus and a method for predicting commands
	149	8607003	B2	2013-12-10	Bland et al.	
	150	8611123	B2	2013-12-17	Koh	
	151	8615679	B2	2013-12-24	Smith et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	152	8619452	B2	2013-12-31	Rajan et al.	
	153	8624851	B2	2014-01-07	Kim et al.	
	154	8624867	B2	2014-01-07	Tamaki et al.	
	155	8631193	B2	2014-01-14	Smith et al.	
	156	8631220	B2	2014-01-14	Smith et al.	
	157	8638311	B2	2014-01-28	Kang et al.	
	158	8648839	B2	2014-02-11	Liaw et al.	
	159	8654104	B2	2014-02-18	Reisman et al.	
	160	8667312	B2	2014-03-04	Rajan et al.	
	161	8671243	B2	2014-03-11	Chen et al.	
	162	8671244	B2	2014-03-11	Rajan et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	163	8674947	B2	2014-03-18	Henderson et al.	
	164	8675429	B1	2014-03-18	Wang et al.	
	165	8677060	B2	2014-03-18	Chen et al.	
	166	8683362	B2	2014-03-25	Shiplacoff et al.	Entire Document
	167	8689064	B1	2014-04-01	Lee et al.	
	168	8692815	B2	2014-04-08	Deslippe et al.	
	169	8698777	B2	2014-04-15	Endo et al.	
	170	8700834	B2	2014-04-15	Horn et al.	
	171	8705239	B1	2014-04-22	Yu et al.	
	172	8707104	B1	2014-04-22	Jean	
	173	8710862	B2	2014-04-29	Ferolito et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	174	8711116	B2	2014-04-29	Papakipos et al.	
	175	8712477	B2	2014-04-29	Yu et al.	Mobile terminal and method for changing page thereof
	176	8713357	B1	2014-04-29	Jean et al.	
	177	8713379	B2	2014-04-29	Takefman et al.	
	178	8717303	B2	2014-05-06	Ludwig	
	179	8723826	B2	2014-05-13	Chen et al.	
	180	8727557	B2	2014-05-20	Yuan et al.	
	181	8730199	B2	2014-05-20	Sleeman et al.	
	182	8738851	B2	2014-05-27	Kunimatsu et al.	
	183	8738853	B2	2014-05-27	Amer et al.	
	184	8743076	B1	2014-06-03	Ludwig	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	185	8745321	B2	2014-06-03	Rajan et al.	
	186	8745514	B1	2014-06-03	Davidson	
	187	8751732	B2	2014-06-10	Danilak et al.	
	188	8754862	B2	2014-06-17	Zaliva	
	189	8756364	B1	2014-06-17	Bhakta et al.	
	190	8757198	B2	2014-06-24	Santamaria et al.	Spring retaining sleeve
	191	8760408	B2	2014-06-24	Heesemans et al.	
	192	8760936	B1	2014-06-24	Rajan et al.	
	193	8763545	B2	2014-07-01	Tseng	Method and device for controlling sewing patterns of a sewing machine
	194	8773937	B2	2014-07-08	Schakel et al.	
	195	8780089	B2	2014-07-15	Yuan et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	196	8782350	B2	2014-07-15	Lee et al.	
	197	8787060	B2	2014-07-22	Lee	
	198	8793608	B2	2014-07-29	Sirpal et al.	Launched application inserted into the stack
	199	8816993	B2	2014-08-26	Yuan et al.	
	200	8831687	B1	2014-09-09	Kotab	
	201	8832577	B2	2014-09-09	Sirpal et al.	Universal clipboard
	202	8836648	B2	2014-09-16	Wilairat	Entire Document
	203	8838076	B2	2014-09-16	Lee	Method and device for storing and displaying music file list in mobile communication terminal using hot keys
	204	8854317	B2	2014-10-07	Homma et al.	
	205	8866785	B2	2014-10-21	Ludwig	
	206	8872728	B2	2014-10-28	Fujiwaka	Terminal device and illumination control method

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	207	8872798	B2	2014-10-28	Rabu et al.	
	208	8878809	B1	2014-11-04	Kim et al.	
	209	8878810	B2	2014-11-04	Ludwig	
	210	8884913	B2	2014-11-11	Saynac et al.	
	211	8896575	B2	2014-11-25	Goertz et al.	
	212	8913031	B2	2014-12-16	Honda et al.	
	213	8917262	B2	2014-12-23	Liaw et al.	
	214	8941879	B2	2015-01-27	Takahashi	Input display apparatus, control method thereof and storage medium
	215	8947381	B2	2015-02-03	JIYAMA et al.	
	216	8952987	B2	2015-02-10	Momeyer et al.	
	217	8954887	B1	2015-02-10	Tseng et al.	Long press interface interactions

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	218	8970540	B1	2015-03-03	Hebenstreit et al.	
	219	8976128	B2	2015-03-10	Moore	
	220	8982081	B2	2015-03-17	Li	
	221	8988353	B2	2015-03-24	Shin et al.	Mobile device and method for editing pages used for a home screen
	222	8988364	B2	2015-03-24	Lee	
	223	9003515	B2	2015-04-07	Ganem	Authenticating human interface device
	224	9003591	B2	2015-04-14	Sakashita et al.	
	225	9013414	B2	2015-04-21	Kung et al.	
	226	9018030	B2	2015-04-28	Li et al.	
	227	9030427	B2	2015-05-12	Yasumatsu	
	228	9035897	B2	2015-05-19	Kinoshita	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	229	9041679	B2	2015-05-26	Reisman et al.	
	230	9045670	B2	2015-06-02	SHITARA et al.	
	231	9046999	B1	2015-06-02	Teller et al.	Entire Document
	232	9047005	B2	2015-06-02	Hill et al.	Substituting touch gestures for GUI or hardware keys to control audio video play
	233	9052761	B2	2015-06-09	Zhou	Methods and devices for user touch operation
	234	9058061	B2	2015-06-16	Aono et al.	Mobile terminal
	235	9058102	B2	2015-06-16	Miyamoto	Symbol input device, image forming apparatus including the symbol input device, and method for inputting symbols
	236	9063597	B2	2015-06-23	Liaw et al.	
	237	9069204	B2	2015-06-30	ZHOU et al.	
	238	9069416	B2	2015-06-30	Garrett et al.	
	239	9069460	B2	2015-06-30	Moore	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	240	9092057	B2	2015-07-28	Varela et al.	
	241	9092129	B2	2015-07-28	Abdo et al.	
	242	9098193	B2	2015-08-04	Stoneham et al.	
	243	9103691	B2	2015-08-11	Wäller et al.	Multimode user interface of a driver assistance system for inputting and presentation of information
	244	9116569	B2	2015-08-25	Stacy et al.	
	245	9116609	B2	2015-08-25	Bocirnea	
	246	9125630	B2	2015-09-08	Menzel	
	247	9130651	B2	2015-09-08	Tabe	
	248	9134880	B2	2015-09-15	Johnson et al.	
	249	9152240	B2	2015-10-06	Yeh	Method for previewing output character and electronic device
	250	9152258	B2	2015-10-06	Behdasht et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	251	9152288	B2	2015-10-06	Dietz	
	252	9195389	B2	2015-11-24	Park et al.	Menu executing method and apparatus in portable terminal
	253	9305531	B2	2016-04-05	Miwa	Online real-time session control method for electronic music device
	254	9405466	B2	2016-08-02	Suraqui	Reduced keyboard with prediction solutions when input is a partial sliding trajectory
	255	9430122	B2	2016-08-30	Cassar	Secondary single screen mode activation through off-screen gesture area activation
	256	9495805	B2	2016-11-15	Shim et al.	Three dimensional (3D) display terminal apparatus and operating method thereof
	257	9524042	B1	2016-12-20	Khafizov et al.	
	258	9538346	B2	2017-01-03	Kim et al.	Message service support method and portable device using the same
	259	9619141	B2	2017-04-11	Konami	Information processing terminal and method, program, and recording medium
	260	9684521	B2	2017-06-20	Shaffer et al.	Systems having discrete and continuous gesture recognizers
	261	9690474	B2	2017-06-27	Chen et al.	User interface, device and method for providing an improved text input

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	262	9881608	B2	2018-01-30	Lebeau et al.	Word-level correction of speech input
	263	9972297	B2	2018-05-15	Xu et al.	Sound processing device, sound data selecting method and sound data selecting program
	264	RE41716	E1	2010-09-21	Fernando et al.	

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1	NATIONAL SEMICONDUCTOR, "EQ50F100- 2.5 to 6.125 Gbps fixed equalizer; For 10 Gigabit Ethernet, storage and telecom backplanes," 2004, pp. 1-2	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	2	Office Action mailed Jul. 15 2013 in corresponding Canadian patent application No. 2731708.	
	3	ON, CALVIN, "ANA: A Method for ARM-on-ARM Execution," Sep. 2007, MIT, pp. 1-62.	
	4	ONOUE, KOICHI et al., "A Virtual Machine Migration System Based on a SPU Emulator," Virtualization Technology in Distributed Computing, Nov. 17, 2006, pp. 1-8	
	5	OPDENACKER, M., "Linux USB drivers," September 15, 2009, pages 1-95	
	6	OSMAN, STEVEN et al., "The Design and Implementation of Zap: A System for Migrating Computing Environments," OSOi, December 2002, pp. 1-16	
	7	OUSTERHOUT, J. et al., "The Case for RAMClouds: Scalable High-Performance Storage Entirely in DRAM," SIGOPS Operating Systems Review, Vol. 43, No. 4, December 2009, pp. 92-105	
	8	PAI, ANKUR et al., "Customizable Multimedia Devices in Virtual Environments," Georgia Institute of Technology, 2008, pp. 1-18	
	9	PARK, H.-J., "Signal Integrity for High Speed Circuit Design," Tutorial 9 (ISSCC 2006), pp. 1-91	
	10	PARK, MIRI et al., "Real-time Operating System Virtualization for Xen-Arm," 2009, pp. 1-2	
	11	Partial International Search Report--PCTUS2012035992--ISAEPO--Jul. 17 2012.	
	12	PASRICHA, SUDEEP et al., "Reducing Backlight Power Consumption for Streaming Video Application on Mobile Handheld Devices," University of California, Nov. 2, 2003, pp. 1-7	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	13	PATTERSON, ROBERT, "Human Factors of Stereoscopic Displays," Washington State University, Jul. 5, 2009, pp. 1-14	
	14	PCI-SIG et al., "Single Root I/O Virtualization and Sharing Specification Revision 1.0," September 11, 2007, pp. 1-84	
	15	PELZL, JAN et al., "Virtualization Technologies for Cars, Solutions to increase safety and security of vehicular ECUs," 2008, pp. 1-10	
	16	PERING, T. et al., "The PSI Board: Realizing a Phone-Centric Body Sensor Network," 4th International Workshop on Wearable and Implantable Body Sensor Networks, March 2007, pages 1-6	
	17	PERING, T., "Intel and Personal Wellness," 22 pages, August 2009	
	18	PHADKE, S. et al., "MLP Aware Heterogeneous Memory System," 2011 EDAA, pp. 1-6	
	19	POTTER, SHAYA, "Virtualization Mechanisms for Mobility, Security and system Administration," Columbia University, 2010, pp. 1-241	
	20	PROBST, MARK et al., "Register Liveness Analysis for Optimizing Dynamic Binary Translation," 2002, pp. 1-10	
	21	RAMESH, G., "Design of De-Emphasis and Equalization Circuits for Gigabit Serial Interconnects," An Applications Workshop for High-Performance Design, September 2005, pp. 1-28	
	22	Red Hat, "Virtualization Guide: Red Hat Virtualization," Red Hat Inc., 2007, pp. 1-104	
	23	REFAI, WAIL MOHSEN, "Office Communication," U.S. Appl. No. 12/233,386, May 27, 2011	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	24	RIECKE, BERNHARD E. et al., "Selected Technical and Perceptual Aspects of Virtual reality Displays," Technical Report No. 154, Oct. 2006, pp. 1-17	
	25	ROSS, ARUN et al., "A Calibration Model for Fingerprint Sensor Interoperability," SPIE Conference on Biometric Technology for Human Identification, Apr. 2006, pp. 1-12	
	26	RUDOLPH, LARRY, "A Virtualization Infrastructure that Supports Pervasive Computing," VMware, IEEE CS, 2009, pp. 1-6	
	27	RYU, W. H. et al., "High-Frequency Simultaneous Switching Output Noise (SSO) Simulation Methodology For a DDR333/400 Data Interface," Jun. 27, 2002, pp. 1-6	
	28	SAHAMI, ALIREZA et al., "Rich Tactile Output on Mobile Devices," Nov. 2008, pp. 1-12	
	29	SANGORRIN, DANIEL et al., "Dual operation System Architecture for Real-Time Embedded Systems," Jul. 6, 2010, slides 1-24	
	30	SATYANARAYANAN, M et al., "Bringing the Cloud Down to Earth: Transient PCs Everywhere," Carnegie Mellon University, Sep. 2010, pp. 1-11	
	31	SATYANARAYANAN, M. et al., "Pervasive Personal Computing in an Internet Suspend/Resume System," IEEE Computer Society, Mar. 2007, pp. 1-10	
	32	SATYANARAYANAN, M. et al., "Towards seamless mobility on pervasive hardware," March 1, 2005, pp. 1-33	
	33	SCHRADER, BERNHARD, "Multi Root I/O Virtualization," FCS TEC-Team, Fujitsu Siemens, Nov. 2, 2008, slides 1-9.	
	34	SCHRADER, J. H. R., "Wireline Equalization using Pulse-Width Modulation," 2007, pp. 1-152	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	35	SCHRADER, J. H. R., "Wireline Equalization using Pulse-Width Modulation," IEEE 2006 Custom Intergrated Circuits Conference (CICC), 2006, pp. 591-598	
	36	SCHRADER, J.H.R et al., "CMOS Transmitter using Pulse-Width Modulation Pre-Emphasis achieving 33dB Loss Compensation at 5-Gb/s," 2005 Symposium on VLSI Circuits Digest of Technical Papers, pp. 388-391	
	37	SCHRADER, J.H.R et al., "Pulse-Width Modulation Pre-Emphasis Applied in a Wireline Transmitter, Achieving 33 dB Loss Compensation at 5-Gb/s in 0.13- ?m CMOS, IEEE Journal Of Solid-State Circuits, Vol. 41, No. 4, April 2006, pp. 990-999	
	38	SEMTECH, "Advanced Communications and Sensing," 25 July, 2011, pp. 1-61	
	39	SEO, SANGWON, "Research on System Virtualization using Xen Hypervisor for ARM based secure mobile phones," Seminar Security in Telecommunications, Jan. 14, 2010, pp. 1-11	
	40	SHAFER, M. et al., "Connector and Chip Vendors Unite to Produce a High-Performance 10 Gb/s NRZ-Capable Serial Backplane," DesignCon 2003; High-Performance System Design Conference, 2003, pp. 1-19	
	41	SHAO, J. et al., "The Bit-reversal SDRAM Address Mapping," 2005, pp. 1-8	
	42	SIDIROPOULOS, S., "HIGH PERFORMANCE INTER-CHIP SIGNALLING," Technical Report No. CSL-TR-98-760, April 1998, pp. 1-139	
	43	SILVIA, "Adaptive HTTP Streaming for open Codecs," Oct. 9, 2010, pp. 1-6	
	44	SMALDONE, STEPHEN, "Leveraging Smart Phones to Reduce Mobility Footprints," 2009, 14 pages	
	45	SMITH, J. E. et al., "Achieving High Performance via Co-Designed Virtual Machines," Oct. 1998, pp. 1-6	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	46	SOUSA, JOAO PEDRO et al., "Aura: An Architectural Framework for User Mobility in Ubiquitous Computing Environments," Carnegie Mellon University Research Showcase, Aug. 1, 2002, pp. 1-15	
	47	SOUSA, JOAO PEDRO, et al., "The Aura Software Architecture: an Infrastructure for Ubiquitous Computing," Carnegie Mellon University Research Showcase, August 1, 2003, pp. 1-48	
	48	STACKHOUSE, B. et al., "A 65 nm 2-Billion Transistor Quad-Core Itanium Processor," IEEE Journal Of Solid-State Circuits, Vol. 44, No. 1, January 2009, pp. 18-31	
	49	STOCKHAMMER, THOMAS, "Dynamic Adaptive Streaming Over HTTP-Design Principles and Standards," Qualcomm Incorporated, February 23, 2011, pp. 1-3	
	50	STOJANOVIC, V. et al., "Adaptive Equalization and Data Recovery in a Dual-Mode (PAM2/4) Serial Link Transceiver," 2004, pp. 1-4	

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Patrick Caldwell/	Date (YYYY-MM-DD)	2019-10-02
Name/Print	Patrick Caldwell	Registration Number	44580

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

PTO/SB/08a (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	5581505	A	1996-12-03	Lee	
	2	5596638	A	1997-01-21	Paterson et al.	
	3	5675329	A	1997-10-07	Barker et al.	
	4	5680160	A	1997-10-21	LaPointe	
	5	5687733	A	1997-11-18	McKown	
	6	5699082	A	1997-12-16	Marks et al.	
	7	5708460	A	1998-01-13	Young et al.	
	8	5729219	A	1998-03-17	Armstrong et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	9	5729612	A	1998-03-17	Abel et al.	
	10	5742894	A	1998-04-21	Jambhekar et al.	
	11	5743859	A	1998-04-28	Wodlinger et al.	
	12	5744027	A	1998-04-28	Connell et al.	
	13	5794163	A	1998-08-11	Paterson et al.	
	14	5805950	A	1998-09-08	Inglese et al.	
	15	5825873	A	1998-10-20	Duncan et al.	
	16	5838244	A	1998-11-17	Schmidt et al.	
	17	5856822	A	1999-01-05	Du et al.	
	18	5859522	A	1999-01-12	Theobald	
	19	5884191	A	1999-03-16	Karpus et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	20	5887995	A	1999-03-30	Holehan	
	21	5889236	A	1999-03-30	Gillespie et al.	
	22	5925942	A	1999-07-20	Theobald	
	23	5947334	A	1999-09-07	Rudick et al.	
	24	5953674	A	1999-09-14	James A. Hutchison	
	25	5970092	A	1999-10-19	Currivan	
	26	5983100	A	1999-11-09	Johansson et al.	
	27	5999892	A	1999-12-07	Fan	
	28	6012105	A	2000-01-04	Rubbmark et al.	
	29	6020878	A	2000-02-01	Robinson	
	30	6030499	A	2000-02-29	Soderholm	Method and apparatus in a paper or board machine for dewatering the web

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	31	6038457	A	2000-03-14	Barkat	
	32	6040933	A	2000-03-21	Khaleghi et al.	
	33	6045512	A	2000-04-04	Roteliuk et al.	
	34	6081724	A	2000-06-27	Wilson	
	35	6097943	A	2000-08-01	Nordwall	
	36	6105600	A	2000-08-22	Wang	Inflation device comprising a connection head compatible with inflation valves of U.S. type and french type
	37	6108064	A	2000-08-22	Minoura et al.	
	38	6118435	A	2000-09-12	Fujita et al.	
	39	6119022	A	2000-09-12	Osborn et al.	
	40	6138036	A	2000-10-24	Breanndan O'Cinneide	
	41	6138245	A	2000-10-24	Son et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	42	6141000	A	2000-10-31	Martin	
	43	6163690	A	2000-12-19	Lilja	
	44	6169538	B1	2001-01-02	Nowlan et al.	
	45	6192238	B1	2001-02-20	Piirainen	
	46	6193152	B1	2001-02-27	Fernando et al.	
	47	6259729	B1	2001-07-10	Seki	
	48	6283763	B1	2001-09-04	Matsuzaki et al.	
	49	6284131	B1	2001-09-04	Hogard et al.	
	50	6285890	B1	2001-09-04	Panian	
	51	6330247	B1	2001-12-11	Chang et al.	
	52	6337681	B1	2002-01-08	Martin	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	53	6351271	B1	2002-02-26	Mainwaring et al.	
	54	6366530	B1	2002-04-02	Sluiter et al.	
	55	6371923	B1	2002-04-16	Roteliuk et al.	
	56	6377825	B1	2002-04-23	Kennedy et al.	
	57	6380581	B1	2002-04-30	Noble et al.	
	58	6385463	B1	2002-05-07	Lieberman et al.	
	59	6388655	B1	2002-05-14	Leung	
	60	6392638	B2	2002-05-21	Hanajima et al.	
	61	6417845	B1	2002-07-09	Chen et al.	
	62	6441807	B1	2002-08-27	Yamaguchi	
	63	6448959	B1	2002-09-10	Kawaguchi et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	64	6449492	B1	2002-09-10	Kenagy et al.	
	65	6456517	B2	2002-09-24	Kim et al.	
	66	6473630	B1	2002-10-29	Baranowski et al.	
	67	6476795	B1	2002-11-05	Derocher et al.	
	68	6477390	B1	2002-11-05	Gum et al.	
	69	6480149	B1	2002-11-12	Sutherland et al.	
	70	6492979	B1	2002-12-10	Kent et al.	
	71	6496854	B1	2002-12-17	Hagersten et al.	
	72	6504530	B1	2003-01-07	Wilson et al.	
	73	6509847	B1	2003-01-21	Anderson	
	74	6523124	B1	2003-02-18	Lunsford et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	75	6526133	B1	2003-02-25	Izaki et al.	Telephone set for continuously displaying caller telephone number by simple operation
	76	6526315	B1	2003-02-25	Inagawa et al.	
	77	6529744	B1	2003-03-04	Birkler et al.	
	78	6533757	B1	2003-03-18	Lampropoulos et al.	
	79	6546262	B1	2003-04-08	Freadman	
	80	6549790	B1	2003-04-15	Rubbmark et al.	
	81	6564285	B1	2003-05-13	Mills et al.	
	82	6567102	B2	2003-05-20	Kung	
	83	6590568	B1	2003-07-08	Astala et al.	
	84	6603986	B1	2003-08-05	Bozoukov	
	85	6626013	B2	2003-09-30	Ohta et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	86	6636203	B1	2003-10-21	Wong et al.	
	87	6636749	B2	2003-10-21	Holmes et al.	
	88	6636918	B1	2003-10-21	Aguilar et al.	
	89	6665803	B2	2003-12-16	Lunsford et al.	
	90	6670234	B2	2003-12-30	Hsu et al.	
	91	6689947	B2	2004-02-10	Ludwig	
	92	6714802	B1	2004-03-30	Barvesten	
	93	6721019	B2	2004-04-13	Kono et al.	
	94	6738514	B1	2004-05-18	Shin et al.	
	95	6747636	B2	2004-06-08	Martin	
	96	6751113	B2	2004-06-15	Bhakta et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	97	6765812	B2	2004-07-20	Anderson	
	98	6776546	B2	2004-08-17	Kraus et al.	
	99	6791640	B1	2004-09-14	Okamoto et al.	
	100	6801211	B2	2004-10-05	Forsline et al.	
	101	6804146	B2	2004-10-12	Johnson	
	102	6829297	B2	2004-12-07	Xia et al.	
	103	6873534	B2	2005-03-29	Bhakta et al.	
	104	6879318	B1	2005-04-12	Chan et al.	
	105	6880998	B2	2005-04-19	Kraus et al.	
	106	6888537	B2	2005-05-03	Benson et al.	
	107	6892270	B2	2005-05-10	Roohparvar	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	108	6917282	B2	2005-07-12	Giegerich	
	109	6919927	B1	2005-07-19	Hyodo	
	110	6928110	B2	2005-08-09	Ougi et al.	
	111	6928299	B1	2005-08-09	Rinne et al.	
	112	6928512	B2	2005-08-09	Ayukawa et al.	
	113	6930900	B2	2005-08-16	Bhakta et al.	
	114	6930903	B2	2005-08-16	Bhakta et al.	
	115	6933991	B2	2005-08-23	Sanelle et al.	
	116	6954495	B2	2005-10-11	Piirainen	
	117	6956562	B1	2005-10-18	Responte et al.	
	118	6961015	B2	2005-11-01	Kernahan et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	119	6967903	B2	2005-11-22	Guanter	
	120	6968208	B2	2005-11-22	Kacines	
	121	6975853	B2	2005-12-13	Fang et al.	
	122	6983169	B2	2006-01-03	Vogel et al.	
	123	6990044	B2	2006-01-24	Kang	
	124	7003316	B1	2006-02-21	Elias et al.	
	125	7006851	B2	2006-02-28	Holmes et al.	
	126	7006854	B2	2006-02-28	Choi	
	127	7010325	B1	2006-03-07	Oh	
	128	7020488	B1	2006-03-28	Bleile et al.	
	129	7024230	B2	2006-04-04	Curtiss et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	130	7030854	B2	2006-04-18	Baucom et al.	
	131	7031670	B2	2006-04-18	May	
	132	7046230	B2	2006-05-16	Zadesky et al.	
	133	7050783	B2	2006-05-23	Curtiss et al.	
	134	7062260	B2	2006-06-13	Vuori	
	135	7062261	B2	2006-06-13	Goldstein et al.	
	136	7064748	B2	2006-06-20	Cok	
	137	7097903	B2	2006-08-29	Kishioka et al.	
	138	7098776	B2	2006-08-29	Chang et al.	
	139	7111540	B2	2006-09-26	Rodriquez	Dual purpose puncher
	140	7122149	B2	2006-10-17	Li et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	141	7123936	B1	2006-10-17	Rydbeck et al.	
	142	7138984	B1	2006-11-21	Miles	
	143	7148882	B2	2006-12-12	Kamrath et al.	
	144	7149511	B1	2006-12-12	Edward F. Bachner et al.	
	145	7149552	B2	2006-12-12	Lair	
	146	7154481	B2	2006-12-26	Cross et al.	
	147	7155254	B2	2006-12-26	Pinder	
	148	7171239	B2	2007-01-30	Tan et al.	
	149	7176897	B2	2007-02-13	Roberts	
	150	7184794	B2	2007-02-27	Hess et al.	
	151	7190350	B2	2007-03-13	Roberts	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	152	7190720	B2	2007-03-13	Fimoff et al.	
	153	7196694	B2	2007-03-27	Roberts	
	154	7205983	B2	2007-04-17	Raap et al.	
	155	7224992	B2	2007-05-29	Patino et al.	
	156	7240836	B2	2007-07-10	Vrotsos et al.	
	157	7245293	B2	2007-07-17	Hoshino et al.	
	158	7254036	B2	2007-08-07	Pauley et al.	
	159	7254973	B2	2007-08-14	Campian	
	160	7269708	B2	2007-09-11	Ware	
	161	7280849	B1	2007-10-09	Bailey	
	162	7286436	B2	2007-10-23	Bhakta et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	163	7289113	B2	2007-10-30	Martin	
	164	7289386	B2	2007-10-30	Bhakta et al.	
	165	7296107	B2	2007-11-13	Lunsford et al.	
	166	7303680	B2	2007-12-04	Connell et al.	
	167	7312784	B2	2007-12-25	Baucom et al.	
	168	7312791	B2	2007-12-25	Hoshino et al.	
	169	7315336	B2	2008-01-01	North et al.	
	170	7318892	B2	2008-01-15	Connell et al.	
	171	7343177	B2	2008-03-11	Seshadri et al.	
	172	7343439	B2	2008-03-11	Mills et al.	
	173	7360022	B2	2008-04-15	Tian et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	174	7363054	B2	2008-04-22	Elias et al.	
	175	7375970	B2	2008-05-20	Pauley et al.	
	176	7386656	B2	2008-06-10	Rajan et al.	
	177	7392338	B2	2008-06-24	Rajan et al.	
	178	7398105	B2	2008-07-08	Kalogeropoulos	
	179	7403743	B2	2008-07-22	Welch	
	180	7405779	B2	2008-07-29	Sanelle et al.	
	181	7423557	B2	2008-09-09	Kang	
	182	7424312	B2	2008-09-09	Pinder et al.	
	183	7435636	B1	2008-10-14	Hanafi	
	184	7437221	B2	2008-10-14	Hardman et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	185	7442050	B1	2008-10-28	Bhakta et al.	
	186	7472220	B2	2008-12-30	Rajan et al.	
	187	7492890	B2	2009-02-17	Milani	
	188	7493109	B2	2009-02-17	Munje et al.	
	189	7511702	B2	2009-03-31	Hotelling	
	190	7523035	B2	2009-04-21	Rokusek et al.	
	191	7526317	B2	2009-04-28	Pinder et al.	
	192	7529872	B1	2009-05-05	Schubert et al.	
	193	7532492	B2	2009-05-12	Dobyns et al.	
	194	7532537	B2	2009-05-12	Solomon et al.	
	195	7535463	B2	2009-05-19	Wilson	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	196	7538760	B2	2009-05-26	Hotelling et al.	
	197	7551899	B1	2009-06-23	Nicolas et al.	Intelligent dialing scheme for telephony application
	198	7555311	B2	2009-06-30	Kangas et al.	Mobile communication terminal and method
	199	7555318	B2	2009-06-30	Seshadri et al.	
	200	7558130	B2	2009-07-07	Grunzke	
	201	7558529	B2	2009-07-07	Seshadri et al.	
	202	7558894	B1	2009-07-07	Lydon et al.	
	203	7565179	B2	2009-07-21	Hyatt	
	204	7565458	B2	2009-07-21	Thijssen	
	205	7571295	B2	2009-08-04	Sakarda et al.	
	206	7580312	B2	2009-08-25	Rajan et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	207	7581127	B2	2009-08-25	Rajan et al.	
	208	7590796	B2	2009-09-15	Rajan et al.	
	209	7598607	B2	2009-10-06	Chung et al.	
	210	7603148	B2	2009-10-13	Michalak	
	211	7609178	B2	2009-10-27	Son et al.	
	212	7609567	B2	2009-10-27	Rajan et al.	
	213	7612436	B1	2009-11-03	Lee et al.	
	214	7619893	B1	2009-11-17	Yu	
	215	7619912	B2	2009-11-17	Bhakta et al.	
	216	7620433	B2	2009-11-17	Bodley	
	217	7622365	B2	2009-11-24	Parekh	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	218	7622895	B1	2009-11-24	Griffin	
	219	7623667	B2	2009-11-24	Sander et al.	
	220	7626579	B2	2009-12-01	Hague et al.	
	221	7626594	B1	2009-12-01	Witehira et al.	
	222	7627128	B2	2009-12-01	Sander et al.	
	223	7627307	B2	2009-12-01	Droste et al.	
	224	7627352	B2	2009-12-01	Daniel M. Gauger et al.	
	225	7630202	B2	2009-12-08	Pauley et al.	
	226	7633963	B1	2009-12-15	Anderson et al.	
	227	7636274	B2	2009-12-22	Solomon et al.	
	228	7639239	B2	2009-12-29	Kajimoto et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	229	7643642	B2	2010-01-05	Patino et al.	
	230	7649577	B2	2010-01-19	Sanelle et al.	
	231	7649605	B2	2010-01-19	Kim	
	232	7650168	B2	2010-01-19	Bailey	
	233	7659885	B2	2010-02-09	Kraus et al.	
	234	7663607	B2	2010-02-16	Hotelling et al.	
	235	7675580	B2	2010-03-09	RHO	
	236	7680490	B2	2010-03-16	Bloebaum et al.	
	237	7680514	B2	2010-03-16	Cook et al.	
	238	7683889	B2	2010-03-23	Ribikauskas et al.	
	239	7689168	B2	2010-03-30	House	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	240	7692627	B2	2010-04-06	Wilson	
	241	7692637	B2	2010-04-06	Davis	
	242	7701329	B2	2010-04-20	Donohue	
	243	7705824	B2	2010-04-27	Baucom et al.	
	244	7715831	B2	2010-05-11	Wakefield	
	245	7715873	B1	2010-05-11	Biere et al.	
	246	7716411	B2	2010-05-11	Panabaker et al.	
	247	7721227	B2	2010-05-18	Ronkainen	Method for describing alternative actions caused by pushing a single button
	248	7724589	B2	2010-05-25	Rajan et al.	
	249	7730338	B2	2010-06-01	Rajan et al.	
	250	7738068	B2	2010-06-15	Lee	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	251	7755612	B2	2010-07-13	Park et al.	
	252	7760187	B2	2010-07-20	Kennedy	
	253	7761724	B2	2010-07-20	Rajan et al.	
	254	7769187	B1	2010-08-03	Farrar et al.	
	255	7777581	B2	2010-08-17	Pfaff et al.	
	256	7778601	B2	2010-08-17	Seshadri et al.	
	257	7779185	B2	2010-08-17	Schubert et al.	
	258	7796652	B2	2010-09-14	Reitlingshoefer et al.	
	259	7800592	B2	2010-09-21	Kerr et al.	
	260	7811097	B1	2010-10-12	Bhakta et al.	
	261	7813715	B2	2010-10-12	McKillop et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	262	7814287	B2	2010-10-12	Pratt	
	263	7818036	B2	2010-10-19	Lair et al.	
	264	7818037	B2	2010-10-19	Lair et al.	
	265	7821506	B2	2010-10-26	Sato et al.	Input device
	266	7826318	B2	2010-11-02	Holden et al.	
	267	7835809	B2	2010-11-16	Paul P. Griffin	
	268	7839643	B1	2010-11-23	Yu	
	269	7839645	B2	2010-11-23	Pauley et al.	
	270	7855931	B2	2010-12-21	LaBerge et al.	
	271	7857225	B2	2010-12-28	Challa et al.	
	272	7864627	B2	2011-01-04	Bhakta et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	273	7869608	B2	2011-01-11	Sander et al.	
	274	7881150	B2	2011-02-01	Solomon et al.	
	275	7889786	B2	2011-02-15	Lapointe	
	276	7902886	B2	2011-03-08	Pfaff et al.	
	277	7903090	B2	2011-03-08	Soss et al.	
	278	7903096	B2	2011-03-08	Jeon et al.	
	279	7912519	B2	2011-03-22	Lee et al.	Mobile communication device with function-assignable side key and method for controlling the side key
	280	7916574	B1	2011-03-29	Solomon et al.	
	281	7930002	B2	2011-04-19	Gong	Method for using multi-function key in a portable phone
	282	7932893	B1	2011-04-26	Berthaud	
	283	7940839	B2	2011-05-10	Lapointe et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	284	7941591	B2	2011-05-10	Aviles	
	285	7952566	B2	2011-05-31	Poupyrev et al.	
	286	7965578		2011-06-21	Bhakta et al.	
	287	7965579		2011-06-21	Solomon et al.	
	288	7966578	B2	2011-06-21	Tolmasky et al.	
	289	7973773	B2	2011-07-05	Pryor	
	290	7973777	B2	2011-07-05	Lee et al.	
	291	7973778	B2	2011-07-05	Chen	
	292	7978721	B2	2011-07-12	Jeddeloh et al.	
	293	7982721	B2	2011-07-19	Hio	
	294	7999795	B2	2011-08-16	Hamblin et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	295	8001434	B1	2011-08-16	Lee et al.	
	296	8018723	B1	2011-09-13	Yu et al.	
	297	8019589	B2	2011-09-13	Rajan et al.	
	298	8022933	B2	2011-09-20	Hardacker et al.	
	299	8033836	B1	2011-10-11	Bhakta et al.	
	300	8041881	B2	2011-10-18	Rajan et al.	

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T5
	1	IS&T/SPIE, "Electronic Imaging," Hyatt Regency Hotel, Jan. 2011, pp. 1-153.	
	2	JACOBSSON, Sarah, "Nexus one's Screen is Gorgeous, But With Issues," PC World, Feb. 32, 2010, pp. 1-5	
	3	JEDEC STANDARD, DDR3 SDRAM Standard, JESD79-3D, Revision of JESD79-3C, November 2008, September 2009, pp. 1-220	
	4	JEONG, JAE-WOO, et al., "Parfait: A New Scheduler Framework supporting Heterogeneous Xen-ARM schedulers," Jan. 2011, pp. 1-5	
	5	JIANG, HAI, et al., "Data Conversion for Process/Thread Migration and Checkpointing," Wayne State University, 2003 International Conference on Parallel Processing (ICPP'03), 2003, pp. 1-8	
	6	Jon Knight, "Qualcomm Sues Apple Over iPhone X Gestures," GadgetHacks, Article, 12/04/2017, available at https://smartphones.gadgethacks.com/news/qualcomm-sues-apple-over-iphone-x-gestures-0181495/	
	7	KALADY, SAIDALAVI, et al., "Implementation of a Purley Hardware-assisted VMM for x86 Architecture," Preceedings of the World congress on Engineering 2009 vol. 1, 2009, pp. 1-5	
	8	KALLA, NAVEEN et al. "Embedded VMM for Portable Virtual Machines." Date unknown. Prior to 2010. Cited in A. Kunk, P. Bohman, and E. Shaw "VMM based rootkit detection on Android," in University of Illinois at Urbana Champaign, May 2010, pp. 1-11	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	9	KARTHICK, A. R., "Memory Management and RMAP VM of 2.6," 14 slides, January 2004	
	10	KASER, DOMINIK, et al., "FingerGlass: Efficient Multiscale Interaction on Multitouch Screens," 2011, pp. 1-10	
	11	Keyword-highlights in JP2008033739A - "Touch screen interaction method and apparatus based on tactile force feedback and pressure measurement," 7/31/2006	
	12	KING, SAMUEL T., et al., "Operating Systems Extensions to Support Host Based Virtual Machines," Department of Electrical Engineering and Computer Science, University of Michigan, 2002, pp. 1-14	
	13	KISHAN, "Virtual Memory Exercises," Windows Internals Course, University of Tokyo, July 2003, pp. 1-3	
	14	KLARE, B. et al., "Assessment of H.264 Video Compression on Automated Face Recognition Performance in Surveillance and Mobile Video Scenarios," Proc. SPIE 7667, Biometric Technology for Human Identification VII, 76670X (14 April 2010), 8 pages	
	15	KLOSTER, J. F. et al., "On the Feasibility of Memory Sharing," June 2006, pp. 1-132	
	16	KLOSTER, JACOB FABER, et al., "Efficient Memory Sharing in the Xen Virtual Machine Monitor," Aalborg University, Jan. 2006, pp. 1-86	
	17	KOTZMANN, THOMAS, et al., "Design of the Java HotSpot Client Complier for Java 6," May 2008, pp. 1-32	
	18	KOZUCH, MICHAEL A. et al., "Migration without Virtualization," Intel Research Pittsburg, 2005, pp. 1-5	
	19	KOZUCH, MICHAEL, et al., "Internet Suspend/Resume," Carnegie Mellon University and Intel Research Pittsburgh, 2002, pp. 1-7	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	20	KRATZ, SVEN et al., "Extending the Virtual Trackball Metaphor to Rear Touch Input," 2010, pp. 1-4	
	21	KRATZ, SVEN et al., "Gesture Recognition Using Motion Estimation on Mobile Phones," 2007, pp. 1-5	
	22	KRAUSE, MIKE et al., "Implementing PCI 1/0 Virtualization Standards," April 6, 2011, pp. 1-8	
	23	LAGAR-CAVILLA, Andres et al."Interactive Resource-Intensive Applications Made Easy," 2007 pp. 1-21.	
	24	LANMAN, DOUGLAS, et al., "Content-Adaptive Parallax Barriers: Optimizing Dual-layer 3D Displays using Low-Rank Light Field Factorization," 2010, pp. 1-10	
	25	LEE, C. J. et al., "DRAM-Aware Last-Level Cache Writeback: Reducing Write-Caused Interference in Memory Systems," April 2010, pp. 1-21	
	26	LI, J., "A Nanosensor Device for Cellphone Integration and Chemical Sensing Network," OHS CELL-ALL Phase II Workshop, July 29, 2010, 22 pages	
	27	LIEBERGELD, STEFFEN, "Efficient Virtualization on ARM Platforms," Techishe Universitat Dresden, May 6, 2009, pp. 1-52	
	28	LIN, M. et al., "Testable Design for Advanced Serial-Link Transceivers," 2007, pp. 1-6	
	29	LIN, X. et al., "A 2.5- to 3.5-Gb/s Adaptive FIR Equalizer With Continuous-Time Wide- Bandwidth Delay Line in 0.25-? m CMOS, IEEE Journal Of Solid-State Circuits, Vol. 41, No. 8, August 2006, pp. 1908-1918	
	30	LIU, C. Y. et al., "Comparison of Signaling and Equalization Schemes in High Speed SerDes (10-25Gbps)," DesignCon 2007, pp. 1-23	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	31	LIU, J. et al., "Equalization in High-Speed Communication Systems," IEEE CIRCUITS AND SYSTEMS MAGAZINE, 2004, pp. 1-14	
	32	LOWELL, DAVID E. et al., "Devirtualizable Virtual Machines Enabling General, Single-Node, Online Maintenance," Hewlett-Packard Laboratories, Oct. 7, 2004, pp. 1-13	
	33	LYNCH, JAMES P., "Nokia 6100 LCD Display Driver," 2010, pp. 1-55	
	34	MACKENZIE, I. SCOTI, et al., "The Tactile Touchpad," Conference on Human Factors in Computing Systems, 1997, pp. 1-5	
	35	MARKATOS, E., "On Using Network RAM as a non-volatile Buffer," August 1998, pp. 1-15	
	36	MARMOR, MICHAEL F., et al., "Visual Insignificance of the Foveal Pit," 2008, pp. 1-7	
	37	MAXIM, "1Gbps to 12.5Gbps; Passive Equalizer for Backplanes and Cables," MAX3787, 19-0406, Rev. 1, December 2005, pp. 1-15	
	38	MAXIM, "Designing a Simple, Small, Wide-band and Low-Power Equalizer for FR4 Copper Links (Featuring the MAX3785, IGbps to 6.4Gbps Equalizer)," DesignCon 2003, HFTA-06.0, 2003, pp. 1-14	
	39	McCALLUM, DAVID C. et al., "ARC-Pad: Absolute+Relative Cursor Positioning for Large Displays with a Mobile Touchscreen," University of Manitoba, Oct. 7, 2009, pp. 1-4	
	40	McCAMMON, ROB, "Android Solutions," Open Kernel Labs, 2009, slides 1-11	
	41	McCAMMON, ROB, "Streamlining Android Migration with Virtualization," ARM and Android, Jul. 19, 2012, pp. 1-4	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	42	McCAMMON, ROB, "Using Virtualization to Create Mass-Market Smartphones," Technology in Depth, 2011, pp. 1-4	
	43	MCGILL, KATHLEEN et al., "Process Migration for Resilient Applications," Dartmouth College, 2011, pp. 1-14	
	44	Memory Management 55 slides, CSE 451: Operating Systems Winter 2007, University of Washington, 1/28/2007	
	45	Micron Technology Announces Syncflash Memory, A New Flash Technology, 1999, pp. 1	
	46	MICRON, "NAND Flash Memory," 16Gb, 32Gb, 64Gb, 128Gb Asynchronous/Synchronous NAND Features, 2009, pp. 1-158	
	47	MIJAT, ROBERTO et al., "Virtualization is Coming to a Platform Near You," ARM, 2011, pp. 1-12	
	48	MOLNOS, ANCA et al., "Composable Processor Virtualization for Embedded Systems," 2010pp. 1-10.	
	49	MOORE, RYAN W. et al., "Addressing the Challenges of DBT for the ARM Architecture," University of Pittsburgh. 2009, pp. 1-10	
	50	MUTHITACHAROEN, ATHICHA, et al., "A Low-bandwidth Network File System," Laboratory for Computer Science, MIT, Department of Computer Science, NYU, Oct. 21, 2001, pp. 1-14	

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

EFS Web 2.1.18

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Patrick Caldwell/	Date (YYYY-MM-DD)	2019-10-02
Name/Print	Patrick Caldwell	Registration Number	44580

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

PTO/SB/08a (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	3358493	A	1967-12-19	Erich	Hydraulic press
	2	3524169	A	1970-08-11	K et al.	
	3	3633322	A	1972-01-11	Morcom	
	4	3659229	A	1972-04-25	Milton	
	5	3738166	A	1973-06-12	Fisher	
	6	3772685	A	1973-11-13	Masi	
	7	3777222	A	1973-12-04	Harris	
	8	3956986	A	1976-05-18	Wirz et al.	Inking system for printing machines

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	9	4067060	A	1978-01-03	Poussart et al.	
	10	4091418	A	1978-05-23	Ciciora	
	11	4152649	A	1979-05-01	Choquet	
	12	4293734	A	1981-10-06	William Pepper	
	13	4296756	A	1981-10-27	Dunning et al.	
	14	4302011	A	1981-11-24	William Pepper	
	15	4353552	A	1982-10-12	William Pepper	
	16	4524421	A	1985-06-18	Searby et al.	
	17	4554419	A	1985-11-19	King et al.	
	18	4636632	A	1987-01-13	Ando	
	19	4644101	A	1987-02-17	Jin et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	20	4694468	A	1987-09-15	Cullum	
	21	4731694	A	1988-03-15	Grabner et al.	
	22	4770281	A	1988-09-13	Hanks	
	23	5038142	A	1991-08-06	Flower et al.	
	24	5159159	A	1992-10-27	Asher	
	25	5205173	A	1993-04-27	Allen	
	26	5231381	A	1993-07-27	Duwaer	
	27	5241308	A	1993-08-31	Young	
	28	5247434	A	1993-09-21	Peterson et al.	
	29	5257413	A	1993-10-26	Warner et al.	
	30	5276787	A	1994-01-04	Searby	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	31	5285474	A	1994-02-08	Chow et al.	
	32	5305423	A	1994-04-19	Clynes	
	33	5309172	A	1994-05-03	Fox	
	34	5311302	A	1994-05-10	Berry et al.	
	35	5343650	A	1994-09-06	Swan	
	36	5371760	A	1994-12-06	Allen et al.	
	37	5386219	A	1995-01-31	Greanias et al.	
	38	5448263	A	1995-09-05	Martin	
	39	5463388	A	1995-10-31	Boie et al.	
	40	5483557	A	1996-01-09	Webb	
	41	5486286	A	1996-01-23	Peterson et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	42	5487827	A	1996-01-30	Peterson et al.	
	43	5510813	A	1996-04-23	Makinwa et al.	
	44	5557653	A	1996-09-17	Paterson et al.	
	45	5566096	A	1996-10-15	Wodlinger et al.	

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20120070973	A1	2012-03-22	Sandhu et al.	
	2	20120074584	A1	2012-03-29	Lee et al.	
	3	20120077314	A1	2012-03-29	Park et al.	
	4	2012007821	A1	2012-01-12	Zaliva	
	5	20120081290	A1	2012-04-05	Heo	Touch keyboard with phonetic character shortcuts

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	6	20120086670	A1	2012-04-12	Teil et al.	
	7	20120102401	A1	2012-04-26	Ijas et al.	Method and apparatus for providing text selection
	8	20120105358	A1	2012-05-03	Momeyer et al.	
	9	20120105367	A1	2012-05-03	Son et al.	Entire Document
	10	20120105370	A1	2012-05-03	Moore	
	11	20120106228	A1	2012-05-03	Lee	
	12	20120109037	A1	2012-05-03	Ellingboe et al.	
	13	20120109621	A1	2012-05-03	Rajan et al.	
	14	20120117507	A1	2012-05-10	Tseng et al.	Notification of Mobile Device Events
	15	20120124281	A1	2012-05-17	Rajan et al.	
	16	20120126883	A1	2012-05-24	Juengling	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	17	20120127685	A1	2012-05-24	Corisis et al.	
	18	20120135567	A1	2012-05-31	Akram et al.	
	19	20120135569	A1	2012-05-31	Corisis	
	20	2012013566	A1	2012-01-19	Chung	
	21	20120138927	A1	2012-06-07	KANG	
	22	20120140583	A1	2012-06-07	CHUNG	
	23	20120147684	A1	2012-06-14	Schakel et al.	
	24	20120154328	A1	2012-06-21	Kono	
	25	20120159387	A1	2012-06-21	OH et al.	Icon display method and apparatus in portable terminal
	26	20120162087	A1	2012-06-28	Hou	
	27	20120180043	A1	2012-07-12	Tsirkin et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	28	20120182249	A1	2012-07-19	Endo et al.	
	29	20120192108	A1	2012-07-26	Kolb	Gesture-based menu controls
	30	20120194461	A1	2012-08-02	Lim	
	31	20120194462	A1	2012-08-02	Lim	
	32	2012019448	A1	2012-01-26	Pitkanen et al.	
	33	20120201088	A1	2012-08-09	Rajan et al.	
	34	20120203958	A1	2012-08-09	Jones et al.	
	35	20120203993	A1	2012-08-09	Virgin et al.	
	36	20120204079	A1	2012-08-09	Takefman et al.	
	37	20120206165	A1	2012-08-16	Ferolito et al.	
	38	20120212420	A1	2012-08-23	Shin	Multi-touch input control system

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	39	20120223900	A1	2012-09-06	JIYAMA et al.	
	40	20120226924	A1	2012-09-06	Rajan et al.	
	41	20120229403	A1	2012-09-13	Jong et al.	
	42	20120229404	A1	2012-09-13	Jong et al.	
	43	20120229405	A1	2012-09-13	Jong et al.	
	44	20120231853	A1	2012-09-13	Takahashi et al.	
	45	2012023450	A1	2012-01-26	Noto et al.	
	46	20120239874	A1	2012-09-20	Lee et al.	
	47	20120240044	A1	2012-09-20	Johnson et al.	
	48	20120242610	A1	2012-09-27	Yasumatsu	
	49	20120244348	A1	2012-09-27	Park et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	50	20120250386	A1	2012-10-04	Lee et al.	
	51	20120252426	A1	2012-10-04	Nagaoka et al.	Electronic device and scheduling control computer program
	52	20120254519	A1	2012-10-04	Ellis	
	53	20120254747	A1	2012-10-04	Bocirnea	
	54	20120266072	A1	2012-10-18	Karaoguz	
	55	20120268361	A1	2012-10-25	Shotel et al.	Hand-held electronic device and operation method applicable thereto
	56	20120271990	A1	2012-10-25	Chen et al.	
	57	20120274662	A1	2012-11-01	Kim et al.	
	58	20120289290	A1	2012-11-15	Chae et al.	Transferring objects between application windows displayed on mobile terminal
	59	20120290946	A1	2012-11-15	Schrock et al.	Multi-screen email client
	60	20120293449	A1	2012-11-22	Dietz	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	61	20120306764	A1	2012-12-06	Kamibeppu	
	62	20120306765	A1	2012-12-06	Moore	
	63	20120306766	A1	2012-12-06	Moore	
	64	20120306775	A1	2012-12-06	MIYACHI et al.	Computer-readable storage medium having stored thereon input processing program, input processing apparatus, input processing method, and input
	65	20120312806	A1	2012-12-13	Burt et al.	Demand supply management override options
	66	20120313888	A1	2012-12-13	Lee et al.	
	67	20120317433	A1	2012-12-13	Ellis et al.	
	68	2012032876	A1	2012-02-09	Tabe	
	69	2012034954	A1	2012-02-09	Tabe	
	70	2012044172	A1	2012-02-23	Ohki et al.	
	71	2012056846	A1	2012-03-08	Zaliva	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	72	2012060123	A1	2012-03-08	Smith	
	73	2012086670	A1	2012-04-12	Teil et al.	
	74	2012105367	A1	2012-05-03	Son et al.	
	75	2012105370	A1	2012-05-03	Moore	
	76	2012109037	A1	2012-05-03	Ellingboe et al.	
	77	2012154328	A1	2012-06-21	Kono et al.	
	78	2012162087	A1	2012-06-28	Hou	
	79	2012182249	A1	2012-07-19	Endo et al.	
	80	2012182296	A1	2012-07-19	Han	
	81	2012194461	A1	2012-08-02	Lim	
	82	2012194462	A1	2012-08-02	Lim	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	83	2012223900	A1	2012-09-06	Jiyama et al.	
	84	2012229403	A1	2012-09-13	De et al.	
	85	2012229404	A1	2012-09-13	De et al.	
	86	2012229405	A1	2012-09-13	De et al.	
	87	2012231853	A1	2012-09-13	Takahashi et al.	
	88	2012240044	A1	2012-09-20	Johnson et al.	
	89	2012242610	A1	2012-09-27	Yasumatsu	
	90	2012244348	A1	2012-09-27	Park et al.	
	91	2012254747	A1	2012-10-04	Bocirnea	
	92	2012266072	A1	2012-10-18	Karaoguz et al.	
	93	2012274662	A1	2012-11-01	Kim et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	94	2012293449	A1	2012-11-22	Dietz	
	95	2012306764	A1	2012-12-06	Kamibeppu	
	96	2012306765	A1	2012-12-06	Moore	
	97	2012306766	A1	2012-12-06	Moore	
	98	2012306788	A1	2012-12-06	Chen et al.	
	99	2012313888	A1	2012-12-13	Lee et al.	
	100	20130002610	A1	2013-01-03	Ho et al.	
	101	20130007399	A1	2013-01-03	Smith et al.	
	102	20130009869	A1	2013-01-10	Wilensky	
	103	20130016586	A1	2013-01-17	Craig	Fish finder with simplified controls
	104	20130019076	A1	2013-01-17	Amidi et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	105	20130021285	A1	2013-01-24	Kimura et al.	
	106	20130021295	A1	2013-01-24	Kimura et al.	
	107	2013002610	A1	2013-01-03	Ho et al.	
	108	20130027350	A1	2013-01-31	Liaw et al.	
	109	20130027358	A1	2013-01-31	Liaw et al.	
	110	20130050122	A1	2013-02-28	KANG et al.	Controlling user equipment as touch pad for external device connected thereto
	111	20130050141	A1	2013-02-28	PARK et al.	Input device and method for terminal equipment having a touch module
	112	20130054881	A1	2013-02-28	Ellis et al.	
	113	20130055134	A1	2013-02-28	Knor	
	114	20130060994	A1	2013-03-07	Higgins et al.	
	115	20130061019	A1	2013-03-07	Fitzpatrick et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	116	20130061101	A1	2013-03-07	Fitzpatrick et al.	
	117	20130063364	A1	2013-03-14	Moore	
	118	20130063389	A1	2013-03-14	Moore	
	119	20130076941	A1	2013-03-28	Palanciuc et al.	
	120	20130082970	A1	2013-04-04	Frey et al.	
	121	20130082979	A1	2013-04-04	Rabu et al.	
	122	20130085215	A1	2013-04-04	SHITARA et al.	
	123	20130086309	A1	2013-04-04	Lee et al.	
	124	20130093687	A1	2013-04-18	Papakipos et al.	
	125	2013009869	A1	2013-01-10	Wilensky	
	126	20130100070	A1	2013-04-25	Zheng et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	127	20130100087	A1	2013-04-25	Liaw et al.	
	128	20130102371	A1	2013-04-25	Silva	
	129	20130103377	A1	2013-04-25	Rajan et al.	
	130	20130103897	A1	2013-04-25	Rajan et al.	
	131	20130106802	A1	2013-05-02	Liaw et al.	
	132	20130109928	A1	2013-05-02	Menzel	
	133	20130120284	A1	2013-05-16	Chen et al.	
	134	20130120302	A1	2013-05-16	Kang et al.	
	135	20130124993	A1	2013-05-16	Daisy	
	136	20130125322	A1	2013-05-23	Sakashita et al.	
	137	20130127765	A1	2013-05-23	Behdasht et al.	Entire Document

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	138	20130132661	A1	2013-05-23	Schakel et al.	
	139	20130132779	A1	2013-05-23	Smith et al.	
	140	20130132838	A1	2013-05-23	Daisy	
	141	20130141388	A1	2013-06-06	Ludwig et al.	
	142	20130154968	A1	2013-06-20	Tomimori	Portable terminal and display control method thereof
	143	20130154981	A1	2013-06-20	Park et al.	Method and apparatus for providing a shortcut number in a user device
	144	20130160514	A1	2013-06-27	Mitze	Bending-straightening machine for a long workpiece, device for feeding in and removing said workpiece and method for bend-straightening long workpieces
	145	20130178701	A1	2013-07-11	Pless et al.	Integrated Delivery and Visualization Tool for a Neuromodulation System
	146	20130181928	A1	2013-07-18	Li	
	147	20130181931	A1	2013-07-18	Kinoshita	
	148	20130188336	A1	2013-07-25	Yuan et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	149	20130188424	A1	2013-07-25	Rajan et al.	
	150	20130191585	A1	2013-07-25	Rajan et al.	
	151	20130205102	A1	2013-08-08	Jones et al.	
	152	2013021285	A1	2013-01-24	Kimura et al.	
	153	2013021295	A1	2013-01-24	Kimura et al.	
	154	20130215064	A1	2013-08-22	Cholewin et al.	
	155	20130238849	A1	2013-09-12	Amer et al.	
	156	20130254456	A1	2013-09-26	Chen et al.	
	157	20130254497	A1	2013-09-26	Chen et al.	
	158	20130268853	A1	2013-10-10	Gommier et al.	Mobile terminal comprising a man/ machine interface
	159	2013027350	A1	2013-01-31	Liaw et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	160	2013027358	A1	2013-01-31	Liaw et al.	
	161	20130275795	A1	2013-10-17	Ellis et al.	
	162	20130282962	A1	2013-10-24	Rub et al.	
	163	20130307809	A1	2013-11-21	Sudou	
	164	20130307827	A1	2013-11-21	Reisman et al.	
	165	20130321317	A1	2013-12-05	Hirukawa	
	166	20130332796	A1	2013-12-12	Ellis	
	167	20130332876	A1	2013-12-12	Johnson et al.	
	168	20130335357	A1	2013-12-19	Hou	
	169	2013044062	A1	2013-02-21	Bose et al.	
	170	2013055134	A1	2013-02-28	Knor	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	171	2013063364	A1	2013-03-14	Moore	
	172	2013063389	A1	2013-03-14	Moore	
	173	2013076649	A1	2013-03-28	Myers et al.	
	174	2013076941	A1	2013-03-28	Palanciuc et al.	
	175	2013082970	A1	2013-04-04	Frey et al.	
	176	2013082979	A1	2013-04-04	Rabu et al.	
	177	2013085215	A1	2013-04-04	Shitara et al.	
	178	2013100070	A1	2013-04-25	Zheng et al.	
	179	2013100087	A1	2013-04-25	Liaw et al.	
	180	2013102371	A1	2013-04-25	Silva et al.	
	181	2013106802	A1	2013-05-02	Liaw et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	182	2013109928	A1	2013-05-02	Menzel	
	183	2013120284	A1	2013-05-16	Chen et al.	
	184	2013120302	A1	2013-05-16	Kang et al.	
	185	2013124993	A1	2013-05-16	Daisy et al.	
	186	2013125322	A1	2013-05-23	Sakashita et al.	
	187	2013127765	A1	2013-05-23	Behdasht et al.	
	188	2013132838	A1	2013-05-23	Daisy et al.	
	189	2013141388	A1	2013-06-06	Ludwig et al.	
	190	2013181928	A1	2013-07-18	Li	
	191	2013181931	A1	2013-07-18	Kinoshita	
	192	2013188336	A1	2013-07-25	Yuan et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	193	2013215064	A1	2013-08-22	Cholewin et al.	
	194	2013307809	A1	2013-11-21	Sudou	
	195	2013307827	A1	2013-11-21	Reisman et al.	
	196	2013321317	A1	2013-12-05	Hirukawa	
	197	2013321340	A1	2013-12-05	Seo et al.	
	198	2013332876	A1	2013-12-12	Johnson et al.	
	199	2013335357	A1	2013-12-19	Hou	
	200	20140006948	A1	2014-01-02	Yang et al.	Method and mobile phone for capturing audio file or video file
	201	20140028601	A1	2014-01-30	Moore	
	202	20140040568	A1	2014-02-06	Lee et al.	
	203	20140040569	A1	2014-02-06	Solomon et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	204	20140057102	A1	2014-02-27	Park et al.	
	205	20140066139	A1	2014-03-06	Ure	
	206	20140095769	A1	2014-04-03	Borkenhagen	
	207	20140096092	A1	2014-04-03	Johnson	
	208	20140099235	A1	2014-04-10	Ellingboe et al.	
	209	20140104219	A1	2014-04-17	Ludwig	
	210	20140104220	A1	2014-04-17	Ludwig	
	211	20140132548	A1	2014-05-15	Ludwig	
	212	20140132549	A1	2014-05-15	Ludwig	
	213	20140134433	A1	2014-05-15	Park et al.	
	214	20140134434	A1	2014-05-15	Park et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	215	20140139473	A1	2014-05-22	Kang et al.	
	216	20140143659	A1	2014-05-22	Xue et al.	Method for Processing Documents by Terminal Having Touch Screen and Terminal Having Touch Screen
	217	20140156919	A1	2014-06-05	Chen et al.	
	218	20140156920	A1	2014-06-05	Chen et al.	
	219	20140168128	A1	2014-06-19	Reisman et al.	
	220	20140191962	A1	2014-07-10	Kim	
	221	20140208248	A1	2014-07-24	Davidson	
	222	20140210727	A1	2014-07-31	Wassingbo	Electronic device with touch-based deactivation of touch input signaling
	223	20140210786	A1	2014-07-31	Ludwig	
	224	20140247216	A1	2014-09-04	Fang	Trigger and control method and system of human-computer interaction operation command and laser emission device
	225	2014028601	A1	2014-01-30	Moore	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	226	20140340358	A1	2014-11-20	MARTINOLI	
	227	20140368455	A1	2014-12-18	Croisonnier et al.	
	228	2014057102	A1	2014-02-27	Park et al.	
	229	2014066139	A1	2014-03-06	Ure	
	230	2014096092	A1	2014-04-03	Johnson	
	231	2014099235	A1	2014-04-10	Ellingboe et al.	
	232	2014104219	A1	2014-04-17	Ludwig	
	233	2014104220	A1	2014-04-17	Ludwig	
	234	2014132548	A1	2014-05-15	Ludwig	
	235	2014132549	A1	2014-05-15	Ludwig	
	236	2014134433	A1	2014-05-15	Park et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	237	2014134434	A1	2014-05-15	Park et al.	
	238	2014139473	A1	2014-05-22	Kang et al.	
	239	2014168128	A1	2014-06-19	Reisman et al.	
	240	2014191962	A1	2014-07-10	Kim	
	241	2014208248	A1	2014-07-24	Davidson	
	242	2014210786	A1	2014-07-31	Ludwig	
	243	2014340358	A1	2014-11-20	Martinoli	
	244	2014368455	A1	2014-12-18	Croisonnier et al.	
	245	20150068526	A1	2015-03-12	Habashi	
	246	20150097791	A1	2015-04-09	Lisseman et al.	
	247	20150197670	A1	2015-07-16	SHITARA et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	248	20150212571	A1	2015-07-30	Kitada	
	249	20150234518	A1	2015-08-20	Teller et al.	
	250	20150253609	A1	2015-09-10	ZHOU et al.	
	251	2015068526	A1	2015-03-12	Habashi	
	252	2015197670	A1	2015-07-16	Shitara et al.	
	253	2015234518	A1	2015-08-20	Teller et al.	
	254	2015253609	A1	2015-09-10	Zhou et al.	
	255	20160226713	A1	2016-08-04	Dellinger et al.	Device, method, and graphical user interface for establishing a relationship and connection between two devices

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

EFS Web 2.1.18

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

NON-PATENT LITERATURE DOCUMENTS Remove			
Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T5
	1	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 1: Basic Architecture, Order Number: 253665-037US, January 2011, pp. 1-540 (2 of 8)	
	2	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 1: Basic Architecture, Order Number: 253665-037US, January 2011, pp. 1-540 (3 of 8)	
	3	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 1: Basic Architecture, Order Number: 253665-037US, January 2011, pp. 1-540 (4 of 8)	
	4	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 1: Basic Architecture, Order Number: 253665-037US, January 2011, pp. 1-540 (5 of 8)	
	5	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 1: Basic Architecture, Order Number: 253665-037US, January 2011, pp. 1-540 (6 of 8)	
	6	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 1: Basic Architecture, Order Number: 253665-037US, January 2011, pp. 1-540 (7 of 8)	
	7	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 1: Basic Architecture, Order Number: 253665-037US, January 2011, pp. 1-540 (8 of 8)	
	8	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 2A: Instruction Set Reference, A-M, Order Number: 253666-037US, January 2011, pp. 1-848 (1 of 10)	
	9	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 2A: Instruction Set Reference, A-M, Order Number: 253666-037US, January 2011, pp. 1-848 (2 of 10)	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	10	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 2A: Instruction Set Reference, A-M, Order Number: 253666-037US, January 2011, pp. 1-848 (3 of 10)	
	11	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 2A: Instruction Set Reference, A-M, Order Number: 253666-037US, January 2011, pp. 1-848 (4 of 10)	
	12	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 2A: Instruction Set Reference, A-M, Order Number: 253666-037US, January 2011, pp. 1-848 (5 of 10)	
	13	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 2A: Instruction Set Reference, A-M, Order Number: 253666-037US, January 2011, pp. 1-848 (6 of 10)	
	14	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 2A: Instruction Set Reference, A-M, Order Number: 253666-037US, January 2011, pp. 1-848 (7 of 10)	
	15	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 2A: Instruction Set Reference, A-M, Order Number: 253666-037US, January 2011, pp. 1-848 (8 of 10)	
	16	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 2A: Instruction Set Reference, A-M, Order Number: 253666-037US, January 2011, pp. 1-848 (9 of 10)	
	17	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 2A: Instruction Set Reference, A-M, Order Number: 253666-037US, January 2011, pp. 1-848 (10 of 10)	
	18	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 2A: Instruction Set Reference, A-M, Order Number: 253666-037US, January 2011, pp. 1-848	
	19	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3A: System Programming Guide, Part 1, Order Number: 253668-037US, January 2011, pp. 1-842	
	20	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3A: System Programming Guide, Part 1, Order Number: 253668-037US, January 2011, pp. 1-842 (1 of 12)	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	21	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3A: System Programming Guide, Part 1, Order Number: 253668-037US, January 2011, pp. 1-842 (2 of 12)	
	22	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3A: System Programming Guide, Part 1, Order Number: 253668-037US, January 2011, pp. 1-842 (3 of 12)	
	23	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3A: System Programming Guide, Part 1, Order Number: 253668-037US, January 2011, pp. 1-842 (4 of 12)	
	24	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3A: System Programming Guide, Part 1, Order Number: 253668-037US, January 2011, pp. 1-842 (5 of 12)	
	25	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3A: System Programming Guide, Part 1, Order Number: 253668-037US, January 2011, pp. 1-842 (6 of 12)	
	26	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3A: System Programming Guide, Part 1, Order Number: 253668-037US, January 2011, pp. 1-842 (7 of 12)	
	27	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3A: System Programming Guide, Part 1, Order Number: 253668-037US, January 2011, pp. 1-842 (8 of 12)	
	28	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3A: System Programming Guide, Part 1, Order Number: 253668-037US, January 2011, pp. 1-842 (9 of 12)	
	29	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3A: System Programming Guide, Part 1, Order Number: 253668-037US, January 2011, pp. 1-842 (10 of 12)	
	30	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3A: System Programming Guide, Part 1, Order Number: 253668-037US, January 2011, pp. 1-842 (11 of 12)	
	31	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3A: System Programming Guide, Part 1, Order Number: 253668-037US, January 2011, pp. 1-842 (12 of 12)	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	32	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3B: System Programming Guide, Part 2, Order Number: 253669-034US, March 2010, pp. 1-936 (1 of 13)	
	33	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3B: System Programming Guide, Part 2, Order Number: 253669-034US, March 2010, pp. 1-936 (2 of 13)	
	34	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3B: System Programming Guide, Part 2, Order Number: 253669-034US, March 2010, pp. 1-936 (3 of 13)	
	35	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3B: System Programming Guide, Part 2, Order Number: 253669-034US, March 2010, pp. 1-936 (4 of 13)	
	36	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3B: System Programming Guide, Part 2, Order Number: 253669-034US, March 2010, pp. 1-936 (5 of 13)	
	37	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3B: System Programming Guide, Part 2, Order Number: 253669-034US, March 2010, pp. 1-936 (6 of 13)	
	38	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3B: System Programming Guide, Part 2, Order Number: 253669-034US, March 2010, pp. 1-936 (7 of 13)	
	39	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3B: System Programming Guide, Part 2, Order Number: 253669-034US, March 2010, pp. 1-936 (8 of 13)	
	40	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3B: System Programming Guide, Part 2, Order Number: 253669-034US, March 2010, pp. 1-936 (9 of 13)	
	41	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3B: System Programming Guide, Part 2, Order Number: 253669-034US, March 2010, pp. 1-936 (10 of 13)	
	42	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3B: System Programming Guide, Part 2, Order Number: 253669-034US, March 2010, pp. 1-936 (11 of 13)	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	43	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3B: System Programming Guide, Part 2, Order Number: 253669-034US, March 2010, pp. 1-936 (12 of 13)	
	44	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3B: System Programming Guide, Part 2, Order Number: 253669-034US, March 2010, pp. 1-936 (13 of 13)	
	45	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3B: System Programming Guide, Part 2, Order Number: 253669-034US, March 2010, pp. 1-936	
	46	INTEL, "Intel® GW80314 I/O Companion Chip," Datasheet, Order Number: 273757-003US, November 2004, pp. 1-88	
	47	International Search Report and Written Opinion--PCTUS2012035992--ISAEPO--Oct 4 2012.	
	48	International Search Report PCT Application No. PCTUS2009065741 dated Feb. 24 2010 3 pages.	
	49	International Written Opinion PCT Application No. PCTUS2009065741 dated Feb. 24 2010 5 pages.	
	50	IQBAL, Asif et al., "An Overview of Microkernel, Hypervisor and Microvisor Virtualization Approaches for Embedded Systems," Lund University, 2009, pp. 1-15	

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Patrick Caldwell/	Date (YYYY-MM-DD)	2019-10-02
Name/Print	Patrick Caldwell	Registration Number	44580

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99**)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20090002312	A1	2009-01-01	Son	
	2	20090007684	A1	2009-01-08	Kurtz et al.	
	3	20090014876	A1	2009-01-15	Youn et al.	
	4	20090022256	A1	2009-01-22	Fitzgerald	
	5	2009002312	A1	2009-01-01	Son	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	6	20090024789	A1	2009-01-22	Rajan et al.	
	7	20090026600	A1	2009-01-29	Koon et al.	
	8	20090027836	A1	2009-01-29	Wakihara	
	9	20090036111	A1	2009-02-05	Danford et al.	
	10	20090036176	A1	2009-02-05	Ure	
	11	20090039492	A1	2009-02-12	KANG et al.	
	12	20090045489	A1	2009-02-19	Koon et al.	
	13	20090046110	A1	2009-02-19	Sadler et al.	
	14	20090051659	A1	2009-02-26	Mickelborough	
	15	20090052218	A1	2009-02-26	KANG	
	16	20090061823	A1	2009-03-05	Chu	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	17	20090065948	A1	2009-03-12	Wang	
	18	20090066660	A1	2009-03-12	Ure	
	19	20090067256	A1	2009-03-12	Bhattacharyya et al.	
	20	20090072662	A1	2009-03-19	Sadler et al.	
	21	20090073138	A1	2009-03-19	Lee et al.	
	22	20090085225	A1	2009-04-02	Park	
	23	20090085608	A1	2009-04-02	Alzheimer	
	24	20090086420	A1	2009-04-02	Stockham et al.	
	25	20090090950	A1	2009-04-09	Forbes et al.	
	26	20090091536	A1	2009-04-09	Callaghan	
	27	20090091962	A1	2009-04-09	Chung et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	28	20090103675	A1	2009-04-23	Moghaddam et al.	
	29	20090127668	A1	2009-05-21	Choi	
	30	20090128991	A1	2009-05-21	Mauritzson	
	31	20090140985	A1	2009-06-04	Liu	
	32	20090143652	A1	2009-06-04	Warburton et al.	
	33	20090153340	A1	2009-06-18	Pinder et al.	
	34	20090158152	A1	2009-06-18	Kodimer et al.	
	35	20090160781	A1	2009-06-25	Henderson et al.	
	36	20090166846	A1	2009-07-02	Pratt et al.	
	37	20090179780	A1	2009-07-16	Tambe	Hand-held thumb touch typable ascii/ unicode keypad for a remote, mobile telephone or a pda
	38	20090180257	A1	2009-07-16	Park et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	39	20090184921	A1	2009-07-23	Scott et al.	
	40	20090197394	A1	2009-08-06	Parekh	
	41	20090206431	A1	2009-08-20	Bolken et al.	
	42	20090213066	A1	2009-08-27	Hardacker et al.	
	43	2009022256	A1	2009-01-22	Fitzgerald	
	44	20090224822	A1	2009-09-10	Alzheimer et al.	
	45	20090225053	A1	2009-09-10	HU	
	46	20090237970	A1	2009-09-24	Chung	
	47	20090255705	A1	2009-10-15	Pratt	
	48	20090256807	A1	2009-10-15	Nurmi	
	49	20090259806	A1	2009-10-15	Kilzer et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	50	20090261457	A1	2009-10-22	Pratt	
	51	20090271731	A1	2009-10-29	Lin et al.	
	52	20090285031	A1	2009-11-19	Rajan et al.	
	53	20090289912	A1	2009-11-26	Chen et al.	
	54	20090295747	A1	2009-12-03	Hsieh et al.	
	55	20090296341	A1	2009-12-03	ELDERSHAW	
	56	20090300314	A1	2009-12-03	LaBerge et al.	
	57	20090300444	A1	2009-12-03	Jeddeloh	
	58	20090302484	A1	2009-12-10	Lee et al.	
	59	20090309142	A1	2009-12-17	Akram	
	60	20090315741	A1	2009-12-24	Kim	Method of providing more bigger effect of button

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	61	20090319703	A1	2009-12-24	Chung	
	62	20090321861	A1	2009-12-31	Oliver et al.	
	63	20090321947	A1	2009-12-31	Pratt	
	64	20090323206	A1	2009-12-31	Oliver et al.	
	65	20090327979	A1	2009-12-31	Haverinen et al.	User interface for a peripheral device
	66	2009036176	A1	2009-02-05	Ure	
	67	2009046110	A1	2009-02-19	Sadler et al.	
	68	2009051659	A1	2009-02-26	Mickelborough	
	69	2009058829	A1	2009-03-05	Kim et al.	
	70	2009066660	A1	2009-03-12	Ure	
	71	2009073138	A1	2009-03-19	Lee et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	72	2009083665	A1	2009-03-26	Anttila et al.	
	73	2009085881	A1	2009-04-02	Keam	
	74	2009086420	A1	2009-04-02	Stockham et al.	
	75	2009091536	A1	2009-04-09	Callaghan	
	76	2009143652	A1	2009-06-04	Warburton et al.	
	77	2009158152	A1	2009-06-18	Kodimer et al.	
	78	2009160781	A1	2009-06-25	Henderson et al.	
	79	2009213066	A1	2009-08-27	Hardacker et al.	
	80	2009225053	A1	2009-09-10	Hu	
	81	2009231290	A1	2009-09-17	Chen	
	82	2009271731	A1	2009-10-29	Lin et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	83	2009289912	A1	2009-11-26	Chen et al.	
	84	2009295747	A1	2009-12-03	Hsieh et al.	
	85	20100005390	A1	2010-01-07	Bong	
	86	20100017872	A1	2010-01-21	Goertz et al.	
	87	20100020039	A1	2010-01-28	Ricks et al.	
	88	20100026640	A1	2010-02-04	Kim et al.	
	89	20100035656	A1	2010-02-11	Pan	
	90	20100039393	A1	2010-02-18	Pratt et al.	
	91	20100045612	A1	2010-02-25	Mölne	
	92	20100052880	A1	2010-03-04	Laitinen et al.	
	93	20100053103	A1	2010-03-04	NO et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	94	20100053116	A1	2010-03-04	Daverman et al.	
	95	20100053532	A1	2010-03-04	LAI	
	96	2010005390	A1	2010-01-07	Bong	
	97	20100066764	A1	2010-03-18	Refai	
	98	20100077829	A1	2010-04-01	Batista et al.	
	99	20100079398	A1	2010-04-01	Shen et al.	
	100	20100085500	A1	2010-04-08	Kim	
	101	20100090973	A1	2010-04-15	Algreatly	
	102	20100097347	A1	2010-04-22	Lin	
	103	20100110748	A1	2010-05-06	Best	
	104	20100117959	A1	2010-05-13	Hong et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	105	20100134429	A1	2010-06-03	You et al.	
	106	20100134448	A1	2010-06-03	Park et al.	
	107	20100149101	A1	2010-06-17	Guo et al.	
	108	20100149124	A1	2010-06-17	Kim et al.	
	109	20100149129	A1	2010-06-17	Homma et al.	
	110	20100156814	A1	2010-06-24	Weber et al.	
	111	20100156818	A1	2010-06-24	Burrough et al.	
	112	20100156823	A1	2010-06-24	Paleczny et al.	
	113	20100164745	A1	2010-07-01	Migos et al.	
	114	20100164884	A1	2010-07-01	Chiu et al.	
	115	20100171711	A1	2010-07-08	Mak-Fan et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	116	20100177057	A1	2010-07-15	Flint et al.	
	117	2010017872	A1	2010-01-21	Goertz et al.	
	118	20100188353	A1	2010-07-29	Yoon et al.	
	119	20100188365	A1	2010-07-29	Tamaki et al.	
	120	20100194709	A1	2010-08-05	Tamaki et al.	
	121	2010020039	A1	2010-01-28	Ricks et al.	
	122	20100201651	A1	2010-08-12	Baucom et al.	
	123	20100206560	A1	2010-08-19	Atencio	
	124	20100207900	A1	2010-08-19	Kung et al.	
	125	20100208082	A1	2010-08-19	Buchner et al.	
	126	20100214239	A1	2010-08-26	Wu	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	127	20100214499	A1	2010-08-26	Sanelle et al.	
	128	20100220065	A1	2010-09-02	Ma	
	129	20100222735	A1	2010-09-02	Plahey et al.	
	130	20100225608	A1	2010-09-09	ZHOU et al.	
	131	20100240390	A1	2010-09-23	Russ et al.	
	132	20100241984	A1	2010-09-23	Nurmi et al.	Method and apparatus for displaying the non alphanumeric character based on a user input
	133	20100245282	A1	2010-09-30	Lai	Touch-screen based input method and system, and electronic device using same
	134	20100257304	A1	2010-10-07	Rajan et al.	
	135	20100259490	A1	2010-10-14	Lee	
	136	2010026640	A1	2010-02-04	Kim et al.	
	137	20100271888	A1	2010-10-28	Rajan et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	138	20100277432	A1	2010-11-04	Tsai	
	139	20100281280	A1	2010-11-04	Rajan et al.	
	140	20100293460	A1	2010-11-18	Budelli	
	141	20100302281	A1	2010-12-02	Kim	Mobile device capable of touch-based zooming and control method thereof
	142	20100332635	A1	2010-12-30	ROGEL et al.	
	143	2010035656	A1	2010-02-11	Pan	
	144	2010045612	A1	2010-02-25	Moelne	
	145	2010045621	A1	2010-02-25	Kang et al.	
	146	2010053103	A1	2010-03-04	No et al.	
	147	2010053532	A1	2010-03-04	Lai	
	148	2010058211	A1	2010-03-04	Lee et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	149	2010077829	A1	2010-04-01	Batista et al.	
	150	2010079398	A1	2010-04-01	Shen et al.	
	151	2010085500	A1	2010-04-08	Kim	
	152	2010088654	A1	2010-04-08	Henhoeffer	
	153	2010090982	A1	2010-04-15	Oba et al.	
	154	2010097347	A1	2010-04-22	Lin	
	155	2010127983	A1	2010-05-27	Irani et al.	
	156	2010134429	A1	2010-06-03	You et al.	
	157	2010134448	A1	2010-06-03	Park et al.	
	158	2010149101	A1	2010-06-17	Guo et al.	
	159	2010149124	A1	2010-06-17	Kim et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	160	2010164884	A1	2010-07-01	Chiu et al.	
	161	2010188327	A1	2010-07-29	Frid et al.	
	162	2010188365	A1	2010-07-29	Tamaki et al.	
	163	2010194709	A1	2010-08-05	Tamaki et al.	
	164	2010201651	A1	2010-08-12	Baucom et al.	
	165	2010206560	A1	2010-08-19	Atencio	
	166	2010207900	A1	2010-08-19	Kung et al.	
	167	2010214499	A1	2010-08-26	Sanelle et al.	
	168	2010222735	A1	2010-09-02	Plahey et al.	
	169	2010225608	A1	2010-09-09	Zhou et al.	
	170	2010241989	A1	2010-09-23	Wen et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	171	2010251119	A1	2010-09-30	Geppert et al.	
	172	2010259490	A1	2010-10-14	Lee	
	173	2010277432	A1	2010-11-04	Tsai	
	174	2010328230	A1	2010-12-30	Faubert et al.	
	175	20110001706	A1	2011-01-06	Sanford et al.	
	176	20110007023	A1	2011-01-13	Abrahamsson et al.	
	177	20110012921	A1	2011-01-20	Cholewin et al.	
	178	20110016250	A1	2011-01-20	Lee et al.	
	179	2011001706	A1	2011-01-06	Sanford et al.	
	180	20110018695	A1	2011-01-27	Bells et al.	
	181	20110025969	A1	2011-02-03	Chen et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	182	20110029868	A1	2011-02-03	Moran et al.	User interfaces for small electronic devices
	183	20110035540	A1	2011-02-10	Fitzgerald et al.	
	184	20110037609	A1	2011-02-17	KIM et al.	
	185	20110037726	A1	2011-02-17	Lee	
	186	20110044064	A1	2011-02-24	Hu et al.	
	187	20110050576	A1	2011-03-03	Forutanpour et al.	Entire Document
	188	20110050588	A1	2011-03-03	Li et al.	Entire Document
	189	20110050591	A1	2011-03-03	Kim et al.	
	190	20110050592	A1	2011-03-03	Kim et al.	
	191	20110050593	A1	2011-03-03	Kim et al.	
	192	20110050594	A1	2011-03-03	Kim et al.	Entire Document

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	193	20110050608	A1	2011-03-03	Homma et al.	
	194	20110050653	A1	2011-03-03	MIYAZAWA et al.	
	195	20110051334	A1	2011-03-03	Griffith et al.	
	196	20110057613	A1	2011-03-10	Taguchi et al.	Charge status display apparatus and electric power supply control apparatus
	197	20110063248	A1	2011-03-17	YOON	
	198	20110066790	A1	2011-03-17	Mogul et al.	
	199	2011007023	A1	2011-01-13	Abrahamsson et al.	
	200	20110080417	A1	2011-04-07	Lin et al.	
	201	20110088416	A1	2011-04-21	Koethler	
	202	20110095783	A1	2011-04-28	Ferolito et al.	
	203	20110102336	A1	2011-05-05	SEOK et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	204	20110102347	A1	2011-05-05	LIM et al.	
	205	20110107212	A1	2011-05-05	JEONG	
	206	20110109573	A1	2011-05-12	Deslippe et al.	
	207	20110109829	A1	2011-05-12	Mathew et al.	
	208	20110110047	A1	2011-05-12	Pauley et al.	
	209	20110113208	A1	2011-05-12	Jouppi et al.	
	210	20110115738	A1	2011-05-19	Suzuki et al.	
	211	20110117968	A1	2011-05-19	Eromaki	
	212	20110118029	A1	2011-05-19	Lukas et al.	
	213	20110122084	A1	2011-05-26	Jeon et al.	
	214	2011012921	A1	2011-01-20	Cholewin et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	215	20110141052	A1	2011-06-16	Bernstein et al.	
	216	20110152739	A1	2011-06-23	Roncadi et al.	
	217	20110164047	A1	2011-07-07	Pance	
	218	20110169745	A1	2011-07-14	Fang et al.	
	219	20110169775	A1	2011-07-14	Liaw et al.	
	220	20110175844	A1	2011-07-21	Berggren	
	221	20110175845	A1	2011-07-21	Honda et al.	
	222	20110175902	A1	2011-07-21	Mahowald	
	223	20110181552	A1	2011-07-28	Goertz et al.	
	224	20110205446	A1	2011-08-25	Hardacker et al.	
	225	20110210942	A1	2011-09-01	Kitamori et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	226	20110210943	A1	2011-09-01	Zaliva	
	227	20110227830	A1	2011-09-22	Chun	Method and apparatus for safe disconnection of external devices from a computer
	228	20110227836	A1	2011-09-22	Li et al.	
	229	20110227877	A1	2011-09-22	Chen	
	230	20110239110	A1	2011-09-29	Garrett et al.	
	231	20110248941	A1	2011-10-13	Abdo et al.	
	232	20110254793	A1	2011-10-20	Ban et al.	
	233	2011025969	A1	2011-02-03	Chen et al.	
	234	20110260994	A1	2011-10-27	Saynac et al.	
	235	20110273394	A1	2011-11-10	Young et al.	
	236	20110273396	A1	2011-11-10	CHUNG	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	237	20110291945	A1	2011-12-01	Richard Alan Ewing et al.	
	238	20110291953	A1	2011-12-01	Cheok et al.	
	239	20110310537	A1	2011-12-22	Imamura et al.	Electronic device and computer program product
	240	20110314423	A1	2011-12-22	Ohmiya et al.	Image display device and image display method
	241	2011037726	A1	2011-02-17	Lee	
	242	2011044064	A1	2011-02-24	Hu et al.	
	243	2011045813	A1	2011-02-24	Choi	
	244	2011050591	A1	2011-03-03	Kim et al.	
	245	2011050592	A1	2011-03-03	Kim et al.	
	246	2011050593	A1	2011-03-03	Kim et al.	
	247	2011050594	A1	2011-03-03	Kim et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	248	2011050608	A1	2011-03-03	Homma et al.	
	249	2011051334	A1	2011-03-03	Griffith et al.	
	250	2011057889	A1	2011-03-10	Sakatsume	
	251	2011059777	A1	2011-03-10	Rao	
	252	2011061021	A1	2011-03-10	Kang et al.	
	253	2011063248	A1	2011-03-17	Yoon	
	254	2011084921	A1	2011-04-14	Kang et al.	
	255	2011088416	A1	2011-04-21	Koethler	
	256	2011102336	A1	2011-05-05	Seok et al.	
	257	2011102347	A1	2011-05-05	Lim et al.	
	258	2011109573	A1	2011-05-12	Deslippe et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	259	2011115738	A1	2011-05-19	Suzuki et al.	
	260	2011118029	A1	2011-05-19	Lukas et al.	
	261	2011122084	A1	2011-05-26	Jeon et al.	
	262	2011152739	A1	2011-06-23	Roncadi et al.	
	263	2011169775	A1	2011-07-14	Liaw et al.	
	264	2011175845	A1	2011-07-21	Honda et al.	
	265	2011181552	A1	2011-07-28	Goertz et al.	
	266	2011205446	A1	2011-08-25	Hardacker et al.	
	267	2011210942	A1	2011-09-01	Kitamori et al.	
	268	2011210943	A1	2011-09-01	Zaliva	
	269	2011227836	A1	2011-09-22	Li et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	270	2011227877	A1	2011-09-22	Chen	
	271	2011239110	A1	2011-09-29	Garrett et al.	
	272	2011248941	A1	2011-10-13	Abdo et al.	
	273	2011254793	A1	2011-10-20	Ban et al.	
	274	2011260984	A1	2011-10-27	Paleczny	
	275	2011260994	A1	2011-10-27	Saynac et al.	
	276	2011261002	A1	2011-10-27	Verthein	
	277	2011273394	A1	2011-11-10	Young et al.	
	278	2011273396	A1	2011-11-10	Chung	
	279	2011291945	A1	2011-12-01	Ewing Jr et al.	
	280	2011291953	A1	2011-12-01	Cheok et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	281	2011302493	A1	2011-12-08	Runstedler et al.	
	282	20120007821	A1	2012-01-12	Zaliva	
	283	20120008436	A1	2012-01-12	Rajan et al.	
	284	20120011310	A1	2012-01-12	Rajan et al.	
	285	20120011386	A1	2012-01-12	Rajan et al.	
	286	20120013566	A1	2012-01-19	CHUNG	
	287	20120018871	A1	2012-01-26	Lee et al.	
	288	20120019448	A1	2012-01-26	Pitkanen et al.	
	289	20120023450	A1	2012-01-26	Noto et al.	
	290	20120032876	A1	2012-02-09	Tabe	
	291	20120034954	A1	2012-02-09	Tabe	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	292	20120037878	A1	2012-02-16	Liu	
	293	20120038045	A1	2012-02-16	Lee	
	294	20120042204	A1	2012-02-16	Smith et al.	
	295	20120044172	A1	2012-02-23	Ohki et al.	
	296	20120056846	A1	2012-03-08	Zaliva	
	297	20120059976	A1	2012-03-08	Rosenband et al.	
	298	20120059978	A1	2012-03-08	Rosenband et al.	
	299	20120063194	A1	2012-03-15	Baek et al.	
	300	20120069647	A1	2012-03-22	Kramer et al.	

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T5
	1	DALL, C., et al., "KVM for ARM," Columbia University, 12th annual Linux Symposium, 2010, pp. 1-12	
	2	D'AMBROSIA, J. et al. "40 Gigabit Ethernet and 100 Gigabit Ethernet Technology Overview," November 2008, pp. 1-16	
	3	DATE, M., et al., "Small-Depth-Error Display Using Depth Fused 3D (DFD)," Feb. 2009, pp. 1-4	
	4	DEERING, MICHAEL F., "The Limits of Human Vision," Sun Microsystems, 1998, pp. 1-6	
	5	DESHANE, TODD, "An Attack-Resistant and Rapid Recovery Desktop System," Clarkson University, Dissertation, Aug. 2010, pp. 1-130	
	6	DESHANE, TODD, et al., "Xen Hypervisor Deployment, Management, and Cloud Computing Tools," Clarkson University, 2010, slides 1-151	
	7	DHIMAN, G. et al., "PDRAM: A Hybrid PRAM and DRAM Main Memory System," DAC '09, July 26-31, 2009, pp. 1-6	
	8	DOUDALIS, IOANNIS, et al., "HARE++: Hardware Assisted Reverse Execution Revisited," Georgia Institute of Technology, Mar. 2011, pp. 1-8	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	9	DOWNS, RICK, "Using Resistive touch screens for human/machine interface," 2005, pp. 1-6	
	10	EBCIOGLU, KERNAL, et al., "A JAVA ILP Machine Based on Fast Dynamic Compilation," IBM T.J. Watson Research Center, 1997, pp. 1-13	
	11	ENCODING- 116 slides, University of Illinois, Urbana Champaign, COURSE CS 438, March 2008	
	12	ERICSON, FINN, "Interactive Handheld Phantograms," KTH Computer Science and Communication, Thesis, 2010, pp. 1-38	
	13	File Wrapper from U.S. Application No. 11/226,061, filed 09-13-2005	
	14	File Wrapper from U.S. Application No. 11/449,435, filed 06-07-2006	
	15	FITZROY-DALE, Nicholas, "Architecture Optimization," University of new South Wales, Mar. 2010, pp. 1-152	
	16	FOSTER, G., "Measurements of Pre-Emphasis on Altera® Stratix® GX with the BERTScope 12500A," Ver. 1, June 2005, pp. 1-7	
	17	FUJITSU, "125Gbps Parallel CDR Transceiver (0.18um)," 2002, pp. 1-2	
	18	GALLOWAY, P. et al., "Using Creative Silicon Technology to Extend the Useful Life of Backplane and Card Substrates at 3.125 Gbps and Beyond," DesignCon 2001, 2001 High-Performance System Design Conference, pp. 1-7	
	19	GARLAN, DAVID, et al., "Project Aura: Toward Distraction-Free Pervasive Computing," IEEE, 2002, pp. 1-10	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	20	GARLEPP, B. W. et al., "A Portable Digital DLL for High-Speed CMOS Interface Circuits," IEEE Journal Of Solid-State Circuits, Vol. 34, No. 5, May 1999, pp. 632-644	
	21	GESLER, WILSON S., "Physical Limits of Acuity and Hyperacuity," University of Texas, Oct. 26, 1983, pp. 1-8	
	22	GILBERT, BENJAMIN, et al., "Pocket ISR: Virtual Machines Anywhere," Carnegie Mellon University, Mar. 2010, pp. 1-19	
	23	GONDI, S. et al., "A 10-Gb/s CMOS Merged Adaptive Equalizer/CDR Circuit for Serial-Link Receivers," 2006 Symposium on VLSI Circuits Digest ofTechnical Papers, IEEE, 2006, pp. 1-2	
	24	GONDI, S. et al., "A IOGb/s CMOS Adaptive Equalizer for Backplane Applications," 2005 IEEE International Solid-State Circuits Conference, 2005, pp. 1-3	
	25	GOODACRE, JOHN et al., "Virtualization Across the ARM Ecosystem," ARM, September 9, 2009, pp. 1-9	
	26	GROZING, M. et al., "Sampling Receive Equalizer with Bit-Rate Flexible Operation up to 10 Gbit/s," IEEE, 2006, pp. 516-519	
	27	GRUNDY, K. et al., "Designing Scalable IOG Backplane Interconnect Systems Utilizing Advanced Verification Methodologies," DesignCon 2006, pp. 1-20	
	28	GUSTLIN, M., "40 and 100 Gigabit Ethernet PCS and PMA Overview," Ethernet Summit, February 2010, pp. 1-15	
	29	HARTIG, HERMANN, "The L4 Microkernel," ARTIST Summer School in Europe, September 2010, slides 1-99	
	30	HEISER, GERNOT et al., "The OKL4 Microvisor: convergence Point of Microkernels and Hypervisors," August 30, 2010, pp. 1-5	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	31	HEISER, GERNOT, "Hypervisors for Consumer Electronics," University of New South Wales, 2009, pp. 1-5	
	32	HERTZUM, MORTEN et al., "TouchGrid: Touchpad pointing by recursively mapping taps to smaller display regions," Behaviour and Information Technology, vol, 24, no. 5, 2005, pp. 1-18	
	33	HIRAISHI, A. et al., "Preferable Improvements and Changes to FB-DiMM High-Speed Channel for 9.6Gbps Operation," ELPIDA, January 26, 2007, pp. 1-35	
	34	HOE, J.C., "18-447 Lecture 21: Virtual Memory: Page Tables and TLBs," April 13, 2009, pp. 1-11	
	35	HOFER, HEIDI, et al., "Organization of the Human Trichromatic Cone Mosaic," Oct. 19, 2005, pp. 1-11	
	36	HOLLIS, T. et al., "Reduction of Duty Cycle Distortion through Band- Pass Filtering," 2005, pp. 1-4	
	37	HOLLIS, T. M. et al., "Mitigating ISi Through Self-Calibrating Continuous-Time Equalization," IEEE Transactions On Circuits And Systems-I: Regular Papers, Vol. 53, No. 10, October 2006, pp. 2234-2245	
	38	HOLLIS, T. M. et al., "Self-Calibrating Continuous-Time Equalization Targeting Inter-symbol Interference," 2006, pp. 1-4	
	39	HOLLIS, T. M., "CIRCUIT AND MODELING SOLUTIONS FOR HIGH-SPEED CHIP-TO-CHIP COMMUNICATION," Dissertation, April 2007, pp. 1-225	
	40	HOLLIS, T. M., "Inter-symbol Interference in Manchester Encoded Data," pp. 1-7, Oct 2006	
	41	HONG, S., "NAND Flash-based Disk Cache Using SLC/MLC Combined Flash Memory," SNAPI 2010, 25 pages	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	42	HowStuffWorks, "How the iPhone works," 2007, pp. 1-4	
	43	HUANG, H. et al., "Design and Implementation of Power-Aware Virtual Memory," 2003, pp. 1-14	
	44	HUNG, PERRY L., "Varmosa: Just-in-time Binary Translation of Operating System Kernels," June, 2009, pp. 1-58	
	45	HUR, Y. S. et al., "Equalization and Near-End Crosstalk (NEXT) Noise Cancellation for 20- Gbit/sec 4 PAM Backplane Serial 1/0 Interconnections," Dissertation, December 2005, pp. 1-143	
	46	HYNIX, "I/0 INTERFACE DESIGN TECHNOLOGY USING ADS," 2005, 41 slides	
	47	HYSER, Chris et al., "Autonomic Virtual Machine Placement in the Data Center," Feb. 26, 2008, pp. 1-11	
	48	IMMERSION, "Creating the HD Haptic Experience in Mobile Devices," 2011, pp. 1-3	
	49	INTEL, "Intel PXA27x Processor Family," Memory Subsystem, July 2004, pp. 1-138	
	50	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 1: Basic Architecture, Order Number: 253665-037US, January 2011, pp. 1-540 (1 of 8)	

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Patrick Caldwell/	Date (YYYY-MM-DD)	2019-10-02
Name/Print	Patrick Caldwell	Registration Number	44580

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16169961
Filing Date	2018-10-24
First Named Inventor	Michael S. Smith
Art Unit	2623
Examiner Name	Antonio J XAVIER
Attorney Docket Number	SMITH070AG

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	10101898	B2	2018-10-16	AMELINE	Multi-touch graphical user interface for interacting with menus on a handheld device
	2	10222891	B1	2019-03-05	Smith	Setting interface system, method, and computer program product for a multi-pressure selection touch screen

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20010005692	A1	2001-06-28	Song	
	2	20010043291	A1	2001-11-22	Kono et al.	
	3	2001005692	A1	2001-06-28	Shik	
	4	20010175805		2011-07-21	Benjamin A. Rottler et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	5	2001043291	A1	2001-11-22	Kono et al.	
	6	20020002629	A1	2002-01-03	Fukushima	
	7	20020002662	A1	2002-01-03	Olarig et al.	
	8	20020005111	A1	2002-01-17	Ludwig	
	9	20020008691	A1	2002-01-24	Hanajima et al.	
	10	2002002629	A1	2002-01-03	Fukushima	
	11	20020033919	A1	2002-03-21	Sanelle et al.	
	12	20020045854	A1	2002-04-18	Royo et al.	
	13	2002005111	A1	2002-01-17	Ludwig	
	14	20020085952	A1	2002-07-04	Ellingboe et al.	
	15	20020086711	A1	2002-07-04	Flannery	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	16	2002008691	A1	2002-01-24	Hanajima et al.	
	17	20020116959	A1	2002-08-29	Ohta et al.	
	18	20020118180	A1	2002-08-29	Martin	
	19	20020129315	A1	2002-09-12	Onvural et al.	
	20	20020130832	A1	2002-09-19	Baucom et al.	
	21	20020180763	A1	2002-12-05	Kung	
	22	2002033919	A1	2002-03-21	Sanelle et al.	
	23	2002045854	A1	2002-04-18	Royo et al.	
	24	2002082068	A1	2002-06-27	Singhal	
	25	2002085952	A1	2002-07-04	Ellingboe et al.	
	26	2002116959	A1	2002-08-29	Ohta et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	27	2002118180	A1	2002-08-29	Martin	
	28	2002130832	A1	2002-09-19	Baucom et al.	
	29	2002180763	A1	2002-12-05	Kung	
	30	20030117408	A1	2003-06-26	Forsline et al.	
	31	20030123328	A1	2003-07-03	Guanter	
	32	20030147041	A1	2003-08-07	Oh et al.	
	33	20030151589	A1	2003-08-14	Bensen et al.	
	34	20030179190	A1	2003-09-25	Franzen	
	35	20030217972	A1	2003-11-27	Connell et al.	
	36	20030232192	A1	2003-12-18	Kishioka et al.	
	37	20030235452	A1	2003-12-25	Kraus et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	38	2003117408	A1	2003-06-26	Forsline et al.	
	39	2003123328	A1	2003-07-03	Guanter	
	40	2003147041	A1	2003-08-07	Oh et al.	
	41	2003151589	A1	2003-08-14	Bensen et al.	
	42	2003217972	A1	2003-11-27	Connell et al.	
	43	2003232192	A1	2003-12-18	Kishioka et al.	
	44	2003234768	A1	2003-12-25	Rekimoto et al.	
	45	2003235452	A1	2003-12-25	Kraus et al.	
	46	20040084372	A1	2004-05-06	Connell et al.	
	47	20040108995	A1	2004-06-10	Hoshino et al.	
	48	20040109788	A1	2004-06-10	Li et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	49	20040121855	A1	2004-06-24	Giegerich	
	50	20040191509	A1	2004-09-30	Kishioka et al.	
	51	20040207542	A1	2004-10-21	Chang et al.	
	52	20040212598	A1	2004-10-28	Kraus et al.	
	53	20040212599	A1	2004-10-28	Cok et al.	
	54	20040239624	A1	2004-12-02	Ramian	
	55	20040263488	A1	2004-12-30	Martin	
	56	2004084372	A1	2004-05-06	Connell et al.	
	57	2004108995	A1	2004-06-10	Hoshino et al.	
	58	2004109788	A1	2004-06-10	Li et al.	
	59	2004121855	A1	2004-06-24	Giegerich	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	60	2004191509	A1	2004-09-30	Kishioka et al.	
	61	2004207542	A1	2004-10-21	Chang et al.	
	62	2004212598	A1	2004-10-28	Kraus et al.	
	63	2004239624	A1	2004-12-02	Ramian	
	64	2004263488	A1	2004-12-30	Martin	
	65	20050018495	A1	2005-01-27	Bhakta et al.	
	66	20050021190	A1	2005-01-27	Worrell et al.	
	67	20050027928	A1	2005-02-03	Avraham et al.	
	68	20050045540	A1	2005-03-03	Connell et al.	
	69	20050052425	A1	2005-03-10	Zadesky et al.	
	70	20050094465	A1	2005-05-05	Gervasi et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	71	20050099403	A1	2005-05-12	Kraus et al.	
	72	20050102444	A1	2005-05-12	Cruz	
	73	20050128853	A1	2005-06-16	Ayukawa et al.	
	74	20050156892	A1	2005-07-21	Grant	
	75	20050182893	A1	2005-08-18	Suh	
	76	20050204091	A1	2005-09-15	Kilbuck et al.	
	77	20050231461	A1	2005-10-20	Raap et al.	
	78	20050242034	A1	2005-11-03	Connell et al.	
	79	20050251617	A1	2005-11-10	Sinclair et al.	
	80	20050264521	A1	2005-12-01	Liu et al.	
	81	20050270037	A1	2005-12-08	Haynes et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	82	20050280746	A1	2005-12-22	North et al.	
	83	2005045540	A1	2005-03-03	Connell et al.	
	84	2005099403	A1	2005-05-12	Kraus et al.	
	85	2005231461	A1	2005-10-20	Raap et al.	
	86	2005242034	A1	2005-11-03	Connell et al.	
	87	2005264521	A1	2005-12-01	Liu et al.	
	88	2005280746	A1	2005-12-22	North et al.	
	89	20060001654	A1	2006-01-05	Smits	
	90	20060001800	A1	2006-01-05	Sanelle et al.	
	91	20060007222	A1	2006-01-12	Uy	
	92	2006001654	A1	2006-01-05	Smits	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	93	20060001800	A1	2006-01-05	Sanelle et al.	
	94	20060022952	A1	2006-02-02	Ryynanen	
	95	20060022955	A1	2006-02-02	Kennedy	
	96	20060026521	A1	2006-02-02	Hotelling et al.	
	97	20060026536	A1	2006-02-02	Hotelling et al.	
	98	20060033701	A1	2006-02-16	Wilson	
	99	20060066590	A1	2006-03-30	Ozawa et al.	
	100	20060075402	A1	2006-04-06	Neiger et al.	
	101	20060077186	A1	2006-04-13	Park et al.	
	102	20060078295	A1	2006-04-13	Yamashita	Recording medium reproducing apparatus, repeated reproduction method, and method of moving repeated reproduction section
	103	20060085757	A1	2006-04-20	Andre et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	104	20060107719	A1	2006-05-25	Campian	
	105	20060114646	A1	2006-06-01	Koibuchi et al.	
	106	20060119586	A1	2006-06-08	Grant et al.	
	107	20060138630	A1	2006-06-29	Bhakta	
	108	20060138983	A1	2006-06-29	Lee et al.	
	109	20060139340	A1	2006-06-29	Geaghan	
	110	20060146014	A1	2006-07-06	Lehtonen	
	111	20060146032	A1	2006-07-06	Kajimoto et al.	
	112	20060167400	A1	2006-07-27	Ellingboe et al.	
	113	20060179088	A1	2006-08-10	Kang	
	114	20060195064	A1	2006-08-31	Plahey et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	115	20060197736	A1	2006-09-07	Baucom et al.	
	116	20060197737	A1	2006-09-07	Baucom et al.	
	117	20060203899	A1	2006-09-14	Gee	
	118	20060209039	A1	2006-09-21	Destura et al.	
	119	20060238495	A1	2006-10-26	Davis	
	120	20060244733	A1	2006-11-02	Geaghan	
	121	20060250377	A1	2006-11-09	Zadesky et al.	
	122	20060260711	A1	2006-11-23	Fry et al.	
	123	20060262099	A1	2006-11-23	Destura et al.	
	124	2006026535	A1	2006-02-02	Hotelling et al.	
	125	20060274050	A1	2006-12-07	Lii	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	126	20060284874	A1	2006-12-21	Wilson	
	127	20060294295	A1	2006-12-28	Fukuzo	
	128	2006033701	A1	2006-02-16	Wilson	
	129	2006044281	A1	2006-03-02	Lai et al.	
	130	2006077186	A1	2006-04-13	Park et al.	
	131	2006107719	A1	2006-05-25	Campian et al.	
	132	2006138983	A1	2006-06-29	Lee et al.	
	133	2006146032	A1	2006-07-06	Kajimoto et al.	
	134	2006161871	A1	2006-07-20	Hotelling et al.	
	135	2006167400	A1	2006-07-27	Ellingboe et al.	
	136	2006179088	A1	2006-08-10	Kang	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	137	2006195064	A1	2006-08-31	Plahey et al.	
	138	2006197736	A1	2006-09-07	Baucom et al.	
	139	2006197737	A1	2006-09-07	Baucom et al.	
	140	2006197750	A1	2006-09-07	Kerr et al.	
	141	2006209039	A1	2006-09-21	Destura Galileo et al.	
	142	2006238495	A1	2006-10-26	Davis	
	143	2006260711	A1	2006-11-23	Fry et al.	
	144	2006262099	A1	2006-11-23	Destura Galileo et al.	
	145	2006284874	A1	2006-12-21	Wilson	
	146	20070008064	A1	2007-01-11	Donohue	
	147	20070035526	A1	2007-02-15	Takenaka et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	148	20070040814	A1	2007-02-22	Lee et al.	
	149	20070066310	A1	2007-03-22	Haar et al.	Mobile communication terminal and method
	150	20070070047	A1	2007-03-29	Jeon et al.	
	151	2007008064	A1	2007-01-11	Donohue	
	152	20070085837	A1	2007-04-19	Ricks et al.	
	153	20070097073	A1	2007-05-03	Takashima et al.	
	154	20070097151	A1	2007-05-03	Rosenberg	
	155	20070103449	A1	2007-05-10	Laitinen et al.	
	156	20070103454	A1	2007-05-10	Elias	
	157	20070113681	A1	2007-05-24	Nishimura et al.	
	158	20070137901	A1	2007-06-21	Chen	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	159	20070146313	A1	2007-06-28	Newman et al.	
	160	20070146343	A1	2007-06-28	Prados	
	161	20070148371	A1	2007-06-28	Kazama	
	162	20070153215	A1	2007-07-05	Lee	
	163	20070176902	A1	2007-08-02	Newman et al.	
	164	20070182864	A1	2007-08-09	Stoneham et al.	
	165	20070192563	A1	2007-08-16	Rajan et al.	
	166	20070195029	A1	2007-08-23	Jeon et al.	
	167	20070204075	A1	2007-08-30	Rajan et al.	
	168	20070204079	A1	2007-08-30	Wu	
	169	20070229477	A1	2007-10-04	Ludwig	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	170	20070237170	A1	2007-10-11	Proctor et al.	
	171	20070246494	A1	2007-10-25	Kim et al.	
	172	20070262967	A1	2007-11-15	RHO	
	173	20070271513	A1	2007-11-22	Andren	User Interface for Remotely Controlling a Digital Music Player
	174	20070291009	A1	2007-12-20	Wright et al.	
	175	2007035526	A1	2007-02-15	Takenaka et al.	
	176	2007040814	A1	2007-02-22	Lee et al.	
	177	2007070047	A1	2007-03-29	Jeon et al.	
	178	2007085837	A1	2007-04-19	Ricks et al.	
	179	2007103454	A1	2007-05-10	Elias et al.	
	180	2007137901	A1	2007-06-21	Chen	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	181	2007146313	A1	2007-06-28	Newman et al.	
	182	2007148371	A1	2007-06-28	Kazama	
	183	2007153215	A1	2007-07-05	Lee	
	184	2007176902	A1	2007-08-02	Newman et al.	
	185	2007182864	A1	2007-08-09	Stoneham et al.	
	186	2007195029	A1	2007-08-23	Jeon et al.	
	187	2007229477	A1	2007-10-04	Ludwig	
	188	2007236470	A1	2007-10-11	Abanami et al.	
	189	2007237170	A1	2007-10-11	Proctor et al.	
	190	2007262967	A1	2007-11-15	Rho	
	191	2007268261	A1	2007-11-22	Lipson	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	192	2007273671	A1	2007-11-29	Zadesky et al.	
	193	20080007675	A1	2008-01-10	Sanelle et al.	
	194	20080010435	A1	2008-01-10	Smith et al.	
	195	20080018613	A1	2008-01-24	Kim et al.	
	196	20080024459	A1	2008-01-31	Poupyrev et al.	
	197	20080024712	A1	2008-01-31	Kim	
	198	20080025108	A1	2008-01-31	Rajan et al.	
	199	20080025122	A1	2008-01-31	Schakel et al.	
	200	20080025123	A1	2008-01-31	Rajan et al.	
	201	20080025124	A1	2008-01-31	Rajan et al.	
	202	20080025136	A1	2008-01-31	Rajan et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	203	20080025137	A1	2008-01-31	Rajan et al.	
	204	20080026803	A1	2008-01-31	Dernuynck	
	205	20080027697	A1	2008-01-31	Rajan et al.	
	206	20080027702	A1	2008-01-31	Rajan et al.	
	207	20080027703	A1	2008-01-31	Rajan et al.	
	208	20080028135	A1	2008-01-31	Rajan et al.	
	209	20080028136	A1	2008-01-31	Schakel et al.	
	210	20080028137	A1	2008-01-31	Schakel et al.	
	211	20080031030	A1	2008-02-07	Rajan et al.	
	212	20080031072	A1	2008-02-07	Rajan et al.	
	213	20080037353	A1	2008-02-14	Rajan et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	214	20080056014	A1	2008-03-06	Rajan et al.	
	215	20080060854	A1	2008-03-13	Perlin	
	216	20080062169	A1	2008-03-13	Heesemans et al.	
	217	20080062773	A1	2008-03-13	Rajan et al.	
	218	20080068343	A1	2008-03-20	Hoshino et al.	
	219	2008007675	A1	2008-01-10	Sanelle et al.	
	220	20080082763	A1	2008-04-03	Rajan et al.	
	221	20080088600	A1	2008-04-17	Prest et al.	
	222	20080094367	A1	2008-04-24	Ven et al.	
	223	20080094367	A1	2008-04-24	De et al.	
	224	20080098331	A1	2008-04-24	Novick et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	225	20080100568	A1	2008-05-01	Koch et al.	
	226	20080100584	A1	2008-05-01	Hague et al.	
	227	20080100590	A1	2008-05-01	Hur et al.	
	228	20080103753	A1	2008-05-01	Rajan et al.	
	229	20080104314	A1	2008-05-01	Rajan et al.	
	230	20080104344	A1	2008-05-01	Shimozono et al.	
	231	20080105600	A1	2008-05-08	Connell et al.	
	232	20080109206	A1	2008-05-08	Rajan et al.	
	233	20080109595	A1	2008-05-08	Rajan et al.	
	234	20080109597	A1	2008-05-08	Schakel et al.	
	235	20080109598	A1	2008-05-08	Schakel et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	236	20080109629	A1	2008-05-08	Karamcheti et al.	
	237	20080115006	A1	2008-05-15	Smith et al.	
	238	20080117573	A1	2008-05-22	Im et al.	
	239	20080120443	A1	2008-05-22	Rajan et al.	
	240	20080122315	A1	2008-05-29	Maruyama et al.	
	241	20080123459	A1	2008-05-29	Rajan et al.	
	242	20080126687	A1	2008-05-29	Rajan et al.	
	243	20080126688	A1	2008-05-29	Rajan et al.	
	244	20080126689	A1	2008-05-29	Rajan et al.	
	245	20080126692	A1	2008-05-29	Rajan et al.	
	246	20080130910	A1	2008-06-05	Jobling et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	247	20080133825	A1	2008-06-05	Rajan et al.	
	248	20080136790	A1	2008-06-12	Hio	
	249	20080146297	A1	2008-06-19	Ho	
	250	20080150911	A1	2008-06-26	Harrison	
	251	20080158171	A1	2008-07-03	Wong et al.	
	252	20080165255	A1	2008-07-10	Christie et al.	Entire Document
	253	20080169960	A1	2008-07-17	Rosenbury	Handheld System for Radar Detection
	254	20080174570	A1	2008-07-24	Jobs et al.	
	255	2008018613	A1	2008-01-24	Kim et al.	
	256	20080204427	A1	2008-08-28	Heesemans et al.	
	257	20080210843	A1	2008-09-04	Han et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	258	20080211786	A1	2008-09-04	Park et al.	
	259	20080215192	A1	2008-09-04	Hardman et al.	
	260	20080231605	A1	2008-09-25	Yang	
	261	20080238884	A1	2008-10-02	Harish	
	262	20080239857	A1	2008-10-02	Rajan et al.	
	263	20080239858	A1	2008-10-02	Rajan et al.	
	264	20080240223	A1	2008-10-02	Badalone	
	265	2008024459	A1	2008-01-31	Poupyrev et al.	
	266	2008024712	A1	2008-01-31	Kim	
	267	20080250408	A1	2008-10-09	Tsui et al.	
	268	20080252607	A1	2008-10-16	Jong et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	269	20080252616	A1	2008-10-16	Chen	
	270	20080259046	A1	2008-10-23	Carsanaro	
	271	20080272478	A1	2008-11-06	Anderson et al.	
	272	20080290435	A1	2008-11-27	Oliver et al.	
	273	20080295839	A1	2008-12-04	Habashi	
	274	20080297487	A1	2008-12-04	Hotelling et al.	
	275	20080298113	A1	2008-12-04	Liu et al.	
	276	20080304431	A1	2008-12-11	Karaoguz	
	277	20080308946	A1	2008-12-18	Pratt	
	278	2008060854	A1	2008-03-13	Perlin	
	279	2008062169	A1	2008-03-13	Heesemans et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	280	2008066010	A1	2008-03-13	Brodersen et al.	
	281	2008068343	A1	2008-03-20	Hoshino et al.	
	282	2008088602	A1	2008-04-17	Hotelling	
	283	2008100584	A1	2008-05-01	Hague et al.	
	284	2008105600	A1	2008-05-08	Connell et al.	
	285	2008130910	A1	2008-06-05	Jobling et al.	
	286	2008136790	A1	2008-06-12	Hio	
	287	2008146285	A1	2008-06-19	Lee et al.	
	288	2008158171	A1	2008-07-03	Wong et al.	
	289	2008177662	A1	2008-07-24	Smith et al.	
	290	2008204427	A1	2008-08-28	Heesemans et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	291	2008210843	A1	2008-09-04	Han et al.	
	292	2008211786	A1	2008-09-04	Park et al.	
	293	2008215192	A1	2008-09-04	Hardman et al.	
	294	2008252607	A1	2008-10-16	De et al.	
	295	2008252616	A1	2008-10-16	Chen	
	296	2008259046	A1	2008-10-23	Carsanaro	
	297	2008295839	A1	2008-12-04	Habashi	
	298	2008304431	A1	2008-12-11	Karaoguz	

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1	2008033739A	JP	A	2008-02-14	Iwan et al.		

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	2	2011034216A	JP	A	2011-02-17	Murata et al.		
	3	1020110004203A	KR		2011-01-13	JUNG JAE GYU		
	4	1020110049431	KR	A	2011-05-12	JEONG, WOOKYUNG | 정우경		
	5	2005114369	WO	A2	2005-12-01	Hotelling et al.		
	6	2008012491	WO	A1	2008-01-31	Kreit et al.		
	7	2008037275	WO	A1	2008-04-03	Laitinen		
	8	2008125130	WO	A1	2008-10-23	Laitinen et al.		
	9	2008131058	WO	A2	2008-10-30	Best		
	10	2008131058	WO	A2	2008-10-30	Best		
	11	2010073731	WO	A1	2010-07-01	Aono et al.		
	12	2011100444	WO	A2	2011-08-18	Nakanishi et al.		

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	13	2011126893	WO	A2	2011-10-13	Keeth et al.			
	14	2012149911	WO	A1	2012-11-08	Hou			

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T5
	1	"Cellphone Hardware Applications," pages 1-24. Source unknown. Released prior to Q4 of 2010.	
	2	"Interfacing 4-wire and 5-wire resistive touchscreens to the LPC247x," Nov. 13, 2008.	
	3	"INTERNATIONAL TECHNOLOGY ROADMAP FOR SEMICONDUCTORS," 2009 Edition, ASSEMBLY AND PACKAGING, pp. 1-70	
	4	3D Packing Newsletter on 3D IS, TSV, WLP & Embedded Technologies, December 2009, pp. 1-16	
	5	3D-IC Alliance, "IMIS™ - Intimate Memory Interface Specification," Revision 1.0, June 1, 2008, pp. 1-33	
	6	AKHSHABI, SAAMER et al., "An Experimental Evaluation of Rate-Adaptation Algorithms in Adaptive Streaming over HTTP," Feb. 23, 2011, pp. 1-12	
	7	ALTERA, "Using Pre-Emphasis and Equalization with Stratix GX," White Paper, September 2003, ver. 1.0, pp. 1-11	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	8	AMD, "BIOS and Kernel Developer's Guide (BKDG) for AMD Family 14h Models OOh-OFh Processors," BKDG for AMD Family 14h Models OOh-OFh Processors, February 16, 2011, Rev. 3.04, pp. 1-403	
	9	AMP, "DDR2 DIMM 25 Degree Imm CL 240 position," DDR2 DIMM 25 Degree 240 -Solder tail, 2005, p. 1	
	10	AMP, "DDR2 DIMM Socket Imm CL 240 position," DDR2 DIMM 240 -Solder tail, 1998, p. 1	
	11	ANALUI, B., "Signal Integrity Issues in High-Speed Wireline Links: Analysis and Integrated System Solutions," Thesis, 2005, pp. 1-194	
	12	ARM, "The ARM Architecture," 2010, pp. 1-43	
	13	ARORA, A., "Sensing by the people, for the people & of the people," April 21, 2008, 48 pages	
	14	AVISSAR, 0. et al., "Heterogeneous Memory Management for Embedded Systems," CASES '01, November 16-17, 2001, pp. 1-10	
	15	BAHAR, BARUS et al., "Mobile-Phone Based Gesture Recognition," Proceedings of the Enterface, 2007, pp. 1-8	
	16	BAKER, BONNIE C. et al., "The Power Behind Resistive Touch Screens," Texas Instruments, 2007, pp. 1-9	
	17	BALAKRISHNAN, H., "Background: Single-Link Communication," Fall 2001, September 5, 2001, pp. 1-6	
	18	BALASUBRAMANIAN, NIRANJAN et al., "Energy Consumption in Mobile Phones: A Measurement Study and Implications for Network Applications," University of Massachusetts Amherst, November 4, 2009, pp. 1-14	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	19	BAR-NIV, A., "Balanced equalization: The 10GBASE-KX4 formula for error-free transmission over backplanes," Networking Solutions, March 2005, pp. 1-4	
	20	BARR, T. W. et al., "Translation Caching: Skip, Don't Walk (the Page Table)," ISCA '10, June 19-23, 2010, pp. 1-12	
	21	BEN-YEHUDA, MULI, et al., "The Turtles Project: Design and Implementation of Nested Virtualization," IBM Research, October 2010, slides 1-92	
	22	BHARDWAJ, RISHI, et al., "A Choices Hypervisor on the ARM Architecture," University of Illinois, Apr. 2006, pp. 1-5	
	23	BICKFORD, JEFFREY, et al., "Rootkits on Smart Phones: Attacks, Implication and Opportunities," Jun. 10, 2010, pp. 1-6	
	24	BIEN, F., "Reconfigurable Equalization for 10-Gb/sec Serial Data Links in a 0.18-?m CMOS Technology," Dissertation, December 2006, pp. 1-121	
	25	BIHLMAYR, Wolfgang et al., "OLED Display Driver for the HCS08 Family," Freescale Semiconductor Application Note, Mar. 2007, pp. 1-42.	
	26	BORNSTEIN, DAN, "Android Dalvik VM Internals," May 29, 2008, slides 1-58	
	27	BRASH, DAVID, "Extensions to the ARMv7-A Architecture," Aug. 2010, pp. 1-21	
	28	BRUECK, et al., "Certificate of Correction," U.S. Pat. No. 7,818,444 B2, Oct. 19, 2010	
	29	BUCHALI, F. et al., "Fast Eye Monitor for 10 Gbit/s and its Application for Optical PMD Compensation," 2000 Optical Society of America, pp. 1-4	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	30	BUCKWALTER, J. F., "Deterministic Jitter in Broadband Communication," Thesis, 2006, pp. 1-220	
	31	BUNGALE, PARASHANTH, "ARM Virtualization: CPU & MMU Issues," VMware, 2010, slides 1-16	
	32	BURDACH, M., "Physical Memory Forensics," 53 slides, Black Hat USA (2006), 1 August 2006	
	33	CARROLL, AARON et al., "An Analysis of Power consumption in a Smartphone," 2010 USENIX Conference, 2010, pp. 1-14	
	34	CASIEZ, G., et al., "RubberEdge: Improved Interaction with Mobile Devices via Elastic-Edged Touchpads," Apr. 2008, pp. 1-1	
	35	CHANDRAMOULI, S., "A BROADBAND PASSIVE DELAY LINE STRUCTURE IN 0.18 MICRON CMOS FOR A GIGABIT FEED FORWARD EQUALIZER," Thesis, 2004, pp. 1-52	
	36	CHANDRASEKARAN, DINESH et al., "Hardware-assisted Secure Virtualization," 2009, pp. 1-8	
	37	CHAPMAN, MATTHEW, et al., "MagiXen: Combining Binary Translation and Virtualization," HP Enterprise Systems and Software Laboratory, May 4, 2007, pp. 1-15	
	38	CHAUDHARY, VIPIN et al., "TECHNIQUES FOR MIGRATING COMPUTATIONS ON THE GRID," 2006, pp. 1-19	
	39	CHEN, J. et al., "High Speed Signaling Design: from 1 Gbps to 10 Gbps," DesignCon East 2004, pp. 1-17	
	40	CHEN, J., et al., "On Static Binary Translation and Optimization for ARM based Applications," Apr. 6, 2008, pp. 1-10	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

	41	CHEN, WEI et al., "An Emulator for Executing IA-32 Application on ARM-Based Systems," Journal of Computers, vol. 5, Jul. 7, 2010, pp. 1133-1141	
	42	CHEN, Y.-H., "Ad-ST AC & 3DIC Technology of ITRI," 2010, pp. 1-14	
	43	CHIPOUNOV, VITALY et al., "Dynamically Translating x86 to LLVM using QEMU," 2010, pp. 1-5	
	44	CHUN, B., et al., "Augmented Smartphone Applications Through Clone Cloud Execution," Intel Research Berkeley, May 18, 2009, pp. 1-5	
	45	CHUN, B., et al., "CloneCloud: Elastic Execution between Mobile Device and Cloud," 2011, pp. 1-14	
	46	CIS 501: Introduction to Computer Architecture, Unit 4: Memory Hierarchy II: Main Memory, CIS 501 (Martin/Roth): Main Memory, Fall 2004, pp, 1-12	
	47	CITRIX, "The 'Nirvana Phone,' Concept Specification and Draft Reference Architecture," 2010, pp. 1-10	
	48	CLARK, CHRISTOPHER, "Live Migration of Virtual Machines," 2005, pp. 1-14	
	49	COOK, H. et al., "Virtual Local Stores: Enabling Software-Managed Memory Hierarchies in Mainstream Computing Environments," Technical Report No. UCB/EECS-2009-131, September 24, 2009, pp. 1-24	
	50	COX, LANDON P. et al., "Pocket Hypervisors: Opportunities and Challenges," Mar. 8, 2007, pp. 1-6.	

If you wish to add additional non-patent literature document citation information please click the Add button Add

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

EXAMINER SIGNATURE			
Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16169961
	Filing Date	2018-10-24
	First Named Inventor	Michael S. Smith
	Art Unit	2623
	Examiner Name	Antonio J XAVIER
	Attorney Docket Number	SMITH070AG

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Patrick Caldwell/	Date (YYYY-MM-DD)	2019-10-02
Name/Print	Patrick Caldwell	Registration Number	44580

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

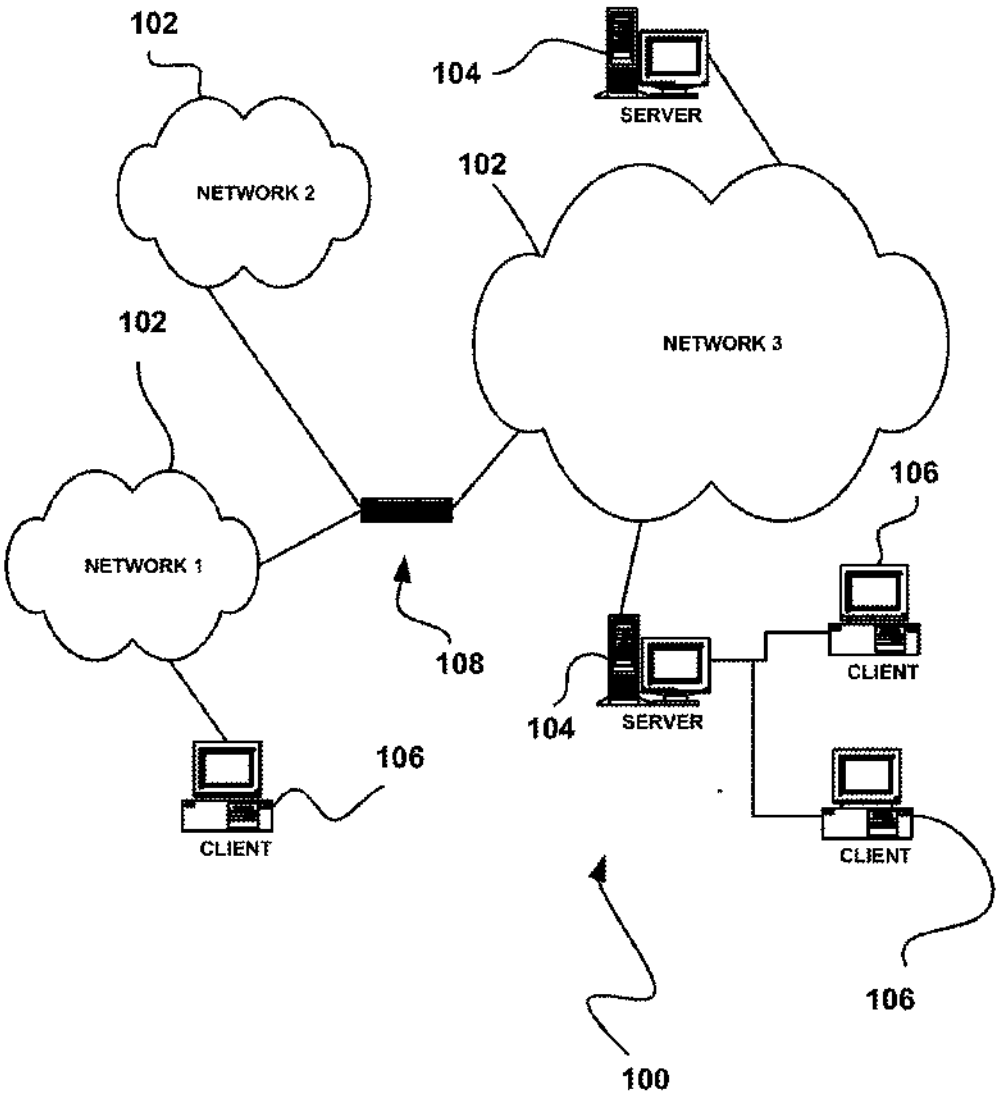

102
104
SERVER
NETWORK 2
102
NETWORK 3
102
NETWORK 1
106
108
CLIENT
104
SERVER
106
CLIENT
CLIENT
106
100

FIGURE 1

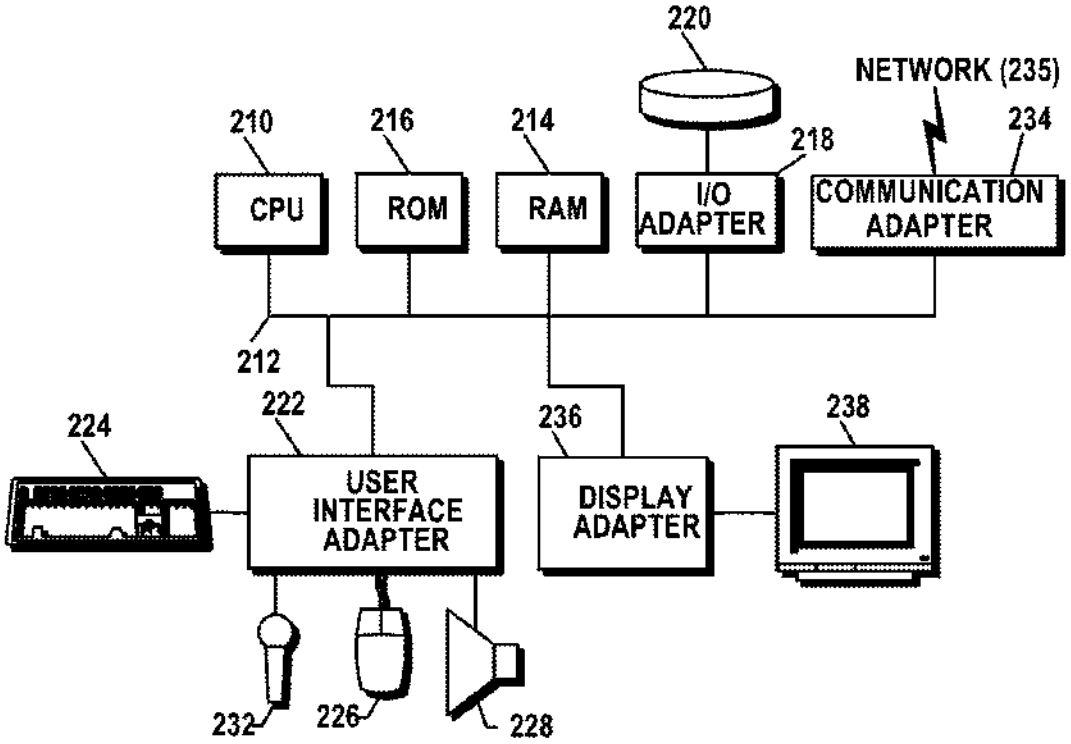

220
NETWORK (235)
210
216
214
218
234
CPU
ROM
RAM
I/O ADAPTER
COMMUNICATION ADAPTER
212
222
224
236
238
USER INTERFACE ADAPTER
DISPLAY ADAPTER
232
226
228

FIGURE 2

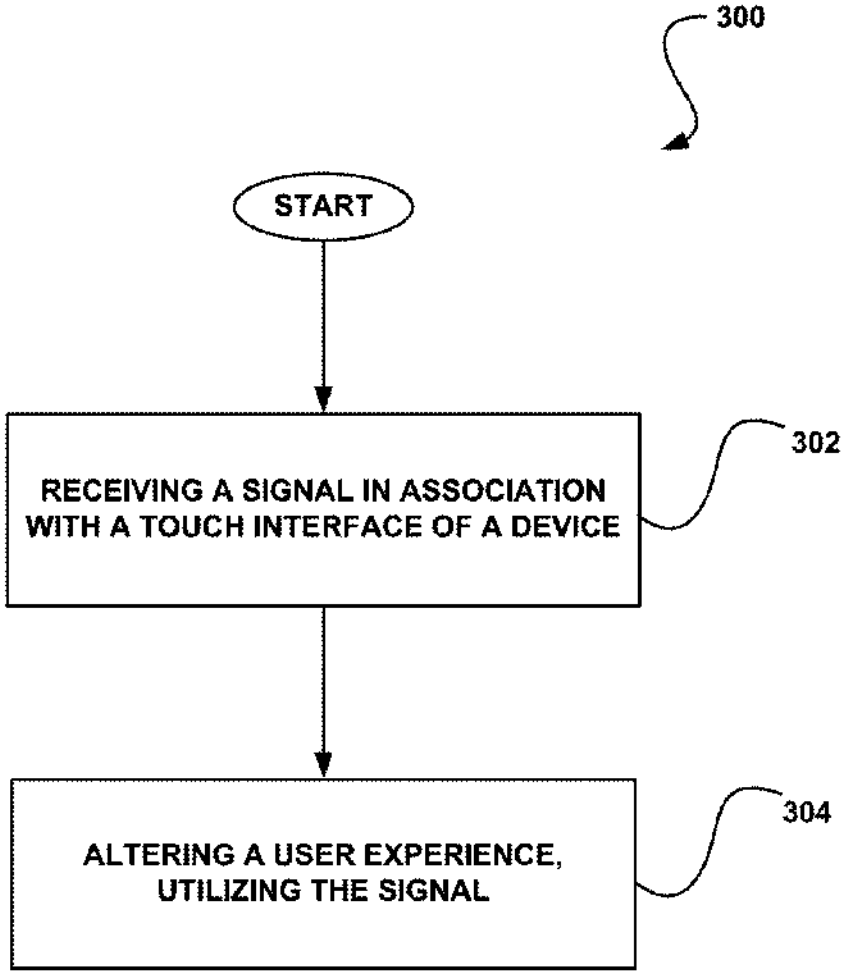

300
START
RECEIVING A SIGNAL IN ASSOCIATION WITH A TOUCH INTERFACE OF A DEVICE
302
ALTERING A USER EXPERIENCE, UTILIZING THE SIGNAL
304

FIGURE 3

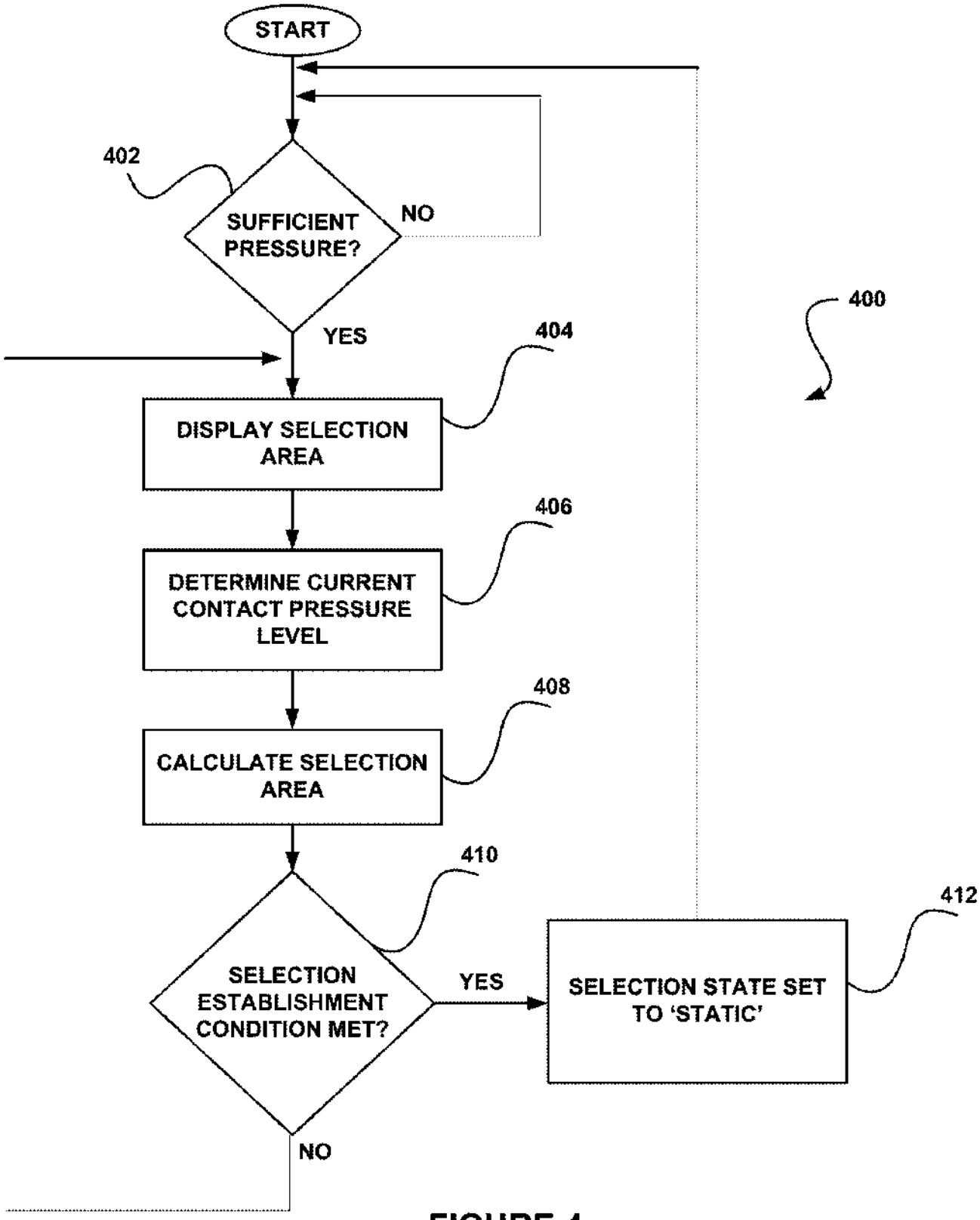

START
402
SUFFICIENT PRESSURE?
NO
YES
400
404
DISPLAY SELECTION AREA
406
DETERMINE CURRENT CONTACT PRESSURE LEVEL
408
CALCULATE SELECTION AREA
410
SELECTION ESTABLISHMENT CONDITION MET?
YES
412
SELECTION STATE SET TO 'STATIC'
NO

FIGURE 4

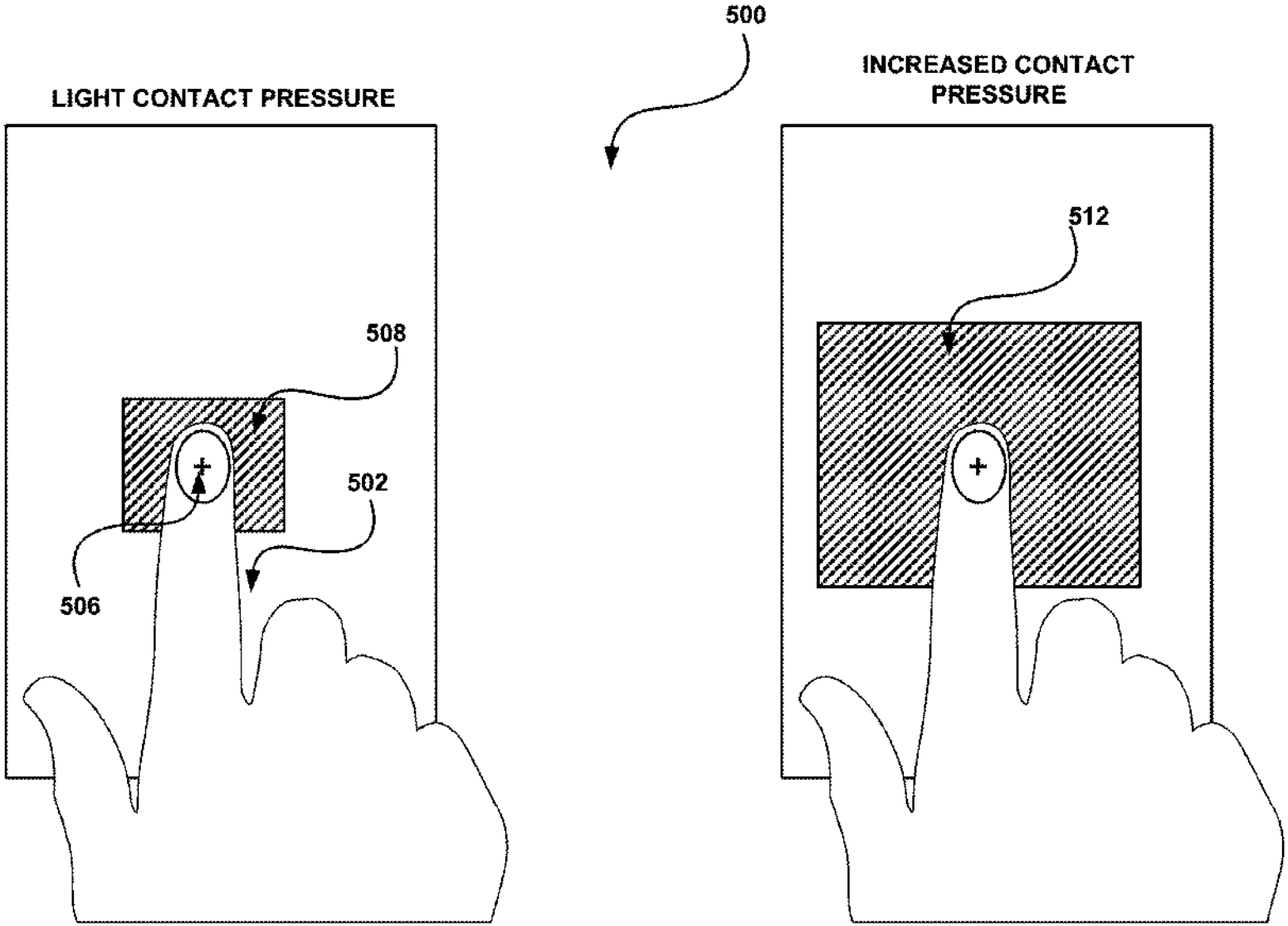

500
LIGHT CONTACT PRESSURE
INCREASED CONTACT PRESSURE
508
502
506
512

FIGURE 5

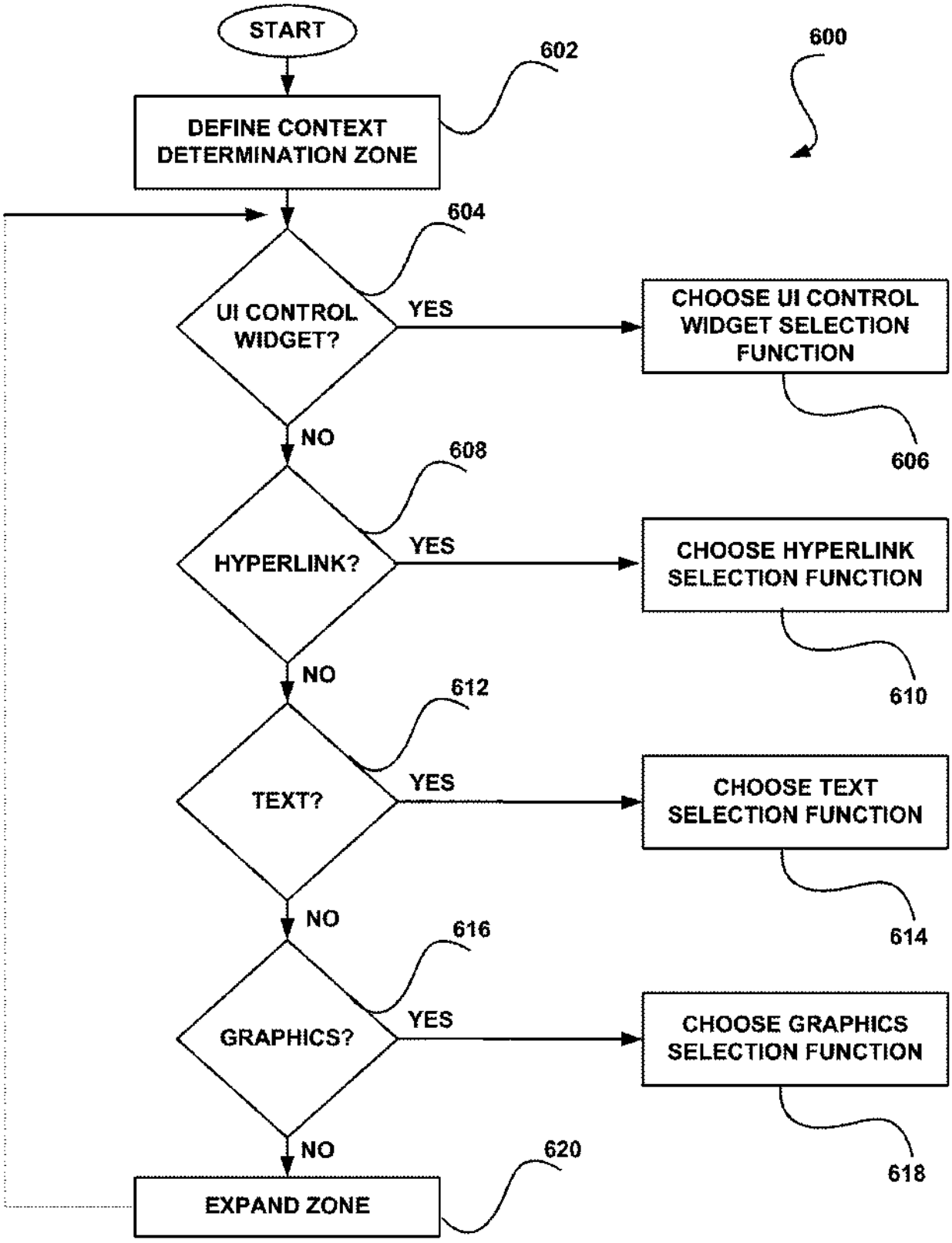

START
600
602
DEFINE CONTEXT DETERMINATION ZONE
604
UI CONTROL WIDGET?
YES
CHOOSE UI CONTROL WIDGET SELECTION FUNCTION
606
NO
608
HYPERLINK?
YES
CHOOSE HYPERLINK SELECTION FUNCTION
610
NO
612
TEXT?
YES
CHOOSE TEXT SELECTION FUNCTION
614
NO
616
GRAPHICS?
YES
CHOOSE GRAPHICS SELECTION FUNCTION
618
NO
620
EXPAND ZONE

FIGURE 6

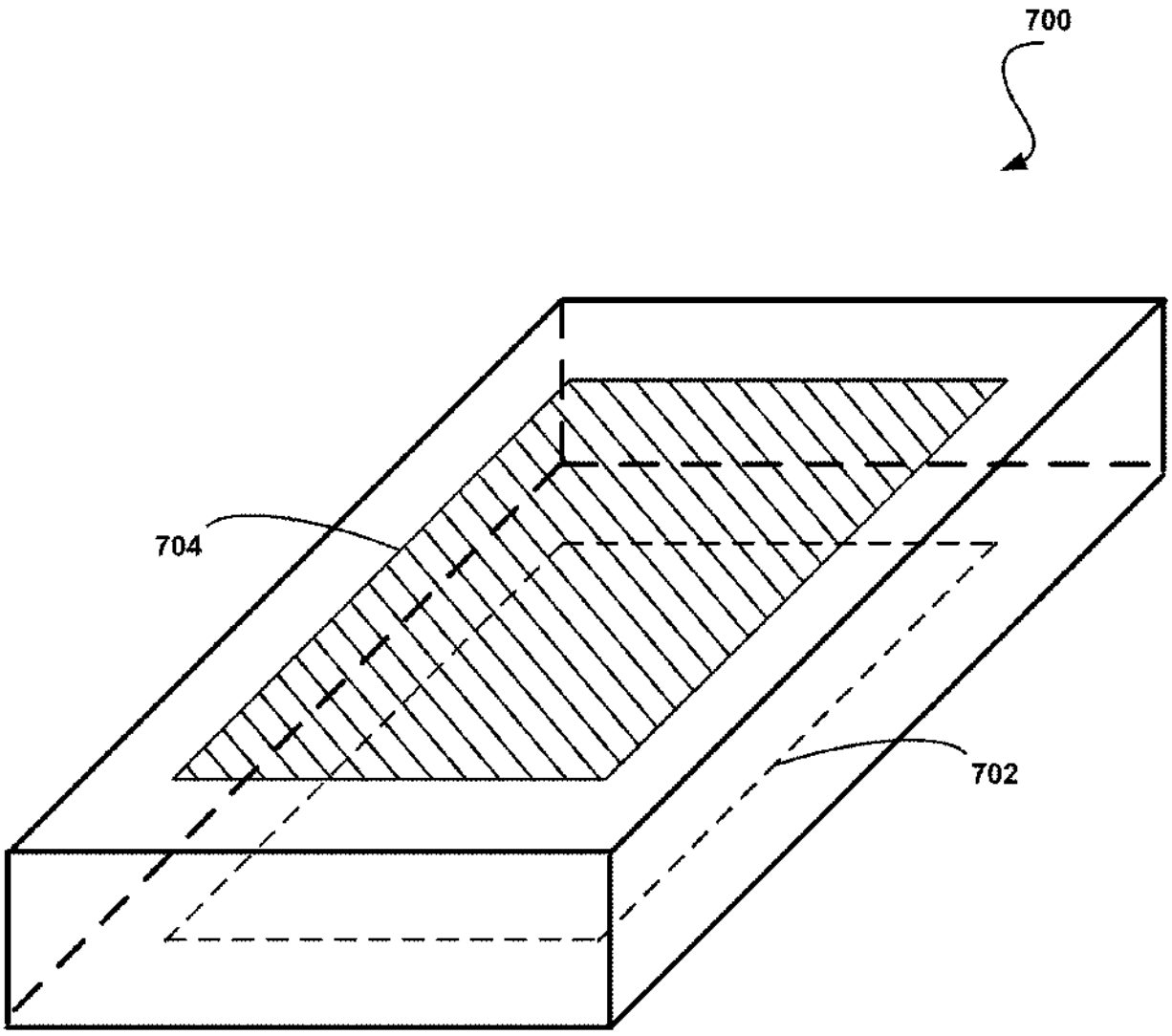


FIGURE 7

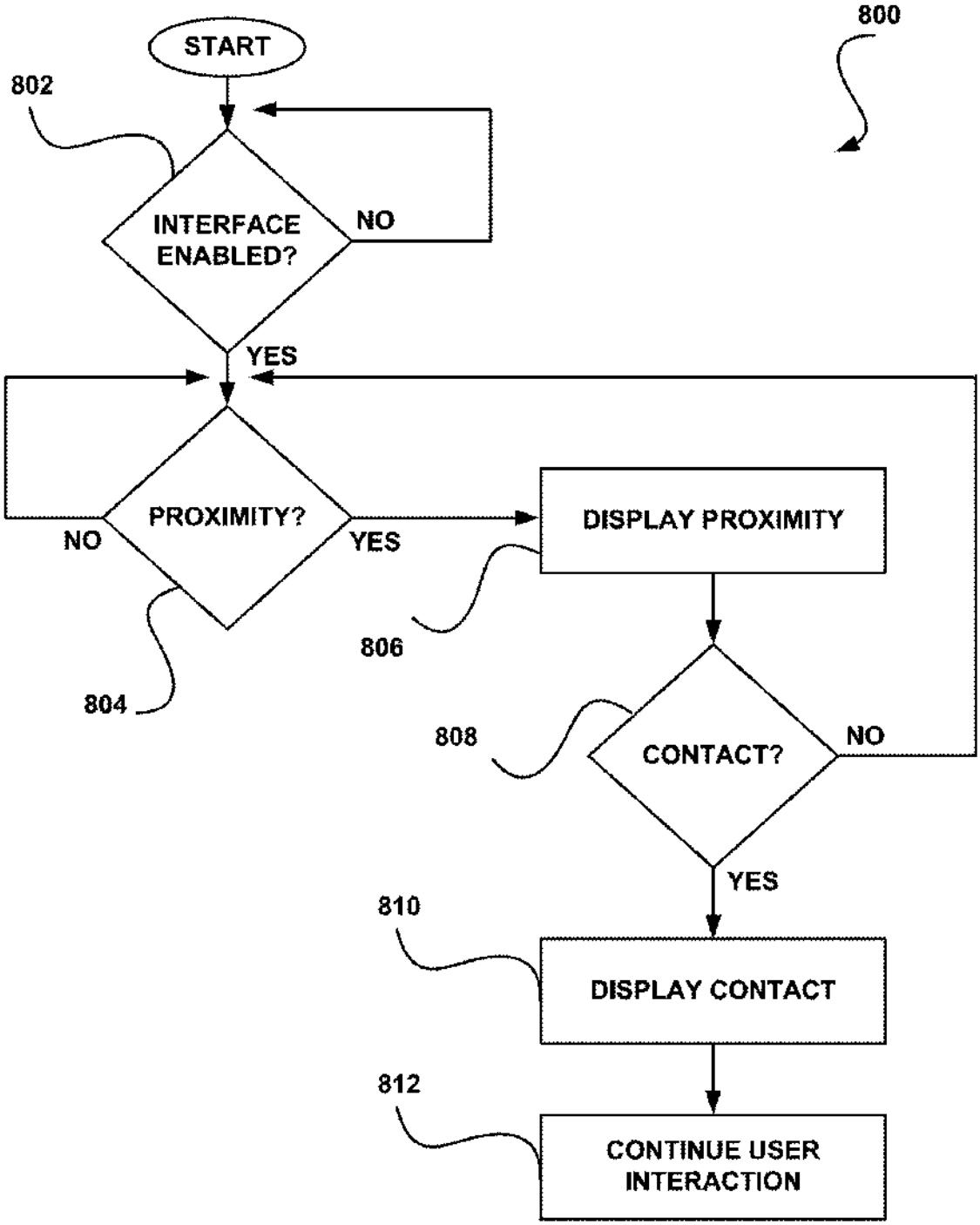

800
START
802
INTERFACE ENABLED?
NO
YES
PROXIMITY?
NO
YES
804
DISPLAY PROXIMITY
806
808
CONTACT?
NO
YES
810
DISPLAY CONTACT
812
CONTINUE USER INTERACTION

FIGURE 8

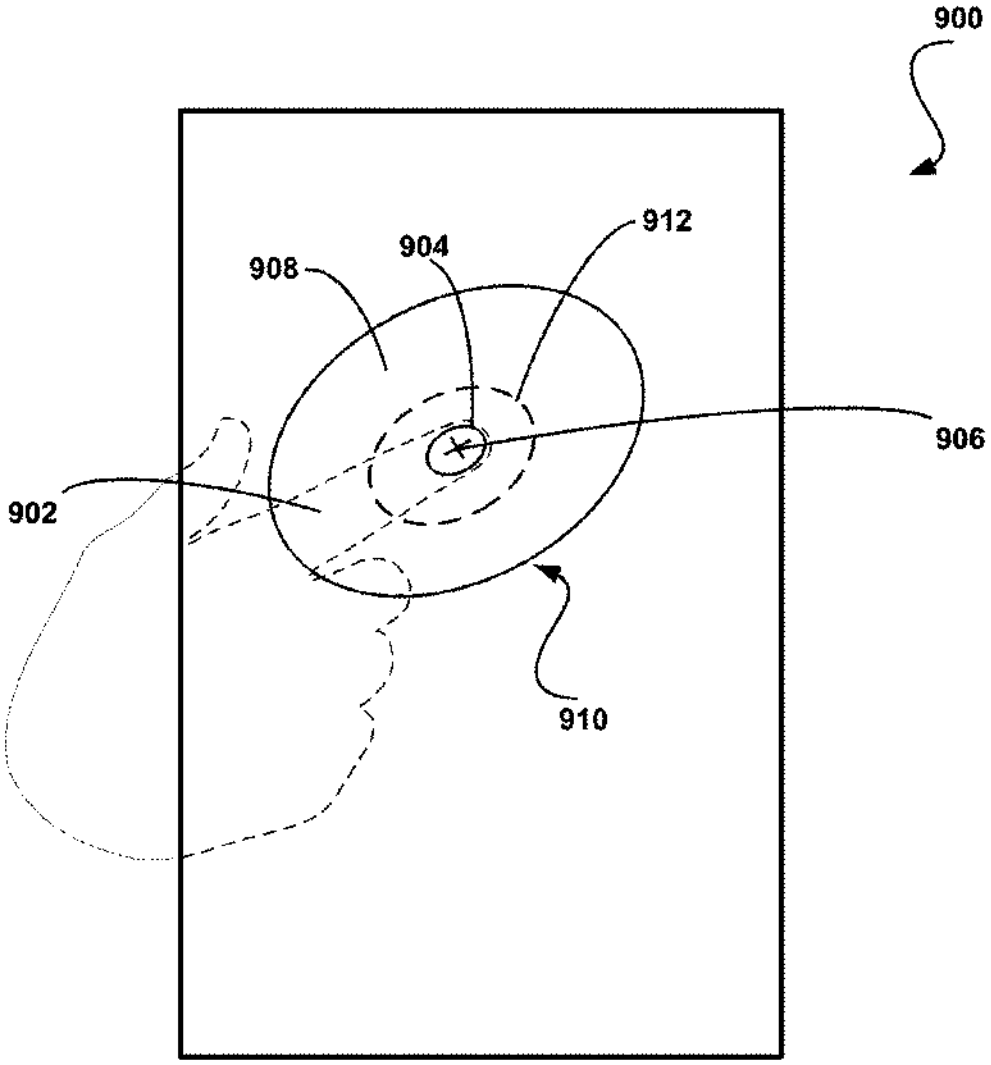


FIGURE 9

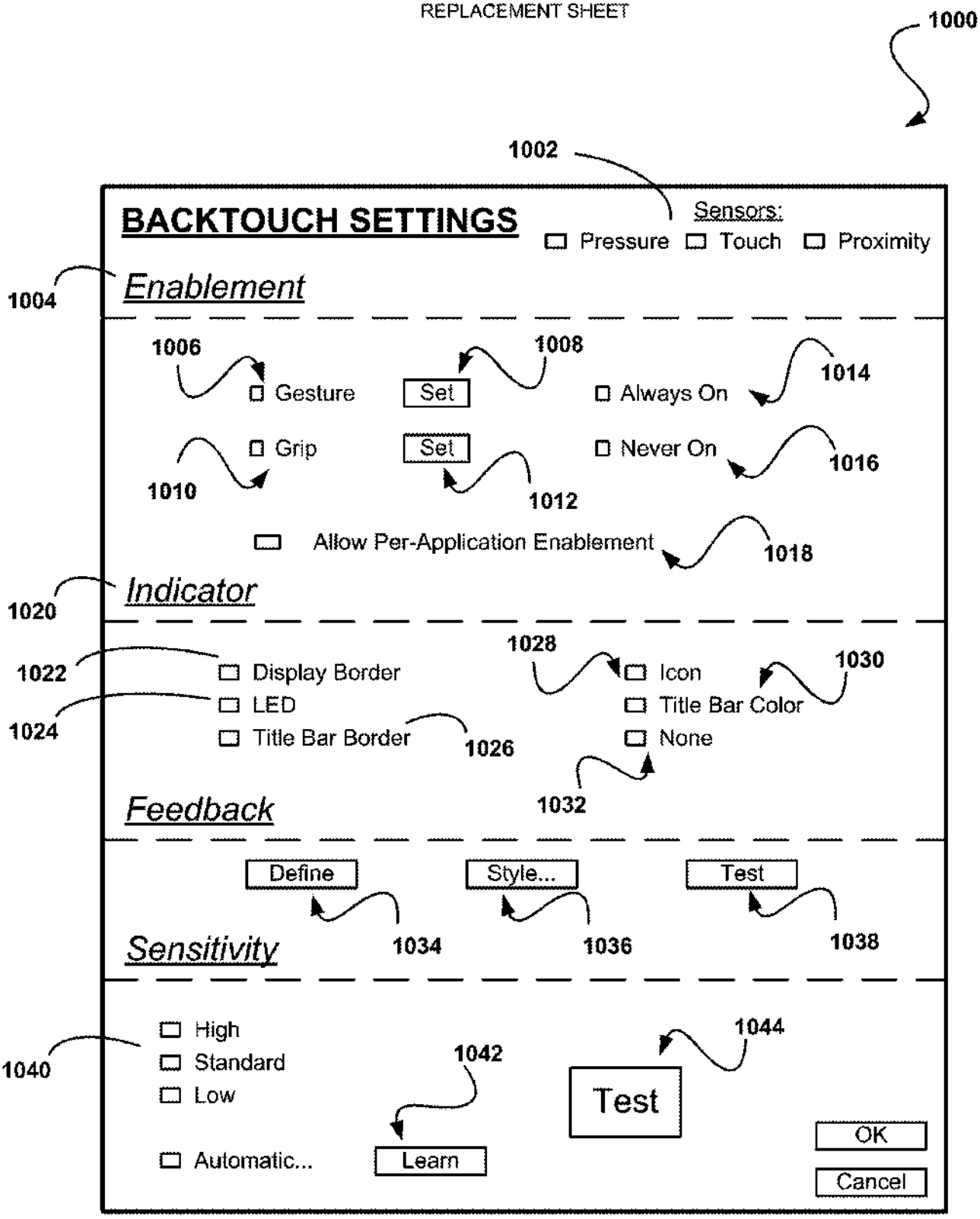

1000
1002
BACKTOUCH SETTINGS
Sensors:
Pressure
Touch
Proximity
1004
Enablement
1006
Gesture
Set
1008
Always On
1014
Grip
Set
Never On
1016
1010
1012
Allow Per-Application Enablement
1018
1020
Indicator
1022
Display Border
1028
Icon
1030
1024
LED
Title Bar Color
Title Bar Border
1026
None
1032
Feedback
Define
Style...
Test
Sensitivity
1034
1036
1038
1040
High
Standard
Low
1042
1044
Test
Automatic...
Learn
OK
Cancel

FIGURE 10

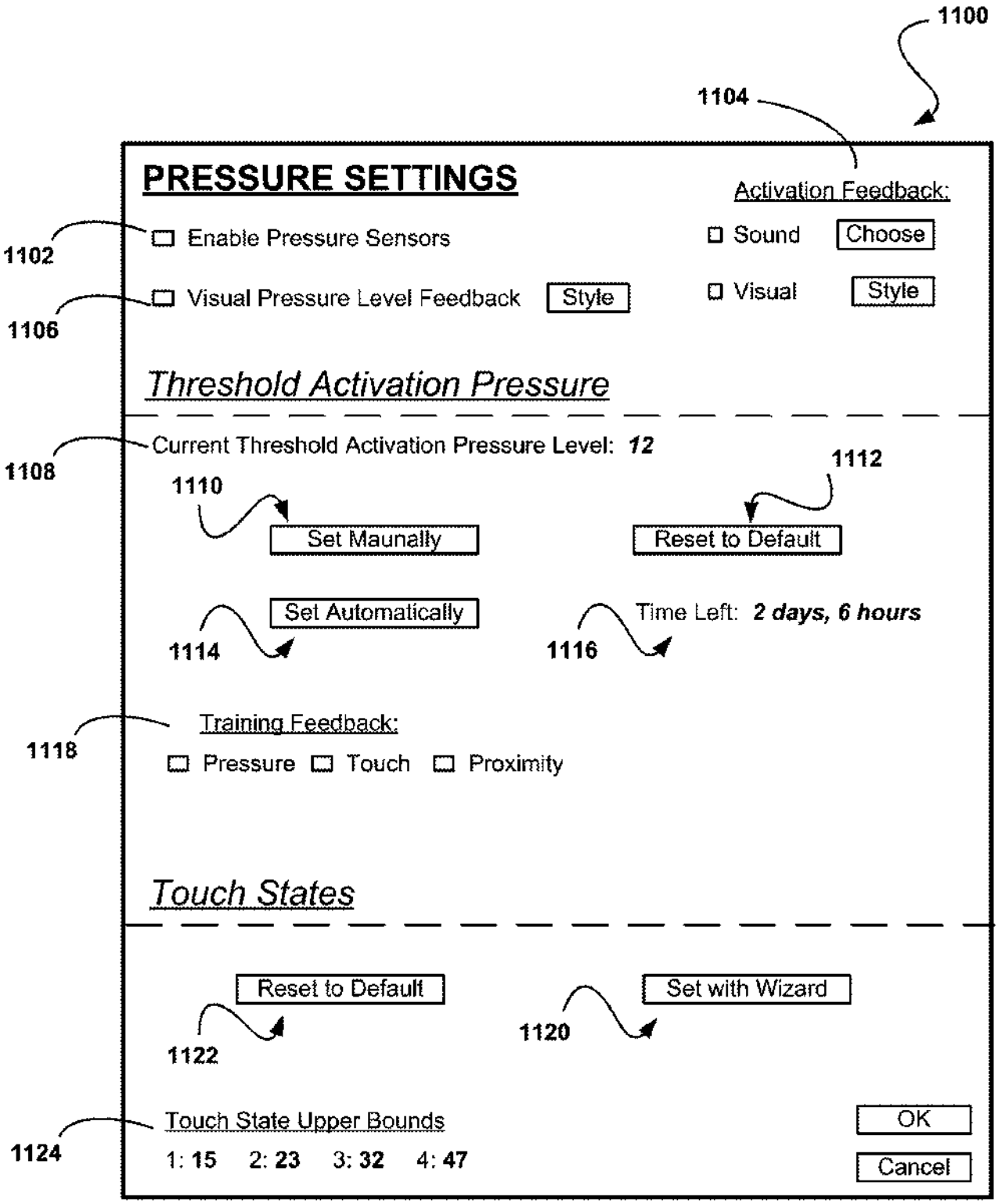

1100
1104
PRESSURE SETTINGS
Activation Feedback:
1102
Enable Pressure Sensors
Sound
Choose
1106
Visual Pressure Level Feedback
Style
Visual
Style
Threshold Activation Pressure
1108
Current Threshold Activation Pressure Level: 12
1112
1110
Set Maunally
Reset to Default
Set Automatically
1114
1116
Time Left: 2 days, 6 hours
1118
Training Feedback:
Pressure
Touch
Proximity
Touch States
Reset to Default
Set with Wizard
1122
1120
1124
Touch State Upper Bounds
1: 15 2: 23 3: 32 4: 47
OK
Cancel

FIGURE 11

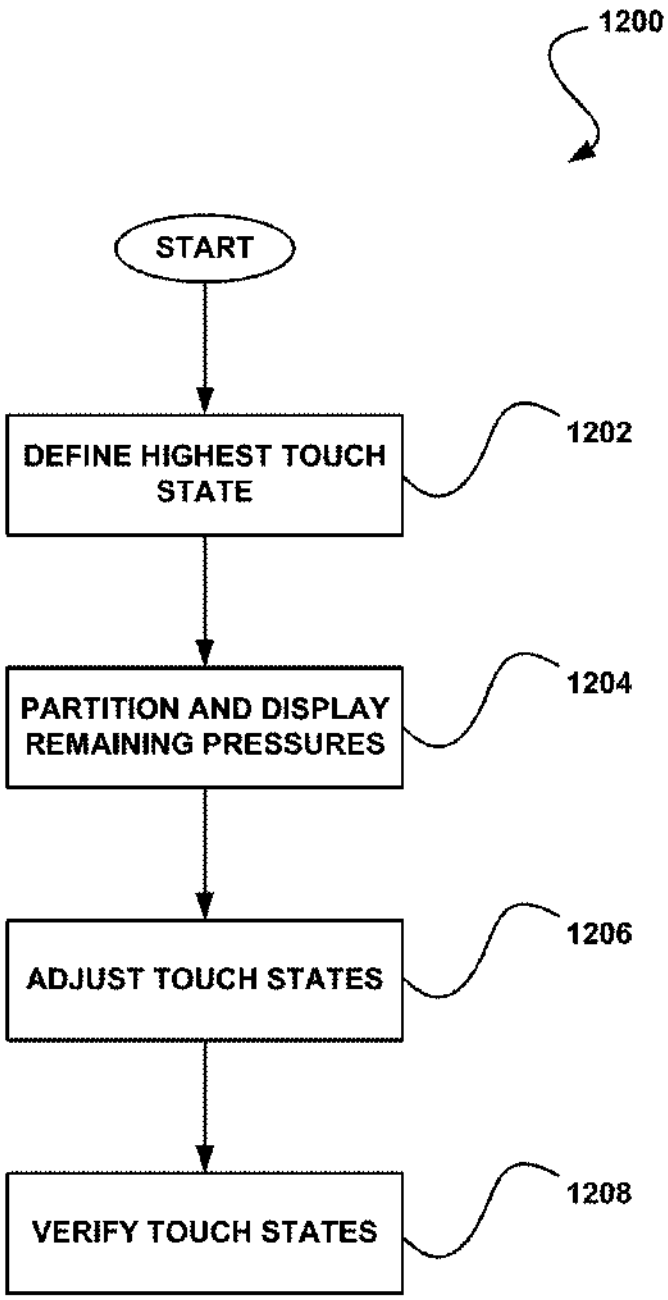

1200
START
DEFINE HIGHEST TOUCH STATE
1202
PARTITION AND DISPLAY REMAINING PRESSURES
1204
ADJUST TOUCH STATES
1206
VERIFY TOUCH STATES
1208

FIGURE 12

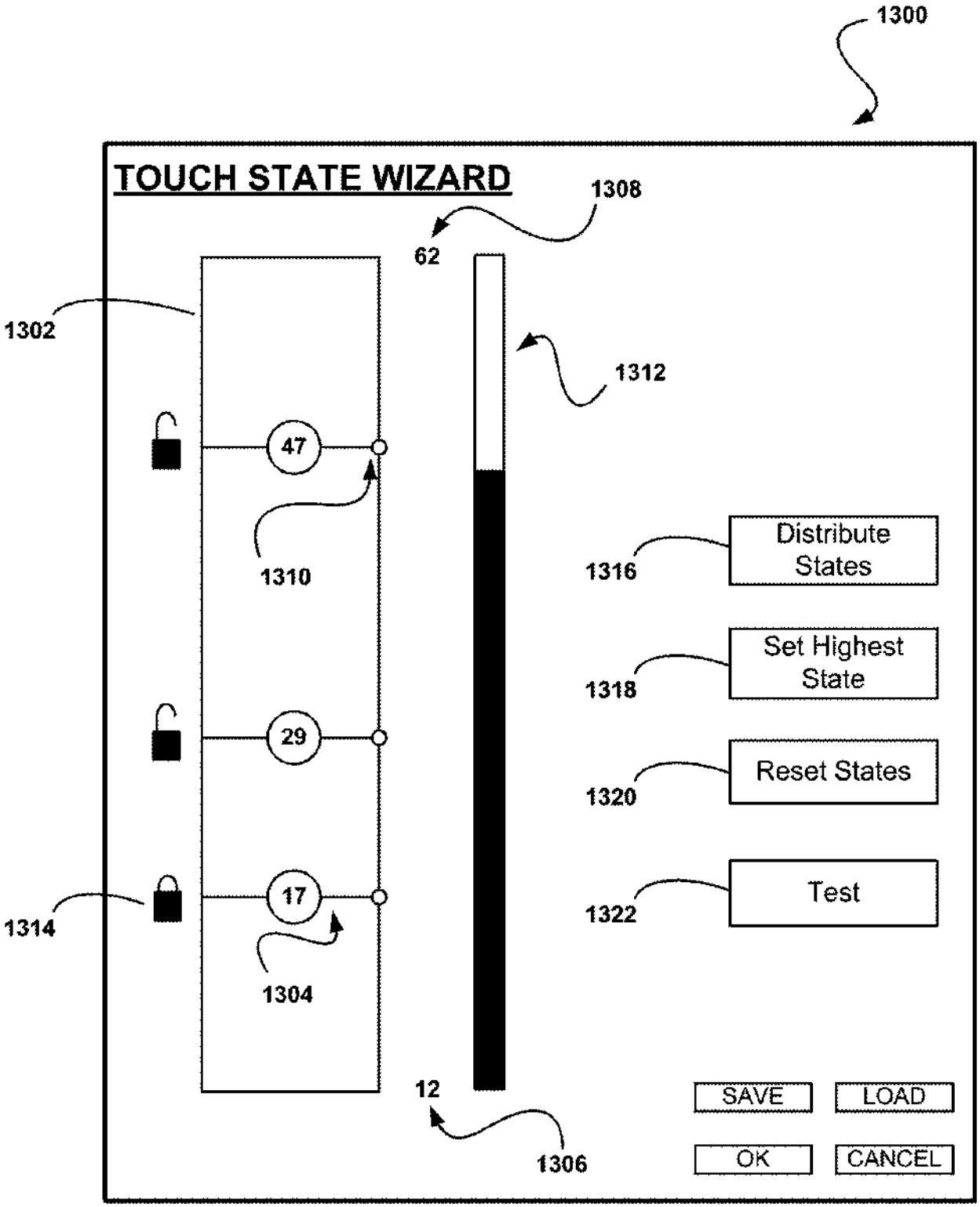

1300
TOUCH STATE WIZARD
1308
62
1302
1312
47
1310
29
17
1304
1314
Distribute States
1316
Set Highest State
1318
Reset States
1320
Test
1322
12
1306
SAVE
LOAD
OK
CANCEL

FIGURE 13

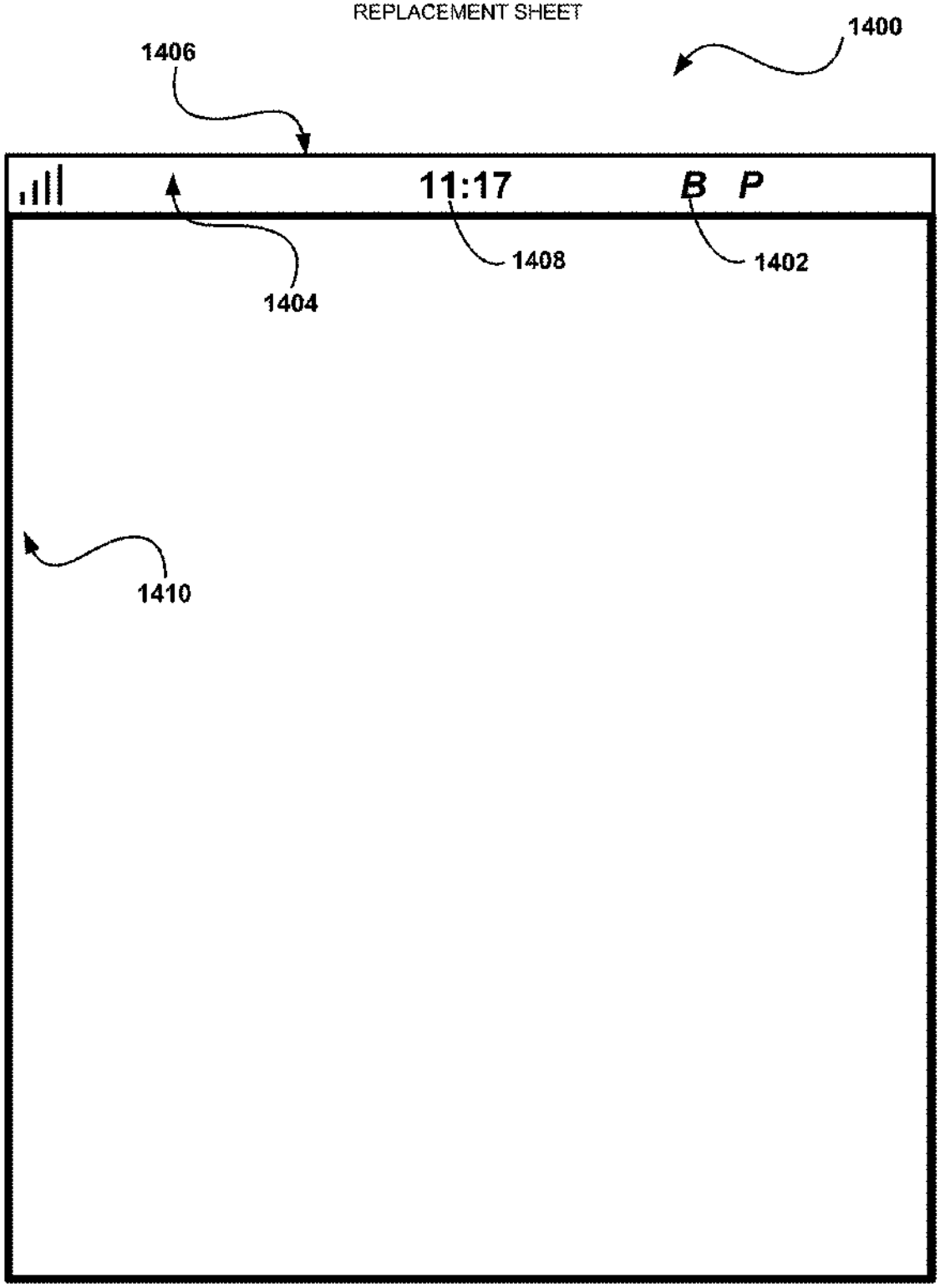


FIGURE 14

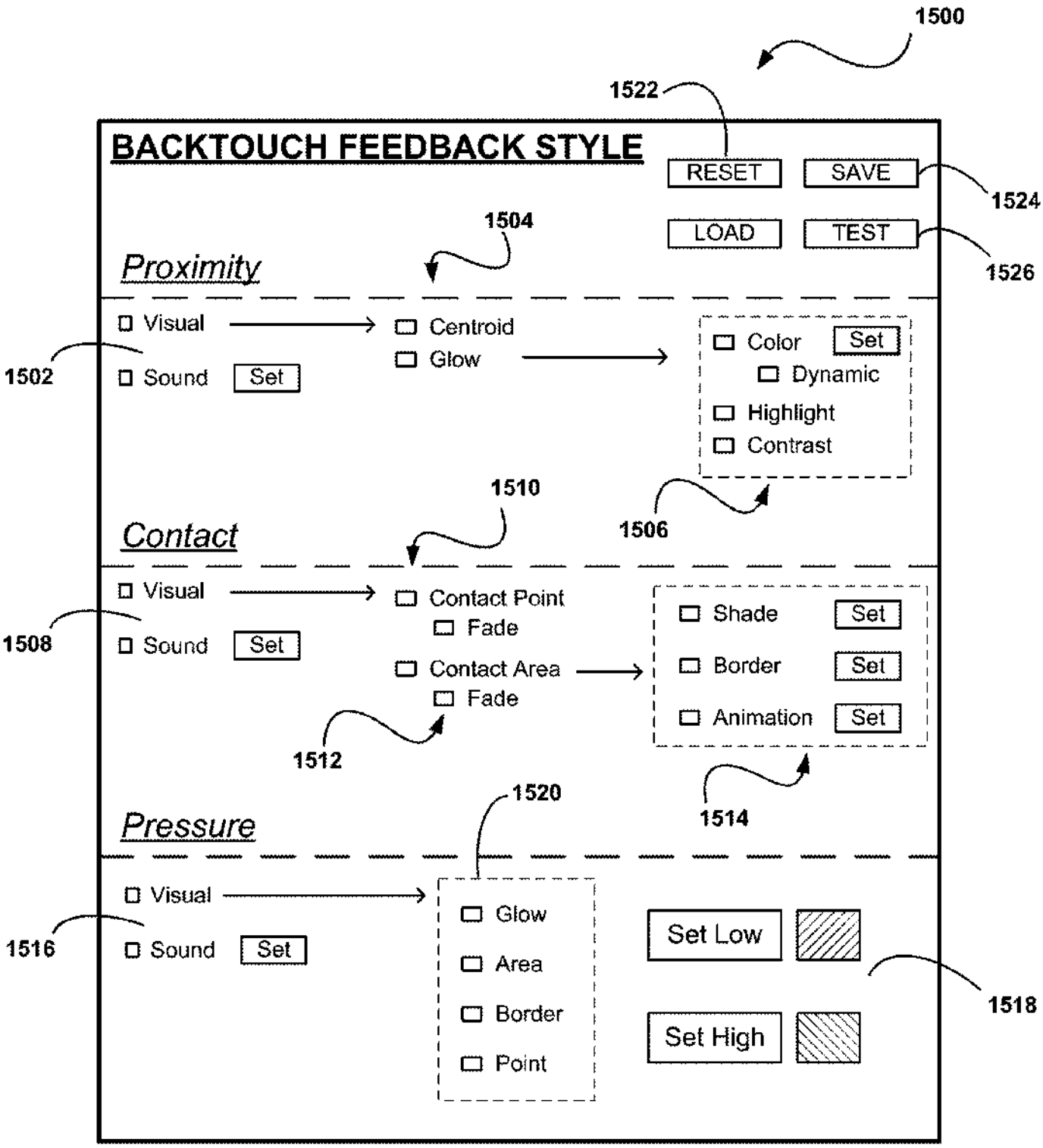

1500
1522
BACKTOUCH FEEDBACK STYLE
RESET
SAVE
1524
LOAD
TEST
1526
1504
Proximity
Visual
Centroid
Glow
Color
Set
Dynamic
Highlight
Contrast
1502
Sound
Set
1506
1510
Contact
Visual
Contact Point
Fade
Contact Area
Fade
Shade
Set
Border
Set
Animation
Set
1508
Sound
Set
1512
1514
1520
Pressure
Visual
Glow
Area
Border
Point
Set Low
Set High
1516
Sound
Set
1518

FIGURE 15

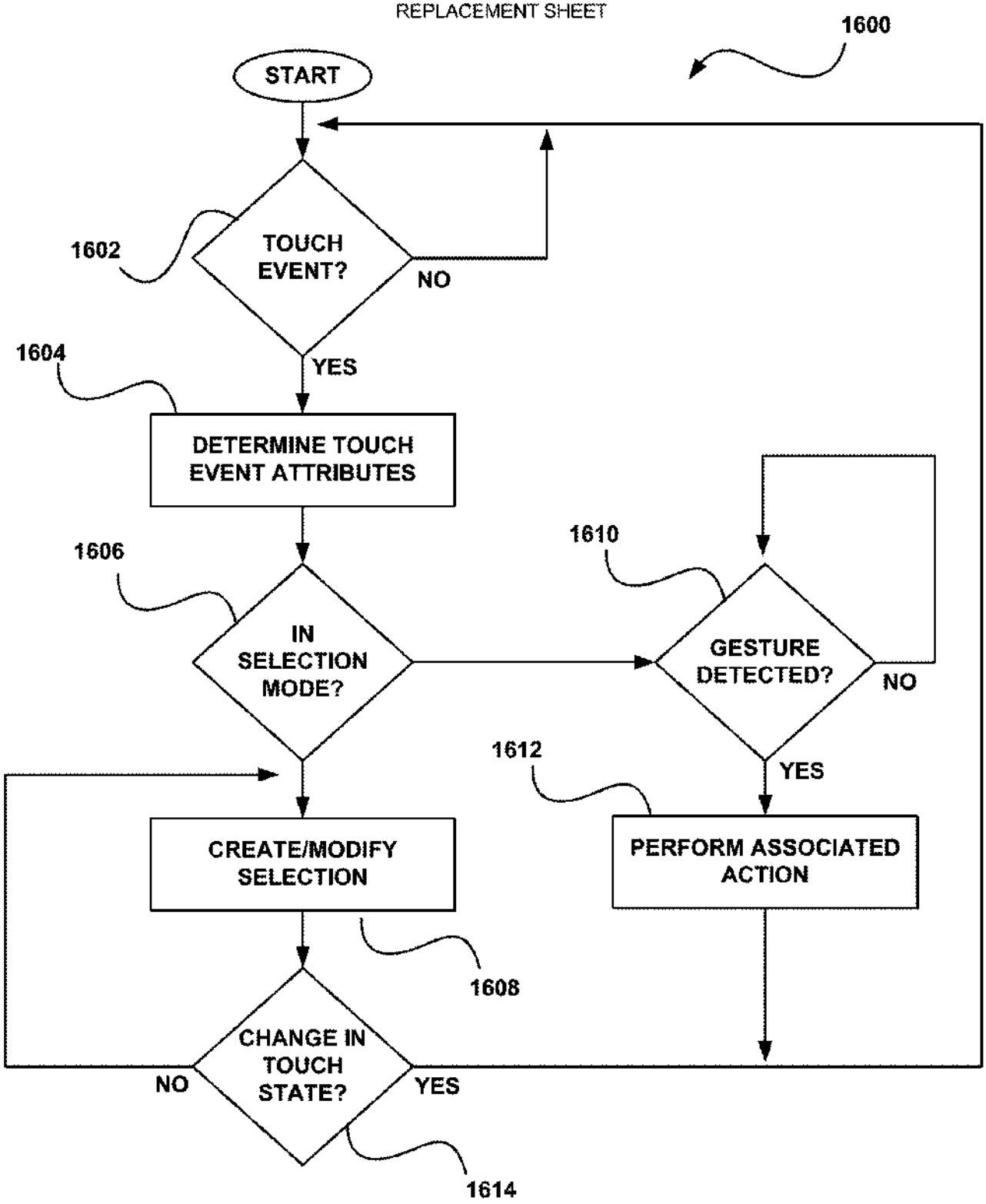

1600
START
1602
TOUCH EVENT?
NO
YES
1604
DETERMINE TOUCH EVENT ATTRIBUTES
1606
IN SELECTION MODE?
1610
GESTURE DETECTED?
NO
YES
1612
CREATE/MODIFY SELECTION
PERFORM ASSOCIATED ACTION
1608
CHANGE IN TOUCH STATE?
NO
YES
1614

FIGURE 16

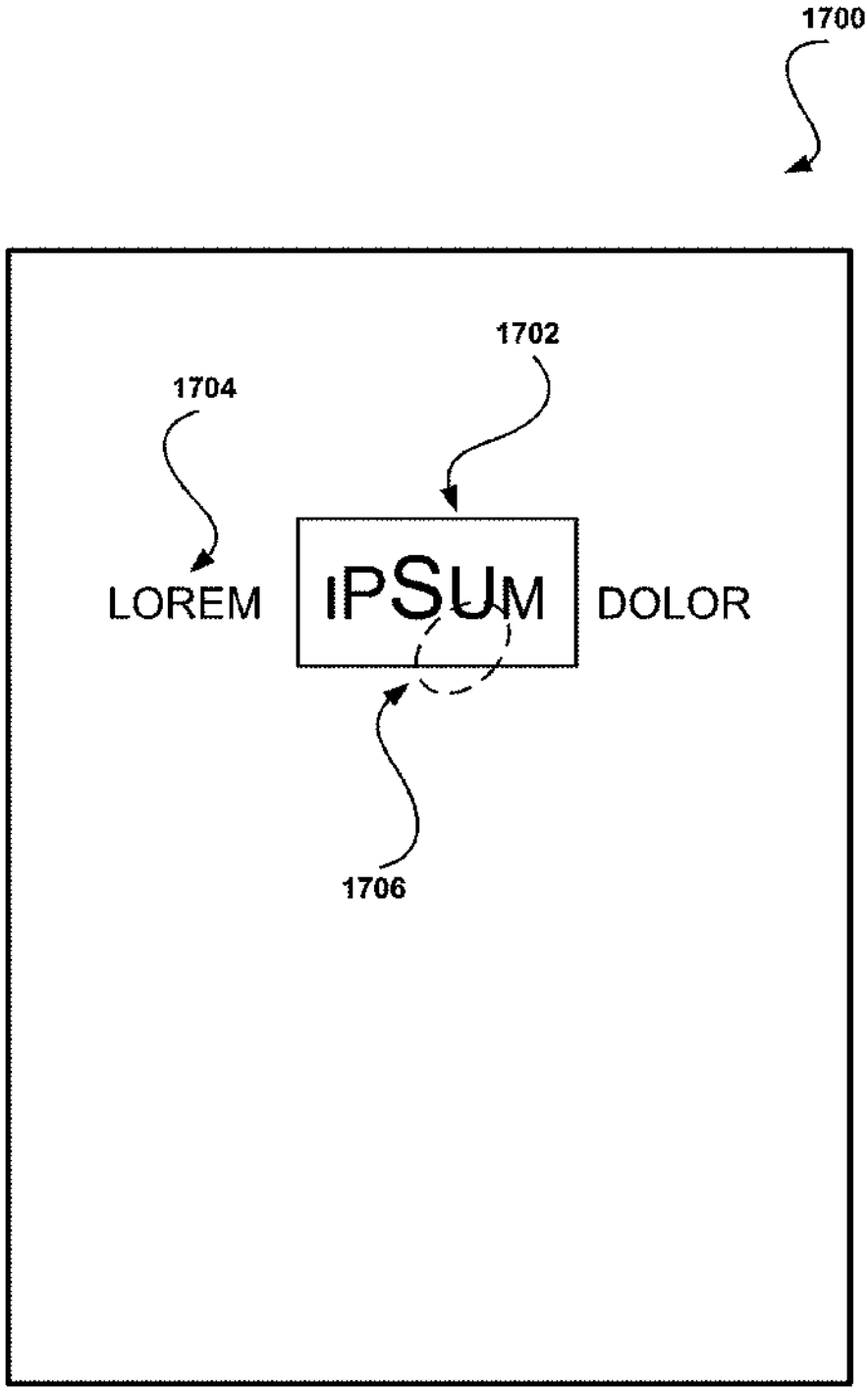


FIGURE 17

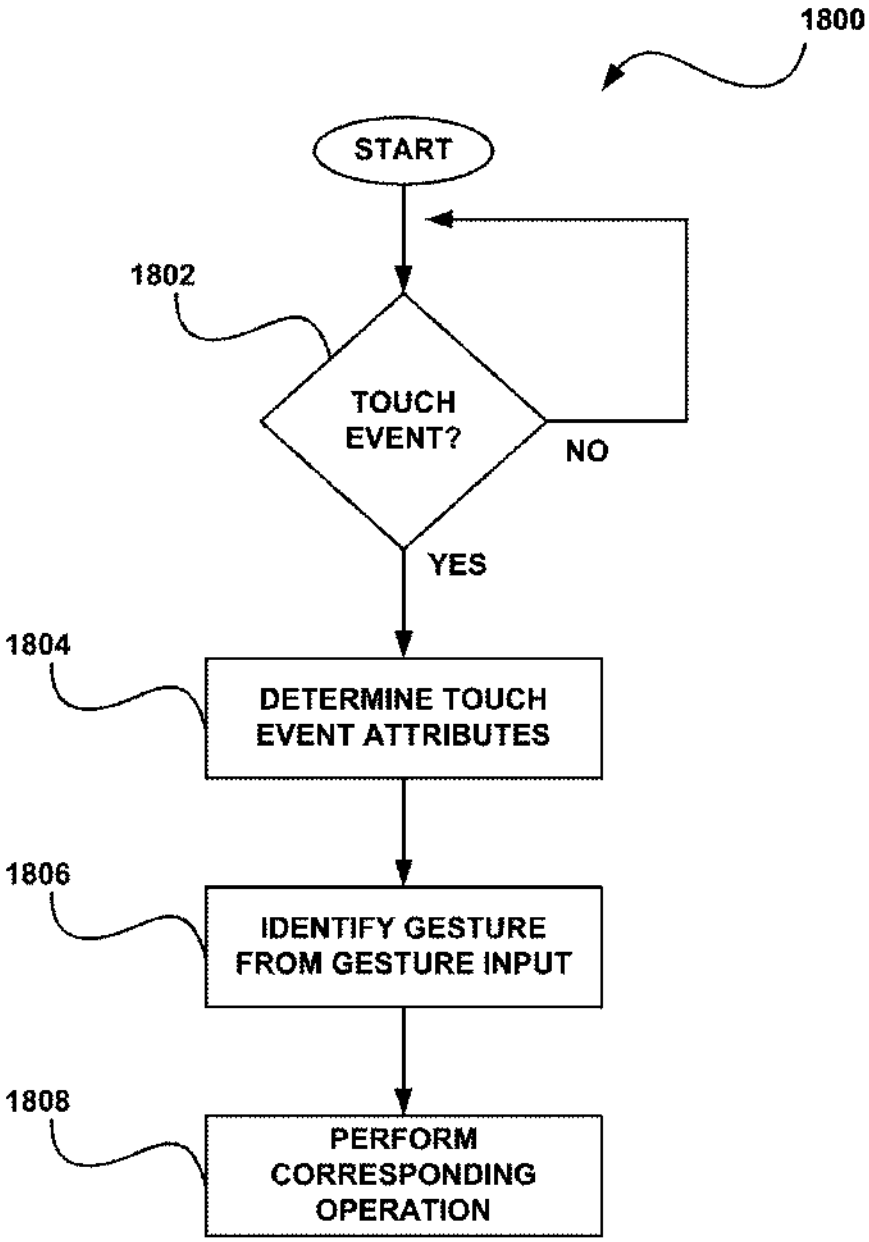

1800
START
1802
TOUCH EVENT?
NO
YES
1804
DETERMINE TOUCH EVENT ATTRIBUTES
1806
IDENTIFY GESTURE FROM GESTURE INPUT
1808
PERFORM CORRESPONDING OPERATION

FIGURE 18

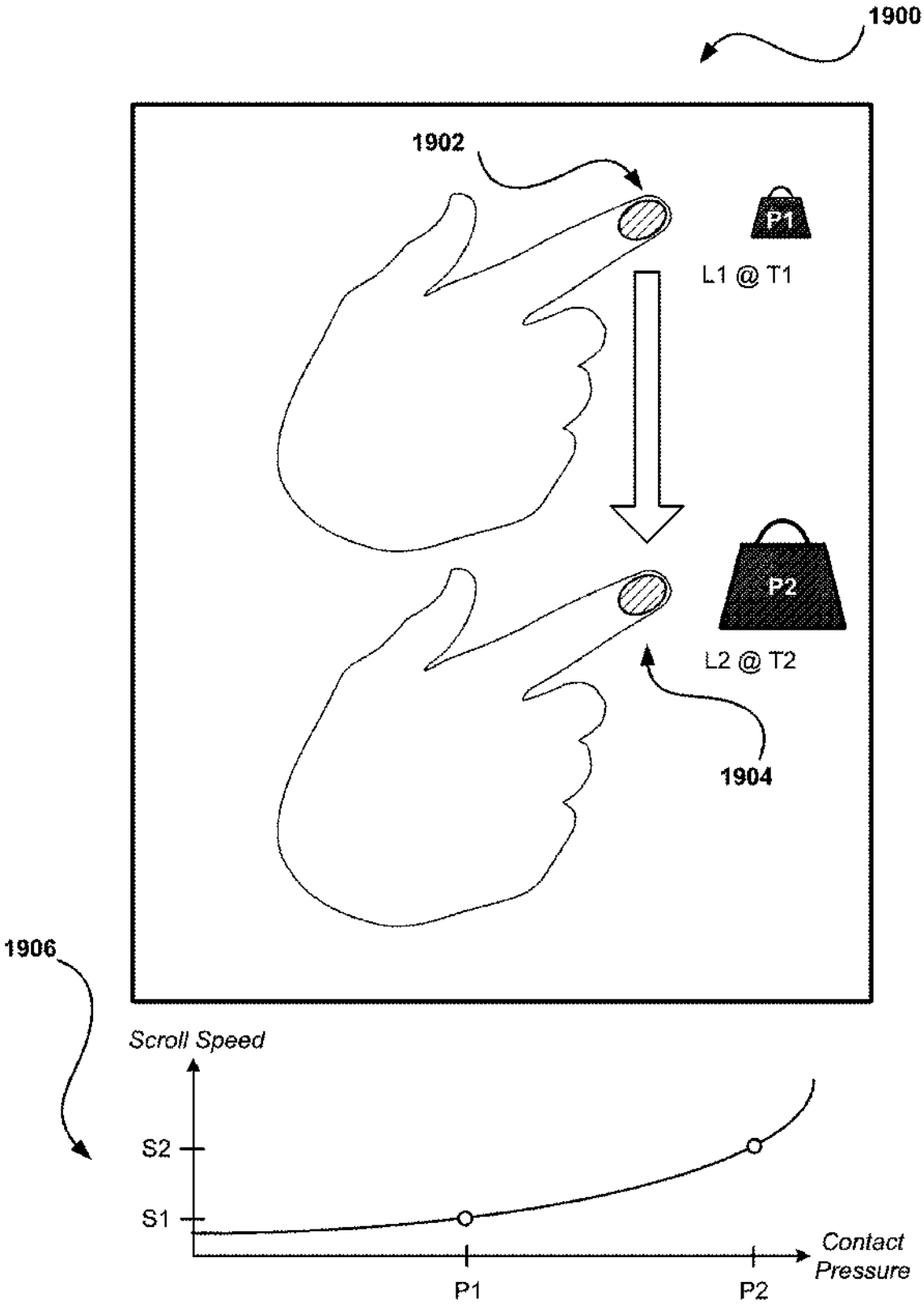

1900
1902
P1
L1 @ T1
P2
L2 @ T2
1904
1906
Scroll Speed
S2
S1
P1
P2
Contact Pressure

FIGURE 19

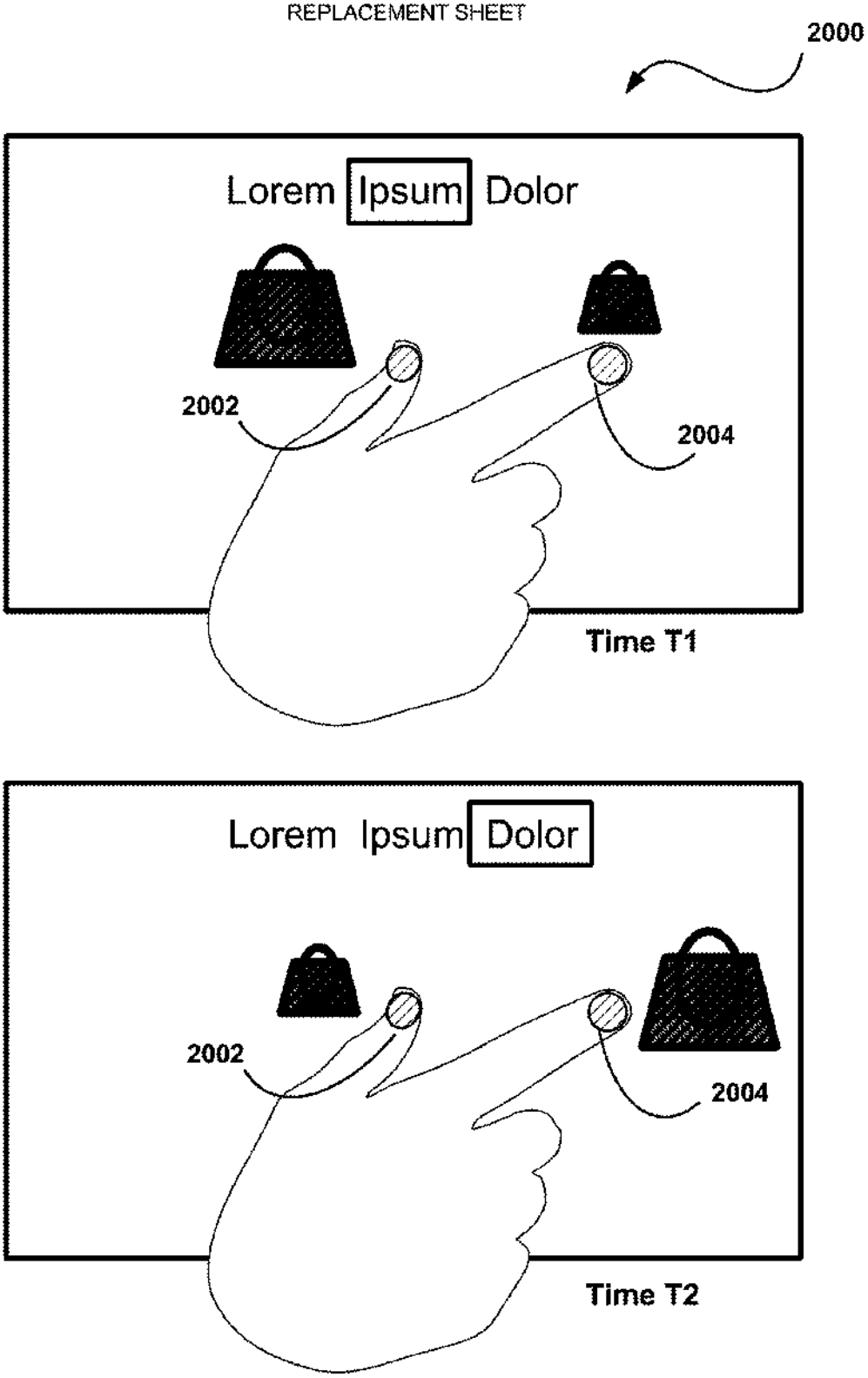

2000
Lorem Ipsum Dolor
2002
2004
Time T1
Lorem Ipsum Dolor
2002
2004
Time T2

FIGURE 20

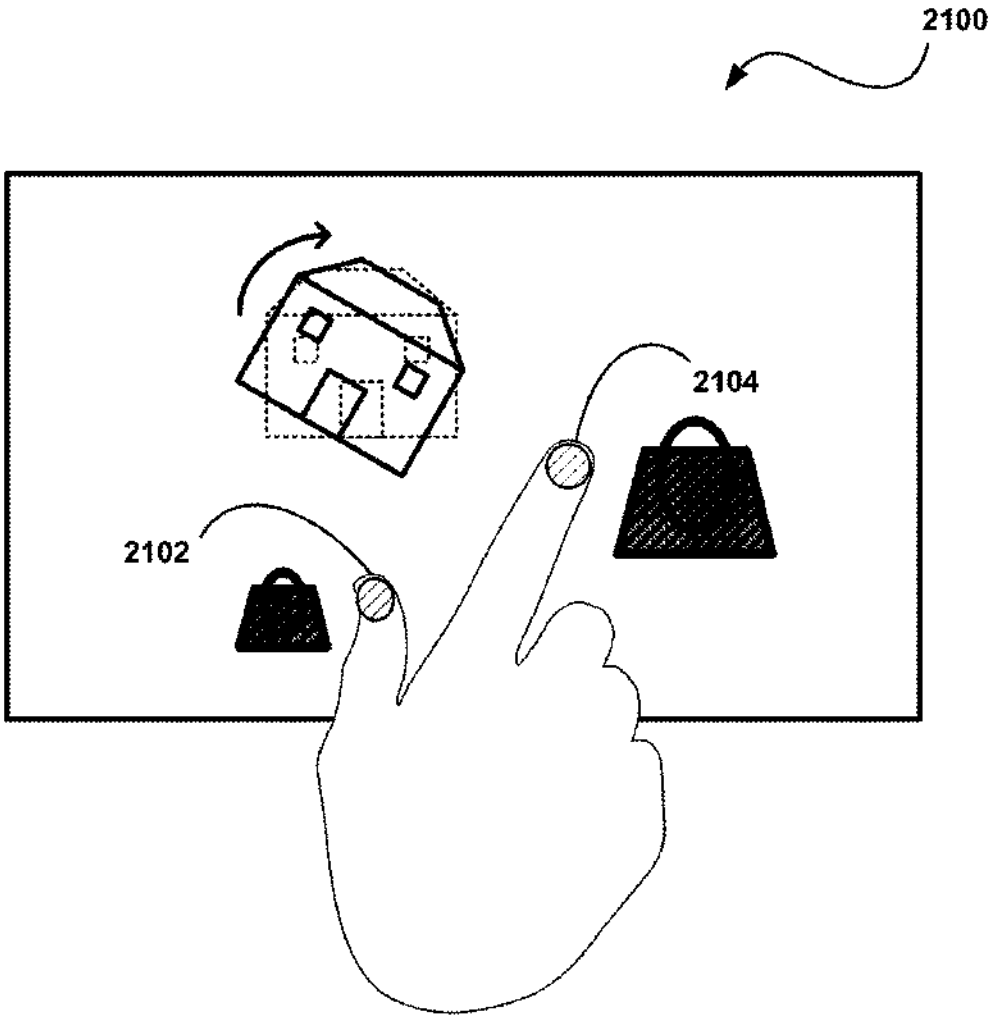


FIGURE 21

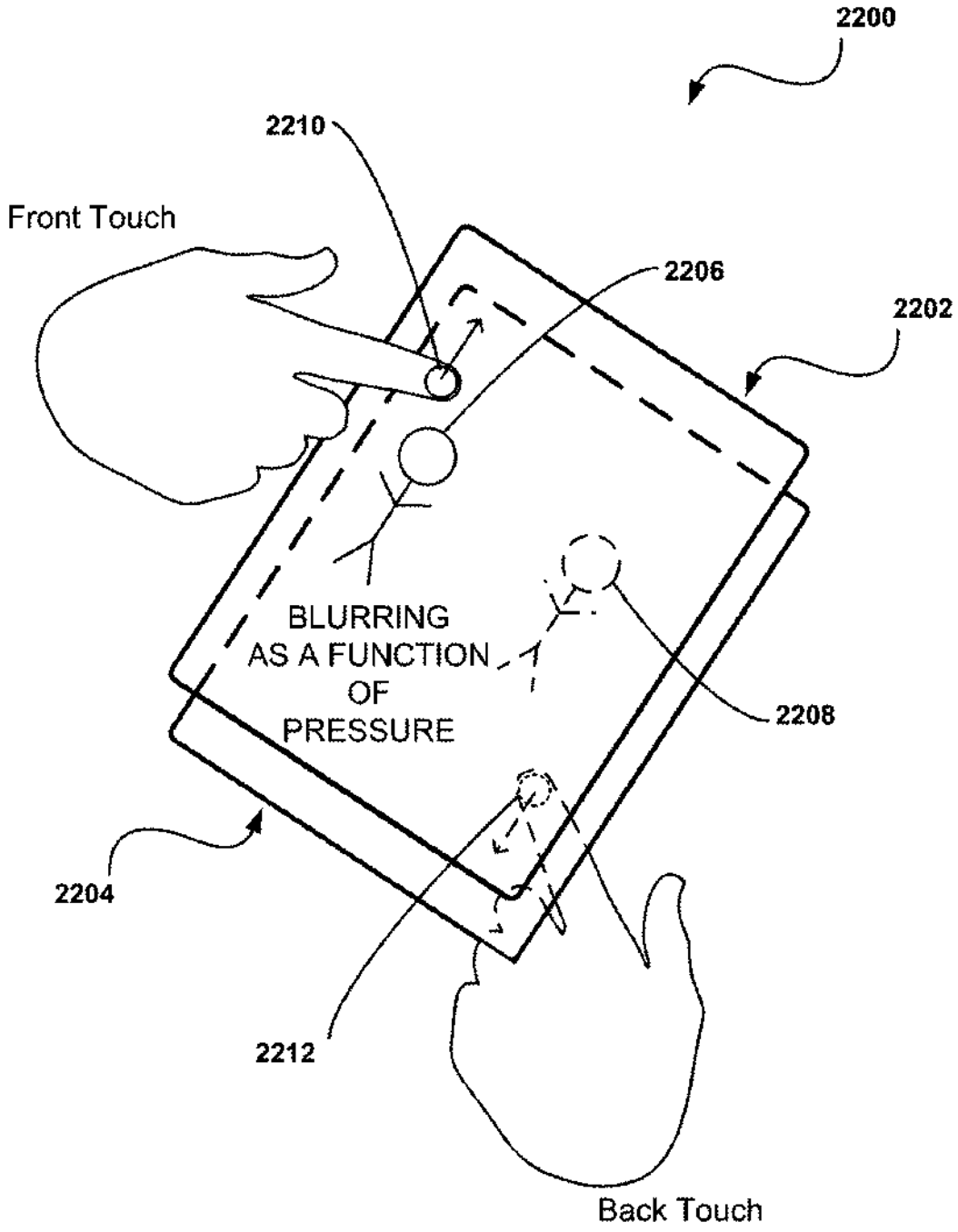

2200
2210
Front Touch
2206
2202
BLURRING
AS A FUNCTION
OF
PRESSURE
2208
2204
2212
Back Touch

FIGURE 22

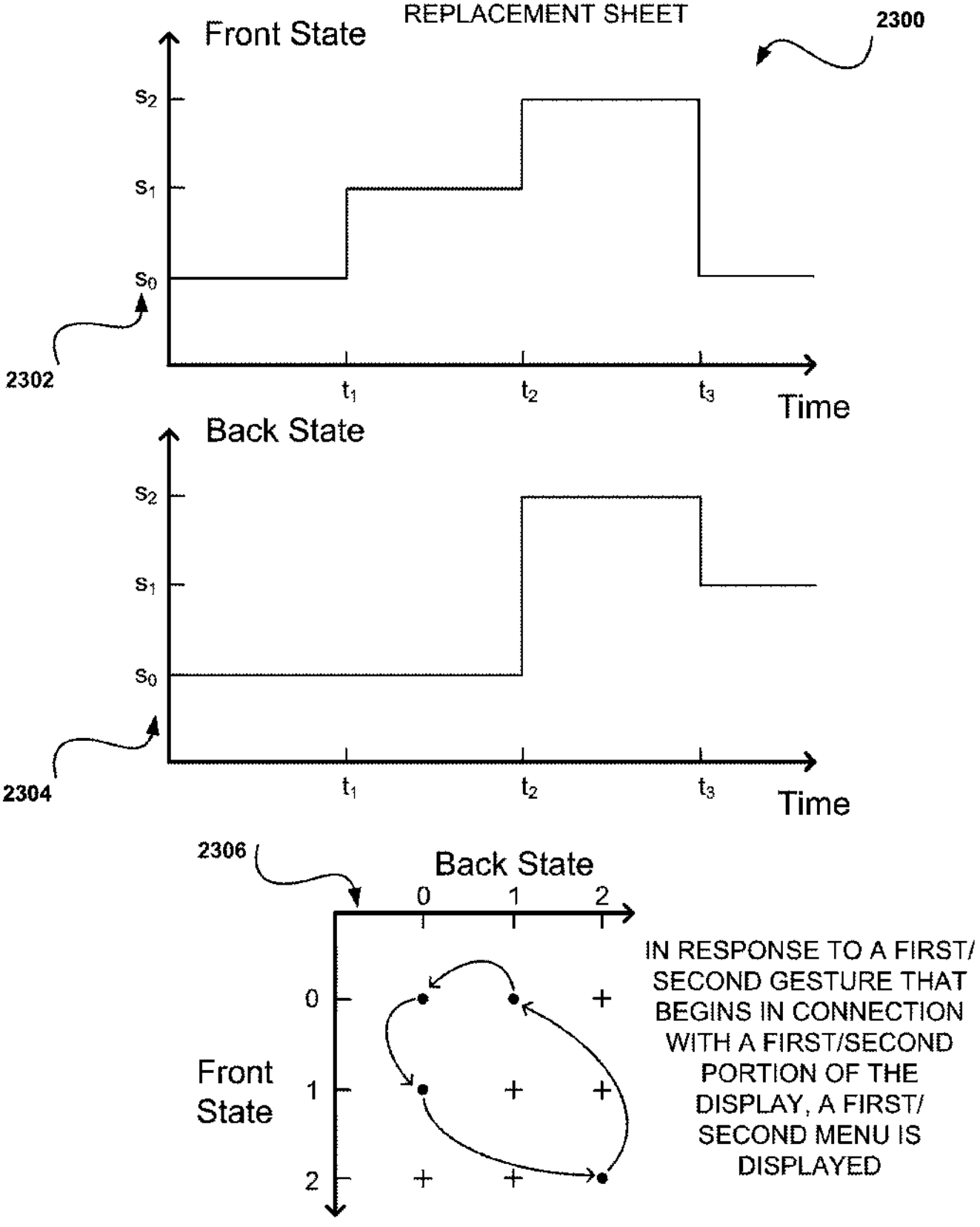

2300
Front State
s_2
s_1
s_0
2302
t_1
t_2
t_3
Time
Back State
s_2
s_1
s_0
2304
t_1
t_2
t_3
Time
2306
Back State
0
1
2
Front State
0
1
2
+
IN RESPONSE TO A FIRST/ SECOND GESTURE THAT BEGINS IN CONNECTION WITH A FIRST/SECOND PORTION OF THE DISPLAY, A FIRST/ SECOND MENU IS DISPLAYED

FIGURE 23

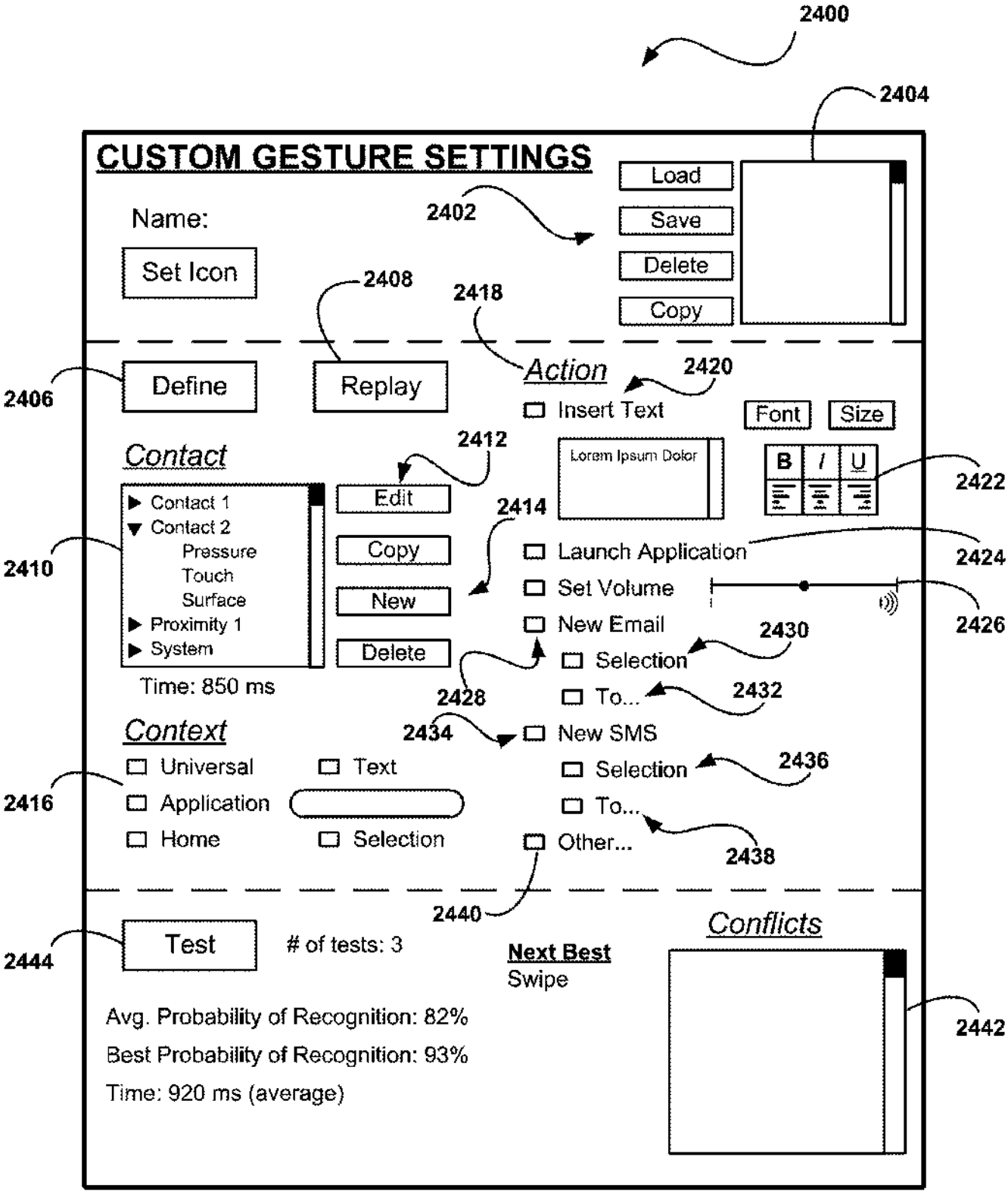

2400
2404
CUSTOM GESTURE SETTINGS
Load
Save
Delete
Copy
Name:
2402
Set Icon
2408
2418
2406
Define
Replay
Action
2420
Insert Text
Font
Size
2412
Contact
Lorem Ipsum Dolor
B
I
U
2422
Edit
2414
Contact 1
Contact 2
Pressure
Touch
Surface
Proximity 1
System
2410
Copy
Launch Application
2424
New
Set Volume
2426
New Email
2430
Delete
Selection
2428
To...
2432
Time: 850 ms
2434
Context
New SMS
Universal
Text
Selection
2436
2416
Application
To...
Home
Selection
Other...
2438
2440
Conflicts
2444
Test
of tests: 3
Next Best
Swipe
2442
Avg. Probability of Recognition: 82%
Best Probability of Recognition: 93%
Time: 920 ms (average)

FIGURE 24

Electronic Patent Application Fee Transmittal

Application Number:	16169961
Filing Date:	24-Oct-2018
Title of Invention:	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT
First Named Inventor/Applicant Name:	Michael S. Smith
Filer:	Patrick Edgar Caldwell
Attorney Docket Number:	SMITH070AG

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
CLAIMS IN EXCESS OF 20	2202	22	50	1100
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
			Total in USD ($)	**1100**

Electronic Acknowledgement Receipt	
EFS ID:	37338869
Application Number:	16169961
International Application Number:	
Confirmation Number:	7650
Title of Invention:	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT
First Named Inventor/Applicant Name:	Michael S. Smith
Customer Number:	92045
Filer:	Patrick Edgar Caldwell
Filer Authorized By:	
Attorney Docket Number:	SMITH070AG
Receipt Date:	01-OCT-2019
Filing Date:	24-OCT-2018
Time Stamp:	21:31:29
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$1100
RAM confirmation Number	E201901L31491615
Deposit Account	
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Amendment/Req. Reconsideration-After Non-Final Reject	SMITH070AG_Amendment_D_vF_01-Oct-2019.pdf	116769 34e6c4617ca5ed034c71facb77d362e62e5ec114	no	26
Warnings:					
Information:					
2	Drawings-only black and white line drawings	SMITH070AG_Drawings_replacement_vFR_01-Oct-2019.pdf	2639950 df4ca439bce7be941abaf149d8d3f2be0837ef03	no	24
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30399 7d57182d5fe1ee403d97ca81e74f5f12d0da519f	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	2787118		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: MICHAEL S. SMITH Application No.: 16/169,961 File Date: 10-24-2018 Title: GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT	Confirmation No.: 7650 Examiner: XAVIER, ANTONIO J Art Unit: 2623 Docket No.: SMITH070AG Date: 10/1/2019

AMENDMENT D

Mail Stop Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Examiner:

In response to the Office Action mailed 9/19/2019, please enter the following.

Amendment to the Drawings:

Submitted herewith is a replacement drawing for entry. No new matter has been added.

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

1.-17. (Cancelled)

18. (Currently Amended) An electronic device, comprising:

a display;

a touch interface ~~including a periphery~~;

one or more processors;

memory; and

one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for:

displaying, utilizing the display, a graphical user interface;

while the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first portion of the ~~periphery~~display and moves inward;

in response to the detection of the first gesture that begins in connection with the first portion of the ~~periphery~~display and moves inward, displaying, utilizing the display, a first menu as sliding in and including a plurality of first menu items;

when the first menu is displayed including the plurality of first menu items:

detecting, utilizing the touch interface, a first pressure on at least one of the first menu items,

when the first pressure on the at least one of the first menu items surpasses a first threshold, performing a first operation, and

when the first pressure on the at least one of the first menu items surpasses a second threshold, performing a second operation;

while the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second portion of the ~~periphery~~display and moves inward;

in response to the detection of the second gesture that begins in connection with the second portion of the ~~periphery~~display and moves inward, displaying, utilizing the display, a second menu including a plurality of second menu items;

when the second menu is displayed including the plurality of second menu items:

detecting, utilizing the touch interface, a second pressure on at least one of the second menu items,

when the second pressure on the at least one of the second menu items surpasses the first threshold, performing a third operation, and

when the second pressure on the at least one of the second menu items surpasses the second threshold, performing a fourth operation;

wherein the electronic device is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer.

19.-44. (Cancelled)

45. (Currently Amended) An electronic device, comprising:

a display;

a touch interface ~~including a periphery~~;

one or more processors;

memory; and

one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for:

displaying, utilizing the display, a graphical user interface;

while the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first portion of the ~~periphery~~display and moves inward;

in response to the detection of the first gesture that begins in connection with the first portion of the ~~periphery~~display and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items;

when the first menu is displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

when the first duration of contact on the at least one of the one or more first menu items [[does]]is detected to not surpass a threshold, performing a first operation, and

when the first duration of contact on the at least one of the one or more first menu items is detected to surpass ~~surpasses~~ the threshold, performing a second operation;

while the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second portion of the ~~periphery~~display and moves inward;

in response to the detection of the second gesture that begins in connection with the second portion of the ~~periphery~~display and moves inward, displaying, utilizing the display, a second menu including one or more second menu items;

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a second duration of contact on at least one of the one or more second menu items,

when the second duration of contact on the at least one of the one or more second menu items [[does]]is detected to not surpass the threshold, performing a third operation, and

when the second duration of contact on the at least one of the one or more second menu items is detected to surpass ~~surpasses~~ the threshold, performing a fourth operation;

wherein the electronic device is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer.

46. (Previously Presented) The electronic device of Claim 45, wherein the electronic device is configured such that at least a portion of the at least one other virtual layer is at least partially translucent such that at least a portion of the at least one virtual display layer is visible through the at least one other virtual layer.

47. (Previously Presented) The electronic device of Claim 46, wherein the electronic device is configured such that the at least portion of the at least one virtual display layer that is visible through the at least one other virtual layer, includes at least a portion of a background image.

48. (Previously Presented) The electronic device of Claim 45, wherein the electronic device is configured such that the first menu and the second menu are displayed in separate virtual display layers.

49. (Previously Presented) The electronic device of Claim 45, wherein the electronic device is configured such that the graphical user interface includes a home screen, for choosing among a plurality of applications.

50. (Cancelled)

51. (Previously Presented) The electronic device of Claim 45, wherein the electronic device is configured such that the one or more first menu items include messages in a list, the first operation includes displaying a view of at least one of the messages, and the second operation includes opening the at least one message.

52. (Previously Presented) The electronic device of Claim 45, wherein the electronic device is configured such that the one or more second menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item;

the third operation includes selecting the at least one of the one or more second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items.

53. (Currently Amended) The electronic device of Claim 45, wherein the electronic device is configured such that hardware status indicia is displayed adjacent to the second portion of the ~~periphery~~display.

54. (Previously Presented) The electronic device of Claim 45, wherein the electronic device is configured such that only one of the first menu or the second menu is capable of being displayed at a time.

55. (Previously Presented) The electronic device of Claim 45, wherein the electronic device is configured such that at least one of the first menu or the second menu substantially fills the display.

56. (Previously Presented) The electronic device of Claim 45, wherein the electronic device is configured such that indicia is displayed via the graphical user interface for prompting a user as to an accessibility of at least one of the first menu or the second menu.

57. (Previously Presented) The electronic device of Claim 45, wherein the electronic device is configured such that the first menu is accessible via the first gesture; the second menu is accessible via the second gesture; at least two of the first, second, third, and fourth operations are performed based on at least two different contact durations, in order to increase operation accessibility via the electronic device that includes a mobile device.

58.-60. (Cancelled)

61. (New) The electronic device of Claim 45, wherein the electronic device is configured such that the first gesture and the second gesture are capable of being detected as moving inward in different directions.

62. (New) The electronic device of Claim 45, wherein the electronic device is configured such that the one or more first menu items include a plurality of application-specific menu items.

63. (New) The electronic device of Claim 45, wherein the electronic device is configured such that the one or more first menu items include a plurality of application menu items for accessing different applications.

64. (New) The electronic device of Claim 45, wherein the electronic device is configured such that the one or more first menu items include a plurality of application menu items for launching different applications.

65. (New) The electronic device of Claim 45, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a deletion operation.

66. (New) The electronic device of Claim 45, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a move operation.

67. (New) The electronic device of Claim 45, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application, where the first operation includes launching the particular application and the second operation includes accessing a menu item rearrange operation.

68. (New) The electronic device of Claim 45, wherein the electronic device is configured such that, the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

69. (New) The electronic device of Claim 68, wherein the electronic device is configured such that the second operation is performed when the first duration of contact on the at least one application menu item is detected to surpass the threshold, and when the first duration of contact is detected to include a slide gesture component.

70. (New) The electronic device of Claim 45, wherein the electronic device is configured such that, the graphical user interface includes a home screen for choosing among a plurality of applications, the one or more first menu items include at least one application menu item associated with a particular application of the plurality of applications, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display another particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

71. (New) The electronic device of Claim 70, wherein the electronic device is configured such that the second operation is performed when:

the first duration of contact on the at least one application menu item is detected to surpass the threshold, and

the first duration of contact is detected to include a slide gesture component after the first duration of contact on the at least one application menu item is detected to surpass the threshold.

72. (New) The electronic device of Claim 45, wherein the electronic device is configured such that the one or more first menu items include at least one application menu item associated with a particular application for, in response to a detection of a selection thereof when the first duration of contact on the at least one application menu item is detected to surpass the threshold, launching the particular application to display a particular application interface of the particular application in an overlying and scaled virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed.

73. (New) The electronic device of Claim 45, wherein the electronic device is configured such that the first portion of the display and the second portion of the display are portions of different edges.

74. (New) The electronic device of Claim 45, wherein the electronic device is configured such that the first portion of the display and the second portion of the display are not portions of different edges.

75. (New) The electronic device of Claim 45, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the first portion of the display and the second portion of the display are part of different edges of the display;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular

application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second portion of the display.

76. (New) The electronic device of Claim 75, wherein the electronic device is configured such that the second operation is performed when:

the first duration of contact on the particular application icon is detected to surpass the threshold, and

the first duration of contact is detected to include a slide gesture component after the first duration of contact on the particular application icon is detected to surpass the threshold.

77. (New) The electronic device of Claim 75, wherein the electronic device is configured such that the one or more first menu items include only a subset of the application icons including the particular application icon.

78. (New) The electronic device of Claim 75, wherein the electronic device is configured such that the one or more first menu items include only a subset of the application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

79. (New) The electronic device of Claim 75, wherein the electronic device is configured such that the one or more first menu items include favorites of the application icons including the particular application icon, at least a portion of which are included as the one or more first menu items in response to detection of user input.

80. (New) The electronic device of Claim 45, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the first portion of the display and the second portion of the display are part of different edges of the display;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items;

the one or more second menu items further include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages, and the second operation includes controlling presentation of the at least one message; and

hardware status indicia is displayed adjacent to the second portion of the display.

81. (New) The electronic device of Claim 45, wherein the electronic device is configured such that when the first duration of contact on the at least one of the one or more first menu items

does not surpass the threshold, the first operation is performed, in response to a cessation of the first duration of contact.

82. (New) The electronic device of Claim 45, wherein the electronic device is configured such that when the second duration of contact on the at least one of the one or more second menu items does not surpass the threshold, the third operation is performed, in response to a cessation of the second duration of contact.

83. (New) The electronic device of Claim 45, wherein the electronic device is configured such that the first menu is at least partially translucent for viewing the graphical user interface thereunder.

84. (New) The electronic device of Claim 45, wherein the electronic device is configured such that the first menu is at least partially translucent for viewing the graphical user interface, including a home screen, thereunder.

85. (New) The electronic device of Claim 45, wherein the electronic device is configured such that at least a portion of the graphical user interface is blurred based on the detection of the first gesture that begins in connection with the first portion of the display and moves inward.

86. (New) The electronic device of Claim 85, wherein the electronic device is configured such that a magnitude of the blurring of the at least portion of the graphical user interface progressively increases as a function of an increase in a magnitude of the first gesture being detected.

87. (New) The electronic device of Claim 85, wherein the electronic device is configured such that a magnitude of the blurring of the at least portion of the graphical user interface progressively increases as a function of an increase in a distance magnitude of the first gesture being detected.

88. (New) The electronic device of Claim 85, wherein the electronic device is configured such that a magnitude of the blurring of the at least portion of the graphical user interface progressively increases while detecting the first gesture moving inward.

89. (New) The electronic device of Claim 88, wherein the electronic device is configured such that the magnitude of the blurring of the at least portion of the graphical user interface progressively decreases as a function of detecting the first gesture moving outward.

90. (New) The electronic device of Claim 86, wherein the electronic device is configured such that the magnitude of the blurring of the at least portion of the graphical user interface progressively decreases as a function of detecting a change in the first gesture.

91. (New) The electronic device of Claim 45, wherein the electronic device is configured such that at least a portion of the graphical user interface is shaded based on the detection of the second gesture that begins in connection with the second portion of the display and moves inward.

92. (New) The electronic device of Claim 91, wherein the electronic device is configured such that a magnitude of the shading of the at least portion of the graphical user interface progressively increases as a function of an increase in a magnitude of the second gesture being detected.

93. (New) The electronic device of Claim 91, wherein the electronic device is configured such that a magnitude of the shading of the at least portion of the graphical user interface progressively increases as a function of an increase in a distance magnitude of the second gesture being detected.

94. (New) The electronic device of Claim 91, wherein the electronic device is configured such that a magnitude of the shading of the at least portion of the graphical user interface progressively increases while detecting the second gesture moving inward.

95. (New) The electronic device of Claim 94, wherein the electronic device is configured such that the magnitude of the shading of the at least portion of the graphical user interface progressively decreases as a function of detecting the second gesture moving outward.

96. (New) The electronic device of Claim 92, wherein the electronic device is configured such that the magnitude of the shading of the at least portion of the graphical user interface progressively decreases as a function of detecting a change in the second gesture.

97. (New) The electronic device of Claim 45, wherein the electronic device is configured such that:

the graphical user interface includes a home screen with a plurality of application icons, for choosing among a plurality of applications;

the first portion of the display and the second portion of the display are part of different edges of the display;

the first menu is at least partially translucent for viewing the graphical user interface thereunder, at least a portion of the graphical user interface is blurred based on the detection of the first gesture that begins in connection with the first portion of the display and moves inward, a magnitude of the blurring of the graphical user interface progressively increases while detecting the first gesture moving inward, and the magnitude of the blurring of the graphical user interface progressively decreases as a function of detecting a change in the first gesture;

at least a part of the graphical user interface is shaded based on the detection of the second gesture that begins in connection with the second portion of the display and moves inward, a magnitude of the shading of the at least part of the graphical user interface progressively increases while detecting the second gesture moving inward, and the magnitude of the shading of the at least part of the graphical user interface progressively decreases as a function of detecting a change in the second gesture;

the one or more first menu items include at least some of the application icons including a particular application icon associated with a particular application, where the first operation includes launching the particular application to display a particular application interface of the particular application instead of the home screen, and the second operation includes launching the particular application to display the particular application interface of the particular application in an overlying virtual display layer that appears at a lesser depth than the at least one virtual display layer in which the graphical user interface is displayed;

the one or more second menu items include a network menu item and a volume menu item, where the third operation includes indicating a selection of the at least one of the one or more second menu items, and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second portion of the display.

98. (New) The electronic device of Claim 45, wherein the electronic device is configured such that the second menu is displayed as sliding in.

99. (New) The electronic device of Claim 97, wherein the electronic device is configured such that at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first gesture begins in connection with the first portion of the display, by beginning near the first portion of the display;

the first gesture begins in connection with the first portion of the display, by beginning at the first portion of the display;

the first gesture begins in connection with the first portion of the display, by beginning near the first portion of the display;

the first gesture begins in connection with the first portion of the display, by beginning at the first portion of the display;

the second gesture begins in connection with the first portion of the display, by beginning near the first portion of the display;

the second gesture begins in connection with the first portion of the display, by beginning at the first portion of the display;

the second gesture begins in connection with the first portion of the display, by beginning near the first portion of the display;

the second gesture begins in connection with the first portion of the display, by beginning at the first portion of the display;

the first gesture begins in connection with the first portion of the display and moves inward from the first portion of the display;

the second gesture that begins in connection with the second portion of the display and moves inward from the second portion of the display;

the display includes a top edge and the first gesture or the second gesture moves inward by moving, at least in part, downward from the top edge;

the display includes a top edge and the first gesture moves inward by moving, at least in part, downward from the top edge, and the second gesture moves inward by not moving, at least in part, downward from the top edge;

the first gesture and the second gesture move inward by moving, at least in part, toward a central area of the touch screen;

the second menu is displayed as sliding in;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are not displayed as sliding in via different directions;

the first menu is displayed as sliding in from the first portion of the display;

the second menu is displayed as appearing from the second portion of the display;

the first menu and the second menu are displayed as sliding in from different edges;

the first menu and the second menu are not displayed as sliding in from different edges;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the first operation and the second operation are related to the same function;

the electronic device is configured such that the first menu and the second menu are displayed in the same at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in different at least one other virtual display layers;

the electronic device is configured such that the first menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the second menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in the at least one other virtual display layer;

the third operation and the fourth operation are related to the same function;

the blurring includes at least one of: dimming, displaying as indistinct, displaying as vague, displaying as cloudy, displaying as obscured, or displaying as smeared;

the first gesture and the second gesture move inward in different directions;

the first gesture and the second gesture do not move inward in different directions;

the first portion of the display and the second portion of the display are part of different edges;

the first portion of the display and the second portion of the display are not part of different edges;

the shading includes at least one of: displaying as to suggest three-dimensionality, shadowing, or displaying as to include a varied degree of light and/or darkness;

the shading includes color shading;

the shading includes reducing a brightness;

the shading includes reducing a color brightness;

the shading includes moving towards black within a color space;

the shading includes incorporating less color;

the at least part is the same as the at least portion; or

the at least part is different from the at least portion.

100. (Previously Presented) The electronic device of Claim 45, wherein the electronic device is configured such that:

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the one or more first menu items include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages, and the second operation includes opening the at least one message, the first portion of the display and the second portion of the display are not part of different edges of the display;

the one or more second menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the third operation includes selecting the at least one of the one or more second menu items; and the fourth

operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second portion of the display.

101. (New) The electronic device of Claim 45, wherein the electronic device is configured such that the electronic device is configured such that the first menu and the second menu are displayed in the at least one other virtual display layer.

102. (New) The electronic device of Claim 45, wherein the electronic device is configured such that the one or more second menu items include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages, and the second operation includes controlling presentation of the at least one message.

103. (New) An electronic device, comprising:

a display;

a touch interface;

one or more processors;

memory; and

one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions means for:

displaying, utilizing the display, a graphical user interface;

while the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first portion of the display and moves inward;

in response to the detection of the first gesture that begins in connection with the first portion of the display and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items;

when the first menu is displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

when the first duration of contact on the at least one of the one or more first menu items is detected to not surpass a threshold, performing a first operation, and

when the first duration of contact on the at least one of the one or more first menu items is detected to surpass the threshold, performing a second operation;

while the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second portion of the display and moves inward;

in response to the detection of the second gesture that begins in connection with the second portion of the display and moves inward, displaying, utilizing the display, a second menu including one or more second menu items;

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a second duration of contact on at least one of the one or more second menu items,

when the second duration of contact on the at least one of the one or more second menu items is detected to not surpass the threshold, performing a third operation, and

when the second duration of contact on the at least one of the one or more second menu items is detected to surpass the threshold, performing a fourth operation;

wherein the electronic device is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer.

Remarks:

The drawings have been the subject of an objection. Such objection is deemed avoided by virtue of the replacement drawing submitted herewith.

Claims 18, 22, 25, 28-35, 37, 38 and 41-60 are rejected under 35 U.S.C. 112(a) or 35 U.S.C. 112 (pre-AIA), first paragraph. Specifically, the Examiner argues that claim language "introduces a second gesture creating a second menu from the same portion of the periphery. Multiple gestures and menus coming from the same periphery (i.e., edge) are not described or explained in the specification as filed." Applicant respectfully disagrees. In addition to specific disclosures that support such feature, applicant contends that the disclosure of one or more alternate embodiments provides support for negative claim limitations in such regard. Applicant draws the Examiner's attention to *Inphi Corporation v. Netlist, Inc.*, 805 F.3d 1350, 1356-57, 116 USPQ2d 2006, 2010-11 (Fed. Cir. 2015), and MPEP § 2173.05(i) that states that "[i]f alternative elements are positively recited in the specification, they may be explicitly excluded in the claims."

Again, applicant respectfully disagrees with the Examiner's latest arguments. However, in the interest of expediting prosecution, applicant has clarified the claims to avoid this rejection.

It is believed that all of the pending issues have been addressed. However, the absence of a reply to a specific rejection, issue, or comment does not signify agreement with or concession of that rejection, issue, or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Still yet, nothing in this reply should be construed as intention to concede any issue with regard to any claim, except as specifically stated in this reply. Finally, it should be noted that no claims, except claim 103, are intended to be construed under 35 U.S.C. 112, paragraph 6.

Should the Examiner deem that any further amendment is desirable to place this Application in condition for allowance, Applicant invites the Examiner to telephone the undersigned attorney at the number listed below.

Respectfully submitted,



Dated: 01 Oct 2019

Patrick E. Caldwell, Esq.
Reg. No. 44,580

The Caldwell Firm, LLC
PO Box 59655
Dallas, Texas 75229-0655
Telephone: (214) 734-2313
pcaldwell@thecaldwellfirm.com

UNITED STATES PATENT AND TRADEMARK OFFICE
COMMISSIONER FOR PATENTS
P.O.BOX 1450
ALEXANDRIA VA 22313-1451

PRESORTED
FIRST-CLASS MAIL
U.S. POSTAGE PAID
POSTEDIGITAL
NNNNN

The Caldwell Firm, LLC
PO Box 59655
Dept. SVIPGP
Dallas, TX 75229

Courtesy Reminder for
Application Serial No: 16/169,961

Attorney Docket No: SMITH070AG
Customer Number: 92045
Date of Electronic Notification: 09/19/2019

This is a courtesy reminder that new correspondence is available for this application. If you have not done so already, please review the correspondence. The official date of notification of the outgoing correspondence will be indicated on the form PTOL-90 accompanying the correspondence.

An email notification regarding the correspondence was sent to the following email address(es) associated with your customer number:
pcaldwell@thecaldwellfirm.com
eofficeaction@appcoll.com

To view your correspondence online or update your email addresses, please visit us anytime at **https://ppair-my.uspto.gov/pair/PrivatePair.**
If you have any questions, please email the Electronic Business Center (EBC) at EBC@uspto.gov or call 1-866-217-9197.

OK TO ENTER: /AX/

09/15/2019

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	Confirmation No.: 7650
MICHAEL S. SMITH	Examiner: XAVIER, ANTONIO J
Application No.: 16/169,961	Art Unit: 2623
File Date: 10-24-2018	Docket No.: SMITH070AG
Title: GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT	Date: 9/9/2019

SUPPLEMENTAL AMENDMENT C

Mail Stop Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Examiner:

Following is a supplement to the response filed on 7/17/2019 in response to the Final Office Action mailed 5/22/2019, and the Advisory Action mailed 7/08/19.

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	0	((slide or drag) near (in or inward)) WITH (edge or periphery) WITH (menu)	US-PGPUB; USPAT	ADJ	ON	2019/09/15 18:39
L2	773	((slide or drag) near (in or inward)) WITH (edge or periphery)	US-PGPUB; USPAT	ADJ	ON	2019/09/15 18:40
L3	9	l2 AND ((edge or periphery) WITH (menu))	US-PGPUB; USPAT	ADJ	ON	2019/09/15 18:41
L4	85	l2 AND (phone)	US-PGPUB; USPAT	ADJ	ON	2019/09/15 18:41
L6	25	((swipe) near (in or inward)) WITH (edge or periphery)	US-PGPUB; USPAT	ADJ	ON	2019/09/15 18:45
L7	24	((swipe) WITH (inward)) WITH (edge or periphery)	US-PGPUB; USPAT	ADJ	ON	2019/09/15 18:46
L8	180	((drag) WITH (inward)) WITH (edge or periphery)	US-PGPUB; USPAT	ADJ	ON	2019/09/15 18:46
S1	0	"15719406"	US-PGPUB; USPAT	ADJ	ON	2017/12/12 12:33
S2	0	"15072351"	US-PGPUB; USPAT	ADJ	ON	2017/12/12 12:36
S3	2	"13567004"	US-PGPUB; USPAT	ADJ	ON	2017/12/12 12:36
S4	3560	(("SMITH") near3 ("Michael")).INV.	US-PGPUB; USPAT; USOCR	ADJ	ON	2017/12/12 12:40
S5	19	(US-20090231290-$ or US-20070268261-$ or US-20060197750-$ or US-20060044281-$ or US-20030234768-$ or US-20080259046-$ or US-20110059777-$ or US-20080088602-$ or US-20110260984-$ or US-20100328230-$ or US-20070273671-$ or US-20070236470-$ or US-20110084921-$ or US-20110057889-$ or US-20110045813-$ or US-20100045621-$).did. or (US-6020878-$ or US-5729219-$ or US-8730199-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:21
S6	9	(US-20100058211-$ or US-20130076649-$ or US-20110261002-$ or US-20080146285-$ or US-20100035656-$ or US-	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:21

		20120060123-$ or US-20110059777-$ or US-20130321340-$ or US-20110291945-$).did.				
S7	27	S5 or S6	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:21
S8	990	touch screen AND (vibrate or vibrator) AND (pressure) AND (menu) AND ((launch$3 or open$3) WITH (program or application or software))	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:25
S9	782	S8 AND ((electronic$1mail or electronic mail or e$1mail) or (SMS or short message) or (social network))	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:26
S10	0	S4 AND S9	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:26
S11	0	S4 AND S8	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:27
S12	901	S4 AND touch	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:27
S13	508	S12 AND pressure	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:27
S14	36	S13 AND menu	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:27
S15	244	S4 AND menu	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:27
S16	133	S4 AND menu AND touch	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:27
S17	97	S16 NOT S14	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:41
S18	0	(back$1touch settings)	US-PGPUB; USPAT	ADJ	ON	2017/12/13 12:27
S19	2	(back$1touch near settings)	US-PGPUB; USPAT	ADJ	ON	2017/12/13 12:31
S20	3561	(("SMITH") near3 ("Michael")).INV.	US-PGPUB; USPAT; USOCR	ADJ	ON	2017/12/14 09:58
S21	82	S20 AND (touch$3 AND menu AND (social or sharing))	US-PGPUB; USPAT; USOCR	ADJ	ON	2017/12/14 09:58
S22	6	(US-20140053116-$ or US-20110302493-$ or US-20110153653-$ or US-20110096174-$ or US-20110025842-$ or US-20080177662-$).did.	US-PGPUB	ADJ	ON	2017/12/14 11:30
S23	0	S22 AND ((pressure or magnitude) WITH (touch))	US-PGPUB; USPAT	ADJ	ON	2017/12/14 11:30

S24	0	S22 AND ((pressure or magnitude))	US-PGPUB; USPAT	ADJ	ON	2017/12/14 11:30
S25	120	(menu) WITH (social media) WITH (shar$3)	US-PGPUB; USPAT	ADJ	ON	2017/12/14 13:58
S26	73418	(custom or programmable) WITH (gesture or input) WITH (application or program or function)	US-PGPUB; USPAT	ADJ	ON	2017/12/14 18:39
S27	3561	(("SMITH") near3 ("Michael")).INV.	US-PGPUB; USPAT; USOCR	ADJ	ON	2017/12/14 18:40
S28	69	S26 AND S27	US-PGPUB; USPAT	ADJ	ON	2017/12/14 18:40
S29	1879	touch WITH (pressure or magnitude) WITH thresholds	US-PGPUB; USPAT	ADJ	ON	2017/12/14 18:59
S30	4	touch WITH (pressure or magnitude) WITH thresholds WITH (context)	US-PGPUB; USPAT	ADJ	ON	2017/12/14 18:59
S31	62	("5745719").URPN.	USPAT	ADJ	ON	2017/12/14 19:20
S32	5	"11038590"	USPAT	ADJ	ON	2017/12/14 19:21
S33	1	"20060161871".pn.	US-PGPUB; USPAT	ADJ	ON	2017/12/14 19:22
S34	1	"20060026535".pn.	US-PGPUB; USPAT	ADJ	ON	2017/12/14 19:24
S35	15	(US-20140053116-$ or US-20110302493-$ or US-20110153653-$ or US-20110096174-$ or US-20110025842-$ or US-20080177662-$ or US-20130291126-$ or US-20060161871-$ or US-20060026535-$ or US-20090058829-$ or US-20090085881-$ or US-20100090982-$ or US-20100188327-$).did. or (US-9524042-$ or US-5745719-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/12/14 19:51
S36	57422	(touch WITH pressure)	US-PGPUB; USPAT	ADJ	ON	2017/12/14 19:51
S37	5	S35 and S36	US-PGPUB; USPAT	ADJ	ON	2017/12/14 19:51
S38	45	(social network or social application) WITH (shar$3 object)	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:22
S39	9596	(social network or social application) WITH (post)	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:37
S40	2866	S39 AND (SMS and e$1mail)	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:37
S41	196	S40 AND (menu WITH GUI)	US-	ADJ	ON	2017/12/15

			PGPUB; USPAT			20:37
S42	18	S41 AND (touch WITH (pressure or magnitude))	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:38
S43	37	(GUI or menu) WITH (pressure or magnitude) WITH (context)	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:50
S44	3	"12597684"	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:52
S45	581	((context sensitive or context$1sensitive) WITH (icon))	US-PGPUB; USPAT	ADJ	ON	2017/12/16 16:13
S46	7	S45 AND (pressure WITH touch)	US-PGPUB; USPAT	ADJ	ON	2017/12/16 16:15
S47	13	menu WITH historical usage	US-PGPUB; USPAT	ADJ	ON	2017/12/18 13:40
S48	1	"8191015".pn.	US-PGPUB; USPAT	ADJ	ON	2017/12/18 13:44
S49	1	"20080065991".pn. AND (menu WITH usage)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 13:44
S50	6827	(social network or social media) WITH (shar$3 WITH (object or link or image or photo))	US-PGPUB; USPAT	ADJ	ON	2017/12/18 19:20
S51	6	S50 WITH (touch$3 WITH menu)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 19:21
S52	12	S50 SAME (touch$3 WITH menu)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 19:22
S53	233	S50 AND (touch$3 WITH menu)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 19:39
S54	165	S50 AND (touch WITH pressure)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 20:34
S55	8887	G06F3/04847.cpc.	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:43
S56	10393	G06F3/04817.cpc.	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:44
S57	23568	g06f3/0482.cpc.	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:44
S58	18904	g06f3/04883.cpc.	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:44
S59	46941	S55 or S56 or S57 or S58	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:44
S60	6344	S59 AND (pressure WITH touch)	US-	ADJ	ON	2017/12/18

			PGPUB; USPAT			21:44
S61	2168	S60 AND (touch WITH menu)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:44
S62	141649	(pressure WITH (magnitude or threshold))	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:45
S63	465	S62 AND S61	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:45
S64	30	S63 AND S50	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:47
S65	100	(slide WITH gesture WITH menu)	US-PGPUB; USPAT	ADJ	ON	2017/12/22 21:32
S66	3	S65 AND (slide WITH pressure)	US-PGPUB; USPAT	ADJ	ON	2017/12/22 21:39
S67	6	S65 AND (slide SAME pressure)	US-PGPUB; USPAT	ADJ	ON	2017/12/22 21:41
S68	0	"15072354"	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:52
S69	3580	(("SMITH") near3 ("Michael")).INV.	US-PGPUB; USPAT; USOCR	ADJ	ON	2018/01/20 17:52
S70	11	S69 AND (intermediate state)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:52
S71	19	S69 AND (gesture WITH menu)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:54
S72	9007	G06F3/04847.cpc.	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:56
S73	10547	G06F3/04817.cpc.	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:56
S74	23888	g06f3/0482.cpc.	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:56
S75	19105	g06f3/04883.cpc.	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:56
S76	47534	(S72 or S73 or S74 or S75)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:56
S77	843	S76 AND (intermediate WITH (pressure or signal or state))	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:57
S78	15	S76 AND (intermediate WITH (pressure or signal or state) WITH menu)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:57

S79	208	("20010005692" | "20010043291" | "20020002629" | "20020005111" | "20020008691" | "20020033919" | "20020045854" | "20020085952" | "20020116952" | "20020116959" | "20020118180" | "20020130832" | "20020180763" | "20030117408" | "20030123328" | "20030147041" | "20030151589" | "20030217972" | "20030232192" | "20030235452" | "20040084372" | "20040108995" | "20040109788" | "20040121855" | "20040191509" | "20040207542" | "20040212598" | "20040239624" | "20040263488" | "20050045540" | "20050099403" | "20050231461" | "20050242034" | "20050264521" | "20050280746" | "20060001654" | "20060001800" | "20060033701" | "20060077186" | "20060107719" | "20060138983" | "20060146032" | "20060167400" | "20060179088" | "20060195064" | "20060197736" | "20060197737" | "20060209039" | "20060238495" | "20060260711" | "20060262099" | "20060284874" | "20070008064" | "20070035526" | "20070040814" | "20070070047" | "20070085837" | "20070103454" | "20070137901" | "20070146313" | "20070148371" | "20070153215" | "20070176902" | "20070182864" | "20070195029" | "20070229477" | "20070237170" | "20070262967" | "20080007675" | "20080018613" | "20080024459" | "20080024712" | "20080060854" | "20080062169" | "20080068343" | "20080094367" | "20080100584" | "20080105600" | "20080130910" | "20080136790" | "20080158171" | "20080204427" | "20080210843" | "20080211786" | "20080215192" | "20080252607" | "20080252616" | "20080259046" | "20080295839" | "20080304431" | "20090002312" | "20090022256" | "20090036176" | "20090046110" | "20090051659" | "20090066660" | "20090073138" | "20090086420" | "20090091536" | "20090143652" | "20090158152" | "20090160781" | "20090213066" | "20090225053" | "20090271731" | "20090289912" | "20090295747" | "20100005390" | "20100017872" | "20100020039" | "20100026640" | "20100035656" | "20100045612" | "20100053103" | "20100053532" | "20100077829" | "20100079398" | "20100085500" | "20100097347" | "20100134429" | "20100134448" | "20100149101" | "20100149124" | "20100164884" | "20100188365" | "20100194709" | "20100201651" | "20100206560" |	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:23

		"20100207900" | "20100214499" | "20100222735" | "20100225608" | "20100259490" | "20100277432" | "20110001706" | "20110007023" | "20110012921" | "20110025969" | "20110037726" | "20110044064" | "20110050591" | "20110050592" | "20110050593" | "20110050594" | "20110050608" | "20110051334" | "20110063248" | "20110088416" | "20110102336" | "20110102347" | "20110105446" | "20110109573" | "20110115738" | "20110118029" | "20110122084" | "20110152739" | "20110169775" | "20110175845" | "20110181552" | "20110210942" | "20110210943" | "20110227836" | "20110227877" | "20110239110" | "20110248941" | "20110254793" | "20110260994" | "20110273394" | "20110273396" | "20110291953" | "20120007821" | "20120013566" | "20120019448" | "20120023450" | "20120032876" | "20120034954" | "20120044172" | "20120056846" | "20120086670" | "20120105367" | "20120105370" | "20120109037" | "20120154328" | "20120162087" | "20120182249" | "20120194461" | "20120194462" | "20120223900" | "20120229403" | "20120229404" | "20120229405" | "20120231853" | "20120240044" | "20120242610" | "20120244348" | "20120254747" | "20120266072" | "20120274662" | "20120293449" | "20120306764" | "20120306765" | "20120306766" | "20120313888" | "20130002610" | "20130009869" | "20130021285" | "20130021295" | "20130027350").PN.				
S80	234	("20130124993" | "20130125322" | "20130127765" | "20130132838" | "20130141388" | "20130181928" | "20130181931" | "20130188336" | "20130215064" | "20130307809" | "20130307827" | "20130321317" | "20130332876" | "20130335357" | "20140028601" | "20140057102" | "20140066139" | "20140096092" | "20140099235" | "20140104219" | "20140104220" | "20140132548" | "20140132549" | "20140134433" | "20140134434" | "20140139473" | "20140168128" | "20140191962" | "20140208248" | "20140210786" | "20140340358" | "20140368455" | "20150068526" | "20150197670" | "20150234518" | "20150253609" | "3633322" | "3738166" | "3772685" | "3777222" | "4293734" | "4296756" | "4302011" | "4353552" | "4524421" | "4554419" | "4636632" | "4644101" | "4770281" | "5241308" | "5247434" | "5276787" | "5305423" | "5309172" |	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:24

		"5311302" | "5343650" | "5386219" | "5448263" | "5486286" | "5487827" | "5566096" | "5680160" | "5742894" | "5743859" | "5744027" | "5838244" | "5856822" | "5947334" | "5999892" | "6108064" | "6118435" | "6141000" | "6193152" | "6283763" | "6284131" | "6337681" | "6351271" | "6392638" | "6417845" | "6441807" | "6509847" | "6526315" | "6533757" | "6567102" | "6626013" | "6636203" | "6689947" | "6721019" | "6738514" | "6747636" | "6776546" | "6791640" | "6801211" | "6879318" | "6880998" | "6888537" | "6917282" | "6919927" | "6933991" | "6961015" | "6967903" | "7030854" | "7097903" | "7098776" | "7122149" | "7138984" | "7205983" | "7254973" | "7289113" | "7303680" | "7312784" | "7312791" | "7315336" | "7318892" | "7405779" | "7423557" | "7437221" | "7535463" | "7626579" | "7639239" | "7649577" | "7649605" | "7659885" | "7675580" | "7692627" | "7692637" | "7701329" | "7705824" | "7738068" | "7755612" | "7903096" | "7932893" | "7952566" | "7973777" | "7973778" | "7982721" | "8022933" | "8057419" | "8068021" | "8072430" | "8094134" | "8094673" | "8102496" | "8184228" | "8188982" | "8199116" | "8207945" | "8209628" | "8223799" | "8228309" | "8253699" | "8269731" | "8269733" | "8270148" | "8279361" | "8286102" | "8310452" | "8319743" | "8325143" | "8334835" | "8334850" | "8345018" | "8349228" | "8373675" | "8384674" | "8411039" | "8416210" | "8424590" | "8427434" | "8451238" | "8471824" | "8477111" | "8479110" | "8487900" | "8493384" | "8497884" | "8508494" | "8542193" | "8542209" | "8553012" | "8564559" | "8587542" | "8624851" | "8624867" | "8638311" | "8648839" | "8654104" | "8674947" | "8692815" | "8698777" | "8717303" | "8723826" | "8727557" | "8743076" | "8745514" | "8754862" | "8760408" | "8780089" | "8816993" | "8854317" | "8866785" | "8872798" | "8878809" | "8878810" | "8884913" | "8896575" | "8913031" | "8917262" | "8947381" | "8970540" | "8976128" | "8982081" | "8988364" | "9003591" | "9013414" | "9018030" | "9030427" | "9035897" | "9041679" | "9045670" | "9046999" | "9063597" | "9069204" | "9069416" | "9069460" | "9092129" | "9098193" | "9116609" | "9125630" | "9130651" | "9134880" | "9152258" | "9152288" | "RE41716").PN.				
S81	442	S79 or S80	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:24
S82	17	S81 AND (intermediate WITH (pressure or	US-	ADJ	ON	2018/01/20

		signal or state))	PGPUB; USPAT			18:24
S83	297	S81 AND (second WITH (pressure or signal or state))	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:26
S84	58	S81 AND (second WITH (pressure or signal or state) WITH third)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:26
S85	1	S81 AND (second WITH (pressure or signal or state) WITH third) WITH menu	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:26
S86	1632	g06f2203/04105.cpc.	US-PGPUB; USPAT	ADJ	ON	2018/01/20 19:35
S87	302	S86 AND (second WITH (pressure or signal or state) WITH third)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 19:35
S88	302	S86 AND (second WITH (pressure or signal or state) WITH third)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 19:35
S89	1	S86 AND (second WITH (pressure or signal or state) WITH third) WITH menu	US-PGPUB; USPAT	ADJ	ON	2018/01/20 19:35
S90	50	S86 AND (intermediate WITH (pressure or signal or state))	US-PGPUB; USPAT	ADJ	ON	2018/01/20 19:36
S91	0	"15072354"	US-PGPUB; USPAT	ADJ	ON	2018/08/08 14:49
S92	14	(US-20130162667-$ or US-20110145764-$ or US-20100313166-$ or US-20080219493-$ or US-20040150644-$ or US-20120306788-$ or US-20110175805-$ or US-20100026640-$ or US-20080178126-$ or US-20110196935-$ or US-20090207175-$ or US-20120225413-$ or US-20080204427-$ or US-20080024459-$).did.	US-PGPUB; USPAT	ADJ	ON	2018/09/07 17:56
S97	1	"20110175805".pn.	US-PGPUB; USPAT	ADJ	ON	2019/01/19 15:58
S98	1	"3659229".pn.	US-PGPUB; USPAT	ADJ	ON	2019/01/19 15:59
S99	473	(cursor or icon) WITH (follow) WITH (gesture or touch)	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:02
S100	14	(cursor or icon) WITH (follow) WITH (gesture or touch) WITH (speed)	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:02
S101	0	"16153765"	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:02
S102	1	"15072354"	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:02
S103	2	(cursor or icon) WITH (follow) WITH (gesture or touch) WITH (gravity)	US-PGPUB;	ADJ	ON	2019/01/19 16:04

			USPAT			
S104	51	(cursor or icon) WITH (gravity) WITH (gesture or touch) WITH (gravity)	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:05
S105	90	(cursor or icon) WITH (snap) WITH (gesture or touch)	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:08
S106	275	(icon) WITH (follow or trail) WITH (gesture or touch)	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:16
S107	14	(US-20130162667-$ or US-20120306788-$ or US-20120225413-$ or US-20110196935-$ or US-20110175805-$ or US-20110145764-$ or US-20100313166-$ or US-20100026640-$ or US-20090207175-$ or US-20080219493-$ or US-20080204427-$ or US-20080178126-$ or US-20080024459-$ or US-20040150644-$).did.	US-PGPUB	ADJ	ON	2019/02/27 07:26
S108	18	(US-20110302493-$ or US-20080177662-$ or US-20060161871-$ or US-20060026535-$ or US-20090058829-$ or US-20090085881-$ or US-20100090982-$ or US-20100188327-$ or US-20100251119-$ or US-20100127983-$ or US-20100241989-$ or US-20100088654-$ or US-20050114794-$ or US-20110061021-$ or US-20120054691-$ or US-20120306788-$ or US-20120182296-$).did. or (US-9524042-$).did.	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:26
S109	31	S107 or S108	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:26
S110	0	S109 AND (virtual layer)	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:26
S111	3	S109 AND (fog or blur)	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:26
S112	2	S109 AND (fore$1ground AND back$1ground)	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:29
S113	1005	(menu WITH (fore$1ground AND back$1ground))	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:30
S114	0	(menu WITH (fore$1ground AND back$1ground)) WITH virtual layer	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:30
S115	23	(menu WITH (fore$1ground AND back$1ground)) WITH layer	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:30
S116	5542	(fore$1ground or back$1ground) WITH (fog or blur)	US-PGPUB; USPAT	ADJ	ON	2019/02/27 13:12
S117	4	(fore$1ground or back$1ground) WITH (fog or blur) WITH menu	US-PGPUB; USPAT	ADJ	ON	2019/02/27 13:12
S118	1	S116 AND (menu WITH transparent)	US-	ADJ	ON	2019/02/27

			PGPUB; USPAT			13:13
S119	29	(edge WITH inward WITH menu)	US-PGPUB; USPAT	ADJ	ON	2019/05/16 23:00

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S93	3480	G06F3/04847.cpc.	USPAT	ADJ	ON	2018/09/07 17:58
S94	4153	G06F3/04817.cpc.	USPAT	ADJ	ON	2018/09/07 17:58
S95	9279	g06f3/0482.cpc.	USPAT	ADJ	ON	2018/09/07 17:58
S96	7394	g06f3/04883.cpc.	USPAT	ADJ	ON	2018/09/07 17:58

9/ 15/ 2019 7:19:23 PM
C:\ Users\ axavier\ Desktop\ axavier data files\ EAST workspaces\ 16169961-CON of 15072354-CON of 13567004.wsp

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/169,961	10/24/2018	Michael S. Smith	SMITH070AG	7650

92045 7590 09/19/2019

The Caldwell Firm, LLC
PO Box 59655
Dept. SVIPGP
Dallas, TX 75229

EXAMINER
XAVIER, ANTONIO J

ART UNIT	PAPER NUMBER
2623	

NOTIFICATION DATE	DELIVERY MODE
09/19/2019	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

eofficeaction@appcoll.com
pcaldwell@thecaldwellfirm.com

Office Action Summary	Application No. 16/169,961	Applicant(s) Smith, Michael S.	
	Examiner ANTONIO J XAVIER	Art Unit 2623	AIA (FITF) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☑ Responsive to communication(s) filed on 9/9/19.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL.** 2b) ☑ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5) ☑ Claim(s) 18,22,25,28-35,37-38 and 41-60 is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6) ☐ Claim(s) _____ is/are allowed.

7) ☑ Claim(s) 18,22,25,28-35,37-38 and 41-60 is/are rejected.

8) ☐ Claim(s) _____ is/are objected to.

9) ☐ Claim(s) _____ are subject to restriction and/or election requirement

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to **PPHfeedback@uspto.gov.**

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☑ The drawing(s) filed on 10/14/18 is/are: a)☐ accepted or b)☑ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☑ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date _____.

4) ☐ Other: _____.

Notice of Pre-AIA or AIA Status

1. The present application is being examined under the pre-AIA first to invent provisions.

In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 17, 2019 as well as the supplemental amendment filed on September 9, 2019 have been entered.

Response to Arguments

3. Applicant's arguments filed July 17, 2019 and September 9, 2019 (hereinafter "Remarks") have been considered but are moot in view of the new ground(s) of rejection.

Examiner notes the change from "at least one edge" to "periphery" are similar in scope and do not avoid the underlying problem.

Drawings

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "second gesture that begins in connection with a second portion of the periphery and moves inward; in response to the detection of the **second gesture** that begins in connection with the **second portion of the periphery** and moves inward, **displaying**, utilizing the display, **a second menu** including a plurality of second menu items" (see at least Claim 18 – emphasis added) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet,

and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112(a):

> (a) IN GENERAL.—The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention.

The following is a quotation of the first paragraph of pre-AIA 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 18, 22, 25, 28-35, 37, 38 and 41-60 are rejected under 35 U.S.C. 112(a) or 35 U.S.C. 112 (pre-AIA), first paragraph, because the specification, while being enabling for "in one embodiment, a pinch slide gesture which begins near an edge of a display and then moves inward may cause a menu or window to slide in from that edge

of the display. As an option, the menu or window may remain visible until a selection is made. In another embodiment, there may be different menus or windows associated with **each edge** of a display" (paragraph [00475] – emphasis added) does not reasonably provide enablement for "second gesture that begins in connection with a second portion of the at least one edge and moves inward; in response to the detection of the **second gesture** that begins in connection with the **second portion of the periphery** and moves inward, **displaying**, utilizing the display, **a second menu** including a plurality of second menu items" (**Claims 18, 25 and 45 –** emphasis added). The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims.

The new language introduces a second gesture creating a second menu from the same portion of the periphery. Multiple gestures and menus coming from the same periphery (i.e., edge) are not described or explained in the specification as filed.

Claims 22, 28-35, 37, 38, 41-44 and 46-60 depend on Claims 18, 25 and 45 and are rejected for substantially the same reasons, discussed above.

Applicant is also encouraged to amend Claims 41, 44, 50, 58 and 59 because they include express limitations requiring the first/second portions to be the same edge of the periphery.

Pertinent Art

7. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure:

a. Fig. 5 of Bae et al. (USPN 2008/0195961) teaches dragging widgets from the edge of the display;

b. Shiota (USPN 2013/0009903) teaches a GUI including dragging inwards from a screen edge.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANTONIO J XAVIER whose telephone number is (571)270-7688. The examiner can normally be reached on M-F 530am-2pm PST.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at http://www.uspto.gov/interviewpractice.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on 571-272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Antonio Xavier/
Primary Examiner, Art Unit 2623

Notice of References Cited	Application/Control No. 16/169,961	Applicant(s)/Patent Under Reexamination Smith, Michael S.	
	Examiner ANTONIO J XAVIER	Art Unit 2623	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-20080195961-A1	08-2008	BAE; Dong Hwan	G06F3/0481	715/769
*	B	US-20130009903-A1	01-2013	Shiota; Naoki	G06F3/04817	345/173
	C					
	D					
	E					
	F					
	G					
	H					
	I					
	J					
	K					
	L					
	M					

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/169,961	Smith, Michael S.
	Examiner	Art Unit
	ANTONIO J XAVIER	2623

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

CLAIMS

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	05/16/2019	09/15/2019							
	1	-	-							
	2	-	-							
	3	-	-							
	4	-	-							
	5	-	-							
	6	-	-							
	7	-	-							
	8	-	-							
	9	-	-							
	10	-	-							
	11	-	-							
	12	-	-							
	13	-	-							
	14	-	-							
	15	-	-							
	16	-	-							
	17	-	-							
	18	✓	✓							
	19	-	-							
	20	-	-							
	21	-	-							
	22	✓	✓							
	23	-	-							
	24	✓	-							
	25	✓	✓							
	26	✓	-							
	27	✓	-							
	28	✓	✓							
	29	✓	✓							
	30	✓	✓							
	31	✓	✓							
	32	✓	✓							
	33	✓	✓							
	34	✓	✓							
	35	✓	✓							
	36	✓	-							
	37	✓	✓							
	38	✓	✓							
	39	✓	-							
	40	✓	-							
	41		✓							
	42		✓							

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/169,961	Smith, Michael S.
	Examiner	**Art Unit**
	ANTONIO J XAVIER	2623

CLAIM		DATE								
Final	Original	05/16/2019	09/15/2019							
	43		✓							
	44		✓							
	45		✓							
	46		✓							
	47		✓							
	48		✓							
	49		✓							
	50		✓							
	51		✓							
	52		✓							
	53		✓							
	54		✓							
	55		✓							
	56		✓							
	57		✓							
	58		✓							
	59		✓							
	60		✓							

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/169,961	Smith, Michael S.
	Examiner	Art Unit
	ANTONIO J XAVIER	2623

CPC - Searched*		
Symbol	Date	Examiner
G06F3/04817	02/27/2019	AX
G06F3/0482	02/27/2019	AX
G06F3/04847	02/27/2019	AX
G06F3/04883	02/27/2019	AX

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	Date	Examiner
G06F3/04817	02/27/2019	AX
G06F3/0482	02/27/2019	AX
G06F3/04847	02/27/2019	AX
G06F3/04883	02/27/2019	AX
Inventor	02/27/2019	AX
EAST	02/27/2019	AX
Reviewed patent family	02/27/2019	AX
Updated EAST	05/16/2019	AX
Updated EAST	09/15/2019	AX

/Antonio Xavier/ Primary Examiner, Art Unit 2623	

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/169,961	Smith, Michael S.
	Examiner	Art Unit
	ANTONIO J XAVIER	2623

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner

/Antonio Xavier/ Primary Examiner, Art Unit 2623	

Electronic Patent Application Fee Transmittal

Application Number:	16169961
Filing Date:	24-Oct-2018
Title of Invention:	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT
First Named Inventor/Applicant Name:	Michael S. Smith
Filer:	Patrick Edgar Caldwell
Attorney Docket Number:	SMITH070AG

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
CLAIMS IN EXCESS OF 20	2202	14	50	700
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
			Total in USD ($)	**700**

Electronic Acknowledgement Receipt	
EFS ID:	37111612
Application Number:	16169961
International Application Number:	
Confirmation Number:	7650
Title of Invention:	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT
First Named Inventor/Applicant Name:	Michael S. Smith
Customer Number:	92045
Filer:	Patrick Edgar Caldwell
Filer Authorized By:	
Attorney Docket Number:	SMITH070AG
Receipt Date:	09-SEP-2019
Filing Date:	24-OCT-2018
Time Stamp:	23:17:35
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$700
RAM confirmation Number	E201999N18115926
Deposit Account	
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Supplemental Response or Supplemental Amendment	SMITH070AG_Supp_Amendment_C_vF_09-Sep-2019.pdf	89236 84c0ce63161322e62e6de6ea9183337d13b70cc0	no	18
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30436 c6aa77e552224a9bdfcc54f7af6e5f9b68f5dd01	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	119672		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.
National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.
New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	Confirmation No.: 7650
MICHAEL S. SMITH	Examiner: XAVIER, ANTONIO J
Application No.: 16/169,961	Art Unit: 2623
File Date: 10-24-2018	Docket No.: SMITH070AG
Title: GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT	Date: 9/9/2019

SUPPLEMENTAL AMENDMENT C

Mail Stop Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Examiner:

Following is a supplement to the response filed on 7/17/2019 in response to the Final Office Action mailed 5/22/2019, and the Advisory Action mailed 7/08/19.

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

1.-17. (Cancelled)

18. (Previously Presented) An electronic device, comprising:

a display;

a touch interface including a periphery;

one or more processors;

memory; and

one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for:

displaying, utilizing the display, a graphical user interface;

while the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first portion of the periphery and moves inward;

in response to the detection of the first gesture that begins in connection with the first portion of the periphery and moves inward, displaying, utilizing the display, a first menu as sliding in and including a plurality of first menu items;

when the first menu is displayed including the plurality of first menu items:

detecting, utilizing the touch interface, a first pressure on at least one of the first menu items,

when the first pressure on the at least one of the first menu items surpasses a first threshold, performing a first operation, and

when the first pressure on the at least one of the first menu items surpasses a second threshold, performing a second operation;

while the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second portion of the periphery and moves inward;

in response to the detection of the second gesture that begins in connection with the second portion of the periphery and moves inward, displaying, utilizing the display, a second menu including a plurality of second menu items;

when the second menu is displayed including the plurality of second menu items:

detecting, utilizing the touch interface, a second pressure on at least one of the second menu items,

when the second pressure on the at least one of the second menu items surpasses the first threshold, performing a third operation, and

when the second pressure on the at least one of the second menu items surpasses the second threshold, performing a fourth operation;

wherein the electronic device is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer.

19.-21. (Cancelled)

22. (Previously Presented) The electronic device of Claim 18, wherein the electronic device is configured such that at least a portion of the at least one other virtual layer is at least partially translucent such that at least a portion of the at least one virtual display layer is visible through the at least one other virtual layer.

23. (Cancelled)

24. (Cancelled)

25. (Previously Presented) A system, comprising:

touch interface means for:

while a graphical user interface is displayed, detecting a first gesture that begins in connection with a first portion of a periphery and moves inward, and detecting a second gesture that begins in connection with a second portion of the periphery and moves inward; and

display means for:

in response to the detection of the first gesture that begins in connection with the first portion of the periphery and moves inward, displaying a first menu as sliding in and including a plurality of first menu items, and

in response to the detection of the second gesture that begins in connection with the second portion of the periphery and moves inward, displaying a second menu including a plurality of second menu items;

said touch interface means further for:

when the first menu is displayed including the plurality of first menu items:

detecting a first pressure on at least one of the first menu items, so that, when the first pressure on the at least one of the first menu items surpasses a first threshold, a first operation is caused; and so that, when the first pressure on the at least one of the first menu items surpasses a second threshold, a second operation is caused.

when the second menu is displayed including the plurality of second menu items:

detecting a second pressure on at least one of the second menu items, so that, when the second pressure on the at least one of the second menu items surpasses the first threshold, a third operation is caused; and, so that, when the second pressure on the at least one of the second menu items surpasses the second threshold, a fourth operation is caused;

wherein the system is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer.

26. (Previously Presented) The electronic device of Claim 18, wherein the electronic device is configured such that the graphical user interface includes a home screen, for choosing among a plurality of applications.

27. (Cancelled)

28. (Previously Presented) The electronic device of Claim 18, wherein the electronic device is configured such that the first gesture and the second gesture are capable of being detected as moving inward in the same direction.

29. (Previously Presented) The electronic device of Claim 18, wherein the electronic device is configured such that the first menu items include messages in a list, the first operation includes displaying a view of at least one of the messages, and the second operation includes opening the at least one message.

30. (Previously Presented) The electronic device of Claim 18, wherein the electronic device is configured such that the second menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the third operation includes selecting the at least one of the second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the second menu items.

31. (Previously Presented) The electronic device of Claim 30, wherein the electronic device is configured such that hardware status indicia is displayed adjacent to the second portion of the periphery.

32. (Previously Presented) The electronic device of Claim 18, wherein the electronic device is configured such that only one of the first menu or the second menu is capable of being displayed at a time.

33. (Previously Presented) The electronic device of Claim 18, wherein the electronic device is configured such that at least one of the first menu or the second menu substantially fills the display.

34. (Previously Presented) The electronic device of Claim 18, wherein the electronic device is configured such that indicia is displayed via the graphical user interface for prompting a user as to an accessibility of at least one of the first menu or the second menu.

35. (Previously Presented) The electronic device of Claim 18, wherein the electronic device is configured such that the first menu is accessible via the first gesture; the second menu is accessible via the second gesture; at least two of the first, second, third, and fourth operations are performed based on at least two different pressures, in order to increase menu and operation accessibility via the electronic device that includes a mobile device.

36. (Cancelled)

37. (Previously Presented) The electronic device of Claim 22, wherein the electronic device is configured such that the at least portion of the at least one virtual display layer that is visible through the at least one other virtual layer, includes at least a portion of a background image.

38. (Previously Presented) The electronic device of Claim 22, wherein the electronic device is configured such that the first menu and the second menu are displayed in separate virtual display layers.

39.-40. (Cancelled)

41. (Previously Presented) The electronic device of Claim 18, wherein the electronic device is configured such that:

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first portion of the periphery and the second portion of the periphery are part of a same edge of the periphery;

the first menu items include messages in a list, the first operation includes displaying a view of at least one of the messages, and the second operation includes opening the at least one message;

the second menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the third operation includes selecting the at least one of the second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the second menu items; and

hardware status indicia is displayed adjacent to the second portion of the periphery.

42. (Previously Presented) The electronic device of Claim 18, wherein the electronic device is configured such that the periphery includes a top edge; and the first gesture and the second gesture are detected as moving inward by moving, at least in part, downward from the top edge.

43. (Previously Presented) The electronic device of Claim 18, wherein the electronic device is configured such that the first portion of the periphery and the second portion of the periphery are part of the same edge.

44. (Previously Presented) The electronic device of Claim 38, wherein the electronic device is configured such that at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the separate virtual display layers are displayed with the same z-value;

the separate virtual display layers are displayed with different z-values;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the periphery includes a single continuous edge;

the periphery includes a plurality of different edges;

the periphery includes four edges along different portions of the touch interface;

the first portion of the periphery and the second portion of the periphery are part of the same edge;

the first portion of the periphery and the second portion of the periphery are part of different edges;

the first gesture begins in connection with the first portion of the periphery, by beginning near the first portion of the periphery;

the first gesture begins in connection with the first portion of the periphery, by beginning at the first portion of the periphery;

the first gesture begins in connection with the first portion of the periphery, by beginning near the first portion of the periphery;

the first gesture begins in connection with the first portion of the periphery, by beginning at the first portion of the periphery;

the second gesture begins in connection with the first portion of the periphery, by beginning near the first portion of the periphery;

the second gesture begins in connection with the first portion of the periphery, by beginning at the first portion of the periphery;

the second gesture begins in connection with the first portion of the periphery, by beginning near the first portion of the periphery;

the second gesture begins in connection with the first portion of the periphery, by beginning at the first portion of the periphery;

the first pressure is part of a third gesture including a pressure gesture, and the second pressure is part of a fourth gesture including another pressure gesture;

the first gesture begins in connection with the first portion of the periphery and moves inward from the first portion of the periphery;

the second gesture that begins in connection with the second portion of the periphery and moves inward from the second portion of the periphery;

the first gesture and the second gesture move inward in the same direction;

the first gesture and the second gesture move inward in different directions;

the periphery includes a top edge and the first gesture and the second gesture move inward by moving, at least in part, downward from the top edge;

the first gesture and the second gesture move inward by moving, at least in part, toward a central area of the touch screen;

the periphery includes a top edge, the first portion includes a first side of the top edge, and the second portion includes a second side of the top edge;

the second menu is displayed as sliding in;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are displayed as sliding in the same direction;

the first menu is displayed as sliding in from the first portion of the periphery;

the second menu is displayed as appearing from the second portion of the periphery;

the first menu and the second menu are displayed as sliding in from the periphery;

the first menu and the second menu are displayed as sliding in from the same edge;

the first menu and the second menu are displayed as sliding in from different edges;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the first operation and the second operation are related to the same function;

the electronic device is configured such that the first menu and the second menu are displayed in the same at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in different at least one other virtual display layers;

the electronic device is configured such that the first menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the second menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in the at least one other virtual display layer; or

the third operation and the fourth operation are related to the same function.

45. (New) An electronic device, comprising:

a display;

a touch interface including a periphery;

one or more processors;

memory; and

one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for:

displaying, utilizing the display, a graphical user interface;

while the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first portion of the periphery and moves inward;

in response to the detection of the first gesture that begins in connection with the first portion of the periphery and moves inward, displaying, utilizing the display, a first menu as sliding in and including one or more first menu items;

when the first menu is displayed including the one or more first menu items:

detecting, utilizing the touch interface, a first duration of contact on at least one of the one or more first menu items,

when the first duration of contact on the at least one of the one or more first menu items does not surpass a threshold, performing a first operation, and

when the first duration of contact on the at least one of the one or more first menu items surpasses the threshold, performing a second operation;

while the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second portion of the periphery and moves inward;

in response to the detection of the second gesture that begins in connection with the second portion of the periphery and moves inward, displaying, utilizing the display, a second menu including one or more second menu items;

when the second menu is displayed including the one or more second menu items:

detecting, utilizing the touch interface, a second duration of contact on at least one of the one or more second menu items,

when the second duration of contact on the at least one of the one or more second menu items does not surpass the threshold, performing a third operation, and

when the second duration of contact on the at least one of the one or more second menu items surpasses the threshold, performing a fourth operation;

wherein the electronic device is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer.

46. (New) The electronic device of Claim 45, wherein the electronic device is configured such that at least a portion of the at least one other virtual layer is at least partially translucent such that at least a portion of the at least one virtual display layer is visible through the at least one other virtual layer.

47. (New) The electronic device of Claim 46, wherein the electronic device is configured such that the at least portion of the at least one virtual display layer that is visible through the at least one other virtual layer, includes at least a portion of a background image.

48. (New) The electronic device of Claim 45, wherein the electronic device is configured such that the first menu and the second menu are displayed in separate virtual display layers.

49. (New) The electronic device of Claim 45, wherein the electronic device is configured such that the graphical user interface includes a home screen, for choosing among a plurality of applications.

50. (New) The electronic device of Claim 45, wherein the electronic device is configured such that the first gesture and the second gesture are capable of being detected as moving inward in the same direction.

51. (New) The electronic device of Claim 45, wherein the electronic device is configured such that the one or more first menu items include messages in a list, the first operation includes displaying a view of at least one of the messages, and the second operation includes opening the at least one message.

52. (New) The electronic device of Claim 45, wherein the electronic device is configured such that the one or more second menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the third operation includes selecting the at least one of the one or more second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items.

53. (New) The electronic device of Claim 45, wherein the electronic device is configured such that hardware status indicia is displayed adjacent to the second portion of the periphery.

54. (New) The electronic device of Claim 45, wherein the electronic device is configured such that only one of the first menu or the second menu is capable of being displayed at a time.

55. (New) The electronic device of Claim 45, wherein the electronic device is configured such that at least one of the first menu or the second menu substantially fills the display.

56. (New) The electronic device of Claim 45, wherein the electronic device is configured such that indicia is displayed via the graphical user interface for prompting a user as to an accessibility of at least one of the first menu or the second menu.

57. (New) The electronic device of Claim 45, wherein the electronic device is configured such that the first menu is accessible via the first gesture; the second menu is accessible via the second gesture; at least two of the first, second, third, and fourth operations are performed based on at least two different contact durations, in order to increase operation accessibility via the electronic device that includes a mobile device.

58. (New) The electronic device of Claim 45, wherein the electronic device is configured such that the periphery includes a top edge; and the first gesture and the second gesture are detected as moving inward by moving, at least in part, downward from the top edge.

59. (New) The electronic device of Claim 45, wherein the electronic device is configured such that the first portion of the periphery and the second portion of the periphery are part of the same edge.

60. (New) The electronic device of Claim 45, wherein the electronic device is configured such that:

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first portion of the periphery and the second portion of the periphery are part of a same edge of the periphery;

the one or more first menu items include one or more messages in a list, the first operation includes displaying a view of at least one of the one or more messages, and the second operation includes opening the at least one message;

the one or more second menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the third operation includes selecting the at least one of the one or more second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the one or more second menu items; and

hardware status indicia is displayed adjacent to the second portion of the periphery.

Remarks:

Claims 18, 22 and 24-40 are rejected under 35 U.S.C. 112(a) or 35 U.S.C. 112 (pre-AIA), first paragraph, because the specification allegedly "does not reasonably provide enablement for a "second gesture that begins in connection with a second portion of the at least one edge and moves inward; in response to the detection of **the second gesture** that begins in connection with the second portion of **the at least one edge** and moves inward, **displaying**, utilizing the display, **a second menu** including a plurality of second menu items" (Claims 18, 24 and 25 - emphasis added). In the latest Advisory Action mailed 7/08/19, the Examiner argues that 'the term "second gesture that begins in connection with a second portion of THE at least one edge" (emphasis added) includes antecedent basis which refers to the same "at least one edge" used for a first gesture. As a result, Examiner is interpreting both the first and second gestures to read on the same at least one edge. Therefore, Examiner is maintaining the rejection under 35 USC 112.'

Applicant respectfully disagrees. However, in the interest of expediting prosecution, applicant has clarified the claims to avoid this rejection.

It is believed that all of the pending issues have been addressed. However, the absence of a reply to a specific rejection, issue, or comment does not signify agreement with or concession of that rejection, issue, or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Still yet, nothing in this reply should be construed as intention to concede any issue with regard to any claim, except as specifically stated in this reply. Finally, it should be noted that no claims, except Claim 25, are intended to be construed under 35 U.S.C. 112, paragraph 6.

Should the Examiner deem that any further amendment is desirable to place this Application in condition for allowance, Applicant invites the Examiner to telephone the undersigned attorney at the number listed below.

Respectfully submitted,



Dated: 09 Sep 2019

The Caldwell Firm, LLC
PO Box 59655
Dallas, Texas 75229-0655
Telephone: (214) 734-2313
pcaldwell@thecaldwellfirm.com

Patrick E. Caldwell, Esq.
Reg. No. 44,580

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 16/169,961	Filing Date 10/24/2018	☐ To be Mailed

ENTITY: ☐ LARGE ☑ SMALL ☐ MICRO

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA		RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A		N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A		N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*		x $50 =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*		x $230 =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).				
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))					
* If the difference in column 1 is less than zero, enter "0" in column 2.				TOTAL	

APPLICATION AS AMENDED - PART II

		(Column 1)		(Column 2)	(Column 3)			
AMENDMENT	09/09/2019	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 34	Minus	** 20	= 14		x $50 =	700
	Independent (37 CFR 1.16(h))	* 3	Minus	*** 3	= 0		x $230 =	0
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	700

		(Column 1)		(Column 2)	(Column 3)			
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=		x $0 =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=		x $0 =	
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.	SLIE
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".	/LISA E FULTON/
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".	
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.	

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/SB/30 (11-17)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Request for Continued Examination (RCE) Transmittal

Address to:
Mail Stop RCE
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Application Number	16/169,961
Filing Date	10-24-2018
First Named Inventor	Michael S Smith
Art Unit	2623
Examiner Name	XAVIER, ANTONIO J
Attorney Docket Number	SMITH070AG

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.
Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. See Instruction Sheet for RCEs (not to be submitted to the USPTO) on page 2.

1. Submission required under 37 CFR 1.114 Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

   a. ☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

      i. ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____

      ii. ☐ Other _____

   b. ☑ Enclosed

      i. ☑ Amendment/Reply

      ii. ☐ Affidavit(s)/ Declaration(s)

      iii. ☐ Information Disclosure Statement (IDS)

      iv. ☐ Other _____

2. Miscellaneous

   a. ☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of _____ months. (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

   b. ☐ Other _____

3. Fees The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.

   a. ☑ The Director is hereby authorized to charge the following fees, any underpayment of fees, or credit any overpayments, to Deposit Account No. 50-4964.

      i. ☑ RCE fee required under 37 CFR 1.17(e)

      ii. ☐ Extension of time fee (37 CFR 1.136 and 1.17)

      iii. ☐ Other _____

   b. ☐ Check in the amount of $ _____ enclosed

   c. ☑ Payment by credit card (Form PTO-2038 enclosed)

   d. ☐ Payment by EFS-Web

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

Signature	/Patrick Caldwell/	Date	17 Jul 2019
Name (Print/Type)	Patrick Caldwell	Registration No.	44580

CERTIFICATE OF MAILING OR TRANSMISSION

I hereby certify that this correspondence is being EFS-Web transmitted to the United States Patent and Trademark Office (USPTO), deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450 or facsimile transmitted to the USPTO on the date shown below.

Signature	/Patrick Caldwell/		
Name (Print/Type)	Patrick Caldwell	Date	17 Jul 2019

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SE ND FEES OR COMPLETED FORMS TO THIS ADDRESS **SEND TO: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/SB/30 (07-09)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Instruction Sheet for RCEs

(not to be submitted to the USPTO)

NOTES:

An RCE is not a new application, and filing an RCE will not result in an application being accorded a new filing date.

Filing Qualifications:

The application must be a utility or plant application filed on or after June 8, 1995. The application cannot be a provisional application, a utility or plant application filed before June 8, 1995, a design application, or a patent under reexamination. See 37 CFR 1.114(e).

Filing Requirements:

Prosecution in the application must be closed. Prosecution is closed if the application is under appeal, or the last Office action is a final action, a notice of allowance, or an action that otherwise closes prosecution in the application (e.g., an Office action under *Ex parte Quayle*). See 37 CFR 1.114(b).

A submission and a fee are required at the time the RCE is filed. If reply to an Office action under 35 U.S.C. 132 is outstanding (e.g., the application is under final rejection), the submission must meet the reply requirements of 37 CFR 1.111. If there is no outstanding Office action, the submission can be an information disclosure statement, an amendment, new arguments, or new evidence. See 37 CFR 1.114(c). The submission may be a previously filed amendment (e.g., an amendment after final rejection).

WARNINGS:

Request for Suspension of Action:

All RCE filing requirements must be met before suspension of action is granted. A request for a suspension of action under 37 CFR 1.103(c) does not satisfy the submission requirement and does not permit the filing of the required submission to be suspended.

Improper RCE will NOT toll Any Time Period:

Before Appeal - If the RCE is improper (e.g., prosecution in the application is not closed or the submission or fee has not been filed) and the application is not under appeal, the time period set forth in the last Office action will continue to run and the application will be abandoned after the statutory time period has expired if a reply to the Office action is not timely filed. No additional time will be given to correct the improper RCE.

Under Appeal - If the RCE is improper (e.g., the submission or the fee has not been filed) and the application is under appeal, the improper RCE is effective to withdraw the appeal. Withdrawal of the appeal results in the allowance or abandonment of the application depending on the status of the claims. If there are no allowed claims, the application is abandoned. If there is at least one allowed claim, the application will be passed to issue on the allowed claim(s). See MPEP 1215.01.

See MPEP 706.07(h) for further information on the RCE practice.

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Patent Application Fee Transmittal

Application Number:	16169961
Filing Date:	24-Oct-2018
Title of Invention:	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT
First Named Inventor/Applicant Name:	Michael S. Smith
Filer:	Patrick Edgar Caldwell
Attorney Docket Number:	SMITH070AG

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
RCE- 1ST REQUEST	2801	1	650	650
		Total in USD ($)		**650**

Electronic Acknowledgement Receipt	
EFS ID:	36618179
Application Number:	16169961
International Application Number:	
Confirmation Number:	7650
Title of Invention:	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT
First Named Inventor/Applicant Name:	Michael S. Smith
Customer Number:	92045
Filer:	Patrick Edgar Caldwell
Filer Authorized By:	
Attorney Docket Number:	SMITH070AG
Receipt Date:	17-JUL-2019
Filing Date:	24-OCT-2018
Time Stamp:	21:43:12
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$650
RAM confirmation Number	071819INTEFSW21433900
Deposit Account	
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Continued Examination (RCE)	SMITH070AG_RCE_vF_17-Jul-2019.pdf	133577 a9d171cd4c9ba2736183382 0ece8c81f77c96c88	no	3
Warnings:					
This is not a USPTO supplied RCE SB30 form.					
Information:					
2	Amendment Submitted/Entered with Filing of CPA/RCE	SMITH070AG_Amendment_C_RCE_vF_17-Jul-2019.pdf	82047 f65e6f0d8c063101e062ae480d0d0f0afbc63572	no	15
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30400 7070e6f670aab92f26138a9063321c700c8b169b	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	246024		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	Confirmation No.: 7650
MICHAEL S. SMITH	Examiner: XAVIER, ANTONIO J
Application No.: 16/169,961	Art Unit: 2623
File Date: 10-24-2018	Docket No.: SMITH070AG
Title: GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT	Date: 7/17/2019

AMENDMENT C

WITH

REQUEST FOR CONTINUED EXAMINATION (RCE)

Mail Stop Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Examiner:

Following are argument(s) in response to the Final Office Action mailed 5/22/2019, and the Advisory Action mailed 7/08/19.

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

1.-17. (Cancelled)

18. (Currently Amended) An electronic device, comprising:

a display;

a touch interface including ~~at least one edge~~a periphery;

one or more processors;

memory; and

one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for:

displaying, utilizing the display, a graphical user interface;

while the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first portion of the ~~at least one edge~~ periphery and moves inward;

in response to the detection of the first gesture that begins in connection with the first portion of the ~~at least one edge~~ periphery and moves inward, displaying, utilizing the display, a first menu as sliding in and including a plurality of first menu items;

when the first menu is displayed including the plurality of first menu items:

detecting, utilizing the touch interface, a first pressure on at least one of the first menu items,

when the first pressure on the at least one of the first menu items surpasses a first threshold, performing a first operation, and

when the first pressure on the at least one of the first menu items surpasses a second threshold, performing a second operation;

while the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second portion of the ~~at least one edge~~ periphery and moves inward;

in response to the detection of the second gesture that begins in connection with the second portion of the ~~at least one edge~~ periphery and moves inward, displaying, utilizing the display, a second menu including a plurality of second menu items;

when the second menu is displayed including the plurality of second menu items:

detecting, utilizing the touch interface, a second pressure on at least one of the second menu items,

when the second pressure on the at least one of the second menu items surpasses the first threshold, performing a third operation, and

when the second pressure on the at least one of the second menu items surpasses the second threshold, performing a fourth operation;

wherein the electronic device is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer.

19.-21. (Cancelled)

22. (Previously Presented) The electronic device of Claim 18, wherein the electronic device is configured such that at least a portion of the at least one other virtual layer is at least partially translucent such that at least a portion of the at least one virtual display layer is visible through the at least one other virtual layer.

23. (Cancelled)

24. (Currently Amended) A non-transitory computer readable storage medium storing one or more programs, the one or more programs comprising instructions which, when executed by an electronic device with a display and a touch interface including a periphery ~~at least one edge~~, cause the electronic device to:

display, utilizing the display, a graphical user interface;

while the graphical user interface is displayed, detect, utilizing the touch interface, a first gesture that begins at a first portion of the ~~at least one edge~~ periphery and moves inward;

in response to the detection of the first gesture that begins at the first portion of the ~~at least one edge~~ periphery and moves inward, display, utilizing the display, a first menu as sliding in and including a plurality of first menu items; and

when the first menu is displayed including the plurality of first menu items:

detecting, utilizing the touch interface, a first pressure on at least one of the first menu items,

when the first pressure on the at least one of the first menu items surpasses a first threshold, performing a first operation, and

when the first pressure on the at least one of the first menu items surpasses a second threshold, performing a second operation;

while the graphical user interface is displayed, detect, utilizing the touch interface, a second gesture that begins in connection with a second portion of the ~~at least one edge~~ periphery and moves inward;

in response to the detection of the second gesture that begins in connection with the second portion of the ~~at least one edge~~ periphery and moves inward, display, utilizing the display, a second menu including a plurality of second menu items;

when the second menu is displayed including the plurality of second menu items:

detect, utilizing the touch interface, a second pressure on at least one of the second menu items,

when the second pressure on the at least one of the second menu items surpasses the first threshold, perform a third operation, and

when the second pressure on the at least one of the second menu items surpasses the second threshold, perform a fourth operation

wherein the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer.

25. (Currently Amended) A system, comprising:

touch interface means for:

while a graphical user interface is displayed, detecting a first gesture that begins in connection with a first portion of ~~at least one edge~~a periphery and moves inward, and detecting a second gesture that begins in connection with a second portion of the ~~at least one edge~~ periphery and moves inward; and

display means for:

in response to the detection of the first gesture that begins in connection with the first portion of the ~~at least one edge~~ periphery and moves inward, displaying a first menu as sliding in and including a plurality of first menu items, and

in response to the detection of the second gesture that begins in connection with the second portion of the ~~at least one edge~~ periphery and moves inward, displaying a second menu including a plurality of second menu items;

said touch interface means further for:

when the first menu is displayed including the plurality of first menu items:

detecting a first pressure on at least one of the first menu items, so that, when the first pressure on the at least one of the first menu items surpasses a first threshold, a first operation is caused; and so that, when the first pressure on the at least one of the first menu items surpasses a second threshold, a second operation is caused.

when the second menu is displayed including the plurality of second menu items:

detecting a second pressure on at least one of the second menu items, so that, when the second pressure on the at least one of the second menu items surpasses the first threshold, a third operation is caused; and, so that, when the second pressure on the at least one of the second menu items surpasses the second threshold, a fourth operation is caused;

wherein the system is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer.

26. (Previously Presented) The electronic device of Claim 18, wherein the electronic device is configured such that the graphical user interface includes a home screen, for choosing among a plurality of applications.

27. (Cancelled)

28. (Previously Presented) The electronic device of Claim 18, wherein the electronic device is configured such that the first gesture and the second gesture are capable of being detected as moving inward in the same direction.

29. (Previously Presented) The electronic device of Claim 18, wherein the electronic device is configured such that the first menu items include messages in a list, the first operation includes displaying a view of at least one of the messages, and the second operation includes opening the at least one message.

30. (Previously Presented) The electronic device of Claim 18, wherein the electronic device is configured such that the second menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the third operation includes selecting the at least one of the second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the second menu items.

31. (Currently Amended) The electronic device of Claim 30, wherein the electronic device is configured such that hardware status indicia is displayed adjacent to the second portion of the ~~at least one edge~~ periphery.

32. (Previously Presented) The electronic device of Claim 18, wherein the electronic device is configured such that only one of the first menu or the second menu is capable of being displayed at a time.

33. (Previously Presented) The electronic device of Claim 18, wherein the electronic device is configured such that at least one of the first menu or the second menu substantially fills the display.

34. (Previously Presented) The electronic device of Claim 18, wherein the electronic device is configured such that indicia is displayed via the graphical user interface for prompting a user as to an accessibility of at least one of the first menu or the second menu.

35. (Previously Presented) The electronic device of Claim 18, wherein the electronic device is configured such that the first menu is accessible via the first gesture; the second menu is accessible via the second gesture; at least two of the first, second, third, and fourth operations are performed based on at least two different pressures, in order to increase menu and operation accessibility via the electronic device that includes a mobile device.

36. (Cancelled)

37. (Previously Presented) The electronic device of Claim 22, wherein the electronic device is configured such that the at least portion of the at least one virtual display layer that is visible through the at least one other virtual layer, includes at least a portion of a background image.

38. (Previously Presented) The electronic device of Claim 22, wherein the electronic device is configured such that the first menu and the second menu are displayed in separate virtual display layers.

39.-40. (Cancelled)

41. (New) The electronic device of Claim 18, wherein the electronic device is configured such that:

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first portion of the periphery and the second portion of the periphery are part of a same edge of the periphery;

the first menu items include messages in a list, the first operation includes displaying a view of at least one of the messages, and the second operation includes opening the at least one message;

the second menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the third operation includes selecting the at least one of the second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the second menu items; and

hardware status indicia is displayed adjacent to the second portion of the periphery.

42. (New) The electronic device of Claim 18, wherein the electronic device is configured such that the periphery includes a top edge; and the first gesture and the second gesture are detected as moving inward by moving, at least in part, downward from the top edge.

43. (New) The electronic device of Claim 18, wherein the electronic device is configured such that the first portion of the periphery and the second portion of the periphery are part of the same edge.

44. (New) The electronic device of Claim 38, wherein the electronic device is configured such that at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the separate virtual display layers are displayed with the same z-value;

the separate virtual display layers are displayed with different z-values;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the periphery includes a single continuous edge;

the periphery includes a plurality of different edges;

the periphery includes four edges along different portions of the touch interface;

the first portion of the periphery and the second portion of the periphery are part of the same edge;

the first portion of the periphery and the second portion of the periphery are part of different edges;

the first gesture begins in connection with the first portion of the periphery, by beginning near the first portion of the periphery;

the first gesture begins in connection with the first portion of the periphery, by beginning at the first portion of the periphery;

the first gesture begins in connection with the first portion of the periphery, by beginning near the first portion of the periphery;

the first gesture begins in connection with the first portion of the periphery, by beginning at the first portion of the periphery;

the second gesture begins in connection with the first portion of the periphery, by beginning near the first portion of the periphery;

the second gesture begins in connection with the first portion of the periphery, by beginning at the first portion of the periphery;

the second gesture begins in connection with the first portion of the periphery, by beginning near the first portion of the periphery;

the second gesture begins in connection with the first portion of the periphery, by beginning at the first portion of the periphery;

the first pressure is part of a third gesture including a pressure gesture, and the second pressure is part of a fourth gesture including another pressure gesture;

the first gesture begins in connection with the first portion of the periphery and moves inward from the first portion of the periphery;

the second gesture that begins in connection with the second portion of the periphery and moves inward from the second portion of the periphery;

the first gesture and the second gesture move inward in the same direction;

the first gesture and the second gesture move inward in different directions;

the periphery includes a top edge and the first gesture and the second gesture move inward by moving, at least in part, downward from the top edge;

the first gesture and the second gesture move inward by moving, at least in part, toward a central area of the touch screen;

the periphery includes a top edge, the first portion includes a first side of the top edge, and the second portion includes a second side of the top edge;

the second menu is displayed as sliding in;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are displayed as sliding in the same direction;

the first menu is displayed as sliding in from the first portion of the periphery;

the second menu is displayed as appearing from the second portion of the periphery;

the first menu and the second menu are displayed as sliding in from the periphery;

the first menu and the second menu are displayed as sliding in from the same edge;

the first menu and the second menu are displayed as sliding in from different edges;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the first operation and the second operation are related to the same function;

the electronic device is configured such that the first menu and the second menu are displayed in the same at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in different at least one other virtual display layers;

the electronic device is configured such that the first menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the second menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in the at least one other virtual display layer; or

the third operation and the fourth operation are related to the same function.

Remarks:

Claims 18, 22 and 24-40 are rejected under 35 U.S.C. 112(a) or 35 U.S.C. 112 (pre-AIA), first paragraph, because the specification allegedly "does not reasonably provide enablement for a "second gesture that begins in connection with a second portion of the at least one edge and moves inward; in response to the detection of **the second gesture** that begins in connection with the second portion of **the at least one edge** and moves inward, **displaying**, utilizing the display, **a second menu** including a plurality of second menu items" (Claims 18, 24 and 25 - emphasis added). In the latest Advisory Action mailed 7/08/19, the Examiner argues that 'the term "second gesture that begins in connection with a second portion of THE at least one edge" (emphasis added) includes antecedent basis which refers to the same "at least one edge" used for a first gesture. As a result, Examiner is interpreting both the first and second gestures to read on the same at least one edge. Therefore, Examiner is maintaining the rejection under 35 USC 112.'

Applicant respectfully disagrees. However, in the interest of expediting prosecution, applicant has clarified the claims to avoid this rejection.

It is believed that all of the pending issues have been addressed. However, the absence of a reply to a specific rejection, issue, or comment does not signify agreement with or concession of that rejection, issue, or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Still yet, nothing in this reply should be construed as intention to concede any issue with regard to any claim, except as specifically stated in this reply. Finally, it should be noted that no claims, except Claim 25, are intended to be construed under 35 U.S.C. 112, paragraph 6.

Respectfully submitted,



Dated: 17 Jul 2019

Patrick E. Caldwell, Esq.
Reg. No. 44,580

The Caldwell Firm, LLC
PO Box 59655
Dallas, Texas 75229-0655
Telephone: (214) 734-2313
pcaldwell@thecaldwellfirm.com

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 16/169,961	Filing Date 10/24/2018	☐ To be Mailed

ENTITY: ☐ LARGE ☑ SMALL ☐ MICRO

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA		RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A		N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A		N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*		x $50 =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*		x $230 =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).				
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))					
* If the difference in column 1 is less than zero, enter "0" in column 2.				TOTAL	

APPLICATION AS AMENDED - PART II

		(Column 1)		(Column 2)	(Column 3)			
AMENDMENT	07/17/2019	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 19	Minus	** 20	= 0		x $50 =	0
	Independent (37 CFR 1.16(h))	* 3	Minus	*** 3	= 0		x $230 =	0
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	0

		(Column 1)		(Column 2)	(Column 3)			
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=		x $0 =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=		x $0 =	
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.	LIE
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".	/ANTHONY TYSON/
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".	
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.	

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/169,961	10/24/2018	Michael S. Smith	SMITH070AG	7650

92045 7590 07/08/2019

The Caldwell Firm, LLC
PO Box 59655
Dept. SVIPGP
Dallas, TX 75229

EXAMINER
XAVIER, ANTONIO J

ART UNIT	PAPER NUMBER
2623	

NOTIFICATION DATE	DELIVERY MODE
07/08/2019	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

eofficeaction@appcoll.com
pcaldwell@thecaldwellfirm.com

Advisory Action Before the Filing of an Appeal Brief	**Application No.** 16/169,961	**Applicant(s)** Smith, Michael S.	
	Examiner ANTONIO J XAVIER	**Art Unit** 2623	**AIA (FITF) Status** No

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 29 May 2019 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

NO NOTICE OF APPEAL FILED

1. ☑ The reply was filed after a final rejection. No Notice of Appeal has been filed. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114 if this is a utility or plant application. Note that RCEs are not permitted in design applications. The reply must be filed within one of the following time periods:
   a) ☐ The period for reply expires ____ months from the mailing date of the final rejection.
   b) ☑ The period for reply expires on: (1) the mailing date of this Advisory Action; or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
   c) ☐ A prior Advisory Action was mailed more than 3 months after the mailing date of the final rejection in response to a first after-final reply filed within 2 months of the mailing date of the final rejection.The current period for reply expires ____ months from the mailing date of *the prior Advisory Action* or SIX MONTHS from the mailing date of the final rejection, whichever is earlier.
   Examiner Note: If box 1 is checked, check either box (a), (b) or (c). ONLY CHECK BOX (b) WHEN THIS ADVISORY ACTION IS THE FIRST RESPONSE TO APPLICANTS FIRST AFTER-FINAL REPLY WHICH WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. ONLY CHECK BOX (c) IN THE LIMITED SITUATION SET FORTH UNDER BOX (c). See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1 136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) or (c) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendments filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   b) ☐ They raise the issue of new matter (see NOTE below);
   c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.
   NOTE: _____ (See 37CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicants reply has overcome the following rejection(s): _____
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s):(a)☐ will not be entered, or (b)☐ will be entered, and an explanation of how the new or amended claims would be rejected is provided below or appended.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____
9. ☐ The affidavit or other evidence filed after final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
10. ☐ The affidavit or other evidence filed after the date of filing the Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
11. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

12. ☑ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
13. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____
14. ☐ Other: _____.

STATUS OF CLAIMS

15. The status of the claim(s) is (or will be) as follows:
    Claim(s) allowed:_____.
    Claim(s) objected to:_____.
    Claim(s) rejected:18,22 and 24-40.
    Claim(s) withdrawn from consideration:_____.

/Antonio Xavier/ Primary Examiner, Art Unit 2623	

Continuation of REQUEST FOR RECONSIDERATION/OTHER 12. The request for reconsideration has been considered but does NOT place the application in condition for allowance because:

On page 2 of the Remarks, Applicant argues "the Examiner is interpreting the claim language in an overly narrow manner. While applicant's claims have sufficient breadth to cover a technique involving 'multiple gestures and menus coming from the same edge,' the claims do not necessarily require 'multiple gestures and menus coming from the SAME edge' (emphasis added). Instead, Claim 18, for example, merely requires detecting 'a first gesture that begins in connection with a FIRST PORTION of the AT LEAST ONE EDGE and moves inward,' and 'a second gesture that begins in connection with a SECOND PORTION of the AT LEAST ONE EDGE and moves inward,' in the specific context claimed (emphasis added)." Examiner is not persuaded.

Examiner notes the term "second gesture that begins in connection with a second portion of THE at least one edge" (emphasis added) includes antecedent basis which refers to the same "at least one edge" used for a first gesture. As a result, Examiner is interpreting both the first and second gestures to read on the same at least one edge. Therefore, Examiner is maintaining the rejection under 35 USC 112.

*Please note CAPS are used to indicate emphasis because formatting on this form is limited

OK TO ENTER: /AX/

07/01/2019

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	Confirmation No.: 7650
MICHAEL S. SMITH	Examiner: XAVIER, ANTONIO J
Application No.: 16/169,961	Art Unit: 2623
File Date: 10-24-2018	Docket No.: SMITH070AG
Title: GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT	Date: 5/29/2019

AMENDMENT B

Mail Stop Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Examiner:

Following are argument(s) in response to the Office Action mailed 5/22/2019.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: MICHAEL S. SMITH Application No.: 16/169,961 File Date: 10-24-2018 Title: GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT	Confirmation No.: 7650 Examiner: XAVIER, ANTONIO J Art Unit: 2623 Docket No.: SMITH070AG Date: 5/29/2019

AMENDMENT B

Mail Stop Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Examiner:

Following are argument(s) in response to the Office Action mailed 5/22/2019.

Remarks:

Claims 18, 22 and 24-40 are rejected under 35 U.S.C. 112(a) or 35 U.S.C. 112 (pre-AIA), first paragraph, because the specification allegedly "does not reasonably provide enablement for a "second gesture that begins in connection with a second portion of the at least one edge and moves inward; in response to the detection of **the second gesture** that begins in connection with the second portion of **the at least one edge** and moves inward, **displaying**, utilizing the display, **a second menu** including a plurality of second menu items" (Claims 18, 24 and 25 - emphasis added).

More particularly, the Examiner argues that "[t]he new language introduces a second gesture creating a second menu from the same at least one edge. Multiple gestures and menus coming from the same edge are not described or explained in the specification as filed." Applicant respectfully disagrees, for at least the reasons discussed below.

Specifically, applicant contends that the Examiner is interpreting the claim language in an overly narrow manner. While applicant's claims have sufficient breadth to cover a technique involving "multiple gestures and menus coming from the same edge," the claims do not necessarily require "multiple gestures and menus coming from the **same** edge" (emphasis added). Instead, Claim 18, for example, merely requires detecting "a first gesture that begins in connection with a **first portion** of the **at least one edge** and moves inward" and "a second gesture that begins in connection with a **second portion** of the **at least one edge** and moves inward," in the specific context claimed (emphasis added). In addition to the plain and ordinary meaning of the claim language *itself*, such breadth of the claim language at issue is further emphasized in Claim 39, by way of Claim Differentiation, when it is required that "the first portion of the at least one edge and the second portion of the at least one edge are part of **different** edges" (emphasis added). Thus, the claim language at issue, when interpreted by its appropriate breadth, is indeed adequately supported by the teachings of the specification, which has been specifically acknowledged by the Examiner.

It is believed that all of the pending issues have been addressed. However, the absence of a reply to a specific rejection, issue, or comment does not signify agreement with or concession of that rejection, issue, or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Still yet, nothing in this reply should be construed as intention to concede any issue with regard to any claim, except as specifically stated in this reply. Finally, it should be noted that no claims, except Claim 25, are intended to be construed under 35 U.S.C. 112, paragraph 6. Finally, regarding the objection to the drawings, applicant brings the Examiner's attention to Figure 23 and the description thereof.

Respectfully submitted,



Dated: 29 May 2019

Patrick E. Caldwell, Esq.
Reg. No. 44,580

The Caldwell Firm, LLC
PO Box 59655
Dallas, Texas 75229-0655
Telephone: (214) 734-2313
pcaldwell@thecaldwellfirm.com

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/169,961	10/24/2018	Michael S. Smith	SMITH070AG	7650

92045 7590 05/22/2019

The Caldwell Firm, LLC
PO Box 59655
Dept. SVIPGP
Dallas, TX 75229

EXAMINER
XAVIER, ANTONIO J

ART UNIT	PAPER NUMBER
2623	

NOTIFICATION DATE	DELIVERY MODE
05/22/2019	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

eofficeaction@appcoll.com
pcaldwell@thecaldwellfirm.com

Office Action Summary	Application No. 16/169,961	Applicant(s) Smith, Michael S.	
	Examiner ANTONIO J XAVIER	Art Unit 2623	AIA (FITF) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☑ Responsive to communication(s) filed on 3/8/19.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☑ This action is **FINAL.** 2b)☐ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5) ☑ Claim(s) 18,22 and 24-40 is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6) ☐ Claim(s) _____ is/are allowed.

7) ☑ Claim(s) 18,22 and 24-40 is/are rejected.

8) ☐ Claim(s) _____ is/are objected to.

9) ☐ Claim(s) _____ are subject to restriction and/or election requirement

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to **PPHfeedback@uspto.gov.**

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☑ The drawing(s) filed on 10/24/18 is/are: a)☐ accepted or b)☑ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☑ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☑ Interview Summary (PTO-413) Paper No(s)/Mail Date _____.

4) ☐ Other: _____.

Notice of Pre-AIA or AIA Status

1. The present application is being examined under the pre-AIA first to invent provisions.

In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

FAI STATUS

2. Per the interview with Patrick E. Caldwell (Reg. No.: 44,580) on May 14, 2019, Applicant has elected to opt out of the FAI pilot and proceed with normal examination using the Claim amendment submitted and discussed in the interview.

Response to Arguments

3. Applicant's arguments filed March 8, 2019 (hereinafter "Remarks") have been considered but are moot in view of the new ground(s) of rejection.

Drawings

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "second gesture that begins in connection with a second portion of the at least one edge and moves inward; in response to the detection of the **second gesture** that begins in connection with the second portion of **the at least one edge** and moves inward, **displaying**, utilizing the display, **a second menu** including a plurality of second menu items" (see at least Claim 18 –emphasis added) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112(a):

> (a) IN GENERAL.—The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention.

The following is a quotation of the first paragraph of pre-AIA 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 18, 22 and 24-40 are rejected under 35 U.S.C. 112(a) or 35 U.S.C. 112 (pre-AIA), first paragraph, because the specification, while being enabling for "in one embodiment, a pinch slide gesture which begins near an edge of a display and then moves inward may cause a menu or window to slide in from that edge of the display. As an option, the menu or window may remain visible until a selection is made. In another embodiment, there may be different menus or windows associated with **each edge** of a display" (paragraph [00475] – emphasis added) does not reasonably provide enablement for "second gesture that begins in connection with a second portion of the at least one edge and moves inward; in response to the detection of the **second gesture** that begins in connection with the second portion of **the at least one edge** and moves inward, **displaying**, utilizing the display, **a second menu** including a plurality of second menu items" (Claims 18, 24 and 25 – emphasis added). The specification does

not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims.

The new language introduces a second gesture creating a second menu from the same at least one edge. Multiple gestures and menus coming from the same edge are not described or explained in the specification as filed.

Claims 22 and 26-40 depend on Claim 18 and is rejected for substantially the same reasons, discussed above.

Pertinent Art

7. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure:

a. Fig. 2 of Smith (USPN 2012/0060123) teaches multiple edge input sliders; and

b. Fitzmaurice et al. (USPN 2004/0212617) teaches edge based pop-up menus.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANTONIO J XAVIER whose telephone number is (571)270-7688. The examiner can normally be reached on M-F 530am-2pm PST.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at http://www.uspto.gov/interviewpractice.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on 571-272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Antonio Xavier/
Primary Examiner, Art Unit 2623

Examiner-Initiated Interview Summary	Application No. 16/169,961	Applicant(s) Smith, Michael S.	
	Examiner ANTONIO J XAVIER	Art Unit 2623	AIA (FITF) Status No

All participants (applicant, applicant's representative, PTO personnel):

(1) ANTONIO J. XAVIER. (3) _____.

(2) Patrick E. Caldwell (Reg. No.: 44,580). (4) _____.

Date of Interview: 14 May 2019.

Type: ☑ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☑ No.
If Yes, brief description: _____.

Issues Discussed ☐ 101 ☐ 112 ☐ 102 ☐ 103 ☑ Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: 18,22 and 24-40.

Identification of prior art discussed: N/A.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

See Continuation Sheet.

Applicant recordation instructions: It is not necessary for applicant to provide a separate record of the substance of interview.

Examiner recordation instructions. Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

/Antonio Xavier/ Primary Examiner, Art Unit 2623	

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments:

Applicant opted out of the FAI pilot and asked that the claims submitted on 3/8/19 be treated as an amendment for review.

Notice of References Cited	Application/Control No. 16/169,961	Applicant(s)/Patent Under Reexamination Smith, Michael S.	
	Examiner ANTONIO J XAVIER	Art Unit 2623	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-20040212617-A1	10-2004	Fitzmaurice, George	G06F3/0481	345/440
*	B	US-20120060123-A1	03-2012	Smith; Hugh	G06F3/04883	715/833
	C					
	D					
	E					
	F					
	G					
	H					
	I					
	J					
	K					
	L					
	M					

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author. Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/169,961	Smith, Michael S.
	Examiner	Art Unit
	ANTONIO J XAVIER	2623

CPC - Searched*		
Symbol	Date	Examiner
G06F3/04817	02/27/2019	AX
G06F3/0482	02/27/2019	AX
G06F3/04847	02/27/2019	AX
G06F3/04883	02/27/2019	AX

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	Date	Examiner
G06F3/04817	02/27/2019	AX
G06F3/0482	02/27/2019	AX
G06F3/04847	02/27/2019	AX
G06F3/04883	02/27/2019	AX
Inventor	02/27/2019	AX
EAST	02/27/2019	AX
Reviewed patent family	02/27/2019	AX
Updated EAST	05/16/2019	AX

/Antonio Xavier/ Primary Examiner, Art Unit 2623	

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/169,961	Smith, Michael S.
	Examiner	Art Unit
	ANTONIO J XAVIER	2623

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner

/Antonio Xavier/ Primary Examiner, Art Unit 2623	

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/169,961	Smith, Michael S.
	Examiner	**Art Unit**
	ANTONIO J XAVIER	2623

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

CLAIMS

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE									
Final	Original	05/16/2019									
	1	-									
	2	-									
	3	-									
	4	-									
	5	-									
	6	-									
	7	-									
	8	-									
	9	-									
	10	-									
	11	-									
	12	-									
	13	-									
	14	-									
	15	-									
	16	-									
	17	-									
	18	✓									
	19	-									
	20	-									
	21	-									
	22	✓									
	23	-									
	24	✓									
	25	✓									
	26	✓									
	27	✓									
	28	✓									
	29	✓									
	30	✓									
	31	✓									
	32	✓									
	33	✓									
	34	✓									
	35	✓									
	36	✓									
	37	✓									
	38	✓									
	39	✓									
	40	✓									

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	29	(edge WITH inward WITH menu)	US-PGPUB; USPAT	ADJ	ON	2019/05/16 23:00
S1	0	"15719406"	US-PGPUB; USPAT	ADJ	ON	2017/12/12 12:33
S2	0	"15072351"	US-PGPUB; USPAT	ADJ	ON	2017/12/12 12:36
S3	2	"13567004"	US-PGPUB; USPAT	ADJ	ON	2017/12/12 12:36
S4	3560	(("SMITH") near3 ("Michael")).INV.	US-PGPUB; USPAT; USOCR	ADJ	ON	2017/12/12 12:40
S5	19	(US-20090231290-$ or US-20070268261-$ or US-20060197750-$ or US-20060044281-$ or US-20030234768-$ or US-20080259046-$ or US-20110059777-$ or US-20080088602-$ or US-20110260984-$ or US-20100328230-$ or US-20070273671-$ or US-20070236470-$ or US-20110084921-$ or US-20110057889-$ or US-20110045813-$ or US-20100045621-$).did. or (US-6020878-$ or US-5729219-$ or US-8730199-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:21
S6	9	(US-20100058211-$ or US-20130076649-$ or US-20110261002-$ or US-20080146285-$ or US-20100035656-$ or US-20120060123-$ or US-20110059777-$ or US-20130321340-$ or US-20110291945-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:21
S7	27	S5 or S6	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:21
S8	990	touch screen AND (vibrate or vibrator) AND (pressure) AND (menu) AND ((launch$3 or open$3) WITH (program or application or software))	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:25
S9	782	S8 AND ((electronic$1mail or electronic mail or e$1mail) or (SMS or short message) or (social network))	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:26
S10	0	S4 AND S9	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:26
S11	0	S4 AND S8	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:27

S12	901	S4 AND touch	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:27
S13	508	S12 AND pressure	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:27
S14	36	S13 AND menu	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:27
S15	244	S4 AND menu	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:27
S16	133	S4 AND menu AND touch	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:27
S17	97	S16 NOT S14	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:41
S18	0	(back$1touch settings)	US-PGPUB; USPAT	ADJ	ON	2017/12/13 12:27
S19	2	(back$1touch near settings)	US-PGPUB; USPAT	ADJ	ON	2017/12/13 12:31
S20	3561	(("SMITH") near3 ("Michael")).INV.	US-PGPUB; USPAT; USOCR	ADJ	ON	2017/12/14 09:58
S21	82	S20 AND (touch$3 AND menu AND (social or sharing))	US-PGPUB; USPAT; USOCR	ADJ	ON	2017/12/14 09:58
S22	6	(US-20140053116-$ or US-20110302493-$ or US-20110153653-$ or US-20110096174-$ or US-20110025842-$ or US-20080177662-$).did.	US-PGPUB	ADJ	ON	2017/12/14 11:30
S23	0	S22 AND ((pressure or magnitude) WITH (touch))	US-PGPUB; USPAT	ADJ	ON	2017/12/14 11:30
S24	0	S22 AND ((pressure or magnitude))	US-PGPUB; USPAT	ADJ	ON	2017/12/14 11:30
S25	120	(menu) WITH (social media) WITH (shar$3)	US-PGPUB; USPAT	ADJ	ON	2017/12/14 13:58
S26	73418	(custom or programmable) WITH (gesture or input) WITH (application or program or function)	US-PGPUB; USPAT	ADJ	ON	2017/12/14 18:39
S27	3561	(("SMITH") near3 ("Michael")).INV.	US-PGPUB; USPAT; USOCR	ADJ	ON	2017/12/14 18:40
S28	69	S26 AND S27	US-PGPUB; USPAT	ADJ	ON	2017/12/14 18:40
S29	1879	touch WITH (pressure or magnitude) WITH thresholds	US-PGPUB;	ADJ	ON	2017/12/14 18:59

			USPAT			
S30	4	touch WITH (pressure or magnitude) WITH thresholds WITH (context)	US-PGPUB; USPAT	ADJ	ON	2017/12/14 18:59
S31	62	("5745719").URPN.	USPAT	ADJ	ON	2017/12/14 19:20
S32	5	"11038590"	USPAT	ADJ	ON	2017/12/14 19:21
S33	1	"20060161871".pn.	US-PGPUB; USPAT	ADJ	ON	2017/12/14 19:22
S34	1	"20060026535".pn.	US-PGPUB; USPAT	ADJ	ON	2017/12/14 19:24
S35	15	(US-20140053116-$ or US-20110302493-$ or US-20110153653-$ or US-20110096174-$ or US-20110025842-$ or US-20080177662-$ or US-20130291126-$ or US-20060161871-$ or US-20060026535-$ or US-20090058829-$ or US-20090085881-$ or US-20100090982-$ or US-20100188327-$).did. or (US-9524042-$ or US-5745719-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/12/14 19:51
S36	57422	(touch WITH pressure)	US-PGPUB; USPAT	ADJ	ON	2017/12/14 19:51
S37	5	S35 and S36	US-PGPUB; USPAT	ADJ	ON	2017/12/14 19:51
S38	45	(social network or social application) WITH (shar$3 object)	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:22
S39	9596	(social network or social application) WITH (post)	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:37
S40	2866	S39 AND (SMS and e$1mail)	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:37
S41	196	S40 AND (menu WITH GUI)	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:37
S42	18	S41 AND (touch WITH (pressure or magnitude))	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:38
S43	37	(GUI or menu) WITH (pressure or magnitude) WITH (context)	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:50
S44	3	"12597684"	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:52
S45	581	((context sensitive or context$1sensitive) WITH (icon))	US-PGPUB; USPAT	ADJ	ON	2017/12/16 16:13
S46	7	S45 AND (pressure WITH touch)	US-PGPUB; USPAT	ADJ	ON	2017/12/16 16:15
S47	13	menu WITH historical usage	US-	ADJ	ON	2017/12/18

			PGPUB; USPAT			13:40
S48	1	"8191015".pn.	US-PGPUB; USPAT	ADJ	ON	2017/12/18 13:44
S49	1	"20080065991".pn. AND (menu WITH usage)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 13:44
S50	6827	(social network or social media) WITH (shar$3 WITH (object or link or image or photo))	US-PGPUB; USPAT	ADJ	ON	2017/12/18 19:20
S51	6	S50 WITH (touch$3 WITH menu)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 19:21
S52	12	S50 SAME (touch$3 WITH menu)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 19:22
S53	233	S50 AND (touch$3 WITH menu)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 19:39
S54	165	S50 AND (touch WITH pressure)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 20:34
S55	8887	G06F3/04847.cpc.	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:43
S56	10393	G06F3/04817.cpc.	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:44
S57	23568	g06f3/0482.cpc.	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:44
S58	18904	g06f3/04883.cpc.	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:44
S59	46941	S55 or S56 or S57 or S58	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:44
S60	6344	S59 AND (pressure WITH touch)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:44
S61	2168	S60 AND (touch WITH menu)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:44
S62	141649	(pressure WITH (magnitude or threshold))	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:45
S63	465	S62 AND S61	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:45
S64	30	S63 AND S50	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:47
S65	100	(slide WITH gesture WITH menu)	US-PGPUB; USPAT	ADJ	ON	2017/12/22 21:32
S66	3	S65 AND (slide WITH pressure)	US-	ADJ	ON	2017/12/22

			PGPUB; USPAT			21:39
S67	6	S65 AND (slide SAME pressure)	US-PGPUB; USPAT	ADJ	ON	2017/12/22 21:41
S68	0	"15072354"	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:52
S69	3580	(("SMITH") near3 ("Michael")).INV.	US-PGPUB; USPAT; USOCR	ADJ	ON	2018/01/20 17:52
S70	11	S69 AND (intermediate state)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:52
S71	19	S69 AND (gesture WITH menu)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:54
S72	9007	G06F3/04847.cpc.	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:56
S73	10547	G06F3/04817.cpc.	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:56
S74	23888	g06f3/0482.cpc.	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:56
S75	19105	g06f3/04883.cpc.	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:56
S76	47534	(S72 or S73 or S74 or S75)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:56
S77	843	S76 AND (intermediate WITH (pressure or signal or state))	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:57
S78	15	S76 AND (intermediate WITH (pressure or signal or state) WITH menu)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:57
S79	208	("20010005692" | "20010043291" | "20020002629" | "20020005111" | "20020008691" | "20020033919" | "20020045854" | "20020085952" | "20020116952" | "20020116959" | "20020118180" | "20020130832" | "20020180763" | "20030117408" | "20030123328" | "20030147041" | "20030151589" | "20030217972" | "20030232192" | "20030235452" | "20040084372" | "20040108995" | "20040109788" | "20040121855" | "20040191509" | "20040207542" | "20040212598" | "20040239624" | "20040263488" | "20050045540" | "20050099403" | "20050231461" | "20050242034" | "20050264521" | "20050280746" | "20060001654" | "20060001800" | "20060033701" | "20060077186" | "20060107719" |	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:23

		"20060138983"	"20060146032"					
		"20060167400"	"20060179088"					
		"20060195064"	"20060197736"					
		"20060197737"	"20060209039"					
		"20060238495"	"20060260711"					
		"20060262099"	"20060284874"					
		"20070008064"	"20070035526"					
		"20070040814"	"20070070047"					
		"20070085837"	"20070103454"					
		"20070137901"	"20070146313"					
		"20070148371"	"20070153215"					
		"20070176902"	"20070182864"					
		"20070195029"	"20070229477"					
		"20070237170"	"20070262967"					
		"20080007675"	"20080018613"					
		"20080024459"	"20080024712"					
		"20080060854"	"20080062169"					
		"20080068343"	"20080094367"					
		"20080100584"	"20080105600"					
		"20080130910"	"20080136790"					
		"20080158171"	"20080204427"					
		"20080210843"	"20080211786"					
		"20080215192"	"20080252607"					
		"20080252616"	"20080259046"					
		"20080295839"	"20080304431"					
		"20090002312"	"20090022256"					
		"20090036176"	"20090046110"					
		"20090051659"	"20090066660"					
		"20090073138"	"20090086420"					
		"20090091536"	"20090143652"					
		"20090158152"	"20090160781"					
		"20090213066"	"20090225053"					
		"20090271731"	"20090289912"					
		"20090295747"	"20100005390"					
		"20100017872"	"20100020039"					
		"20100026640"	"20100035656"					
		"20100045612"	"20100053103"					
		"20100053532"	"20100077829"					
		"20100079398"	"20100085500"					
		"20100097347"	"20100134429"					
		"20100134448"	"20100149101"					
		"20100149124"	"20100164884"					
		"20100188365"	"20100194709"					
		"20100201651"	"20100206560"					
		"20100207900"	"20100214499"					
		"20100222735"	"20100225608"					
		"20100259490"	"20100277432"					
		"20110001706"	"20110007023"					
		"20110012921"	"20110025969"					
		"20110037726"	"20110044064"					
		"20110050591"	"20110050592"					
		"20110050593"	"20110050594"					
		"20110050608"	"20110051334"					
		"20110063248"	"20110088416"					
		"20110102336"	"20110102347"					
		"20110105446"	"20110109573"					
		"20110115738"	"20110118029"					
		"20110122084"	"20110152739"					
		"20110169775"	"20110175845"					
		"20110181552"	"20110210942"					
		"20110210943"	"20110227836"					
		"20110227877"	"20110239110"					
		"20110248941"	"20110254793"					
		"20110260994"	"20110273394"					

		"20110273396" | "20110291953" | "20120007821" | "20120013566" | "20120019448" | "20120023450" | "20120032876" | "20120034954" | "20120044172" | "20120056846" | "20120086670" | "20120105367" | "20120105370" | "20120109037" | "20120154328" | "20120162087" | "20120182249" | "20120194461" | "20120194462" | "20120223900" | "20120229403" | "20120229404" | "20120229405" | "20120231853" | "20120240044" | "20120242610" | "20120244348" | "20120254747" | "20120266072" | "20120274662" | "20120293449" | "20120306764" | "20120306765" | "20120306766" | "20120313888" | "20130002610" | "20130009869" | "20130021285" | "20130021295" | "20130027350".PN.				
S80	234	("20130124993" | "20130125322" | "20130127765" | "20130132838" | "20130141388" | "20130181928" | "20130181931" | "20130188336" | "20130215064" | "20130307809" | "20130307827" | "20130321317" | "20130332876" | "20130335357" | "20140028601" | "20140057102" | "20140066139" | "20140096092" | "20140099235" | "20140104219" | "20140104220" | "20140132548" | "20140132549" | "20140134433" | "20140134434" | "20140139473" | "20140168128" | "20140191962" | "20140208248" | "20140210786" | "20140340358" | "20140368455" | "20150068526" | "20150197670" | "20150234518" | "20150253609" | "3633322" | "3738166" | "3772685" | "3777222" | "4293734" | "4296756" | "4302011" | "4353552" | "4524421" | "4554419" | "4636632" | "4644101" | "4770281" | "5241308" | "5247434" | "5276787" | "5305423" | "5309172" | "5311302" | "5343650" | "5386219" | "5448263" | "5486286" | "5487827" | "5566096" | "5680160" | "5742894" | "5743859" | "5744027" | "5838244" | "5856822" | "5947334" | "5999892" | "6108064" | "6118435" | "6141000" | "6193152" | "6283763" | "6284131" | "6337681" | "6351271" | "6392638" | "6417845" | "6441807" | "6509847" | "6526315" | "6533757" | "6567102" | "6626013" | "6636203" | "6689947" | "6721019" | "6738514" | "6747636" | "6776546" | "6791640" | "6801211" | "6879318" | "6880998" | "6888537" | "6917282" | "6919927" | "6933991" | "6961015" | "6967903" | "7030854" | "7097903" | "7098776" | "7122149" | "7138984" | "7205983" | "7254973" | "7289113" | "7303680" | "7312784" | "7312791" | "7315336" | "7318892" |	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:24

		"7405779" | "7423557" | "7437221" | "7535463" | "7626579" | "7639239" | "7649577" | "7649605" | "7659885" | "7675580" | "7692627" | "7692637" | "7701329" | "7705824" | "7738068" | "7755612" | "7903096" | "7932893" | "7952566" | "7973777" | "7973778" | "7982721" | "8022933" | "8057419" | "8068021" | "8072430" | "8094134" | "8094673" | "8102496" | "8184228" | "8188982" | "8199116" | "8207945" | "8209628" | "8223799" | "8228309" | "8253699" | "8269731" | "8269733" | "8270148" | "8279361" | "8286102" | "8310452" | "8319743" | "8325143" | "8334835" | "8334850" | "8345018" | "8349228" | "8373675" | "8384674" | "8411039" | "8416210" | "8424590" | "8427434" | "8451238" | "8471824" | "8477111" | "8479110" | "8487900" | "8493384" | "8497884" | "8508494" | "8542193" | "8542209" | "8553012" | "8564559" | "8587542" | "8624851" | "8624867" | "8638311" | "8648839" | "8654104" | "8674947" | "8692815" | "8698777" | "8717303" | "8723826" | "8727557" | "8743076" | "8745514" | "8754862" | "8760408" | "8780089" | "8816993" | "8854317" | "8866785" | "8872798" | "8878809" | "8878810" | "8884913" | "8896575" | "8913031" | "8917262" | "8947381" | "8970540" | "8976128" | "8982081" | "8988364" | "9003591" | "9013414" | "9018030" | "9030427" | "9035897" | "9041679" | "9045670" | "9046999" | "9063597" | "9069204" | "9069416" | "9069460" | "9092129" | "9098193" | "9116609" | "9125630" | "9130651" | "9134880" | "9152258" | "9152288" | "RE41716").PN.				
S81	442	S79 or S80	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:24
S82	17	S81 AND (intermediate WITH (pressure or signal or state))	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:24
S83	297	S81 AND (second WITH (pressure or signal or state))	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:26
S84	58	S81 AND (second WITH (pressure or signal or state) WITH third)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:26
S85	1	S81 AND (second WITH (pressure or signal or state) WITH third) WITH menu	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:26
S86	1632	g06f2203/04105.cpc.	US-PGPUB; USPAT	ADJ	ON	2018/01/20 19:35
S87	302	S86 AND (second WITH (pressure or signal or state) WITH third)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 19:35

S88	302	S86 AND (second WITH (pressure or signal or state) WITH third)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 19:35
S89	1	S86 AND (second WITH (pressure or signal or state) WITH third) WITH menu	US-PGPUB; USPAT	ADJ	ON	2018/01/20 19:35
S90	50	S86 AND (intermediate WITH (pressure or signal or state))	US-PGPUB; USPAT	ADJ	ON	2018/01/20 19:36
S91	0	"15072354"	US-PGPUB; USPAT	ADJ	ON	2018/08/08 14:49
S92	14	(US-20130162667-$ or US-20110145764-$ or US-20100313166-$ or US-20080219493-$ or US-20040150644-$ or US-20120306788-$ or US-20110175805-$ or US-20100026640-$ or US-20080178126-$ or US-20110196935-$ or US-20090207175-$ or US-20120225413-$ or US-20080204427-$ or US-20080024459-$).did.	US-PGPUB; USPAT	ADJ	ON	2018/09/07 17:56
S97	1	"20110175805".pn.	US-PGPUB; USPAT	ADJ	ON	2019/01/19 15:58
S98	1	"3659229".pn.	US-PGPUB; USPAT	ADJ	ON	2019/01/19 15:59
S99	473	(cursor or icon) WITH (follow) WITH (gesture or touch)	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:02
S100	14	(cursor or icon) WITH (follow) WITH (gesture or touch) WITH (speed)	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:02
S101	0	"16153765"	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:02
S102	1	"15072354"	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:02
S103	2	(cursor or icon) WITH (follow) WITH (gesture or touch) WITH (gravity)	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:04
S104	51	(cursor or icon) WITH (gravity) WITH (gesture or touch) WITH (gravity)	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:05
S105	90	(cursor or icon) WITH (snap) WITH (gesture or touch)	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:08
S106	275	(icon) WITH (follow or trail) WITH (gesture or touch)	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:16
S107	14	(US-20130162667-$ or US-20120306788-$ or US-20120225413-$ or US-20110196935-$ or US-20110175805-$ or US-20110145764-$ or US-20100313166-$ or US-20100026640-$ or US-20090207175-$ or US-20080219493-$ or US-20080204427-$ or US-20080178126-$ or US-	US-PGPUB	ADJ	ON	2019/02/27 07:26

		20080024459-$ or US-20040150644-$).did.				
S108	18	(US-20110302493-$ or US-20080177662-$ or US-20060161871-$ or US-20060026535-$ or US-20090058829-$ or US-20090085881-$ or US-20100090982-$ or US-20100188327-$ or US-20100251119-$ or US-20100127983-$ or US-20100241989-$ or US-20100088654-$ or US-20050114794-$ or US-20110061021-$ or US-20120054691-$ or US-20120306788-$ or US-20120182296-$).did. or (US-9524042-$).did.	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:26
S109	31	S107 or S108	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:26
S110	0	S109 AND (virtual layer)	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:26
S111	3	S109 AND (fog or blur)	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:26
S112	2	S109 AND (fore$1ground AND back$1ground)	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:29
S113	1005	(menu WITH (fore$1ground AND back$1ground))	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:30
S114	0	(menu WITH (fore$1ground AND back$1ground)) WITH virtual layer	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:30
S115	23	(menu WITH (fore$1ground AND back$1ground)) WITH layer	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:30
S116	5542	(fore$1ground or back$1ground) WITH (fog or blur)	US-PGPUB; USPAT	ADJ	ON	2019/02/27 13:12
S117	4	(fore$1ground or back$1ground) WITH (fog or blur) WITH menu	US-PGPUB; USPAT	ADJ	ON	2019/02/27 13:12
S118	1	S116 AND (menu WITH transparent)	US-PGPUB; USPAT	ADJ	ON	2019/02/27 13:13

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S93	3480	G06F3/04847.cpc.	USPAT	ADJ	ON	2018/09/07 17:58
S94	4153	G06F3/04817.cpc.	USPAT	ADJ	ON	2018/09/07 17:58
S95	9279	g06f3/0482.cpc.	USPAT	ADJ	ON	2018/09/07 17:58
S96	7394	g06f3/04883.cpc.	USPAT	ADJ	ON	2018/09/07 17:58

5/ 16/ 2019 11:14:32 PM
C:\ Users\ axavier\ Desktop\ axavier data files\ EAST workspaces\ 16169961-CON of 15072354-CON of 13567004.wsp

Doc Code: M865 or FAI.REQ.INTV

PTOL-413A (07-18)
Approved for use through 08/31/2018. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Applicant Initiated Interview Request Form

Application No.: 16/169,961 First Named Applicant: Michael S Smith
Examiner: XAVIER, ANTONIO J Art Unit: 2623 Status of Application: Response to Pre-Interview Comm

Tentative Participants:
(1) Patrick Caldwell (2) XAVIER, ANTONIO J
(3) _____ (4) _____

Proposed Date of Interview: _____ **Proposed Time:** _____ **(○AM○PM)**

Type of Interview Requested:
(1) ☑ Telephonic (2) ☐ Personal (3) ☐ Video Conference

Exhibit To Be Shown or Demonstrated: ☐ YES ☑ NO
If yes, provide brief description: _____

Issues To Be Discussed

Issues (Rej., Obj., etc)	Claims/ Fig. #s	Prior Art	Discussed	Agreed	Not Agreed
(1)	18-40		☐	☐	☐
(2)			☐	☐	☐
(3)			☐	☐	☐
(4)			☐	☐	☐

☐ Continuation Sheet Attached ☐ Proposed Amendment or Arguments Attached
Brief Description of Arguments to be Presented: _____

An interview was conducted on the above-identified application on _____

NOTE: This form should be completed and filed by applicant in advance of the interview (see MPEP § 713.01). If this form is signed by a registered practitioner not of record, the Office will accept this as an indication that he or she is authorized to conduct an interview on behalf of the principal (37 CFR 1.32(a)(3)) pursuant to 37 CFR 1.34. This is not a power of attorney to any above named practitioner. See the Instruction Sheet for this form, which is incorporated by reference. By signing this form, applicant or practitioner is certifying that he or she has read the Instruction Sheet. After the interview is conducted, applicant is advised to file a statement of the substance of this interview (37 CFR 1.133(b)) as soon as possible. This application will not be delayed from issue because of applicant's failure to submit a written record of this interview.

/Patrick Caldwell/
Applicant/Applicant's Representative Signature

Examiner/SPE Signature

Patrick Caldwell
Typed/Printed Name of Applicant or Representative

214-734-2313
Applicant's/Applicant's Representative's Telephone Number

44580
Registration Number, if applicable

This collection of information is required by 37 CFR 1.133. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 24 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.
If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Doc Code: M865 or FAI.REQ.INTV

PTOL-413A (08-10)
Approved for use through 08/31/2010. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Instruction Sheet for:
APPLICANT INITIATED INTERVIEW REQUEST FORM

(Not to be Submitted to the USPTO)

1. If this form is signed by a registered practitioner not of record, the authority to submit the Applicant Initiated Interview Request Form is pursuant to limited authority to act in a representative capacity under 37 CFR 1.34 and further proof of authority to act in a representative capacity may be required. *See* 37 CFR 1.34.

   The Office will accept the signed form as an indication that the registered practitioner not of record is authorized to conduct an interview on behalf of the principal in pursuant to 37 CFR 1.34.

   For more information, see the "Conducting an Interview with a Registered Practitioner Acting in a Representative Capacity" notice which is available on the USPTO Web site at: http://www.uspto.gov/patents/law/notices/2010.jsp.

2. This is not a power of attorney to any named practitioner. Accordingly, any registered practitioner not of record named on the form does not have authority to sign a request to change the correspondence address, a request for express abandonment, a disclaimer, a power of attorney, or other document requiring the signature of the applicant, assignee of the entire interest or an attorney of record. If appropriate, a separate power of attorney to the named practitioner should be executed and filed in the US Patent and Trademark Office.

3. Any interview concerning an unpublished application under 35 U.S.C. § 122(b) with a registered practitioner not of record who obtains authorization through use of the PTOL-413A will be conducted based on the information and files supplied by the practitioner in view of the confidentiality requirements of 35 U.S.C. § 122(a).

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Acknowledgement Receipt

EFS ID:	35373381
Application Number:	16169961
International Application Number:	
Confirmation Number:	7650
Title of Invention:	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT
First Named Inventor/Applicant Name:	Michael S. Smith
Customer Number:	92045
Filer:	Patrick Edgar Caldwell
Filer Authorized By:	
Attorney Docket Number:	SMITH070AG
Receipt Date:	08-MAR-2019
Filing Date:	24-OCT-2018
Time Stamp:	23:32:28
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Applicant Arguments/Remarks Made in an Amendment	SMITH070AG_Amendment_vF_03082019.pdf	98340 8532894017dcec91ff1d92e46b011d51aba2fac89	no	18

Warnings:

Information:					
2	First Action Interview - Schedule Interview request	SMITH070AG_InterviewReq_03082019_vF.pdf	1019359 09a531 46bbd8e961612fc97dbbfad42ea5cd0453c	no	3
Warnings:					
Information:					
			Total Files Size (in bytes):	1117699	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	Confirmation No.: 7650
MICHAEL S. SMITH	Examiner: XAVIER, ANTONIO J
Application No.: 16/169,961	Art Unit: 2623
File Date: 10-24-2018	Docket No.: SMITH070AG
Title: GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT	Date: 3/8/2019

AMENDMENT(S)/ARGUMENT(S) IN RESPONSE TO FIRST ACTION INTERVIEW PILOT PROGRAM PRE-INTERVIEW COMMUNICATION

Mail Stop Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Examiner:

Following are amendment(s)/argument(s) in response to the First Action Interview Pilot Program Pre-Interview Communication mailed 3/5/2019.

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

1.-17. (Cancelled)

18. (Currently Amended) An electronic device, comprising:

a display;

a touch interface including at least one edge;

one or more processors;

memory; and

one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for:

displaying, utilizing the display, a graphical user interface;

while the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first portion of the at least one edge and moves inward;

in response to the detection of the first gesture that begins in connection with the first portion of the at least one edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including a plurality of first menu items; [[and]]

when the first menu is displayed including the plurality of first menu items:

detecting, utilizing the touch interface, a first pressure on at least one of the first menu items,

when the first pressure on the at least one of the first menu items surpasses a first threshold, performing a first operation, and

when the first pressure on the at least one of the first menu items surpasses a second threshold, performing a second operation;

while the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second portion of the at least one edge and moves inward;

in response to the detection of the second gesture that begins in connection with the second portion of the at least one edge and moves inward, displaying, utilizing the display, a second menu including a plurality of second menu items;

when the second menu is displayed including the plurality of second menu items:

detecting, utilizing the touch interface, a second pressure on at least one of the second menu items,

when the second pressure on the at least one of the second menu items surpasses the first threshold, performing a third operation, and

when the second pressure on the at least one of the second menu items surpasses the second threshold, performing a fourth operation;

wherein the electronic device is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer.

19.-21. (Cancelled)

22. (Currently Amended) The electronic device of Claim [[20]]18, wherein the electronic device is configured such that at least a portion of the at least one other virtual [[later]]layer is at least partially translucent such that at least a portion of the at least one virtual display layer is visible through the at least one other virtual [[later]]layer.

23. (Cancelled)

24. (Currently Amended) A non-transitory computer readable storage medium storing one or more programs, the one or more programs comprising instructions which, when executed by an electronic device with a display and a touch interface including at least one edge, cause the electronic device to:

display, utilizing the display, a graphical user interface;

while the graphical user interface is displayed, detect, utilizing the touch interface, a first gesture that begins at a first portion of the at least one edge and moves inward;

in response to the detection of the first gesture that begins at the first portion of the at least one edge and moves inward, display, utilizing the display, a first menu as sliding in and including a plurality of first menu items; and

when the first menu is displayed including the plurality of first menu items:

detecting, utilizing the touch interface, a first pressure on at least one of the first menu items,

when the first pressure on the at least one of the first menu items surpasses a first threshold, performing a first operation, and

when the first pressure on the at least one of the first menu items surpasses a second threshold, performing a second operation;

while the graphical user interface is displayed, detect, utilizing the touch interface, a second gesture that begins in connection with a second portion of the at least one edge and moves inward;

in response to the detection of the second gesture that begins in connection with the second portion of the at least one edge and moves inward, display, utilizing the display, a second menu including a plurality of second menu items;

when the second menu is displayed including the plurality of second menu items:

detect, utilizing the touch interface, a second pressure on at least one of the second menu items,

when the second pressure on the at least one of the second menu items surpasses the first threshold, perform a third operation, and

when the second pressure on the at least one of the second menu items surpasses the second threshold, perform a fourth operation

wherein the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer.

25. (Currently Amended) A system, comprising:

touch interface means for:

while a graphical user interface is displayed, detecting a first gesture that begins in connection with a first portion of at least one edge and moves inward, and detecting a second gesture that begins in connection with a second portion of the at least one edge and moves inward; and

display means for:

in response to the detection of the first gesture that begins in connection with the first portion of the at least one edge and moves inward, displaying a first menu as sliding in and including a plurality of first menu items[[;]], and

in response to the detection of the second gesture that begins in connection with the second portion of the at least one edge and moves inward, displaying a second menu including a plurality of second menu items;

said touch interface means further for:

when the first menu is displayed including the plurality of first menu items:

detecting~~, utilizing the touch interface,~~ a first pressure on at least one of the first menu items, so that, when the first pressure on the at least one of the first menu items surpasses a first threshold, a first operation is caused; and so that, when the first pressure on the at least one of the first menu items surpasses a second threshold, a second operation is caused.

when the second menu is displayed including the plurality of second menu items:

detecting a second pressure on at least one of the second menu items, so that, when the second pressure on the at least one of the second

menu items surpasses the first threshold, a third operation is caused; and, so that, when the second pressure on the at least one of the second menu items surpasses the second threshold, a fourth operation is caused;

wherein the system is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer.

26. (New) The electronic device of Claim 18, wherein the electronic device is configured such that the graphical user interface includes a home screen, for choosing among a plurality of applications.

27. (New) The electronic device of Claim 18, wherein the electronic device is configured such that the first portion of the at least one edge and the second portion of the at least one edge are part of the same edge.

28. (New) The electronic device of Claim 18, wherein the electronic device is configured such that the first gesture and the second gesture are capable of being detected as moving inward in the same direction.

29. (New) The electronic device of Claim 18, wherein the electronic device is configured such that the first menu items include messages in a list, the first operation includes displaying a view of at least one of the messages, and the second operation includes opening the at least one message.

30. (New) The electronic device of Claim 18, wherein the electronic device is configured such that the second menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the third operation includes selecting the at least one of the second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the second menu items.

31. (New) The electronic device of Claim 30, wherein the electronic device is configured such that hardware status indicia is displayed adjacent to the second portion of the at least one edge.

32. (New) The electronic device of Claim 18, wherein the electronic device is configured such that only one of the first menu or the second menu is capable of being displayed at a time.

33. (New) The electronic device of Claim 18, wherein the electronic device is configured such that at least one of the first menu or the second menu substantially fills the display.

34. (New) The electronic device of Claim 18, wherein the electronic device is configured such that indicia is displayed via the graphical user interface for prompting a user as to an accessibility of at least one of the first menu or the second menu.

35. (New) The electronic device of Claim 18, wherein the electronic device is configured such that the first menu is accessible via the first gesture; the second menu is accessible via the second gesture; at least two of the first, second, third, and fourth operations are performed based on at least two different pressures, in order to increase menu and operation accessibility via the electronic device that includes a mobile device.

36. (New) The electronic device of Claim 18, wherein the electronic device is configured such that the at least one edge includes a top edge; and the first gesture and the second gesture are detected as moving inward by moving, at least in part, downward from the top edge.

37. (New) The electronic device of Claim 22, wherein the electronic device is configured such that the at least portion of the at least one virtual display layer that is visible through the at least one other virtual layer, includes at least a portion of a background image.

38. (New) The electronic device of Claim 22, wherein the electronic device is configured such that the first menu and the second menu are displayed in separate virtual display layers.

39. (New) The electronic device of Claim 38, wherein the electronic device is configured such that at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the separate virtual display layers are displayed with the same z-value;

the separate virtual display layers are displayed with different z-values;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the at least one edge includes a single edge;

the at least one edge includes a plurality of different edges;

the at least one edge includes a single edge along a periphery of the touch interface;

the at least one edge includes four edges along different portions of a periphery of the touch interface;

the first portion of the at least one edge and the second portion of the at least one edge are part of the same edge;

the first portion of the at least one edge and the second portion of the at least one edge are part of different edges;

the first gesture begins in connection with the first portion of the at least one edge, by beginning near the first portion of the at least one edge;

the first gesture begins in connection with the first portion of the at least one edge, by beginning at the first portion of the at least one edge;

the first gesture begins in connection with the first portion of the at least one edge, by beginning near the first portion of the at least one edge;

the first gesture begins in connection with the first portion of the at least one edge, by beginning at the first portion of the at least one edge;

the second gesture begins in connection with the first portion of the at least one edge, by beginning near the first portion of the at least one edge;

the second gesture begins in connection with the first portion of the at least one edge, by beginning at the first portion of the at least one edge;

the second gesture begins in connection with the first portion of the at least one edge, by beginning near the first portion of the at least one edge;

the second gesture begins in connection with the first portion of the at least one edge, by beginning at the first portion of the at least one edge;

the first pressure is part of a third gesture including a pressure gesture, and the second pressure is part of a fourth gesture including another pressure gesture;

the first gesture begins in connection with the first portion of the at least one edge and moves inward from the first portion of the at least one edge;

the second gesture that begins in connection with the second portion of the at least one edge and moves inward from the second portion of the at least one edge;

the first gesture and the second gesture move inward in the same direction;

the first gesture and the second gesture move inward in different directions;

the at least one edge includes a top edge and the first gesture and the second gesture move inward by moving, at least in part, downward from the top edge;

the first gesture and the second gesture move inward by moving, at least in part, toward a central area of the touch screen;

the at least one edge includes a top edge, the first portion includes a first side of the top edge, and the second portion includes a second side of the top edge;

the second menu is displayed as sliding in;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are displayed as sliding in the same direction;

the first menu is displayed as sliding in from the first portion of the at least one edge;

the second menu is displayed as appearing from the second portion of the at least one edge;

the first menu and the second menu are displayed as sliding in from the at least one edge;

the first menu and the second menu are displayed as sliding in from the same edge;

the first menu and the second menu are displayed as sliding in from different edges;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the first operation and the second operation are related to the same function;

the electronic device is configured such that the first menu and the second menu are displayed in the same at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in different at least one other virtual display layers;

the electronic device is configured such that the first menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the second menu is displayed in the at least one other virtual display layer;

the electronic device is configured such that the first menu and the second menu are displayed in the at least one other virtual display layer; or

the third operation and the fourth operation are related to the same function.

40. (New) The electronic device of Claim 18, wherein the electronic device is configured such that:

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the first portion of the at least one edge and the second portion of the at least one edge are part of the same edge;

the first menu items include messages in a list, the first operation includes displaying a view of at least one of the messages, and the second operation includes opening the at least one message;

the second menu items include a network interface menu item, a music menu item, a camera menu item, a volume menu item, and a brightness menu item; the third operation includes selecting the at least one of the second menu items; and the fourth operation includes opening a contextual menu with one or more options associated with the at least one of the second menu items; and

hardware status indicia is displayed adjacent to the second portion of the at least one edge.

Remarks:

Claims 18-25 have been preliminarily rejected under 35 U.S.C. 103 based on US-20120060123-A1 (Smith) in view of US-20120306788-A1 (Chen). Applicant respectfully disagrees with such preliminary rejection. First, Chen has a filing date of May 29, 2012 that postdates a priority claim of the present application (to U.S. Provisional Application No. 61/581,918, filed December 30, 2011). Further, while Chen claims priority to a provisional application filed on May 31, 2011, Chen does not include a claim that is actually entitled to the benefit of priority of the provisional application. See the combination of terms highlighted from Claim 1 from Chen below:

> 1. An electronic apparatus with a touch input system, comprising:
>
> a touch display screen, displaying information of the electronic apparatus, and having a first display screen edge and a second display screen edge; and
>
> a touch sensing device, connected to the touch display screen, and detecting and receiving a touch signal.
>
> **wherein when the touch sensing device detects a complete touch signal, the electronic apparatus calculates a sliding track and a sliding angle of the complete touch signal, and displays a menu operation interface with arc-shaped arrangement in the touch display screen when the sliding angle of the sliding track exceeds a predetermined angle, wherein the menu operation interface with arc-shaped arrangement comprises a plurality of sector functional options**, and
>
> **when the touch sensing device detects an incomplete touch signal, the electronic apparatus calculates the sliding track and the sliding angle, and displays a part of the menu operation interface with arc-shaped arrangement in the touch display screen**. (emphasis added)

Thus, Chen is not proper prior art under *Dynamic Drinkware, LLC v. National Graphics, Inc.*, 800 F.3d 1375 (Fed. Cir. 2015), as a reference patent is only entitled to claim the benefit of the filing date of its provisional application if the disclosure of the provisional application provides support for the claims in the reference patent in compliance with § 112, ¶ 1. See MPEP 706.

Despite the above and in the interest of expediting prosecution, applicant has amended the claims. Further, applicant contends that the cited prior art (that is proper) under the above rejection does not disclose at least the following highlighted terms, in the specific context claimed.

"18. (Currently Amended) An electronic device, comprising:

a display;

a touch interface including at least one edge;

one or more processors;

memory; and

one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for:

displaying, utilizing the display, a graphical user interface;

while the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first portion of the at least one edge and moves inward;

in response to the detection of the first gesture that begins in connection with the first portion of the at least one edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including a plurality of first menu items; [[and]]

when the first menu is displayed including the plurality of first menu items:

detecting, utilizing the touch interface, a first pressure on at least one of the first menu items,

when the first pressure on the at least one of the first menu items surpasses a first threshold, performing a first operation, and

when the first pressure on the at least one of the first menu items surpasses a second threshold, performing a second operation;

while the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second portion of the at least one edge and moves inward;

in response to the detection of the second gesture that begins in connection with the second portion of the at least one edge and moves inward, displaying, utilizing the display, a second menu including a plurality of second menu items;

when the second menu is displayed including the plurality of second menu items:

detecting, utilizing the touch interface, a second pressure on at least one of the second menu items,

when the second pressure on the at least one of the second menu items surpasses the first threshold, performing a third operation, and

when the second pressure on the at least one of the second menu items surpasses the second threshold, performing a fourth operation;

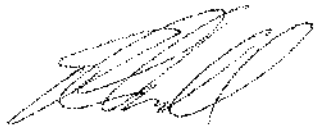
wherein the electronic device is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer."

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir.1991).

Applicant respectfully asserts that at least the third element of the prima facie case of obviousness has not been met, since the prior art excerpts, as relied upon by the Examiner, fail to teach or suggest all of the claim limitations, as noted above. With respect to the other independent claims, applicant respectfully asserts that such claims are deemed allowable for reasons similar, but not necessarily identical, to one or more of the aforementioned reasons (see each claim for specific claim language contained therein). The claims have been preliminarily rejected under non-statutory double patenting. Such rejection is deemed moot by virtue of the claims (as amended) being patentably distinct from related patents currently granted. Regarding the objection to the drawings, applicant respectfully points out figure 14 et al. It is believed that all of the pending issues have been addressed. However, the absence of a reply to a specific rejection, issue, or comment does not signify agreement with or concession of that rejection, issue, or comment. In addition, because the arguments made above may not be exhaustive, there

may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Still yet, nothing in this reply should be construed as intention to concede any issue with regard to any claim, except as specifically stated in this reply. Finally, it should be noted that no claims, except Claim 25, are intended to be construed under 35 U.S.C. 112, paragraph 6.

Respectfully submitted,



Dated: 08 Mar 2019

The Caldwell Firm, LLC
PO Box 59655
Dallas, Texas 75229-0655
Telephone: (214) 734-2313
pcaldwell@thecaldwellfirm.com

Patrick E. Caldwell, Esq.
Reg. No. 44,580

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/169,961	10/24/2018	Michael S. Smith	SMITH070AG	7650

92045 7590 03/05/2019

The Caldwell Firm, LLC
PO Box 59655
Dept. SVIPGP
Dallas, TX 75229

EXAMINER
XAVIER, ANTONIO J

ART UNIT	PAPER NUMBER
2623	

NOTIFICATION DATE	DELIVERY MODE
03/05/2019	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

eofficeaction@appcoll.com
pcaldwell@thecaldwellfirm.com

First Action Interview Pilot Program Pre-Interview Communication	**Application No.** 16/169,961	**Applicant(s)** Smith, Michael S.	
	Examiner ANTONIO J XAVIER	**Art Unit** 2623	**AIA (FITF) Status** No

-The MAILING OR NOTIFICATION DATE of this communication appears on the cover sheet with the correspondence address -

THE SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE **ONE MONTH OR THIRTY (30) DAYS,** WHICHEVER IS LONGER, FROM THE MAILING OR NOTIFICATION DATE OF THIS COMMUNICATION.

This time period for reply is extendable under 37 CFR 1.136(a) for only ONE additional MONTH.

This communication constitutes notice under 37 CFR 1.136(a)(1)(i).

Applicant must, within the time period for reply, file: (1) A letter requesting not to have a first action interview; (2) A reply under 37 CFR 1.111 waiving the first action interview and First Action Interview Office Action; or (3) An Applicant Initiated Interview Request Form (PTOL-413A) electronically via EFS-Web, accompanied by a proposed amendment or arguments, and schedule the interview within 2 months from the filing of the request. A failure to respond to this communication will be treated as a request not to have an interview. If applicant waives the First Action Interview Office Action, the instant Pre-Interview Communication is deemed the first Office Action on the Merits. The next subsequent Office action may be made final if appropriate. See MPEP 706.07(a).

Status

1) ☑ Responsive to communication(s) filed on 10/24/18 .

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____ .

Disposition of Claims

2) ☑ Claim(s) 18-25 is/are pending in the application.

2a) Of the above claim(s) _____ is/are withdrawn from consideration.

3) ☐ Claim(s) _____ is/are allowed.

4) ☑ Claim(s) 18-25 is/are rejected.

5) ☐ Claim(s) _____ is/are objected to.

6) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

7) ☐ The specification is objected to by the Examiner.

8) ☑ The drawing(s) filed on 10/24/18 is/are: a) ☐ accepted or b) ☑ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

9) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some * c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

Contact Information

Examiner's Telephone Number: (571)270-7688

Examiner's Typical Work Schedule: M-F 530am-2pm PST

Supervisor's Name: Amare Mengistu

Supervisor's Telephone Number: 571-272-7674

Attachment(s)	
1) ☑ Notice of References Cited (PTO-892)	3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
2) ☑ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ .	4) ☐ Other: _____ .

First Action Interview Pilot Program Pre-Interview Communication	**Application No.** 16/169,961	**Applicant(s)** Smith, Michael S.	
	Examiner ANTONIO J XAVIER	**Art Unit** 2623	**AIA (FITF) Status** No

Notification of Rejection(s) and/or Objection(s)

#	Claim(s)	Reference(s) (If applicable)	Rejection Statutory Basis	Brief Explanation of Rejection
1	18-20 and 24 -25	A and B	35 USC 103	Chen teaches a gesture sliding in from an edge to create a menu (Figs. 2A-3B). The currently claimed "edge" is subject to BRI and appears to include Chen. Chen, [0058] teaches selection of the menu items but is silent on multiple pressure threshold
2	21-23	A, B and C	35 USC 103	Yamada teaches virtual layers in a GUI (Fig. 10 and [0090]-[0097] teach foreground and background layers for a menu and translucent layers to see what is beneath). KSR known technique to combine references
3	18-23	A, B and C plus family	Obviousness DP	Claims similar in scope to patent family

Expanded Discussion/Commentary

1		Kim teaches touch input and multiple pressure thresholds to distinguish a selection or additional menu generation (Figs. 3A-8 and [0068]-[0097] At least [0080] teaches a touch state and [0078] teach pressure/menu state KSR known technique to combine references
1		Chen, Fig. 7 and [0060] further teach multiple menus can be generated
*		Drawings don't show the inventive concept as claimed

DATE: 27 February 2019	/Antonio Xavier/ Primary Examiner, Art Unit 2623	

Notice of References Cited	Application/Control No. 16/169,961	Applicant(s)/Patent Under Reexamination Smith, Michael S.	
	Examiner ANTONIO J XAVIER	Art Unit 2623	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-20120060123-A1	03-2012	Smith; Hugh	G06F3/04883	715/833
*	B	US-20120306788-A1	12-2012	Chen; Kai-Yi	G06F3/0482	345/173
*	C	US-20100127983-A1	05-2010	Irani; Pourang	G06F3/03543	345/163
*	D	US-20100026640-A1	02-2010	KIM; Hyun-jin	G06F3/0414	345/173
*	E	US-20110242395-A1	10-2011	YAMADA; Akihiko	H04N5/232	348/333.02
	F					
	G					
	H					
	I					
	J					
	K					
	L					
	M					

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/169,961	Smith, Michael S.
	Examiner	Art Unit
	ANTONIO J XAVIER	2623

CPC - Searched*		
Symbol	Date	Examiner
G06F3/04817	02/27/2019	AX
G06F3/0482	02/27/2019	AX
G06F3/04847	02/27/2019	AX
G06F3/04883	02/27/2019	AX

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	Date	Examiner
G06F3/04817	02/27/2019	AX
G06F3/0482	02/27/2019	AX
G06F3/04847	02/27/2019	AX
G06F3/04883	02/27/2019	AX
Inventor	02/27/2019	AX
EAST	02/27/2019	AX
Reviewed patent family	02/27/2019	AX

/Antonio Xavier/ Primary Examiner, Art Unit 2623	

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/169,961	Smith, Michael S.
	Examiner	Art Unit
	ANTONIO J XAVIER	2623

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner

/Antonio Xavier/ Primary Examiner, Art Unit 2623	

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (03-15)
Approved for use through 07/31/2016. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	
Filing Date	
First Named Inventor	Michael S. Smith
Art Unit	
Examiner Name	
Attorney Docket Number	SMITH070AG

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	8677060	B2	2014-03-18	Chen et al.	
	2	8689064	B1	2014-04-01	Lee et al.	
	3	8692815	B2	2014-04-08	Deslippe et al.	
	4	8698777	B2	2014-04-15	Endo et al.	
	5	8700834	B2	2014-04-15	Horn et al.	
	6	8705239	B1	2014-04-22	Yu et al.	
	7	8707104	B1	2014-04-22	Jean	
	8	8710862	B2	2014-04-29	Ferolito et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	9	8711116	B2	2014-04-29	Papakipos et al.	
	10	8713357	B1	2014-04-29	Jean et al.	
	11	8713379	B2	2014-04-29	Takefman et al.	
	12	8717303	B2	2014-05-06	Ludwig	
	13	8723826	B2	2014-05-13	Chen et al.	
	14	8727557	B2	2014-05-20	Yuan et al.	
	15	8738851	B2	2014-05-27	Kunimatsu et al.	
	16	8738853	B2	2014-05-27	Amer et al.	
	17	8743076	B1	2014-06-03	Ludwig	
	18	8745321	B2	2014-06-03	Rajan et al.	
	19	8745514	B1	2014-06-03	Davidson	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	20	8751732	B2	2014-06-10	Danilak et al.	
	21	8754862	B2	2014-06-17	Zaliva	
	22	8756364	B1	2014-06-17	Bhakta et al.	
	23	8760408	B2	2014-06-24	Heesemans et al.	
	24	8760936	B1	2014-06-24	Rajan et al.	
	25	8773937	B2	2014-07-08	Schakel et al.	
	26	8780089	B2	2014-07-15	Yuan et al.	
	27	8782350	B2	2014-07-15	Lee et al.	
	28	8787060	B2	2014-07-22	Lee	
	29	8816993	B2	2014-08-26	Yuan et al.	
	30	8831687	B1	2014-09-09	Kotab	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	31	8854317	B2	2014-10-07	Homma et al.	
	32	8866785	B2	2014-10-21	Ludwig	
	33	8872798	B2	2014-10-28	Rabu et al.	
	34	8878809	B1	2014-11-04	Kim et al.	
	35	8878810	B2	2014-11-04	Ludwig	
	36	8884913	B2	2014-11-11	Saynac et al.	
	37	8896575	B2	2014-11-25	Goertz et al.	
	38	8913031	B2	2014-12-16	Honda et al.	
	39	8917262	B2	2014-12-23	Liaw et al.	
	40	8947381	B2	2015-02-03	JIYAMA et al.	
	41	8970540	B1	2015-03-03	Hebenstreit et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	42	8976128	B2	2015-03-10	Moore	
	43	8982081	B2	2015-03-17	Li	
	44	8988364	B2	2015-03-24	Lee	
	45	9003591	B2	2015-04-14	Sakashita et al.	
	46	9013414	B2	2015-04-21	Kung et al.	
	47	9018030	B2	2015-04-28	Li et al.	
	48	9030427	B2	2015-05-12	Yasumatsu	
	49	9035897	B2	2015-05-19	Kinoshita	
	50	9041679	B2	2015-05-26	Reisman et al.	
	51	9045670	B2	2015-06-02	SHITARA et al.	
	52	9046999	B1	2015-06-02	Teller et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	53	9063597	B2	2015-06-23	Liaw et al.	
	54	9069204	B2	2015-06-30	ZHOU et al.	
	55	9069416	B2	2015-06-30	Garrett et al.	
	56	9069460	B2	2015-06-30	Moore	
	57	9092129	B2	2015-07-28	Abdo et al.	
	58	9098193	B2	2015-08-04	Stoneham et al.	
	59	9116609	B2	2015-08-25	Bocimea	
	60	9125630	B2	2015-09-08	Menzel	
	61	9130651	B2	2015-09-08	Tabe	
	62	9134880	B2	2015-09-15	Johnson et al.	
	63	9152258	B2	2015-10-06	Behdasht et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	64	9152288	B2	2015-10-06	Dietz	
	65	RE41716	E1	2010-09-21	Fernando et al.	

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2]	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1	LYNCH, JAMES P., "Nokia 6100 LCD Display Driver," 2010, pp. 1-55	
	2	MACKENZIE, I. SCOTI, et al., "The Tactile Touchpad," Conference on Human Factors in Computing Systems, 1997, pp. 1-5	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	3	MARKATOS, E., "On Using Network RAM as a non-volatile Buffer," August 1998, pp. 1-15	
	4	MARMOR, MICHAEL F., et al., "Visual Insignificance of the Foveal Pit," 2008, pp.1-7	
	5	MAXIM, "Designing a Simple, Small, Wide-band and Low-Power Equalizer for FR4 Copper Links (Featuring the MAX3785, IGbps to 6.4Gbps Equalizer)," DesignCon 2003, HFTA-06.0, 2003, pp. 1-14	
	6	Maxim, "IGbps to 12.5Gbps; Passive Equalizer for Backplanes and Cables," MAX3787, 19-0406, Rev. 1, December 2005, pp. 1-15	
	7	MCCALLUM, DAVID C. et al., "ARC-Pad: Absolute+Relative Cursor Positioning for Large Displays with a Mobile Touchscreen," University of Manitoba, Oct. 7, 2009, 1-4	
	8	MCCAMMON, ROB, "Android Solutions," Open Kernel Labs, 2009, slides 1-11	
	9	MCCAMMON, ROB, "Streamlining Android Migration with Virtualization," ARM and Android, July 19, 2012, pp. 1-4	
	10	MCCAMMON, ROB, "Using Virtualization to Create Mass-Market Smartphones," Technology in Depth, 2011, pp. 1-4	
	11	MCGILL, KATHLEEN et al., "Process Migration for Resilient Applications," Dartmouth College, 2011, pp. 1-14	
	12	Memory Management 55 slides	
	13	Memory Management 55 slides, CSE 451: Operating Systems Winter 2007, University of Washington, 1/28/2007	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	14	Methodology For a DDR333/400 Data Interface," pp. 1-6, Jun. 27, 2002	
	15	Micron Technology Announces SyncflashTM Memory, A New Flash Technology, 1999, pp. 1	
	16	MICRON, "NANO Flash Memory," 16Gb, 32Gb, 64Gb, 128Gb Asynchronous/Synchronous NANO Features, 2009, pp. 1-158	
	17	MIJAT, ROBERTO et al., "Virtualization is Coming to a Platform Near You," ARM, 2011, pp. 1-12	
	18	MOLNOS, ANCA et al., "Composable Processor Virtualization for Embedded Systems," 2010, pp. 1-10	
	19	MORRE, RYAN W. et al., "Addressing the Challenges of DBT for the ARM Architecture," University of Pittsburgh. 2009, pp. 1-10	
	20	MUTHITACHAROEN, ATHICHA et al., "A Low-bandwidth Network File System," Laboratory for Computer Science, MIT, Department of Computer Science, NYU, Oct. 21, 2001, pp. 1-14	
	21	NATIONAL Semiconductor, "EQ50F100- 2.5 to 6.125 Gbps fixed equalizer; For 10 Gigabit Ethernet, storage and telecom backplanes," 2004, pp. 1-2	
	22	ON, CALVIN, "ANA: A Method for ARM-on-ARM Execution," September 2007, MIT, pp.1-62	
	23	ONOUE, KOICHI et al., "A Virtual Machine Migration System Based on a SPU Emulator," Virtualization Technology in Distributed Computing, Nov. 17, 2006, pp. 1-8	
	24	OPDENACKER, M., "Linux USB drivers," September 15, 2009, pages 1-95	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	25	OSMAN, STEVEN et al., "The Design and Implementation of Zap: A System for Migrating Computing Environments," OSOi, December 2002, pp. 1-16	
	26	OUSTERHOUT, J. et al., "The Case for RAMClouds: Scalable High-Performance Storage Entirely in DRAM," SIGOPS Operating Systems Review, Vol. 43, No. 4, December 2009, pp. 92-105	
	27	PAI, ANKUR et al., "Customizable Multimedia Devices in Virtual Environments," Georgia Institute ofTechnology, 2008, pp. 1-18	
	28	PARK, H.-J., "Signal Integrity for High Speed Circuit Design," Tutorial 9 (ISSCC 2006), pp. 1-91	
	29	PARK, MIRI et al., "Real-time Operating System Virtualization for Xen-Arm," 2009, pp. 1-2	
	30	PASRICHA, SUDEEP et al., "Reducing Backlight Power Consumption for Streaming Video Application on Mobile Hand held Devices," University of California, November 2, 2003, pp. 1-7	
	31	PATTERSON, ROBERT, "Human Factors of Stereoscopic Displays," Washington State University, July 5, 2009, pp. 1-14	
	32	PCI-SIG et al., "Single Root 1/0 Virtualization and Sharing Specification Revision 1.0," September 11, 2007, pp. 1-84	
	33	PELZL, JAN et al., "Virtualization Technologies for Cars, Solutions to increase satety and security of vehicular ECUs," 2008, pp. 1-10	
	34	PERI NG, T., "Intel and Personal Wellness," 22 pages, August 2009	
	35	PERING, T. et al., "The PSI Board: Realizing a Phone-Centric Body Sensor Network," 4th International Workshop on Wearable and Implantable Body Sensor Networks, March 2007, pages 1-6	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	36	PERING, T., "Intel and Personal Wellness," 22 pages	
	37	PETTY, CHRIS, "Multi-Root Overview," PCI-SIG, PCI Express, slides 1-31	
	38	PHADKE, S. et al., "MLP Aware Heterogeneous Memory System," 2011 EDAA, pp. 1-6	
	39	POTTER, SHAYA, "Virtualization Mechanisms for Mobility, Security and system Administration," Columbia University, 2010, pp. 1-241	
	40	PROBST, MARK et al., "Register Liveness Analysis for Optimizing Dynamic Binary Translation," 2002, pp. 1-10	
	41	RAMESH, G., "Design of De-Emphasis and Equalization Circuits for Gigabit Serial Interconnects," An Applications Workshop for High-Performance Design, September 2005, pp. 1-28	
	42	RED HAT, "Virtualization Guide: Red Hat Virtualization," Red Hat Inc., 2007, pp. 1-104	
	43	REFAI, WAIL MOHSEN, "Office Communication," US App No 12/233,386, May 27, 2011	
	44	RIECKE, BERNHARD E. et al., "Selected Technical and Perceptual Aspects of Virtual reality Displays," Technical Report no. 154, October 2006, pp. 1-17	
	45	ROSS, ARUN et al., "A Calibration Model for Fingerprint Sensor Interoperability," SPIE Conference on Biometric Technology for Human Identification, April 2006, pp. 1-12	
	46	RUDOLPH, LARRY, "A Virtualization Infrastructure that Supports Pervasive Computing," VMwar, IEEE CS, 2009, pp.1-6	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	47	RYU, W. H. et al., "High-Frequency Simultaneous Switching Output Noise (SSO) Simulation	
	48	RYU, W. H. et al., "High-Frequency Simultaneous Switching Output Noise (SSO) Simulation Methodology For a DDR333/400 Data Interface," pp. 1-6	
	49	SAHAMI, ALI REZA et al., "Rich Tactile Output on Mobile Devices," November 2008, pp. 1-12	
	50	SANGORRIN, DANIEL et al., "Dual operation System Architecture for Real-Time Embedded Systems," July 6, 2010, slides 1-24	

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature	/Antonio Xavier/	Date Considered	02/25/2019

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Patrick Caldwell/	Date (YYYY-MM-DD)	2018-10-24
Name/Print	Patrick Caldwell	Registration Number	44580

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (03-15)
Approved for use through 07/31/2016. OMB 0651-0031
U.S Patent and Trademark Office; U.S DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	
Filing Date	
First Named Inventor	Michael Smith
Art Unit	
Examiner Name	
Attorney Docket Number	SMITH070AG

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	8952987		2015-02-10	Momeyer et al.	
	2	9092057		2015-07-28	Varela et al.	
	3	9116569		2015-08-25	Stacy et al.	

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20090256807	A1	2009-10-15	Nurmi	
	2	20120105358	A1	2012-05-03	Momeyer et al.	
	3	20150097791	A1	2015-04-09	Lisseman et al.	

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2]	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1		

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature	/Antonio Xavier/	Date Considered	02/25/2019

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Patrick Caldwell/	Date (YYYY-MM-DD)	2018-10-24
Name/Print	Patrick Caldwell	Registration Number	44580

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	0	"15719406"	US-PGPUB; USPAT	ADJ	ON	2017/12/12 12:33
S2	0	"15072351"	US-PGPUB; USPAT	ADJ	ON	2017/12/12 12:36
S3	2	"13567004"	US-PGPUB; USPAT	ADJ	ON	2017/12/12 12:36
S4	3560	(("SMITH") near3 ("Michael")).INV.	US-PGPUB; USPAT; USOCR	ADJ	ON	2017/12/12 12:40
S5	19	(US-20090231290-$ or US-20070268261-$ or US-20060197750-$ or US-20060044281-$ or US-20030234768-$ or US-20080259046-$ or US-20110059777-$ or US-20080088602-$ or US-20110260984-$ or US-20100328230-$ or US-20070273671-$ or US-20070236470-$ or US-20110084921-$ or US-20110057889-$ or US-20110045813-$ or US-20100045621-$).did. or (US-6020878-$ or US-5729219-$ or US-8730199-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:21
S6	9	(US-20100058211-$ or US-20130076649-$ or US-20110261002-$ or US-20080146285-$ or US-20100035656-$ or US-20120060123-$ or US-20110059777-$ or US-20130321340-$ or US-20110291945-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:21
S7	27	S5 or S6	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:21
S8	990	touch screen AND (vibrate or vibrator) AND (pressure) AND (menu) AND ((launch$3 or open$3) WITH (program or application or software))	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:25
S9	782	S8 AND ((electronic$1mail or electronic mail or e$1mail) or (SMS or short message) or (social network))	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:26
S10	0	S4 AND S9	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:26
S11	0	S4 AND S8	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:27
S12	901	S4 AND touch	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:27

S13	508	S12 AND pressure	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:27
S14	36	S13 AND menu	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:27
S15	244	S4 AND menu	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:27
S16	133	S4 AND menu AND touch	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:27
S17	97	S16 NOT S14	US-PGPUB; USPAT	ADJ	ON	2017/12/12 13:41
S18	0	(back$1touch settings)	US-PGPUB; USPAT	ADJ	ON	2017/12/13 12:27
S19	2	(back$1touch near settings)	US-PGPUB; USPAT	ADJ	ON	2017/12/13 12:31
S20	3561	(("SMITH") near3 ("Michael")).INV.	US-PGPUB; USPAT; USOCR	ADJ	ON	2017/12/14 09:58
S21	82	S20 AND (touch$3 AND menu AND (social or sharing))	US-PGPUB; USPAT; USOCR	ADJ	ON	2017/12/14 09:58
S22	6	(US-20140053116-$ or US-20110302493-$ or US-20110153653-$ or US-20110096174-$ or US-20110025842-$ or US-20080177662-$).did.	US-PGPUB	ADJ	ON	2017/12/14 11:30
S23	0	S22 AND ((pressure or magnitude) WITH (touch))	US-PGPUB; USPAT	ADJ	ON	2017/12/14 11:30
S24	0	S22 AND ((pressure or magnitude))	US-PGPUB; USPAT	ADJ	ON	2017/12/14 11:30
S25	120	(menu) WITH (social media) WITH (shar$3)	US-PGPUB; USPAT	ADJ	ON	2017/12/14 13:58
S26	73418	(custom or programmable) WITH (gesture or input) WITH (application or program or function)	US-PGPUB; USPAT	ADJ	ON	2017/12/14 18:39
S27	3561	(("SMITH") near3 ("Michael")).INV.	US-PGPUB; USPAT; USOCR	ADJ	ON	2017/12/14 18:40
S28	69	S26 AND S27	US-PGPUB; USPAT	ADJ	ON	2017/12/14 18:40
S29	1879	touch WITH (pressure or magnitude) WITH thresholds	US-PGPUB; USPAT	ADJ	ON	2017/12/14 18:59
S30	4	touch WITH (pressure or magnitude) WITH thresholds WITH (context)	US-PGPUB;	ADJ	ON	2017/12/14 18:59

			USPAT			
S31	62	("5745719").URPN.	USPAT	ADJ	ON	2017/12/14 19:20
S32	5	"11038590"	USPAT	ADJ	ON	2017/12/14 19:21
S33	1	"20060161871".pn.	US-PGPUB; USPAT	ADJ	ON	2017/12/14 19:22
S34	1	"20060026535".pn.	US-PGPUB; USPAT	ADJ	ON	2017/12/14 19:24
S35	15	(US-20140053116-$ or US-20110302493-$ or US-20110153653-$ or US-20110096174-$ or US-20110025842-$ or US-20080177662-$ or US-20130291126-$ or US-20060161871-$ or US-20060026535-$ or US-20090058829-$ or US-20090085881-$ or US-20100090982-$ or US-20100188327-$).did. or (US-9524042-$ or US-5745719-$).did.	US-PGPUB; USPAT	ADJ	ON	2017/12/14 19:51
S36	57422	(touch WITH pressure)	US-PGPUB; USPAT	ADJ	ON	2017/12/14 19:51
S37	5	S35 and S36	US-PGPUB; USPAT	ADJ	ON	2017/12/14 19:51
S38	45	(social network or social application) WITH (shar$3 object)	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:22
S39	9596	(social network or social application) WITH (post)	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:37
S40	2866	S39 AND (SMS and e$1mail)	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:37
S41	196	S40 AND (menu WITH GUI)	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:37
S42	18	S41 AND (touch WITH (pressure or magnitude))	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:38
S43	37	(GUI or menu) WITH (pressure or magnitude) WITH (context)	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:50
S44	3	"12597684"	US-PGPUB; USPAT	ADJ	ON	2017/12/15 20:52
S45	581	((context sensitive or context$1sensitive) WITH (icon))	US-PGPUB; USPAT	ADJ	ON	2017/12/16 16:13
S46	7	S45 AND (pressure WITH touch)	US-PGPUB; USPAT	ADJ	ON	2017/12/16 16:15
S47	13	menu WITH historical usage	US-PGPUB; USPAT	ADJ	ON	2017/12/18 13:40
S48	1	"8191015".pn.	US-	ADJ	ON	2017/12/18

			PGPUB; USPAT			13:44
S49	1	"20080065991".pn. AND (menu WITH usage)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 13:44
S50	6827	(social network or social media) WITH (shar$3 WITH (object or link or image or photo))	US-PGPUB; USPAT	ADJ	ON	2017/12/18 19:20
S51	6	S50 WITH (touch$3 WITH menu)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 19:21
S52	12	S50 SAME (touch$3 WITH menu)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 19:22
S53	233	S50 AND (touch$3 WITH menu)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 19:39
S54	165	S50 AND (touch WITH pressure)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 20:34
S55	8887	G06F3/04847.cpc.	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:43
S56	10393	G06F3/04817.cpc.	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:44
S57	23568	g06f3/0482.cpc.	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:44
S58	18904	g06f3/04883.cpc.	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:44
S59	46941	S55 or S56 or S57 or S58	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:44
S60	6344	S59 AND (pressure WITH touch)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:44
S61	2168	S60 AND (touch WITH menu)	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:44
S62	141649	(pressure WITH (magnitude or threshold))	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:45
S63	465	S62 AND S61	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:45
S64	30	S63 AND S50	US-PGPUB; USPAT	ADJ	ON	2017/12/18 21:47
S65	100	(slide WITH gesture WITH menu)	US-PGPUB; USPAT	ADJ	ON	2017/12/22 21:32
S66	3	S65 AND (slide WITH pressure)	US-PGPUB; USPAT	ADJ	ON	2017/12/22 21:39
S67	6	S65 AND (slide SAME pressure)	US-	ADJ	ON	2017/12/22

			PGPUB; USPAT			21:41
S68	0	"15072354"	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:52
S69	3580	(("SMITH") near3 ("Michael")).INV.	US-PGPUB; USPAT; USOCR	ADJ	ON	2018/01/20 17:52
S70	11	S69 AND (intermediate state)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:52
S71	19	S69 AND (gesture WITH menu)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:54
S72	9007	G06F3/04847.cpc.	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:56
S73	10547	G06F3/04817.cpc.	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:56
S74	23888	g06f3/0482.cpc.	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:56
S75	19105	g06f3/04883.cpc.	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:56
S76	47534	(S72 or S73 or S74 or S75)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:56
S77	843	S76 AND (intermediate WITH (pressure or signal or state))	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:57
S78	15	S76 AND (intermediate WITH (pressure or signal or state) WITH menu)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 17:57
S79	208	("20010005692" | "20010043291" | "20020002629" | "20020005111" | "20020008691" | "20020033919" | "20020045854" | "20020085952" | "20020116952" | "20020116959" | "20020118180" | "20020130832" | "20020180763" | "20030117408" | "20030123328" | "20030147041" | "20030151589" | "20030217972" | "20030232192" | "20030235452" | "20040084372" | "20040108995" | "20040109788" | "20040121855" | "20040191509" | "20040207542" | "20040212598" | "20040239624" | "20040263488" | "20050045540" | "20050099403" | "20050231461" | "20050242034" | "20050264521" | "20050280746" | "20060001654" | "20060001800" | "20060033701" | "20060077186" | "20060107719" | "20060138983" | "20060146032" | "20060167400" | "20060179088" | "20060195064" | "20060197736" | "20060197737" | "20060209039" |	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:23

		"20060238495"	"20060260711"					
		"20060262099"	"20060284874"					
		"20070008064"	"20070035526"					
		"20070040814"	"20070070047"					
		"20070085837"	"20070103454"					
		"20070137901"	"20070146313"					
		"20070148371"	"20070153215"					
		"20070176902"	"20070182864"					
		"20070195029"	"20070229477"					
		"20070237170"	"20070262967"					
		"20080007675"	"20080018613"					
		"20080024459"	"20080024712"					
		"20080060854"	"20080062169"					
		"20080068343"	"20080094367"					
		"20080100584"	"20080105600"					
		"20080130910"	"20080136790"					
		"20080158171"	"20080204427"					
		"20080210843"	"20080211786"					
		"20080215192"	"20080252607"					
		"20080252616"	"20080259046"					
		"20080295839"	"20080304431"					
		"20090002312"	"20090022256"					
		"20090036176"	"20090046110"					
		"20090051659"	"20090066660"					
		"20090073138"	"20090086420"					
		"20090091536"	"20090143652"					
		"20090158152"	"20090160781"					
		"20090213066"	"20090225053"					
		"20090271731"	"20090289912"					
		"20090295747"	"20100005390"					
		"20100017872"	"20100020039"					
		"20100026640"	"20100035656"					
		"20100045612"	"20100053103"					
		"20100053532"	"20100077829"					
		"20100079398"	"20100085500"					
		"20100097347"	"20100134429"					
		"20100134448"	"20100149101"					
		"20100149124"	"20100164884"					
		"20100188365"	"20100194709"					
		"20100201651"	"20100206560"					
		"20100207900"	"20100214499"					
		"20100222735"	"20100225608"					
		"20100259490"	"20100277432"					
		"20110001706"	"20110007023"					
		"20110012921"	"20110025969"					
		"20110037726"	"20110044064"					
		"20110050591"	"20110050592"					
		"20110050593"	"20110050594"					
		"20110050608"	"20110051334"					
		"20110063248"	"20110088416"					
		"20110102336"	"20110102347"					
		"20110105446"	"20110109573"					
		"20110115738"	"20110118029"					
		"20110122084"	"20110152739"					
		"20110169775"	"20110175845"					
		"20110181552"	"20110210942"					
		"20110210943"	"20110227836"					
		"20110227877"	"20110239110"					
		"20110248941"	"20110254793"					
		"20110260994"	"20110273394"					
		"20110273396"	"20110291953"					
		"20120007821"	"20120013566"					
		"20120019448"	"20120023450"					
		"20120032876"	"20120034954"					

		"20120044172" | "20120056846" | "20120086670" | "20120105367" | "20120105370" | "20120109037" | "20120154328" | "20120162087" | "20120182249" | "20120194461" | "20120194462" | "20120223900" | "20120229403" | "20120229404" | "20120229405" | "20120231853" | "20120240044" | "20120242610" | "20120244348" | "20120254747" | "20120266072" | "20120274662" | "20120293449" | "20120306764" | "20120306765" | "20120306766" | "20120313888" | "20130002610" | "20130009869" | "20130021285" | "20130021295" | "20130027350").PN.				
S80	234	("20130124993" | "20130125322" | "20130127765" | "20130132838" | "20130141388" | "20130181928" | "20130181931" | "20130188336" | "20130215064" | "20130307809" | "20130307827" | "20130321317" | "20130332876" | "20130335357" | "20140028601" | "20140057102" | "20140066139" | "20140096092" | "20140099235" | "20140104219" | "20140104220" | "20140132548" | "20140132549" | "20140134433" | "20140134434" | "20140139473" | "20140168128" | "20140191962" | "20140208248" | "20140210786" | "20140340358" | "20140368455" | "20150068526" | "20150197670" | "20150234518" | "20150253609" | "3633322" | "3738166" | "3772685" | "3777222" | "4293734" | "4296756" | "4302011" | "4353552" | "4524421" | "4554419" | "4636632" | "4644101" | "4770281" | "5241308" | "5247434" | "5276787" | "5305423" | "5309172" | "5311302" | "5343650" | "5386219" | "5448263" | "5486286" | "5487827" | "5566096" | "5680160" | "5742894" | "5743859" | "5744027" | "5838244" | "5856822" | "5947334" | "5999892" | "6108064" | "6118435" | "6141000" | "6193152" | "6283763" | "6284131" | "6337681" | "6351271" | "6392638" | "6417845" | "6441807" | "6509847" | "6526315" | "6533757" | "6567102" | "6626013" | "6636203" | "6689947" | "6721019" | "6738514" | "6747636" | "6776546" | "6791640" | "6801211" | "6879318" | "6880998" | "6888537" | "6917282" | "6919927" | "6933991" | "6961015" | "6967903" | "7030854" | "7097903" | "7098776" | "7122149" | "7138984" | "7205983" | "7254973" | "7289113" | "7303680" | "7312784" | "7312791" | "7315336" | "7318892" | "7405779" | "7423557" | "7437221" | "7535463" | "7626579" | "7639239" | "7649577" | "7649605" | "7659885" | "7675580" | "7692627" | "7692637" |	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:24

		"7701329" | "7705824" | "7738068" | "7755612" | "7903096" | "7932893" | "7952566" | "7973777" | "7973778" | "7982721" | "8022933" | "8057419" | "8068021" | "8072430" | "8094134" | "8094673" | "8102496" | "8184228" | "8188982" | "8199116" | "8207945" | "8209628" | "8223799" | "8228309" | "8253699" | "8269731" | "8269733" | "8270148" | "8279361" | "8286102" | "8310452" | "8319743" | "8325143" | "8334835" | "8334850" | "8345018" | "8349228" | "8373675" | "8384674" | "8411039" | "8416210" | "8424590" | "8427434" | "8451238" | "8471824" | "8477111" | "8479110" | "8487900" | "8493384" | "8497884" | "8508494" | "8542193" | "8542209" | "8553012" | "8564559" | "8587542" | "8624851" | "8624867" | "8638311" | "8648839" | "8654104" | "8674947" | "8692815" | "8698777" | "8717303" | "8723826" | "8727557" | "8743076" | "8745514" | "8754862" | "8760408" | "8780089" | "8816993" | "8854317" | "8866785" | "8872798" | "8878809" | "8878810" | "8884913" | "8896575" | "8913031" | "8917262" | "8947381" | "8970540" | "8976128" | "8982081" | "8988364" | "9003591" | "9013414" | "9018030" | "9030427" | "9035897" | "9041679" | "9045670" | "9046999" | "9063597" | "9069204" | "9069416" | "9069460" | "9092129" | "9098193" | "9116609" | "9125630" | "9130651" | "9134880" | "9152258" | "9152288" | "RE41716").PN.				
S81	442	S79 or S80	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:24
S82	17	S81 AND (intermediate WITH (pressure or signal or state))	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:24
S83	297	S81 AND (second WITH (pressure or signal or state))	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:26
S84	58	S81 AND (second WITH (pressure or signal or state) WITH third)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:26
S85	1	S81 AND (second WITH (pressure or signal or state) WITH third) WITH menu	US-PGPUB; USPAT	ADJ	ON	2018/01/20 18:26
S86	1632	g06f2203/04105.cpc.	US-PGPUB; USPAT	ADJ	ON	2018/01/20 19:35
S87	302	S86 AND (second WITH (pressure or signal or state) WITH third)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 19:35
S88	302	S86 AND (second WITH (pressure or signal or state) WITH third)	US-PGPUB; USPAT	ADJ	ON	2018/01/20 19:35
S89	1	S86 AND (second WITH (pressure or signal	US-	ADJ	ON	2018/01/20

		or state) WITH third) WITH menu	PGPUB; USPAT			19:35
S90	50	S86 AND (intermediate WITH (pressure or signal or state))	US-PGPUB; USPAT	ADJ	ON	2018/01/20 19:36
S91	0	"15072354"	US-PGPUB; USPAT	ADJ	ON	2018/08/08 14:49
S92	14	(US-20130162667-$ or US-20110145764-$ or US-20100313166-$ or US-20080219493-$ or US-20040150644-$ or US-20120306788-$ or US-20110175805-$ or US-20100026640-$ or US-20080178126-$ or US-20110196935-$ or US-20090207175-$ or US-20120225413-$ or US-20080204427-$ or US-20080024459-$).did.	US-PGPUB; USPAT	ADJ	ON	2018/09/07 17:56
S97	1	"20110175805".pn.	US-PGPUB; USPAT	ADJ	ON	2019/01/19 15:58
S98	1	"3659229".pn.	US-PGPUB; USPAT	ADJ	ON	2019/01/19 15:59
S99	473	(cursor or icon) WITH (follow) WITH (gesture or touch)	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:02
S100	14	(cursor or icon) WITH (follow) WITH (gesture or touch) WITH (speed)	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:02
S101	0	"16153765"	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:02
S102	1	"15072354"	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:02
S103	2	(cursor or icon) WITH (follow) WITH (gesture or touch) WITH (gravity)	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:04
S104	51	(cursor or icon) WITH (gravity) WITH (gesture or touch) WITH (gravity)	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:05
S105	90	(cursor or icon) WITH (snap) WITH (gesture or touch)	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:08
S106	275	(icon) WITH (follow or trail) WITH (gesture or touch)	US-PGPUB; USPAT	ADJ	ON	2019/01/19 16:16
S107	14	(US-20130162667-$ or US-20120306788-$ or US-20120225413-$ or US-20110196935-$ or US-20110175805-$ or US-20110145764-$ or US-20100313166-$ or US-20100026640-$ or US-20090207175-$ or US-20080219493-$ or US-20080204427-$ or US-20080178126-$ or US-20080024459-$ or US-20040150644-$).did.	US-PGPUB	ADJ	ON	2019/02/27 07:26
S108	18	(US-20110302493-$ or US-20080177662-$ or US-20060161871-$ or US-20060026535-	US-PGPUB;	ADJ	ON	2019/02/27 07:26

		$ or US-20090058829-$ or US-20090085881-$ or US-20100090982-$ or US-20100188327-$ or US-20100251119-$ or US-20100127983-$ or US-20100241989-$ or US-20100088654-$ or US-20050114794-$ or US-20110061021-$ or US-20120054691-$ or US-20120306788-$ or US-20120182296-$).did. or (US-9524042-$).did.	USPAT			
S109	31	S107 or S108	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:26
S110	0	S109 AND (virtual layer)	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:26
S111	3	S109 AND (fog or blur)	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:26
S112	2	S109 AND (fore$1ground AND back$1ground)	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:29
S113	1005	(menu WITH (fore$1ground AND back$1ground))	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:30
S114	0	(menu WITH (fore$1ground AND back$1ground)) WITH virtual layer	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:30
S115	23	(menu WITH (fore$1ground AND back$1ground)) WITH layer	US-PGPUB; USPAT	ADJ	ON	2019/02/27 07:30
S116	5542	(fore$1ground or back$1ground) WITH (fog or blur)	US-PGPUB; USPAT	ADJ	ON	2019/02/27 13:12
S117	4	(fore$1ground or back$1ground) WITH (fog or blur) WITH menu	US-PGPUB; USPAT	ADJ	ON	2019/02/27 13:12
S118	1	S116 AND (menu WITH transparent)	US-PGPUB; USPAT	ADJ	ON	2019/02/27 13:13

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S93	3480	G06F3/04847.cpc.	USPAT	ADJ	ON	2018/09/07 17:58
S94	4153	G06F3/04817.cpc.	USPAT	ADJ	ON	2018/09/07 17:58
S95	9279	g06f3/0482.cpc.	USPAT	ADJ	ON	2018/09/07 17:58
S96	7394	g06f3/04883.cpc.	USPAT	ADJ	ON	2018/09/07 17:58

2/ 27/ 2019 2:32:41 PM
C:\ Users\ axavier\ Desktop\ axavier data files\ EAST workspaces\ 16169961-CON of 15072354-CON of 13567004.wsp

Bibliographic Data

Application No: 16/169,961

Foreign Priority claimed: ○ Yes ◉ No

35 USC 119 (a-d) conditions met: ☐ Yes ☑ No ☐ Met After Allowance

Verified and Acknowledged: /Antonio Xavier/ (Examiner's Signature) | (Initials)

Title: GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT

FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
10/24/2018	345	2623	SMITH070AG
RULE			

APPLICANTS

P4TENTS1, LLC, Wilmington, DE,

INVENTORS

Michael S. Smith Palo Alto, CA, UNITED STATES

CONTINUING DATA

This application is a CON of 15072354 03/16/2016 PAT 10133397

15072354 is a CON of 13567004 08/03/2012 PAT 9417754

13567004 has PRO of 61581918 12/30/2011

13567004 has PRO of 61569213 12/09/2011

13567004 has PRO of 61566577 12/02/2011

13567004 has PRO of 61515835 08/05/2011

FOREIGN APPLICATIONS

IF REQUIRED, FOREIGN LICENSE GRANTED**

11/14/2018

**** SMALL ENTITY ****

STATE OR COUNTRY

UNITED STATES

ADDRESS

The Caldwell Firm, LLC

PO Box 59655

Dept. SVIPGP

Dallas, TX 75229

UNITED STATES

FILING FEE RECEIVED

$3,055

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (03-15)
Approved for use through 07/31/2016. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	
Filing Date	
First Named Inventor	Michael S. Smith
Art Unit	
Examiner Name	
Attorney Docket Number	SMITH070AG

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	6990044	B2	2006-01-24	Kang	
	2	7003316	B1	2006-02-21	Elias et al.	
	3	7006851	B2	2006-02-28	Holmes et al.	
	4	7010325	B1	2006-03-07	Oh	
	5	7020488	B1	2006-03-28	Bleile et al.	
	6	7024230	B2	2006-04-04	Curtiss et al.	
	7	7030854	B2	2006-04-18	Baucom et al.	
	8	7031670	B2	2006-04-18	May	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	9	7050783	B2	2006-05-23	Curtiss et al.	
	10	7062260	B2	2006-06-13	Vuori	
	11	7062261	B2	2006-06-13	Goldstein et al.	
	12	7064748	B2	2006-06-20	Cok	
	13	7097903	B2	2006-08-29	Kishioka et al.	
	14	7098776	B2	2006-08-29	Chang et al.	
	15	7122149	B2	2006-10-17	Li et al.	
	16	7123936	B1	2006-10-17	Rydbeck et al.	
	17	7138984	B1	2006-11-21	Miles	
	18	7149511	B1	2006-12-12	Edward F. Bachner et al.	
	19	7149552	B2	2006-12-12	Lair	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	20	7155254	B2	2006-12-26	Pinder	
	21	7171239	B2	2007-01-30	Tan et al.	
	22	7184794	B2	2007-02-27	Hess et al.	
	23	7190720	B2	2007-03-13	Fimoff et al.	
	24	7205983	B2	2007-04-17	Raap et al.	
	25	7224992	B2	2007-05-29	Patino et al.	
	26	7240836	B2	2007-07-10	Vrotsos et al.	
	27	7254036	B2	2007-08-07	Pauley et al.	
	28	7254973	B2	2007-08-14	Campian	
	29	7269708	B2	2007-09-11	Ware	
	30	7280849	B1	2007-10-09	Bailey	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	31	7286436	B2	2007-10-23	Bhakta et al.	
	32	7289113	B2	2007-10-30	Martin	
	33	7289386	B2	2007-10-30	Bhakta et al.	
	34	7296107	B2	2007-11-13	Lunsford et al.	
	35	7303680	B2	2007-12-04	Connell et al.	
	36	7312784	B2	2007-12-25	Baucom et al.	
	37	7312791	B2	2007-12-25	Hoshino et al.	
	38	7315336	B2	2008-01-01	North et al.	
	39	7318892	B2	2008-01-15	Connell et al.	
	40	7343177	B2	2008-03-11	Seshadri et al.	
	41	7343439	B2	2008-03-11	Mills et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	42	7360022	B2	2008-04-15	Tian et al.	
	43	7363054	B2	2008-04-22	Elias et al.	
	44	7375970	B2	2008-05-20	Pauley et al.	
	45	7386656	B2	2008-06-10	Rajan et al.	
	46	7392338	B2	2008-06-24	Rajan et al.	
	47	7398105	B2	2008-07-08	Kalogeropoulos	
	48	7403743	B2	2008-07-22	Welch	
	49	7405779	B2	2008-07-29	Sanelle et al.	
	50	7423557	B2	2008-09-09	Kang	
	51	7424312	B2	2008-09-09	Pinder et al.	
	52	7435636	B1	2008-10-14	Hanafi	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	53	7437221	B2	2008-10-14	Hardman et al.	
	54	7442050	B1	2008-10-28	Bhakta et al.	
	55	7472220	B2	2008-12-30	Rajan et al.	
	56	7492890	B2	2009-02-17	Milani	
	57	7493109	B2	2009-02-17	Munje et al.	
	58	7523035	B2	2009-04-21	Rokusek et al.	
	59	7526317	B2	2009-04-28	Pinder et al.	
	60	7529872	B1	2009-05-05	Schubert et al.	
	61	7532492	B2	2009-05-12	Dobyns et al.	
	62	7532537	B2	2009-05-12	Solomon et al.	
	63	7535463	B2	2009-05-19	Wilson	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	64	7555318	B2	2009-06-30	Seshadri et al.	
	65	7558130	B2	2009-07-07	Grunzke	
	66	7558529	B2	2009-07-07	Seshadri et al.	
	67	7558894	B1	2009-07-07	Lydon et al.	
	68	7565179	B2	2009-07-21	Hyatt	
	69	7565458	B2	2009-07-21	Thijssen	
	70	7571295	B2	2009-08-04	Sakarda et al.	
	71	7580312	B2	2009-08-25	Rajan et al.	
	72	7581127	B2	2009-08-25	Rajan et al.	
	73	7590796	B2	2009-09-15	Rajan et al.	
	74	7598607	B2	2009-10-06	Chung et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	75	7603148	B2	2009-10-13	Michalak	
	76	7609567	B2	2009-10-27	Rajan et al.	
	77	7612436	B1	2009-11-03	Lee et al.	
	78	7619893	B1	2009-11-17	Yu	
	79	7619912	B2	2009-11-17	Bhakta et al.	
	80	7620433	B2	2009-11-17	Bodley	
	81	7622365	B2	2009-11-24	Parekh	
	82	7622895	B1	2009-11-24	Griffin	
	83	7623667	B2	2009-11-24	Sander et al.	
	84	7626579	B2	2009-12-01	Hague et al.	
	85	7626594	B1	2009-12-01	Witehira et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	86	7627128	B2	2009-12-01	Sander et al.	
	87	7627307	B2	2009-12-01	Droste et al.	
	88	7627352	B2	2009-12-01	Daniel M. Gauger et al.	
	89	7630202	B2	2009-12-08	Pauley et al.	
	90	7633963	B1	2009-12-15	Anderson et al.	
	91	7636274	B2	2009-12-22	Solomon et al.	
	92	7639239	B2	2009-12-29	Kajimoto et al.	
	93	7643642	B2	2010-01-05	Patino et al.	
	94	7649577	B2	2010-01-19	Sanelle et al.	
	95	7649605	B2	2010-01-19	Kim	
	96	7650168	B2	2010-01-19	Bailey	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	97	7659885	B2	2010-02-09	Kraus et al.	
	98	7675580	B2	2010-03-09	RHO	
	99	7680490	B2	2010-03-16	Bloebaum et al.	
	100	7680514	B2	2010-03-16	Cook et al.	
	101	7689168	B2	2010-03-30	House	
	102	7692627	B2	2010-04-06	Wilson	
	103	7692637	B2	2010-04-06	Davis	
	104	7701329	B2	2010-04-20	Donohue	
	105	7705824	B2	2010-04-27	Baucom et al.	
	106	7715831	B2	2010-05-11	Wakefield	
	107	7715873	B1	2010-05-11	Biere et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	108	7716411	B2	2010-05-11	Panabaker et al.	
	109	7724589	B2	2010-05-25	Rajan et al.	
	110	7730338	B2	2010-06-01	Rajan et al.	
	111	7738068	B2	2010-06-15	Lee	
	112	7755612	B2	2010-07-13	Park et al.	
	113	7760187	B2	2010-07-20	Kennedy	
	114	7761724	B2	2010-07-20	Rajan et al.	
	115	7769187	B1	2010-08-03	Farrar et al.	
	116	7777581	B2	2010-08-17	Pfaff et al.	
	117	7778601	B2	2010-08-17	Seshadri et al.	
	118	7779185	B2	2010-08-17	Schubert et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	119	7796652	B2	2010-09-14	Reillingshoefer et al.	
	120	7811097	B1	2010-10-12	Bhakta et al.	
	121	7813715	B2	2010-10-12	McKillop et al.	
	122	7814287	B2	2010-10-12	Pratt	
	123	7818036	B2	2010-10-19	Lair et al.	
	124	7818037	B2	2010-10-19	Lair et al.	
	125	7826318	B2	2010-11-02	Holden et al.	
	126	7835809	B2	2010-11-16	Paul P. Griffin	
	127	7839643	B1	2010-11-23	Yu	
	128	7839645	B2	2010-11-23	Pauley et al.	
	129	7855931	B2	2010-12-21	LaBerge et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	130	7857225	B2	2010-12-28	Challa et al.	
	131	7864627	B2	2011-01-04	Bhakta et al.	
	132	7869608	B2	2011-01-11	Sander et al.	
	133	7881150	B2	2011-02-01	Solomon et al.	
	134	7889786	B2	2011-02-15	Lapointe	
	135	7902886	B2	2011-03-08	Pfaff et al.	
	136	7903096	B2	2011-03-08	Jeon et al.	
	137	7916574	B1	2011-03-29	Solomon et al.	
	138	7932893	B1	2011-04-26	Berthaud	
	139	7940839	B2	2011-05-10	Lapointe et al.	
	140	7941591	B2	2011-05-10	Aviles	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	141	7952566	B2	2011-05-31	Poupyrev et al.	
	142	7965578		2011-06-21	Bhakta et al.	
	143	7965579		2011-06-21	Solomon et al.	
	144	7966578	B2	2011-06-21	Tolmasky et al.	
	145	7973777	B2	2011-07-05	Lee et al.	
	146	7973778	B2	2011-07-05	Chen	
	147	7978721	B2	2011-07-12	Jeddeloh et al.	
	148	7982721	B2	2011-07-19	Hio	
	149	7999795	B2	2011-08-16	Hamblin et al.	
	150	8001434	B1	2011-08-16	Lee et al.	
	151	8018723	B1	2011-09-13	Yu et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	152	8019589	B2	2011-09-13	Rajan et al.	
	153	8022933	B2	2011-09-20	Hardacker et al.	
	154	8033836	B1	2011-10-11	Bhakta et al.	
	155	8041881	B2	2011-10-18	Rajan et al.	
	156	8055833	B2	2011-11-08	Danilak et al.	
	157	8057419	B2	2011-11-15	Ellingboe et al.	
	158	8060774	B2	2011-11-15	Smith et al.	
	159	8068021	B1	2011-11-29	Donohue	
	160	8072430	B2	2011-12-06	Kim et al.	
	161	8072837	B1	2011-12-06	Solomon et al.	
	162	8077535	B2	2011-12-13	Schakel et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	163	8081474	B1	2011-12-20	Zohni et al.	
	164	8081535	B2	2011-12-20	Bhakta et al.	
	165	8081536	B1	2011-12-20	Solomon et al.	
	166	8081537	B1	2011-12-20	Bhakta et al.	
	167	8081677	B2	2011-12-20	Badalone	
	168	8089795	B2	2012-01-03	Rajan et al.	
	169	8090897	B2	2012-01-03	Rajan et al.	
	170	8093702	B2	2012-01-10	Lua et al.	
	171	8094134	B2	2012-01-10	Suzuki et al.	
	172	8094673	B2	2012-01-10	Proctor et al.	
	173	8102496	B2	2012-01-24	Kim	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	174	8103928	B2	2012-01-24	Hargan	
	175	8106491	B2	2012-01-31	Corisis et al.	
	176	8106520	B2	2012-01-31	Keeth et al.	
	177	8111534	B2	2012-02-07	Walker	
	178	8111566	B1	2012-02-07	Wang et al.	
	179	8112266	B2	2012-02-07	Rajan et al.	
	180	8115291	B2	2012-02-14	Baek et al.	
	181	8120044	B2	2012-02-21	Cho et al.	
	182	8122207	B2	2012-02-21	Rajan et al.	
	183	8127185	B2	2012-02-28	Jeddeloh	
	184	8127204	B2	2012-02-28	Hargan	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	185	8130527	B2	2012-03-06	Keeth	
	186	8130560	B1	2012-03-06	Rajan et al.	
	187	8134378	B2	2012-03-13	Keeth	
	188	8135900	B2	2012-03-13	Kunimatsu et al.	
	189	8143710	B2	2012-03-27	Cho	
	190	8148763	B2	2012-04-03	Kim et al.	
	191	8148807	B2	2012-04-03	Lee et al.	
	192	8154901	B1	2012-04-10	Lee et al.	
	193	8154935	B2	2012-04-10	Rajan et al.	
	194	8158967	B2	2012-04-17	Tang et al.	
	195	8169233	B2	2012-05-01	Ferolito et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	196	8169841	B2	2012-05-01	Johnson et al.	
	197	8173507	B2	2012-05-08	Lim et al.	
	198	8174105	B2	2012-05-08	Kwang et al.	
	199	8174115	B2	2012-05-08	Chung	
	200	8180954	B2	2012-05-15	Kilzer et al.	
	201	8181048	B2	2012-05-15	Rajan et al.	
	202	8184228	B2	2012-05-22	Han et al.	
	203	8185778	B2	2012-05-22	Kilzer et al.	
	204	8187901	B2	2012-05-29	Sheen	
	205	8188982	B2	2012-05-29	You et al.	
	206	8189328	B2	2012-05-29	Kanapathippillai et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	207	8193646	B2	2012-06-05	Wood et al.	
	208	8199116	B2	2012-06-12	Jeon et al.	
	209	8207945	B2	2012-06-26	Jong et al.	
	210	8209479	B2	2012-06-26	Rajan et al.	
	211	8209628	B1	2012-06-26	Davidson	
	212	8218705	B2	2012-07-10	Moghaddam et al.	
	213	8223799	B2	2012-07-17	Karaoguz	
	214	8228309	B2	2012-07-24	Tamaki et al.	
	215	8244971	B2	2012-08-14	Rajan et al.	
	216	8253699	B2	2012-08-28	Son	
	217	8261041	B2	2012-09-04	Kunimatsu	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	218	8264903	B1	2012-09-11	Lee et al.	
	219	8269731	B2	2012-09-18	Molne	
	220	8269733	B2	2012-09-18	HU	
	221	8270148	B2	2012-09-18	Griffith et al.	
	222	8279361	B2	2012-10-02	Chen et al.	
	223	8279690	B1	2012-10-02	Wang et al.	
	224	8280714	B2	2012-10-02	Rajan et al.	
	225	8286102	B1	2012-10-09	Wilensky	
	226	8287291	B1	2012-10-16	Bhakta et al.	
	227	8296496	B2	2012-10-23	Mogul et al.	
	228	8301833	B1	2012-10-30	Chen et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	229	8310452	B2	2012-11-13	Takenaka et al.	
	230	8315349	B2	2012-11-20	Badalone	
	231	8319743	B2	2012-11-27	NO et al.	
	232	8325143	B2	2012-12-04	Destura et al.	
	233	8327104	B2	2012-12-04	Smith et al.	
	234	8334835	B2	2012-12-18	Shen et al.	
	235	8334850	B2	2012-12-18	Tsai	
	236	8340953	B2	2012-12-25	Rajan et al.	
	237	8345018	B2	2013-01-01	Jong et al.	
	238	8345427	B2	2013-01-01	Pauley et al.	
	239	8349228	B2	2013-01-08	Kazama	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	240	8359187	B2	2013-01-22	Rajan et al.	
	241	8359501	B1	2013-01-22	Lee et al.	
	242	8359600	B2	2013-01-22	KANG et al.	
	243	8370566	B2	2013-02-05	Danilak et al.	
	244	8373675	B2	2013-02-12	Jeon et al.	
	245	8380263	B2	2013-02-19	Murakami et al.	
	246	8384674	B1	2013-02-26	Slothower et al.	
	247	8386833	B2	2013-02-26	Smith et al.	
	248	8387045	B2	2013-02-26	Yasutaka et al.	
	249	8397013	B1	2013-03-12	Rosenband et al.	
	250	8407412	B2	2013-03-26	Rajan et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	251	8411039	B2	2013-04-02	Guo et al.	
	252	8416210	B2	2013-04-09	Jong et al.	
	253	8417870	B2	2013-04-09	Lee et al.	
	254	8424599	B2	2013-04-23	Atencio	
	255	8427434	B1	2013-04-23	Merolla	
	256	8446781	B1	2013-05-21	Rajan et al.	
	257	8451238	B2	2013-05-28	Kim et al.	
	258	8452917	B2	2013-05-28	Amer et al.	
	259	8458436	B2	2013-06-04	Kunimatsu et al.	
	260	8471824	B2	2013-06-25	Kim et al.	
	261	8473670	B2	2013-06-25	Sareen et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	262	8477111	B2	2013-07-02	Lim	
	263	8479110	B2	2013-07-02	Johnson et al.	
	264	8487900	B2	2013-07-16	Chiu et al.	
	265	8488325	B1	2013-07-16	Yu	
	266	8489837	B1	2013-07-16	Lee	
	267	8493384	B1	2013-07-23	Reisman et al.	
	268	8497884	B2	2013-07-30	Cholewin et al.	
	269	8508494	B2	2013-08-13	Moore	
	270	8516185	B2	2013-08-20	Lee et al.	
	271	8516187	B2	2013-08-20	Chen et al.	
	272	8516188	B1	2013-08-20	Solomon et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	273	8542193	B2	2013-09-24	Hardacker et al.	
	274	8542209	B2	2013-09-24	Lim	
	275	8553012	B2	2013-10-08	Baucom et al.	
	276	8564559	B2	2013-10-22	Hou	
	277	8566505	B2	2013-10-22	Kilzer et al.	
	278	8566516	B2	2013-10-22	Schakel et al.	
	279	8566556	B2	2013-10-22	Rajan et al.	
	280	8587542	B2	2013-11-19	Moore	
	281	8589639	B2	2013-11-19	Nakai et al.	
	282	8595419	B2	2013-11-26	Rajan et al.	
	283	8599634	B1	2013-12-03	Lee et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	284	8601204	B2	2013-12-03	Rajan et al.	
	285	8607003	B2	2013-12-10	Bland et al.	
	286	8611123	B2	2013-12-17	Koh	
	287	8615679	B2	2013-12-24	Smith et al.	
	288	8619452	B2	2013-12-31	Rajan et al.	
	289	8624851	B2	2014-01-07	Kim et al.	
	290	8624867	B2	2014-01-07	Tamaki et al.	
	291	8631193	B2	2014-01-14	Smith et al.	
	292	8631220	B2	2014-01-14	Smith et al.	
	293	8638311	B2	2014-01-28	Kang et al.	
	294	8648839	B2	2014-02-11	Liaw et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	295	8654104	B2	2014-02-18	Reisman et al.	
	296	8667312	B2	2014-03-04	Rajan et al.	
	297	8671243	B2	2014-03-11	Chen et al.	
	298	8671244	B2	2014-03-11	Rajan et al.	
	299	8674947	B2	2014-03-18	Henderson et al.	
	300	8675429	B1	2014-03-18	Wang et al.	

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] j	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T5
	1	HUANG, H. et al., "Design and Implementation of Power-Aware Virtual Memory," 2003, pp. 1-14	
	2	HUNG, PERRY L., "Varmosa: Just-in-time Binary Translation of Operating System Kernels," June, 2009, pp. 1-58	
	3	HUR, Y. S. et al., "Equalization and Near-End Crosstalk (NEXT) Noise Cancellation for 20- Gbit/sec 4 PAM Backplane Serial 1/0 Interconnections," Dissertation, December 2005, pp. 1-143	
	4	hynix, "1/0 INTERFACE DESIGN TECHNOLOGY USING ADS," 2005, 41 slides	
	5	HYSER, CHRIS et al., "Autonomic Virtual Machine Placement in the Data Center," February 26, 2008, pp. 1-11	
	6	IMIS™ - Intimate Memory Interface Specification," Revision 1.0, June 1, 2008, pp. 1-33	
	7	IMMERSION "Creating the HD Haptic Experience in Mobile Devices," 2011, pp. 1-3	
	8	IMMERSION, "TouchSense System for Mobile Devices," 2010, pp. 1-8	

EFS Web 2.1.17

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	9	Intel, "Intel PXA27x Processor Family," Memory Subsystem, July 2004, pp. 1-138	
	10	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 1: Basic Architecture, Order Number: 253665-037US, January 2011, pp. 1-540	
	11	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 2A: Instruction Set Reference, A-M, Order Number: 253666-037US, January 2011, pp. 1-848	
	12	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3A: System Programming Guide, Part 1, Order Number: 253668-037US, January 2011, pp. 1-842	
	13	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3B: System Programming Guide, Part 2, Order Number: 253669-034US, March 2010, pp. 1-936	
	14	Intel, "Intel® GW80314 1/0 Companion Chip," Datasheet, Order Number: 273757-003US, November 2004, pp. 1-88	
	15	Interfacing 4-wire and 5-wire resistive touchscreens to the LPC247x, Nov. 13, 2008	
	16	INTERNATIONAL TECHNOLOGY ROADMAP FOR SEMICONDUCTORS," 2009 Edition, ASSEMBLY AND PACKAGING, pp. 1-70	
	17	IPHONE, "How the I phone works," HowStuffWorks, 2007, pp. 1-4	
	18	IQBAL, ASIF et al., "An Overview of Microkernel, Hypervisor and Microvisor Virtualization Approaches for Embedded Systems," Lund University, 2009, pp. 1-15	
	19	IS& T /SPI E, "Electronic Imaging," Hyatt Regency Hotel, January 2011, pp. 1-153	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	20	JACOBSSON, SARAH, "Nexus one's Screen is Gorgeous, But With Issues," PCWorld, February 32, 2010, pp 1-5	
	21	JEDEC STANDARD, DDR3 SDRAM Standard, JESD79-3D, Revision of JESD79-3C, November 2008, September 2009, pp. 1-220	
	22	JEONG, JAE-WOO et al.," PARFAIT: A New Scheduler Framework supporting Heterogeneous Xen-ARM schedulers," Jan 2011, pp. 1-5	
	23	JIANG, HAI et al., "Data Conversion for Process/Thread Migration and Checkpointing," Wayne State University, 2003 International Conference on Parallel Processing (ICPP'03), 2003, pp. 1-8	
	24	KALADY, SAIDALAVI et al., "Implementation of a Purley Hardware-assisted VMM for x86 Architecture," Preceedings of the World congress on Engineering 2009 Vol. 1, 2009, pp. 1-5	
	25	KALLA, NAVEEN et al., "Embedded VMM for Portable Virtual Machines," pp. 1-11	
	26	KARTHICK, A. R., "Memory Management and RMAP VM of 2.6," 14 slides	
	27	KARTHICK, A. R., "Memory Management and RMAP VM of 2.6," 14 slides, January 2004	
	28	KASER, DOMINIK et al., "FingerGlass: Efficient Multiscale Interaction on Multitouch Screens," 2011, pp. 1-10	
	29	KING, SAMUEL T. et al.," Operating Systems Extensions to Support Host Based Virtual Machines," Department of Electrical Engineering and Computer Science, University of Michigan, 2002, pp. 1-14	
	30	KISHAN, "Virtual Memory Exercises," Windows Internals Course, University of Tokyo, July 2003, pp. 1-3	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	31	KLARE, B. et al., "Assessment of H.264 Video Compression on Automated Face Recognition Performance in Surveillance and Mobile Video Scenarios," 8 pages, April 2010	
	32	KLARE, B. et al., "Assessment of H.264 Video Compression on Automated Face Recognition Performance in Surveillance and Mobile Video Scenarios," 8 pages	
	33	KLOSTER, J. F. et al., "On the Feasibility of Memory Sharing," June 2006, pp. 1-132	
	34	KLOSTER, JACOB FABER et al., "Efficient Memory Sharing in the Xen Virtual Machine Monitor," Aalborg University, January 2006, pp. 1-86	
	35	KOTZMANN, THOMAS et al., "Design of the Java Hotspot Client Complier for Java 6," May 2008, pp. 1-32	
	36	KOZUCH, MICHAEL A. et al., "Migration without Virtualization," Intel Research Pittsburg, 2005, pp. 1-5	
	37	KOZUCH, MICHAEL et al., "Internet Suspend/Resume," Carnegie Mellon University and Intel Research Pittsburgh, 2002, pp. 1-7	
	38	KRATZ, SVEN et al., "Extending the Virtual Trackball Metaphor to Rear Touch Input," 2010, PP. 1-4	
	39	KRATZ, SVEN et al., "Gesture Recognition Using Motion Estimation on Mobile Phones," 2007, pp. 1-5	
	40	KRAUSE, MIKE et al., "Implementing PCI I/O Virtualization Standards," April 6, 2011, pp. 1-8	
	41	LAGAR-CAVILLA, ANDRES et al., "Interactive Resource-Intensive Applications Made Easy," 2007 pp. 1-21	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	42	LANMAN, SOUGLAS et al., "Content-Adaptive Parallax Barriers: Optimizing Dual-layer 3D Displays using Low-Rank Light Field Factorization," 2010, pp. 1-10	
	43	LEE, C. J. et al., "DRAM-Aware Last-Level Cache Writeback: Reducing Write-Caused Interference in Memory Systems," April 2010, pp. 1-21	
	44	LI, J., "A Nanosensor Device for Cellphone Integration and Chemical Sensing Network," OHS CELL-ALL Phase II Workshop, July 29, 2010, 22 pages	
	45	LIEBERGELD, STEFFEN, "Efficient Virtualization on ARM Platforms," Techishe Universitat Dresden, May 6, 2009, pp. 1-52	
	46	LIN, M. et al., "Testable Design for Advanced Serial-Link Transceivers," 2007, pp. 1-6	
	47	LIN, X. et al., "A 2.5- to 3.5-Gb/s Adaptive FIR Equalizer With Continuous-Time Wide- Bandwidth Delay Line in 0.25-?m CMOS, IEEE Journal Of Solid-State Circuits, Vol. 41, No. 8, August 2006 pp. 1908-1918	
	48	LIU, C. Y. et al., "Comparison of Signaling and Equalization Schemes in High Speed SerDes (10-25Gbps)," DesignCon 2007, pp. 1-23	
	49	LIU, J. et al., "Equalization in High-Speed Communication Systems," IEEE CIRCUITS AND SYSTEMS MAGAZINE, 2004, pp. 1-14	
	50	LOWELL, DAVIDE. et al., "Devirtualizable Virtual Machines Enabling General, Single-Node, Online Maintenance," Hewlett-Packard Laboratories, Oct. 7, 2004, pp. 1-13	

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature	/Antonio Xavier/	Date Considered	02/25/2019

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

EFS Web 2.1.17

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Patrick Caldwell/	Date (YYYY-MM-DD)	2018-10-24
Name/Print	Patrick Caldwell	Registration Number	44580

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (03-15)
Approved for use through 07/31/2016. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	
Filing Date	
First Named Inventor	Michael S. Smith
Art Unit	
Examiner Name	
Attorney Docket Number	SMITH070AG

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	3524169	A	1970-08-11	K et al.	
	2	3633322	A	1972-01-11	Morcom	
	~~3~~	~~3659229~~	~~A~~	~~1972-04-25~~	T *Milton is listed inventor	/AX/
	4	3738166	A	1973-06-12	Fisher	
	5	3772685	A	1973-11-13	Masi	
	6	3777222	A	1973-12-04	Harris	
	7	4067060	A	1978-01-03	Poussart et al.	
	8	4091418	A	1978-05-23	Ciciora	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	9	4152649	A	1979-05-01	Choquet	
	10	4293734	A	1981-10-06	William Pepper	
	11	4296756	A	1981-10-27	Dunning et al.	
	12	4302011	A	1981-11-24	William Pepper	
	13	4353552	A	1982-10-12	William Pepper	
	14	4524421	A	1985-06-18	Searby et al.	
	15	4554419	A	1985-11-19	King et al.	
	16	4636632	A	1987-01-13	Ando	
	17	4644101	A	1987-02-17	Jin et al.	
	18	4694468	A	1987-09-15	Cullum	
	19	4770281	A	1988-09-13	Hanks	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	20	5205173	A	1993-04-27	Allen	
	21	5241308	A	1993-08-31	Young	
	22	5247434	A	1993-09-21	Peterson et al.	
	23	5257413	A	1993-10-26	Warner et al.	
	24	5276787	A	1994-01-04	Searby	
	25	5285474	A	1994-02-08	Chow et al.	
	26	5305423	A	1994-04-19	Clynes	
	27	5309172	A	1994-05-03	Fox	
	28	5311302	A	1994-05-10	Berry et al.	
	29	5343650	A	1994-09-06	Swan	
	30	5371760	A	1994-12-06	Allen et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	31	5386219	A	1995-01-31	Greanias et al.	
	32	5448263	A	1995-09-05	Martin	
	33	5483557	A	1996-01-09	Webb	
	34	5486286	A	1996-01-23	Peterson et al.	
	35	5487827	A	1996-01-30	Peterson et al.	
	36	5557653	A	1996-09-17	Paterson et al.	
	37	5566096	A	1996-10-15	Wodlinger et al.	
	38	5581505	A	1996-12-03	Lee	
	39	5596638	A	1997-01-21	Paterson et al.	
	40	5680160	A	1997-10-21	LaPointe	
	41	5687733	A	1997-11-18	McKown	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	42	5729612	A	1998-03-17	Abel et al.	
	43	5742894	A	1998-04-21	Jambhekar et al.	
	44	5743859	A	1998-04-28	Wodlinger et al.	
	45	5744027	A	1998-04-28	Connell et al.	
	46	5794163	A	1998-08-11	Paterson et al.	
	47	5805950	A	1998-09-08	Inglese et al.	
	48	5825873	A	1998-10-20	Duncan et al.	
	49	5838244	A	1998-11-17	Schmidt et al.	
	50	5856822	A	1999-01-05	Du et al.	
	51	5859522	A	1999-01-12	Theobald	
	52	5884191	A	1999-03-16	Karpus et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	53	5889236	A	1999-03-30	Gillespie et al.	
	54	5925942	A	1999-07-20	Theobald	
	55	5947334	A	1999-09-07	Rudick et al.	
	56	5953674	A	1999-09-14	James A. Hutchison	
	57	5970092	A	1999-10-19	Currivan	
	58	5983100	A	1999-11-09	Johansson et al.	
	59	5999892	A	1999-12-07	Fan	
	60	6012105	A	2000-01-04	Rubbmark et al.	
	61	6038457	A	2000-03-14	Barkat	
	62	6040933	A	2000-03-21	Khaleghi et al.	
	63	6045512	A	2000-04-04	Roteliuk et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	64	6081724	A	2000-06-27	Wilson	
	65	6097943	A	2000-08-01	Nordwall	
	66	6108064	A	2000-08-22	Minoura et al.	
	67	6118435	A	2000-09-12	Fujita et al.	
	68	6119022	A	2000-09-12	Osborn et al.	
	69	6138036	A	2000-10-24	Breanndan O'Cinneide	
	70	6138245	A	2000-10-24	Son et al.	
	71	6141000	A	2000-10-31	Martin	
	72	6163690	A	2000-12-19	Lilja	
	73	6169538	B1	2001-01-02	Nowlan et al.	
	74	6192238	B1	2001-02-20	Piirainen	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	75	6193152	B1	2001-02-27	Fernando et al.	
	76	6259729	B1	2001-07-10	Seki	
	77	6283763	B1	2001-09-04	Matsuzaki et al.	
	78	6284131	B1	2001-09-04	Hogard et al.	
	79	6285890	B1	2001-09-04	Panian	
	80	6330247	B1	2001-12-11	Chang et al.	
	81	6337681	B1	2002-01-08	Martin	
	82	6351271	B1	2002-02-26	Mainwaring et al.	
	83	6366530	B1	2002-04-02	Sluiter et al.	
	84	6371923	B1	2002-04-16	Roteliuk et al.	
	85	6377825	B1	2002-04-23	Kennedy et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	86	6380581	B1	2002-04-30	Noble et al.	
	87	6385463	B1	2002-05-07	Lieberman et al.	
	88	6392638	B2	2002-05-21	Hanajima et al.	
	89	6417845	B1	2002-07-09	Chen et al.	
	90	6441807	B1	2002-08-27	Yamaguchi	
	91	6449492	B1	2002-09-10	Kenagy et al.	
	92	6456517	B2	2002-09-24	Kim et al.	
	93	6473630	B1	2002-10-29	Baranowski et al.	
	94	6476795	B1	2002-11-05	Derocher et al.	
	95	6477390	B1	2002-11-05	Gum et al.	
	96	6480149	B1	2002-11-12	Sutherland et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	97	6496854	B1	2002-12-17	Hagersten et al.	
	98	6509847	B1	2003-01-21	Anderson	
	99	6523124	B1	2003-02-18	Lunsford et al.	
	100	6526315	B1	2003-02-25	Inagawa et al.	
	101	6529744	B1	2003-03-04	Birkler et al.	
	102	6533757	B1	2003-03-18	Lampropoulos et al.	
	103	6546262	B1	2003-04-08	Freadman	
	104	6549790	B1	2003-04-15	Rubbmark et al.	
	105	6564285	B1	2003-05-13	Mills et al.	
	106	6567102	B2	2003-05-20	Kung	
	107	6590568	B1	2003-07-08	Astala et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	108	6603986	B1	2003-08-05	Bozoukov	
	109	6626013	B2	2003-09-30	Ohta et al.	
	110	6636203	B1	2003-10-21	Wong et al.	
	111	6636749	B2	2003-10-21	Holmes et al.	
	112	6636918	B1	2003-10-21	Aguilar et al.	
	113	6665803	B2	2003-12-16	Lunsford et al.	
	114	6670234	B2	2003-12-30	Hsu et al.	
	115	6689947	B2	2004-02-10	Ludwig	
	116	6714802	B1	2004-03-30	Barvesten	
	117	6721019	B2	2004-04-13	Kono et al.	
	118	6738514	B1	2004-05-18	Shin et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	119	6747636	B2	2004-06-08	Martin	
	120	6751113	B2	2004-06-15	Bhakta et al.	
	121	6765812	B2	2004-07-20	Anderson	
	122	6776546	B2	2004-08-17	Kraus et al.	
	123	6791640	B1	2004-09-14	Okamoto et al.	
	124	6801211	B2	2004-10-05	Forsline et al.	
	125	6804146	B2	2004-10-12	Johnson	
	126	6829297	B2	2004-12-07	Xia et al.	
	127	6873534	B2	2005-03-29	Bhakta et al.	
	128	6879318	B1	2005-04-12	Chan et al.	
	129	6880998	B2	2005-04-19	Kraus et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	130	6888537	B2	2005-05-03	Benson et al.	
	131	6892270	B2	2005-05-10	Roohparvar	
	132	6917282	B2	2005-07-12	Giegerich	
	133	6919927	B1	2005-07-19	Hyodo	
	134	6928110	B2	2005-08-09	Ougi et al.	
	135	6928299	B1	2005-08-09	Rinne et al.	
	136	6928512	B2	2005-08-09	Ayukawa et al.	
	137	6930900	B2	2005-08-16	Bhakta et al.	
	138	6930903	B2	2005-08-16	Bhakta et al.	
	139	6933991	B2	2005-08-23	Sanelle et al.	
	140	6954495	B2	2005-10-11	Piirainen	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	141	6956562	B1	2005-10-18	Responte et al.	
	142	6961015	B2	2005-11-01	Kernahan et al.	
	143	6967903	B2	2005-11-22	Guanter	
	144	6968208	B2	2005-11-22	Kacines	
	145	6975853	B2	2005-12-13	Fang et al.	
	146	6983169	B2	2006-01-03	Vogel et al.	

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20110273396	A1	2011-11-10	CHUNG	
	2	20110291945	A1	2011-12-01	Richard Alan Ewing et al.	
	3	20110291953	A1	2011-12-01	Cheok et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	4	20120007821	A1	2012-01-12	Zaliva	
	5	20120008436	A1	2012-01-12	Rajan et al.	
	6	20120011310	A1	2012-01-12	Rajan et al.	
	7	20120011386	A1	2012-01-12	Rajan et al.	
	8	20120013566	A1	2012-01-19	CHUNG	
	9	20120018871	A1	2012-01-26	Lee et al.	
	10	20120019448	A1	2012-01-26	Pitkanen et al.	
	11	20120023450	A1	2012-01-26	Noto et al.	
	12	20120032876	A1	2012-02-09	Tabe	
	13	20120034954	A1	2012-02-09	Tabe	
	14	20120037878	A1	2012-02-16	Liu	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	15	20120038045	A1	2012-02-16	Lee	
	16	20120042204	A1	2012-02-16	Smith et al.	
	17	20120044172	A1	2012-02-23	Ohki et al.	
	18	20120056846	A1	2012-03-08	Zaliva	
	19	20120059976	A1	2012-03-08	Rosenband et al.	
	20	20120059978	A1	2012-03-08	Rosenband et al.	
	21	20120063194	A1	2012-03-15	Baek et al.	
	22	20120069647	A1	2012-03-22	Kramer et al.	
	23	20120070973	A1	2012-03-22	Sandhu et al.	
	24	20120074584	A1	2012-03-29	Lee et al.	
	25	20120077314	A1	2012-03-29	Park et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	26	20120086670	A1	2012-04-12	Teil et al.	
	27	20120105367	A1	2012-05-03	Son et al.	
	28	20120105370	A1	2012-05-03	Moore	
	29	20120106228	A1	2012-05-03	Lee	
	30	20120109037	A1	2012-05-03	Ellingboe et al.	
	31	20120109621	A1	2012-05-03	Rajan et al.	
	32	20120124281	A1	2012-05-17	Rajan et al.	
	33	20120126883	A1	2012-05-24	Juengling	
	34	20120127685	A1	2012-05-24	Corisis et al.	
	35	20120135567	A1	2012-05-31	Akram et al.	
	36	20120135569	A1	2012-05-31	Corisis	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	37	20120138927	A1	2012-06-07	KANG	
	38	20120140583	A1	2012-06-07	CHUNG	
	39	20120147684	A1	2012-06-14	Schakel et al.	
	40	20120154328	A1	2012-06-21	Kono	
	41	20120162087	A1	2012-06-28	Hou	
	42	20120180043	A1	2012-07-12	Tsirkin et al.	
	43	20120182249	A1	2012-07-19	Endo et al.	
	44	20120194461	A1	2012-08-02	Lim	
	45	20120194462	A1	2012-08-02	Lim	
	46	20120201088	A1	2012-08-09	Rajan et al.	
	47	20120203958	A1	2012-08-09	Jones et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	48	20120203993	A1	2012-08-09	Virgin et al.	
	49	20120204079	A1	2012-08-09	Takefman et al.	
	50	20120206165	A1	2012-08-16	Ferolito et al.	
	51	20120223900	A1	2012-09-06	JIYAMA et al.	
	52	20120226924	A1	2012-09-06	Rajan et al.	
	53	20120229403	A1	2012-09-13	Jong et al.	
	54	20120229404	A1	2012-09-13	Jong et al.	
	55	20120229405	A1	2012-09-13	Jong et al.	
	56	20120231853	A1	2012-09-13	Takahashi et al.	
	57	20120239874	A1	2012-09-20	Lee et al.	
	58	20120240044	A1	2012-09-20	Johnson et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	59	20120242610	A1	2012-09-27	Yasumatsu	
	60	20120244348	A1	2012-09-27	Park et al.	
	61	20120250386	A1	2012-10-04	Lee et al.	
	62	20120254519	A1	2012-10-04	Ellis	
	63	20120254747	A1	2012-10-04	Bocimea	
	64	20120266072	A1	2012-10-18	Karaoguz	
	65	20120271990	A1	2012-10-25	Chen et al.	
	66	20120274662	A1	2012-11-01	Kim et al.	
	67	20120293449	A1	2012-11-22	Dietz	
	68	20120306764	A1	2012-12-06	Kamibeppu	
	69	20120306765	A1	2012-12-06	Moore	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	70	20120306766	A1	2012-12-06	Moore	
	71	20120313888	A1	2012-12-13	Lee et al.	
	72	20120317433	A1	2012-12-13	Ellis et al.	
	73	20130002610	A1	2013-01-03	Ho et al.	
	74	20130007399	A1	2013-01-03	Smith et al.	
	75	20130009869	A1	2013-01-10	Wilensky	
	76	20130019076	A1	2013-01-17	Amidi et al.	
	77	20130021285	A1	2013-01-24	Kimura et al.	
	78	20130021295	A1	2013-01-24	Kimura et al.	
	79	20130027350	A1	2013-01-31	Liaw et al.	
	80	20130027358	A1	2013-01-31	Liaw et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	81	20130054881	A1	2013-02-28	Ellis et al.	
	82	20130055134	A1	2013-02-28	Knor	
	83	20130060994	A1	2013-03-07	Higgins et al.	
	84	20130061019	A1	2013-03-07	Fitzpatrick et al.	
	85	20130061101	A1	2013-03-07	Fitzpatrick et al.	
	86	20130063364	A1	2013-03-14	Moore	
	87	20130063389	A1	2013-03-14	Moore	
	88	20130076941	A1	2013-03-28	Palanciuc et al.	
	89	20130082970	A1	2013-04-04	Frey et al.	
	90	20130082979	A1	2013-04-04	Rabu et al.	
	91	20130085215	A1	2013-04-04	SHITARA et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	92	20130086309	A1	2013-04-04	Lee et al.	
	93	20130093687	A1	2013-04-18	Papakipos et al.	
	94	20130100070	A1	2013-04-25	Zheng et al.	
	95	20130100087	A1	2013-04-25	Liaw et al.	
	96	20130102371	A1	2013-04-25	Silva	
	97	20130103377	A1	2013-04-25	Rajan et al.	
	98	20130103897	A1	2013-04-25	Rajan et al.	
	99	20130106802	A1	2013-05-02	Liaw et al.	
	100	20130109928	A1	2013-05-02	Menzel	
	101	20130120284	A1	2013-05-16	Chen et al.	
	102	20130120302	A1	2013-05-16	Kang et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	103	20130124993	A1	2013-05-16	Daisy	
	104	20130125322	A1	2013-05-23	Sakashita et al.	
	105	20130127765	A1	2013-05-23	Behdasht et al.	
	106	20130132661	A1	2013-05-23	Schakel et al.	
	107	20130132779	A1	2013-05-23	Smith et al.	
	108	20130132838	A1	2013-05-23	Daisy	
	109	20130141388	A1	2013-06-06	Ludwig et al.	
	110	20130181928	A1	2013-07-18	Li	
	111	20130181931	A1	2013-07-18	Kinoshita	
	112	20130188336	A1	2013-07-25	Yuan et al.	
	113	20130188424	A1	2013-07-25	Rajan et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	114	20130191585	A1	2013-07-25	Rajan et al.	
	115	20130205102	A1	2013-08-08	Jones et al.	
	116	20130215064	A1	2013-08-22	Cholewin et al.	
	117	20130238849	A1	2013-09-12	Amer et al.	
	118	20130254456	A1	2013-09-26	Chen et al.	
	119	20130254497	A1	2013-09-26	Chen et al.	
	120	20130275795	A1	2013-10-17	Ellis et al.	
	121	20130282962	A1	2013-10-24	Rub et al.	
	122	20130307809	A1	2013-11-21	Sudou	
	123	20130307827	A1	2013-11-21	Reisman et al.	
	124	20130321317	A1	2013-12-05	Hirukawa	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	125	20130332796	A1	2013-12-12	Ellis	
	126	20130332876	A1	2013-12-12	Johnson et al.	
	127	20130335357	A1	2013-12-19	Hou	
	128	20140028601	A1	2014-01-30	Moore	
	129	20140040568	A1	2014-02-06	Lee et al.	
	130	20140040569	A1	2014-02-06	Solomon et al.	
	131	20140057102	A1	2014-02-27	Park et al.	
	132	20140066139	A1	2014-03-06	Ure	
	133	20140095769	A1	2014-04-03	Borkenhagen	
	134	20140096092	A1	2014-04-03	Johnson	
	135	20140099235	A1	2014-04-10	Ellingboe et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	136	20140104219	A1	2014-04-17	Ludwig	
	137	20140104220	A1	2014-04-17	Ludwig	
	138	20140132548	A1	2014-05-15	Ludwig	
	139	20140132549	A1	2014-05-15	Ludwig	
	140	20140134433	A1	2014-05-15	Park et al.	
	141	20140134434	A1	2014-05-15	Park et al.	
	142	20140139473	A1	2014-05-22	Kang et al.	
	143	20140156919	A1	2014-06-05	Chen et al.	
	144	20140156920	A1	2014-06-05	Chen et al.	
	145	20140168128	A1	2014-06-19	Reisman et al.	
	146	20140191962	A1	2014-07-10	Kim	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	147	20140208248	A1	2014-07-24	Davidson	
	148	20140210786	A1	2014-07-31	Ludwig	
	149	20140340358	A1	2014-11-20	MARTINOLI	
	150	20140368455	A1	2014-12-18	Croisonnier et al.	
	151	20150068526	A1	2015-03-12	Habashi	
	152	20150197670	A1	2015-07-16	SHITARA et al.	
	153	20150234518	A1	2015-08-20	Teller et al.	
	154	20150253609	A1	2015-09-10	ZHOU et al.	

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2]	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

NON-PATENT LITERATURE DOCUMENTS Remove			
Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T5
	1	CLARK, CHISTOPHER, "Live Migration of Virtual Machines," 2005, pp. 1-14	
	2	COOK, H. et al., "Virtual Local Stores: Enabling Software-Managed Memory Hierarchies in Mainstream Computing Environments," Technical Report No. UCB/EECS-2009-131, September 24, 2009, pp. 1-24	
	3	COX, LANDON P. et al., "Pocket Hypervisors: Opportunities and Challenges," March 8, 2007, pp 1-6	
	4	DALL, CHRISTOFFER et al., "KVM for ARM," Columbia University, 12th annual Linux Symposium, 2010, pp. 1-12	
	5	D'AMBROSIA, J. et al. "40 Gigabit Ethernet and 100 Gigabit Ethernet Technology Overview," November 2008, pp. 1-16	
	6	DATE, MUNEKAZU et al., "Small-Depth-Error Display Using Depth Fused 30 (DFD)," February 2009, pp. 1-4	
	7	DEERING, MICHAEL F., "The Limits of Human Vision," Sun Microsystems, 1998, PP. 1-6	
	8	DESHANE, TODD et al., "Xen Hypervisor Deployment, Management, and Cloud Computing Tools," Clarkson University, 2010, slides 1-151	
	9	DESHANE, TODD, "An Attack-Resistant and Rapid Recovery Desktop System," Clarkson University, Dissertation, August 2010, pp.1-130	

EFS Web 2.1.17

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	10	DH I MAN, G. et al., "PDRAM: A Hybrid PRAM and DRAM Main Memory System," DAC '09, July 26-31, 2009, pp. 1-6	
	11	DOUDALIS, IOANNIS et al., "HARE++: Hardware Assisted Reverse Execution Revisited," Georgia Institute of Technology, March 2011, pp. 1-8	
	12	DOWNS, RICK, "Using Resistive touch screens for human/machine interface," 2005, pp. 1-6	
	13	EBCIOGLU, KERNAL et al., "A JAVA ILP Machine Based on Fast Dynamic Compilation," IBM T.J. Watson Research Center, 1997, pp. 1-13	
	14	ENCODING- 116 slides	
	15	ENCODING- 116 slides, University of Illinois, Urbana Champaign, COURSE CS 438, March 2008	
	16	ERICSON, FINN, "Interactive Handheld Phantograms," KTH Computer Science and Communication, Thesis, 2010, pp. 1-38	
	17	File Wrapper from U.S. Application No. 11/226,061	
	18	File Wrapper from U.S. Application No. 11/226,061, filed 09-13-2005	
	19	File Wrapper from U.S. Application No. 11/449,435	
	20	File Wrapper from U.S. Application No. 11/449,435, filed 06-07-2006	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	21	FITZROY-DALE, NICHOLAS, "Architecture Optimization," University of new South Wales, March 2010, pp. 1-152	
	22	FOSTER, G., "Measurements of Pre-Emphasis on Altera® Stratix® GX with the BERTScope 12500A," Ver. 1, June 2005, pp. 1-7	
	23	FUJITSU, "125Gbps Parallel CDR Transceiver (0.18um)," 2002, pp. 1-2	
	24	GALLOWAY, P. et al., "Using Creative Silicon Technology to Extend the Useful Life of Backplane and Card Substrates at 3.125 Gbps and Beyond," DesignCon 2001, 2001 High-Performance System Design Conference, pp. 1-7	
	25	GARLAN, DAVID et al., "Project Aura: Toward Distraction-Free Pervasive Computing," IEEE, 2002, pp. 1-10	
	26	GARLEPP, B. W. et al., "A Portable Digital DLL for High-Speed CMOS Interface Circuits," IEEE Journal Of Solid-State Circuits, Vol. 34, No. 5, May 1999, pp. 632-644	
	27	GESLER, WILSON S., "Physical Limits of Acuity and Hyperacuity," University of Texas, October 26, 1983, pp. 1-8	
	28	GILBERT, BENJAMIN et al., "Pocket ISR: Virtual Machines Anywhere," Carnegie Mellon University, March 2010, pp. 1-19	
	29	GONDI, S. et al., "A 10-Gb/s CMOS Merged Adaptive Equalizer/CDR Circuit for Serial-Link Receivers," 2006 Symposium on VLSI Circuits Digest ofTechnical Papers, IEEE, 2006, pp. 1-2	
	30	GONDI, S. et al., "A IOGb/s CMOS Adaptive Equalizer for Backplane Applications," 2005 IEEE International Solid-State Circuits Conference, 2005, pp. 1-3	
	31	GOODACRE, JOHN et al., "Virtualization Across the ARM Ecosystem," ARM, September 9, 2009, pp. 1-9	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	32	GROZING, M. et al., "Sampling Receive Equalizer with Bit-Rate Flexible Operation up to 10 Gbit/s," IEEE, 2006, pp. 516-519	
	33	GRUNDY, K. et al., "Designing Scalable IOG Backplane Interconnect Systems Utilizing Advanced Verification Methodologies," DesignCon 2006, pp. 1-20	
	34	GUSTLIN, M., "40 and 100 Gigabit Ethernet PCS and PMA Overview," Ethernet Summit, February 2010, pp. 1-15	
	35	HARTIG, HERMANN, "The L4 Microkernel," ARTIST Summer School in Europe, September 2010, slides 1-99	
	36	HEISER, GERNOT et al., "The OKL4 Microvisor: convergence Point of Microkernels and Hypervisors," August 30, 2010, pp. 1-5	
	37	HEISER, GERNOT, "Hypervisors for Consumer Electronics," University of New South Wales, 2009, pp. 1-5	
	38	HERTZUM, MORTEN et al., "TouchGrid: Touchpad pointing by recursively mapping taps to smaller display regions," Behaviour and Information Technology, vol, 24, no. 5, 2005, pp. 1-18	
	39	HIRAISHI, A. et al., "Preferable Improvements and Changes to FB-DiMM High-Speed Channel for 9.6Gbps Operation," ELPIDA, January 26, 2007, pp. 1-35	
	40	HOE, J.C., "18-447 Lecture 21: Virtual Memory: Page Tables and TLBs," April 13, 2009, pp. 1-11	
	41	HOFER, HEIDI et al., "Organization of the Human Trichromatic Cone Mosaic," Oct 19, 2005, pp.1-11	
	42	HOLLIS, T. et al., "Reduction of Duty Cycle Distortion through Band- Pass Filtering," 2005, pp. 1-4	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	43	HOLLIS, T. M. et al., "Mitigating ISi Through Self-Calibrating Continuous-Time Equalization," IEEE Transactions On Circuits And Systems-I: Regular Papers, Vol. 53, No. 10, October 2006, pp. 2234-2245	
	44	HOLLIS, T. M. et al., "Self-Calibrating Continuous-Time Equalization Targeting Inter-symbol Interference," 2006, pp. 1-4	
	45	HOLLIS, T. M., "CIRCUIT AND MODELING SOLUTIONS FOR HIGH-SPEED CHIP-TO-CHIP COMMUNICATION," Dissertation, April 2007, pp. 1-225	
	46	HOLLIS, T. M., "Inter-symbol Interference in Manchester Encoded Data," pp. 1-7	
	47	HOLLIS, T. M., "Inter-symbol Interference in Manchester Encoded Data," pp. 1-7, Oct 2006	
	48	HOLLIS, T., "Mitigating ISi through Self-Calibrating Continuous-Time Equalization," 36 slides	
	49	HOLLIS, T., "Mitigating ISi through Self-Calibrating Continuous-Time Equalization," 36 slides, Oct. 2006	
	50	Hong, Seongcheol, "NANO Flash-based Disk Cache Using SLC/MLC Combined Flash Memory," SNAPI 2010, 25 pages	

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature	/Antonio Xavier/	Date Considered	02/25/2019

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Patrick Caldwell/	Date (YYYY-MM-DD)	2018-10-24
Name/Print	Patrick Caldwell	Registration Number	44580

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (03-15)
Approved for use through 07/31/2016. OMB 0651-0031
U.S Patent and Trademark Office; U.S DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	
Filing Date	
First Named Inventor	Michael S. Smith
Art Unit	
Examiner Name	
Attorney Docket Number	SMITH070AG

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	1	SATYANARAYANAN, M. et al., "Towards seamless mobility on pervasive hardward," March 1, 2005, pp. 1-33	
	2	SATYANARAYANAN, MAHADEV et al., "Bringing the Cloud Down to Earth: Transient PCs Everywhere," Carnegie Mellon University, September 2010, pp. 1-11	
	3	SATYANARAYANAN, MAHADEV et al.," Pervasive Personal Computing in an Internet Suspend/Resume System," IEEE Computer Society, March 2007, pp. 1-10	
	4	SCHRADER, BERNHARD, "Multi Root 1/0 Virtualization," FCS TEC-Team, Fujitsu Siemens, November 2, 2008, slides 1-9	
	5	SCHRADER, J. H. R., "Wireline Equalization using Pulse-Width Modulation," 2007, pp. 1-152	
	6	SCHRADER, J. H. R., "Wireline Equalization using Pulse-Width Modulation," IEEE 2006 Custom Intergrated Circuits Conference (CICC), 2006, pp. 591-598	
	7	SCHRADER, J.H.R et al., "CMOS Transmitter using Pulse-Width Modulation Pre-Emphasis achieving 33dB Loss Compensation at 5-Gb/s," 2005 Symposium on VLSI Circuits Digest of Technical Papers, pp. 388-391	
	8	SCHRADER, J.H.R et al., "Pulse-Width Modulation Pre-Emphasis Applied in a Wireline Transmitter, Achieving 33 dB Loss Compensation at 5-Gb/s in 0.13- ?m CMOS, IEEE Journal Of Solid-State Circuits, Vol. 41, No. 4, April 2006, pp. 990-999	
	9	SEMTECH, "Advanced Communications and Sensing," 25 July, 2011, pp. 1-61	
	10	SEO, SANGWON, "Research on System Virtualization using Xen Hypervisor for ARM based secure mobile phones," Seminar Security in Telecommunications, January 14, 2010, pp. 1-11	
	11	SHAFER, M. et al., "Connector and Chip Vendors Unite to Produce a High-Performance 10 Gb/s NRZ-Capable Serial Backplane," DesignCon 2003; High-Performance System Design Conference, 2003, pp. 1-19	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	12	SHAO, J. et al., "The Bit-reversal SDRAM Address Mapping," 2005, pp. 1-8	
	13	SIDIROPOULOS, S., "HIGH PERFORMANCE INTER-CHIP SIGNALLING," Technical Report No. CSL-TR-98-760, April 1998, pp. 1-139	
	14	SILVIA, "Adaptive HTTP Streaming for open Codecs," Oct. 9, 2010, pp 1-6	
	15	SMALDONE, STEPHEN, "Leveraging Smart Phones to Reduce Mobility Footprints," 2009	
	16	SMITH, J. E. et al., "Achieving High Performance via Co-Designed Virtual Machines," Oct. 1998, pp.1-6	
	17	SOUSA, JOAO PEDRO et al., "Aura: An Architectural Framework for User Mobility in Ubiquitous Computing Environments," Carnegie Mellon University Research Showcase, August 1, 2002, pp. 1-15	
	18	SOUSA, JOAO PEDRO et al., "The Aura Software Architecture: an Infrastructure for Ubiquitous Computing," Carnegie Mellon University Research Showcase	
	19	SOUSA, JOAO PEDRO, et al., "The Aura software Architecture: an Infrastructure for Ubiquitous Computing," Carnegie Mellon University Research Showcase, August 1, 2003, pp. 1-48	
	20	STACHHOUSE, B. et al., "A 65 nm 2-Billion Transistor Quad-Core Itanium Processor," IEEE Journal Of Solid-State Circuits, Vol. 44, No. 1, January 2009, pp. 18-31	
	21	STOCKHAMMER, THOMAS, "dynamic Adaptive Streaming over HTTP-Design Principles and Standards," Qualcomm Incorporated, February 23, 2011, pp. 1-3	
	22	STOJANOVIC, V. et al., "Adaptive Equalization and Data Recovery in a Dual-Mode (PAM2/4) Serial Link Transceiver," 2004, pp. 1-4	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	23	STOJANOVIC, V. et al., "Modeling and Analysis of High-Speed Links," pp. 1-49	
	24	STOJANOVIC, V. et al., "Modeling and Analysis of High-Speed Links," pp. 1-49, March 2003	
	25	STOJANOVIC, V., "CHANNEL-LIMITED HIGH-SPEED LINKS: MODELING, ANALYSIS AND DESIGN," Dissertation, September 2004, pp. 1-180	
	26	SUCHITHA V, "Simulation methodology using SigXp 15.1 (SPB) for enabling DDR2-533 memory interface based on Intel® 945GMS design," Session Number: 6.10, Intel, pp. 1-36	
	27	SUCHITHA V, "Simulation methodology using SigXp 15.1 (SPB) for enabling DDR2-533 memory interface based on Intel® 945GMS design," Session Number: 6.10, Intel, pp. 1-36, Sept 2006	
	28	SUD, SHIVANI et al., "Dynamic Migration of Computation through Virtualization of the Mobile Platform," Intel Future Technology Research, April 1, 2012, pp. 1-10	
	29	SUD, SHIVANI, et al., "Dynamic Migration of Computation through virtualization of the mobile platform," Intel Labs, Oct. 26, 2009, slides 1-16	
	30	SUDAN, K. et al., "Micro-Pages: Increasing DRAM Efficiency with Locality-Aware Data Placement," ASPLOS'10, March 13-17, 2010, pp. 1-12	
	31	SUN, R. et al., "A Low-Power 20-Gb/s Continuous-Time Adaptive Passive Equalizer," Thesis, 2005, pp. 1-71	
	32	TAKEFMAN, M. L. et al., U.S. Provisional Application No. 61/457,233, filed February 8, 2011	
	33	Texas Instruments, "DC TO 4-GBPS DUAL 1:2 MULTIPLEXER/REPEATER/EQUALIZER," SN65LVCP40, SLLS623D-SEPTEMBER 2004-REVISED FEBRUARY 2006, pp. 1-22	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	34	THE INTERNATIONAL TECHNOLOGY ROADMAP FOR SEMICONDUCTORS, Interconnect, 2009, pp. 1-89	
	35	TIRUVURU, R. et al., "Transmission Line based FIR Structures for High Speed Adaptive Equalization," ISCAS 2006, IEEE, 2006, pp. 1051-1054	
	36	TOMS, T. R., QUALCOMM, CDMA Technologies,"An Assessment of 3D Interconnect, Equipment Readiness and ITRS 3D," July 16, 2008, pp. 1-23	
	37	TURUDIC, A. et al., "Pre-Emphasis and Equalization Parameter Optimization with Fast, Worst- Case/Multibillion-Bit Verification," DesignCon 2007, January 2007, pp. 1-28	
	38	Understanding the Linux Virtual Memory Manager, Chapter 3: Page Table Management, pp. 33-52	
	39	Understanding the Linux Virtual Memory Manager, Chapter 3: Page Table Management, pp. 33-52, Mel Gorman, April 2004	
	40	USER'S GUIDE, "Motorola Backflip with Motoblur," 2010, pp. 1-67	
	41	VAN SCHAIK, CARL et al., "High-Performance Microkernels and Virtualization on ARM and Segmented Architectures," 2007, pp. 1-11	
	42	VARANASI, PRASHANT, "Implementing Hardware-Supported Virtualization in OKL4 on ARM," November 30, 2010, pp. 1-88	
	43	VMware, "Understanding Full virtualization, Paravirutalization, and Hardware Assist," September 11, 2007, pp. 1-17	
	44	VRAZEL, M. G. et al., "Overcoming Signal Integrity Issues with Wideband Crosstalk Cancellation Technology," DesignCon 2006, pp. 1-25	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	45	WANG, B. et al., "6b9b Encoding Scheme for Improving Single-Ended Interface Bandwidth and Reducing Power Consumption without Pin Count Increase," IEEE, 2007, pp. 25-28	
	46	WANG, Z. et al., "Exploiting Smart-Phone USB Connectivity For Fun And Profit," ACSAC '10, December 6-10, 2010, 10 pages	
	47	WELTE, H., "Anatomy of contemporary GSM cellphone hardware," April 16, 2010, pages 1-11	
	48	WIJERING, JEROEN, "What is Video Streaming?," LongTail Community Blog, April 27, 2011, pp. 1-6	
	49	WILTON, S. J. E., "Implementing Logic in FPGA Memory Arrays: Heterogeneous Memory Architectures," 2002, pp. 1-6	
	50	WINTEK, "Specifications for LCD Module," 2010, pp 1-28	

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature	/Antonio Xavier/	Date Considered	02/25/2019

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Patrick Caldwell/	Date (YYYY-MM-DD)	2018-10-24
Name/Print	Patrick Caldwell	Registration Number	44580

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (03-15)
Approved for use through 07/31/2016. OMB 0651-0031
U.S Patent and Trademark Office; U.S DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99**)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	1	WITI, K. et al., "Test & Simulation Results in Support mof SAS-2," Vitesse, 17 slides	
	2	WITT, K. et al., "Test & Simulation Results in Support of SAS-2," Vitesse, 17 slides, January 2006	
	3	WOLBACK, ADAM et al., "Transient customization of Mobile Computing Infrastructure," Carnegie Mellon University, April 20, 2008, pp. 1-5	
	4	WOLF, CHRIS, "Let's Get Virtual: A Look at Today's Server Virtualization Architectures," Burton Group Data center Strategies, May 14, 2007, pp 1-42	
	5	XIAO, FENG et al., "Mobile Imaging: The Big Challenge of the Small Pixel," SPIE-IS& T Vol. 7250, 2009, pp.1-9	
	6	XU, FAN et al., "A Dynamic Binary Translation Framework Based on Page Fault Mechanism in Linux Kernel," IEEE International Conference on Computer and Information Technology, 2010, p. 1-6	
	7	YE, D. et al., "Prototyping a Hybrid Main Memory Using a Virtual Machine Monitor," 2008, pp. 1-8	
	8	YE, D. et al., "Prototyping a Hybrid Main Memory Using a Virtual Machine Monitor," October 2008, 15 slides	
	9	YUEN, R. et al., "A 5Gb/s Transmitter with Reflection Cancellation for Backplane Transceivers," pp. 1-4	
	10	YUEN, R. et al., "A 5Gb/s Transmitter with Reflection Cancellation for Backplane Transceivers," pp. 1-4, Sept. 2006	
	11	ZCTOAK, CODEN, "Special Topic: Mobile Cloud Computing and Applications," ZTE Communications, vol. 9, March 2011, pp. 1-70,	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	12	ZHOU, HON BO et al., "Receiver Makes Right Data Conversion in PVM," Oak Ridge National Laboratory, 1995 pp. 1-8
	13	ZWICKER, MATIHIAS et al., "Antialiasing for Automultiscopic 3D displays," 2006, pp 1

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature	/Antonio Xavier/	Date Considered	02/25/2019

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Patrick Caldwell/	Date (YYYY-MM-DD)	2018-10-24
Name/Print	Patrick Caldwell	Registration Number	44580

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (03-15)
Approved for use through 07/31/2016. OMB 0651-0031
U.S Patent and Trademark Office; U.S DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	
Filing Date	
First Named Inventor	Michael S. Smith
Art Unit	
Examiner Name	
Attorney Docket Number	SMITH070AG

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20010005692	A1	2001-06-28	Song	
	2	20010043291	A1	2001-11-22	Kono et al.	
	3	20010175805 *20110175805		2011-07-21	Benjamin A. Rottler et al.	/AX/
	4	20020002629	A1	2002-01-03	Fukushima	
	5	20020002662	A1	2002-01-03	Olarig et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	6	20020005111	A1	2002-01-17	Ludwig	
	7	20020008691	A1	2002-01-24	Hanajima et al.	
	8	20020033919	A1	2002-03-21	Sanelle et al.	
	9	20020045854	A1	2002-04-18	Royo et al.	
	10	20020085952	A1	2002-07-04	Ellingboe et al.	
	11	20020086711	A1	2002-07-04	Flannery	
	12	20020116959	A1	2002-08-29	Ohta et al.	
	13	20020118180	A1	2002-08-29	Martin	
	14	20020129315	A1	2002-09-12	Onvural et al.	
	15	20020130832	A1	2002-09-19	Baucom et al.	
	16	20020180763	A1	2002-12-05	Kung	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	17	20030117408	A1	2003-06-26	Forsline et al.	
	18	20030123328	A1	2003-07-03	Guanter	
	19	20030147041	A1	2003-08-07	Oh et al.	
	20	20030151589	A1	2003-08-14	Bensen et al.	
	21	20030217972	A1	2003-11-27	Connell et al.	
	22	20030232192	A1	2003-12-18	Kishioka et al.	
	23	20030235452	A1	2003-12-25	Kraus et al.	
	24	20040084372	A1	2004-05-06	Connell et al.	
	25	20040108995	A1	2004-06-10	Hoshino et al.	
	26	20040109788	A1	2004-06-10	Li et al.	
	27	20040121855	A1	2004-06-24	Giegerich	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	28	20040191509	A1	2004-09-30	Kishioka et al.	
	29	20040207542	A1	2004-10-21	Chang et al.	
	30	20040212598	A1	2004-10-28	Kraus et al.	
	31	20040212599	A1	2004-10-28	Cok et al.	
	32	20040239624	A1	2004-12-02	Ramian	
	33	20040263488	A1	2004-12-30	Martin	
	34	20050018495	A1	2005-01-27	Bhakta et al.	
	35	20050027928	A1	2005-02-03	Avraham et al.	
	36	20050045540	A1	2005-03-03	Connell et al.	
	37	20050094465	A1	2005-05-05	Gervasi et al.	
	38	20050099403	A1	2005-05-12	Kraus et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	39	20050102444	A1	2005-05-12	Cruz	
	40	20050128853	A1	2005-06-16	Ayukawa et al.	
	41	20050182893	A1	2005-08-18	Suh	
	42	20050204091	A1	2005-09-15	Kilbuck et al.	
	43	20050231461	A1	2005-10-20	Raap et al.	
	44	20050242034	A1	2005-11-03	Connell et al.	
	45	20050251617	A1	2005-11-10	Sinclair et al.	
	46	20050264521	A1	2005-12-01	Liu et al.	
	47	20050270037	A1	2005-12-08	Haynes et al.	
	48	20050280746	A1	2005-12-22	North et al.	
	49	20060001654	A1	2006-01-05	Smits	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	50	20060001800	A1	2006-01-05	Sanelle et al.	
	51	20060007222	A1	2006-01-12	Uy	
	52	20060022955	A1	2006-02-02	Kennedy	
	53	20060033701	A1	2006-02-16	Wilson	
	54	20060075402	A1	2006-04-06	Neiger et al.	
	55	20060077186	A1	2006-04-13	Park et al.	
	56	20060085757	A1	2006-04-20	Andre et al.	
	57	20060107719	A1	2006-05-25	Campian	
	58	20060138630	A1	2006-06-29	Bhakta	
	59	20060138983	A1	2006-06-29	Lee et al.	
	60	20060146032	A1	2006-07-06	Kajimoto et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	61	20060167400	A1	2006-07-27	Ellingboe et al.	
	62	20060179088	A1	2006-08-10	Kang	
	63	20060195064	A1	2006-08-31	Plahey et al.	
	64	20060197736	A1	2006-09-07	Baucom et al.	
	65	20060197737	A1	2006-09-07	Baucom et al.	
	66	20060203899	A1	2006-09-14	Gee	
	67	20060209039	A1	2006-09-21	Destura et al.	
	68	20060238495	A1	2006-10-26	Davis	
	69	20060260711	A1	2006-11-23	Fry et al.	
	70	20060262099	A1	2006-11-23	Destura et al.	
	71	20060274050	A1	2006-12-07	Lii	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	72	20060284874	A1	2006-12-21	Wilson	
	73	20060294295	A1	2006-12-28	Fukuzo	
	74	20070008064	A1	2007-01-11	Donohue	
	75	20070035526	A1	2007-02-15	Takenaka et al.	
	76	20070040814	A1	2007-02-22	Lee et al.	
	77	20070070047	A1	2007-03-29	Jeon et al.	
	78	20070085837	A1	2007-04-19	Ricks et al.	
	79	20070097151	A1	2007-05-03	Rosenberg	
	80	20070103454	A1	2007-05-10	Elias	
	81	20070137901	A1	2007-06-21	Chen	
	82	20070146313	A1	2007-06-28	Newman et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	83	20070148371	A1	2007-06-28	Kazama	
	84	20070153215	A1	2007-07-05	Lee	
	85	20070176902	A1	2007-08-02	Newman et al.	
	86	20070182864	A1	2007-08-09	Stoneham et al.	
	87	20070192563	A1	2007-08-16	Rajan et al.	
	88	20070195029	A1	2007-08-23	Jeon et al.	
	89	20070204075	A1	2007-08-30	Rajan et al.	
	90	20070204079	A1	2007-08-30	Wu	
	91	20070229477	A1	2007-10-04	Ludwig	
	92	20070237170	A1	2007-10-11	Proctor et al.	
	93	20070246494	A1	2007-10-25	Kim et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	94	20070262967	A1	2007-11-15	RHO	
	95	20070291009	A1	2007-12-20	Wright et al.	
	96	20080007675	A1	2008-01-10	Sanelle et al.	
	97	20080010435	A1	2008-01-10	Smith et al.	
	98	20080018613	A1	2008-01-24	Kim et al.	
	99	20080024712	A1	2008-01-31	Kim	
	100	20080025108	A1	2008-01-31	Rajan et al.	
	101	20080025122	A1	2008-01-31	Schakel et al.	
	102	20080025123	A1	2008-01-31	Rajan et al.	
	103	20080025124	A1	2008-01-31	Rajan et al.	
	104	20080025136	A1	2008-01-31	Rajan et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	105	20080025137	A1	2008-01-31	Rajan et al.	
	106	20080026803	A1	2008-01-31	Demuynck	
	107	20080027697	A1	2008-01-31	Rajan et al.	
	108	20080027702	A1	2008-01-31	Rajan et al.	
	109	20080027703	A1	2008-01-31	Rajan et al.	
	110	20080028135	A1	2008-01-31	Rajan et al.	
	111	20080028136	A1	2008-01-31	Schakel et al.	
	112	20080028137	A1	2008-01-31	Schakel et al.	
	113	20080031030	A1	2008-02-07	Rajan et al.	
	114	20080031072	A1	2008-02-07	Rajan et al.	
	115	20080037353	A1	2008-02-14	Rajan et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	116	20080056014	A1	2008-03-06	Rajan et al.	
	117	20080060854	A1	2008-03-13	Perlin	
	118	20080062169	A1	2008-03-13	Heesemans et al.	
	119	20080062773	A1	2008-03-13	Rajan et al.	
	120	20080068343	A1	2008-03-20	Hoshino et al.	
	121	20080082763	A1	2008-04-03	Rajan et al.	
	122	20080094367	A1	2008-04-24	De et al.	
	123	20080098331	A1	2008-04-24	Novick et al.	
	124	20080100584	A1	2008-05-01	Hague et al.	
	125	20080103753	A1	2008-05-01	Rajan et al.	
	126	20080104314	A1	2008-05-01	Rajan et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	127	20080104344	A1	2008-05-01	Shimozono et al.	
	128	20080105600	A1	2008-05-08	Connell et al.	
	129	20080109206	A1	2008-05-08	Rajan et al.	
	130	20080109595	A1	2008-05-08	Rajan et al.	
	131	20080109597	A1	2008-05-08	Schakel et al.	
	132	20080109598	A1	2008-05-08	Schakel et al.	
	133	20080109629	A1	2008-05-08	Karamcheti et al.	
	134	20080115006	A1	2008-05-15	Smith et al.	
	135	20080120443	A1	2008-05-22	Rajan et al.	
	136	20080123459	A1	2008-05-29	Rajan et al.	
	137	20080126687	A1	2008-05-29	Rajan et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	138	20080126688	A1	2008-05-29	Rajan et al.	
	139	20080126689	A1	2008-05-29	Rajan et al.	
	140	20080126692	A1	2008-05-29	Rajan et al.	
	141	20080130910	A1	2008-06-05	Jobling et al.	
	142	20080133825	A1	2008-06-05	Rajan et al.	
	143	20080136790	A1	2008-06-12	Hio	
	144	20080150911	A1	2008-06-26	Harrison	
	145	20080158171	A1	2008-07-03	Wong et al.	
	146	20080165255	A1	2008-07-10	Christie et al.	
	147	20080174570	A1	2008-07-24	Jobs et al.	
	148	20080204427	A1	2008-08-28	Heesemans et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	149	20080210843	A1	2008-09-04	Han et al.	
	150	20080211786	A1	2008-09-04	Park et al.	
	151	20080215192	A1	2008-09-04	Hardman et al.	
	152	20080239857	A1	2008-10-02	Rajan et al.	
	153	20080239858	A1	2008-10-02	Rajan et al.	
	154	20080240223	A1	2008-10-02	Badalone	
	155	20080250408	A1	2008-10-09	Tsui et al.	
	156	20080252607	A1	2008-10-16	Jong et al.	
	157	20080252616	A1	2008-10-16	Chen	
	158	20080272478	A1	2008-11-06	Anderson et al.	
	159	20080290435	A1	2008-11-27	Oliver et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	160	20080295839	A1	2008-12-04	Habashi	
	161	20080297487	A1	2008-12-04	Hotelling et al.	
	162	20080298113	A1	2008-12-04	Liu et al.	
	163	20080304431	A1	2008-12-11	Karaoguz	
	164	20080308946	A1	2008-12-18	Pratt	
	165	20090002312	A1	2009-01-01	Son	
	166	20090014876	A1	2009-01-15	Youn et al.	
	167	20090022256	A1	2009-01-22	Fitzgerald	
	168	20090024789	A1	2009-01-22	Rajan et al.	
	169	20090026600	A1	2009-01-29	Koon et al.	
	170	20090036111	A1	2009-02-05	Danford et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	171	20090036176	A1	2009-02-05	Ure	
	172	20090039492	A1	2009-02-12	KANG et al.	
	173	20090045489	A1	2009-02-19	Koon et al.	
	174	20090046110	A1	2009-02-19	Sadler et al.	
	175	20090051659	A1	2009-02-26	Mickelborough	
	176	20090052218	A1	2009-02-26	KANG	
	177	20090065948	A1	2009-03-12	Wang	
	178	20090066660	A1	2009-03-12	Ure	
	179	20090067256	A1	2009-03-12	Bhattacharyya et al.	
	180	20090073138	A1	2009-03-19	Lee et al.	
	181	20090085225	A1	2009-04-02	Park	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	182	20090085608	A1	2009-04-02	Alzheimer	
	183	20090086420	A1	2009-04-02	Stockham et al.	
	184	20090090950	A1	2009-04-09	Forbes et al.	
	185	20090091536	A1	2009-04-09	Callaghan	
	186	20090091962	A1	2009-04-09	Chung et al.	
	187	20090103675	A1	2009-04-23	Moghaddam et al.	
	188	20090127668	A1	2009-05-21	Choi	
	189	20090128991	A1	2009-05-21	Mauritzson	
	190	20090143652	A1	2009-06-04	Warburton et al.	
	191	20090158152	A1	2009-06-18	Kodimer et al.	
	192	20090160781	A1	2009-06-25	Henderson et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	193	20090166846	A1	2009-07-02	Pratt et al.	
	194	20090180257	A1	2009-07-16	Park et al.	
	195	20090197394	A1	2009-08-06	Parekh	
	196	20090206431	A1	2009-08-20	Bolken et al.	
	197	20090213066	A1	2009-08-27	Hardacker et al.	
	198	20090224822	A1	2009-09-10	Alzheimer et al.	
	199	20090225053	A1	2009-09-10	HU	
	200	20090237970	A1	2009-09-24	Chung	
	201	20090255705	A1	2009-10-15	Pratt	
	202	20090259806	A1	2009-10-15	Kilzer et al.	
	203	20090261457	A1	2009-10-22	Pratt	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	204	20090271731	A1	2009-10-29	Lin et al.	
	205	20090285031	A1	2009-11-19	Rajan et al.	
	206	20090289912	A1	2009-11-26	Chen et al.	
	207	20090295747	A1	2009-12-03	Hsieh et al.	
	208	20090300314	A1	2009-12-03	LaBerge et al.	
	209	20090300444	A1	2009-12-03	Jeddeloh	
	210	20090302484	A1	2009-12-10	Lee et al.	
	211	20090309142	A1	2009-12-17	Akram	
	212	20090319703	A1	2009-12-24	Chung	
	213	20090321861	A1	2009-12-31	Oliver et al.	
	214	20090321947	A1	2009-12-31	Pratt	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	215	20090323206	A1	2009-12-31	Oliver et al.	
	216	20100005390	A1	2010-01-07	Bong	
	217	20100017872	A1	2010-01-21	Goertz et al.	
	218	20100020039	A1	2010-01-28	Ricks et al.	
	219	20100026640	A1	2010-02-04	Kim et al.	
	220	20100035656	A1	2010-02-11	Pan	
	221	20100045612	A1	2010-02-25	Molne	
	222	20100053103	A1	2010-03-04	NO et al.	
	223	20100053532	A1	2010-03-04	LAI	
	224	20100066764	A1	2010-03-18	Refai	
	225	20100077829	A1	2010-04-01	Batista et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	226	20100079398	A1	2010-04-01	Shen et al.	
	227	20100085500	A1	2010-04-08	Kim	
	228	20100097347	A1	2010-04-22	Lin	
	229	20100110748	A1	2010-05-06	Best	
	230	20100134429	A1	2010-06-03	You et al.	
	231	20100134448	A1	2010-06-03	Park et al.	
	232	20100149101	A1	2010-06-17	Guo et al.	
	233	20100149124	A1	2010-06-17	Kim et al.	
	234	20100164745	A1	2010-07-01	Migos et al.	
	235	20100164884	A1	2010-07-01	Chiu et al.	
	236	20100188353	A1	2010-07-29	Yoon et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	237	20100188365	A1	2010-07-29	Tamaki et al.	
	238	20100194709	A1	2010-08-05	Tamaki et al.	
	239	20100201651	A1	2010-08-12	Baucom et al.	
	240	20100206560	A1	2010-08-19	Atencio	
	241	20100207900	A1	2010-08-19	Kung et al.	
	242	20100208082	A1	2010-08-19	Buchner et al.	
	243	20100214499	A1	2010-08-26	Sanelle et al.	
	244	20100222735	A1	2010-09-02	Plahey et al.	
	245	20100225608	A1	2010-09-09	ZHOU et al.	
	246	20100240390	A1	2010-09-23	Russ et al.	
	247	20100257304	A1	2010-10-07	Rajan et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	248	20100259490	A1	2010-10-14	Lee	
	249	20100271888	A1	2010-10-28	Rajan et al.	
	250	20100277432	A1	2010-11-04	Tsai	
	251	20100281280	A1	2010-11-04	Rajan et al.	
	252	20100293460	A1	2010-11-18	Budelli	
	253	20100332635	A1	2010-12-30	ROGEL et al.	
	254	20110001706	A1	2011-01-06	Sanford et al.	
	255	20110007023	A1	2011-01-13	Abrahamsson et al.	
	256	20110012921	A1	2011-01-20	Cholewin et al.	
	257	20110016250	A1	2011-01-20	Lee et al.	
	258	20110025969	A1	2011-02-03	Chen et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	259	20110035540	A1	2011-02-10	Fitzgerald et al.	
	260	20110037726	A1	2011-02-17	Lee	
	261	20110044064	A1	2011-02-24	Hu et al.	
	262	20110050576	A1	2011-03-03	Forutanpour et al.	
	263	20110050591	A1	2011-03-03	Kim et al.	
	264	20110050592	A1	2011-03-03	Kim et al.	
	265	20110050593	A1	2011-03-03	Kim et al.	
	266	20110050594	A1	2011-03-03	Kim et al.	
	267	20110050608	A1	2011-03-03	Homma et al.	
	268	20110051334	A1	2011-03-03	Griffith et al.	
	269	20110066790	A1	2011-03-17	Mogul et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	270	20110080417	A1	2011-04-07	Lin et al.	
	271	20110088416	A1	2011-04-21	Koethler	
	272	20110095783	A1	2011-04-28	Ferolito et al.	
	273	20110102336	A1	2011-05-05	SEOK et al.	
	274	20110102347	A1	2011-05-05	LIM et al.	
	275	20110109573	A1	2011-05-12	Deslippe et al.	
	276	20110109829	A1	2011-05-12	Mathew et al.	
	277	20110110047	A1	2011-05-12	Pauley et al.	
	278	20110113208	A1	2011-05-12	Jouppi et al.	
	279	20110115738	A1	2011-05-19	Suzuki et al.	
	280	20110117968	A1	2011-05-19	Eromaki	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	281	20110118029	A1	2011-05-19	Lukas et al.	
	282	20110122084	A1	2011-05-26	Jeon et al.	
	283	20110152739	A1	2011-06-23	Roncadi et al.	
	284	20110164047	A1	2011-07-07	Pance	
	285	20110169745	A1	2011-07-14	Fang et al.	
	286	20110169775	A1	2011-07-14	Liaw et al.	
	287	20110175844	A1	2011-07-21	Berggren	
	288	20110175845	A1	2011-07-21	Honda et al.	
	289	20110175902	A1	2011-07-21	Mahowald	
	290	20110181552	A1	2011-07-28	Goertz et al.	
	291	20110205446	A1	2011-08-25	Hardacker et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	292	20110210942	A1	2011-09-01	Kitamori et al.	
	293	20110210943	A1	2011-09-01	Zaliva	
	294	20110227836	A1	2011-09-22	Li et al.	
	295	20110227877	A1	2011-09-22	Chen	
	296	20110239110	A1	2011-09-29	Garrett et al.	
	297	20110248941	A1	2011-10-13	Abdo et al.	
	298	20110254793	A1	2011-10-20	Ban et al.	
	299	20110260994	A1	2011-10-27	Saynac et al.	
	300	20110273394	A1	2011-11-10	Young et al.	

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] j	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	1	2005114369	WO	A2	2005-12-01	Hotelling et al.		
	2	2008037275	WO	A1	2008-04-03	Laitinen		
	3	2008131058	WO	A2	2008-10-30	Best		
	4	2008131058	WO	A2	2008-10-30	Best		
	5	2011100444	WO	A2	2011-08-18	Nakanishi et al.		
	6	2011126893	WO	A2	2011-10-13	Keeth et al.		
	7	2012149911	WO	A1	2012-11-08	Hou		

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T5
	1	3D Packing Newsletter on 3D IS, TSV, WLP & Embedded Technologies, December 2009, pp. 1-16	
	2	AKHSHABI, SAAMER et al., "An Experimental Evaluation of Rate-Adaptation Algorithms in Adaptive Streaming over HTTP," February 23, 2011, pp. 1-12	

EFS Web 2.1.17

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	3	ALTERA, "Using Pre-Emphasis and Equalization with Stratix GX," White Paper, September 2003, ver. 1.0, pp. 1-11	
	4	AMO, "BIOS and Kernel Developer's Guide (BKDG) for AMO Family 14h Models OOh-OFh Processors," BKDG for AMO Family 14h Models OOh-OFh Processors, February 16, 2011, Rev. 3.04, pp. 1-403	
	5	AMP, "DDR2 DIMM 25 Degree Imm CL 240 position," DDR2 DIMM 25 Degree 240 -Solder tail, 2005, p. 1	
	6	AMP, "DDR2 DIMM Socket Imm CL 240 position," DDR2 DIMM 240 -Solder tail, 1998, p. 1	
	7	ANALUI, B., "Signal Integrity Issues in High-Speed Wireline Links: Analysis and Integrated System Solutions," Thesis, 2005, pp. 1-194	
	8	ARM, "The ARM Architecture," 2010, pp. 1-43	
	9	ARORA, A., "Sensing by the people, for the people & of the people," April 21, 2008, 48 pages	
	10	AVISSAR, 0. et al., "Heterogeneous Memory Management for Embedded Systems," CASES '01, November 16-17, 2001, pp. 1-10	
	11	BAHAR, BARUS et al., "Mobile-Phone Based Gesture Recognition," Proceedings of the Enterface '07, 2007, PP. 1-8	
	12	BAKER, BONNIE C. et al., "The Power Behind Resistive Touch Screens," Texas Instruments, 2007, pp. 1-9	
	13	BALAKRISHNAN, H., "Background: Single-Link Communication," Fall 2001, September 5, 2001, pp. 1-6	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	14	BALASUBRAMANIAN, NIRANJAN et al., "Energy Consumption in Mobile Phones: A Measurement Study and Implications for Network Applications," University of Massachusetts Amherst, November 4, 2009, pp. 1-14	
	15	BAR-NIV, A., "Balanced equalization: The 10GBASE-KX4 formula for error-free transmission over backplanes," Networking Solutions, March 2005, pp. 1-4	
	16	BARR, T. W. et al., "Translation Caching: Skip, Don't Walk (the Page Table)," ISCA '1O, June 19-23, 2010, pp. 1-12	
	17	BEN-YEHUDA, MULi et al., "IBM Research Report, the Turtles Project: Design and Implementation of Tested Virtualization," IBM Research Division, January 9, 2010, pp 1-15	
	18	BEN-YEHUDA, MULi et al., "The Turtles Project: Design and Implementation of Nested Virtualization," IBM Research, October 2010, slides 1-92	
	19	BHARDWAJ, RISHI et al., "A Choices Hypervisor on the ARM Architecture," University of Illinois, April, 2006, pp. 1-5	
	20	BICKFORD, JEFFERY et al., "Rootkits on Smart Phones: Attacks, Implication and Opportunities," June 10, 2010, pp. 1-6	
	21	BIEN, F., "Reconfigurable Equalization for 10-Gb/sec Serial Data Links in a 0.18-?m CMOS Technology," Dissertation, December 2006, pp. 1-121	
	22	BIHLMAYR, WOLFGANG et al., "OLEO Display Driver for the HCS08 Family," Freescale Semiconductor Application Note, March 2007, pp. 1-42	
	23	BORNSTEIN, D., "ANDROID- Dalvik VM Internals," 58 pages	
	24	BORNSTEIN, D., "ANDROID- Dalvik VM Internals," 58 pages, November 2011	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	25	BORNSTEIN, DAN, "Android Dalvik VM Internals," May 29, 2008, slides 1-58	
	26	BRASH, DAVID, "Extensions to the ARMv7-A Architecture," August 2010, pp. 1-21	
	27	BRUECK et al., "Certificate of Correction," US Pat No. 7,818,444B2. Oct. 19, 2010	
	28	BUCHALI, F. et al., "Fast Eye Monitor for 10 Gbit/s and its Application for Optical PMD Compensation," 2000 Optical Society of America, pp. 1-4	
	29	BUCHALI, S. et al., "Fast eye monitor for 10 Gbit/s and its application for optical PMD compensation", Conf. Opt. Fiber Commun. (OFC) 2001, vol. 2, March 2001	
	30	BUCKWALTER, J. F., "Deterministic Jitter in Broadband Communication," Thesis, 2006, pp. 1-220	
	31	BUNGALE, PARASHANTH, "ARM Virtualization: CPU & MMU Issues," VMware, 2010, slides 1-16	
	32	BURDACH, M., "Physical Memory Forensics," 53 slides	
	33	BURDACH, M., "Physical Memory Forensics," 53 slides, Black Hat USA (2006), 1 August 2006	
	34	CARROLL, AARON et al., "An Analysis of Power consumption in a Smartphone," 2010 USENIX Conference, 2010, pp. 1-14	
	35	CASIEZ, GERY et al., "RubberEdge: Improved Interaction with Mobile Devices via Elastic-Edged Touchpads," April 2008, pp. 1-1	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	36	Cellphone Hardware Applications, pages 1-24	
	37	CHANDRAMOULI, S., "A BROADBAND PASSIVE DELAY LINE STRUCTURE IN 0.18 MICRON CMOS FOR A GIGABIT FEED FORWARD EQUALIZER," Thesis, 2004, pp. 1-52	
	38	CHANDRASEKARAN, DIN ESH et al., "Hardware-assisted Secure Virtualization," 2009 pp. 1-8	
	39	CHAPMAN, MATTHEW et al., "MagiXen: Combining Binary Translation and Virtualization," HP Enterprise Systems and Software Laboratory, May 4, 2007, pp 1-15	
	40	CHAUDHARY, VIPIN et al., "TECHNIQUES FOR MIGRATING COMPUTATIONS ON THE GRID," 2006, pp. 1-19	
	41	CHEN, J. et al., "High Speed Signaling Design: from 1 Gbps to 10 Gbps," DesignCon East 2004, pp. 1-17	
	42	CHEN, JUINN-YEU et al., "On Static Binary Translation and Optimization for ARM based Applications," April 6, 2008, pp. 1-10	
	43	CHEN, WEI et al., "An Emulator for Executing IA-32 Application on ARM-Based Systems," Journal of Computers, vol. 5, July 7, 2010, ppll33-1141	
	44	CHEN, Y.-H., "Ad-ST AC & 3DIC Technology of ITRI," 2010, pp. 1-14	
	45	CHI POU NOV, VITALY et al., "Dynamically Translating x86 to LLVM using QEMU," 2010, pp. 1-5	
	46	CHUN, BYUNG-GON et al., "Augmented Smartphone Applications Through Clone Cloud Execution," Intel Research Berkeley, May 18, 2009, pp. 1-5	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	47	CHUN, BYUNG-GON et al.," CloneCloud: Elastic Execution between Mobile Device and Cloud," 2011, pp. 1-14	
	48	CIS 501: Introduction to Computer Architecture, Unit 4: Memory Hierarchy II: Main Memory, CIS 501 (Martin/Roth): Main Memory, pp, 1-12	
	49	CIS 501: Introduction to Computer Architecture, Unit 4: Memory Hierarchy II: Main Memory, CIS 501 (Martin/Roth): Main Memory, pp, 1-12, Sept 2005	
	50	CITRIX, "The 'Nirvana Phone,' Concept Specification and Draft Reference Architecture," 2010, pp. 1-10	

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature	/Antonio Xavier/	Date Considered	02/25/2019

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Patrick Caldwell/	Date (YYYY-MM-DD)	2018-10-24
Name/Print	Patrick Caldwell/	Registration Number	44580

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /AX/

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/169,961	10/24/2018	Michael S. Smith	SMITH070AG	7650

92045 7590 12/28/2018

The Caldwell Firm, LLC
PO Box 59655
Dept. SVIPGP
Dallas, TX 75229

EXAMINER
XAVIER, ANTONIO J

ART UNIT	PAPER NUMBER
2623	

NOTIFICATION DATE	DELIVERY MODE
12/28/2018	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

eofficeaction@appcoll.com
pcaldwell@thecaldwellfirm.com

Decision Granting Request for Prioritized Examination (Track I)	**Application No.** 16/169,961	**Applicant(s)** Smith, Michael S.	
	Examiner CHERYL P GIBSON BAYLOR	**Art Unit** OPET	**AIA (First Inventor to File) Status** No

1. THE REQUEST FILED 24 October 2018 IS **GRANTED** .

The above-identified application has met the requirements for prioritized examination

A. ☑ for an original nonprovisional application (Track I).
B. ☐ for an application undergoing continued examination (RCE).

2. **The above-identified application will undergo prioritized examination**. The application will be accorded special status throughout its entire course of prosecution until one of the following occurs:

A. filing a **petition for extension of time** to extend the time period for filing a reply;

B. filing an **amendment to amend the application to contain more than four independent claims, more than thirty total claims** , or a multiple dependent claim;

C. filing a **request for continued examination** ;

D. filing a notice of appeal;

E. filing a request for suspension of action;

F. mailing of a notice of allowance;

G. mailing of a final Office action;

H. completion of examination as defined in 37 CFR 41.102; or

I. abandonment of the application.

Telephone inquiries with regard to this decision should be directed to CHERYL GIBSON BAYLOR at (571)272-3213. In his/her absence, calls may be directed to Petition Help Desk at (571) 272-3282.

/CHERYL GIBSON BAYLOR/ Paralegal Specialist, OPET	

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
16/169,961	10/24/2018	2621	985	SMITH070AG	17	1

CONFIRMATION NO. 7650

FILING RECEIPT

92045
The Caldwell Firm, LLC
PO Box 59655
Dept. SVIPGP
Dallas, TX 75229

OC000000103808532

Date Mailed: 11/19/2018

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

Inventor(s)

Michael S. Smith, Palo Alto, CA;

Applicant(s)

P4TENTS1, LLC, Wilmington, DE;

Power of Attorney: The patent practitioners associated with Customer Number 92045

Domestic Priority data as claimed by applicant

This application is a CON of 15/072,354 03/16/2016 PAT 10133397
which is a CON of 13/567,004 08/03/2012 PAT 9417754
which claims benefit of 61/515,835 08/05/2011
and claims benefit of 61/566,577 12/02/2011
and claims benefit of 61/569,213 12/09/2011
and claims benefit of 61/581,918 12/30/2011

Foreign Applications for which priority is claimed (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see http://www.uspto.gov for more information.) - None.
Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.

Permission to Access Application via Priority Document Exchange: Yes

Permission to Access Search Results: Yes

Applicant may provide or rescind an authorization for access using Form PTO/SB/39 or Form PTO/SB/69 as appropriate.

If Required, Foreign Filing License Granted: 11/14/2018
The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 16/169,961**
Projected Publication Date: Request for Non-Publication Acknowledged
Non-Publication Request: Yes
Early Publication Request: No
** **SMALL ENTITY** **
Title

GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT

Preliminary Class

345

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications: No

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at http://www.uspto.gov/web/offices/pac/doc/general/index.html.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4258).

LICENSE FOR FOREIGN FILING UNDER

Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign AssetsControl, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

SelectUSA

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The U.S. offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to promote and facilitate business investment. SelectUSA provides information assistance to the international investor community; serves as an ombudsman for existing and potential investors; advocates on behalf of U.S. cities, states, and regions competing for global investment; and counsels U.S. economic development organizations on investment attraction best practices. To learn more about why the United States is the best country in the world to develop technology, manufacture products, deliver services, and grow your business, visit http://www.SelectUSA.gov or call +1-202-482-6800.

PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number: 16/169,961

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY FEE($)
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	75		N/A	
SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A	330		N/A	
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	380		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	17 minus 20 =	*	x 50 =	0.00	OR		
INDEPENDENT CLAIMS (37 CFR 1.16(h))	1 minus 3 =	*	x 230 =	0.00			
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			200			
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				0.00			
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	985		TOTAL	

APPLICATION AS AMENDED - PART II

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY ADDITIONAL FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE($)
AMENDMENT A	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY ADDITIONAL FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE($)
AMENDMENT B	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20"
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 16/169,961	Filing Date 10/24/2018	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 = *		X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 = *		X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT 11/16/2018

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 8	Minus	** 20	= 0	X $50 =	0
Independent (37 CFR 1.16(h))	* 3	Minus	***3	= 0	X $230 =	0
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	0

AMENDMENT

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LDRC
CHERRI FITZGERALD

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**
If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Doc Code: FAI.REQ
Document Description: Request First Action Interview

PTO/SB/413C (05-11)
Approved for use through 01/31/2013. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

REQUEST FOR FIRST ACTION INTERVIEW (FULL PILOT PROGRAM)

Attorney Docket Number: SMITH070AG	Application Number (if known): 16/169,961	Filing date: 10/24/2018
First Named Inventor: Michael S Smith	Title: GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT	

APPLICANT HEREBY REQUESTS A FIRST ACTION INTERVIEW IN THE ABOVE-IDENTIFIED APPLICATION. See Instruction Sheet on page 2.

1. The application must contain three (3) or fewer independent claims and twenty (20) or fewer total claims.

2. The application must not contain any multiple dependent claims.

3. By filing this request:

   Applicant is agreeing to make an election without traverse if the Office determines that the claims are not obviously directed to a single invention; and

   Applicant is agreeing not to request for a refund of the search fee and any excess claims fee paid in the application after the mailing or notification of the pre-interview communication prepared by the examiner.

4. Other attachments: _____

Signature /Patrick Caldwell/	Date 11/16/2018
Name (Print/Typed) Patrick Caldwell	Registration Number 44580

Note: *This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.*

☐ *Total of _____ forms are submitted.

The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/SB/413C (05-11)
Approved for use through 07/31/2012 OMB 0651-0031
U.S. Patent and Trademark Office, U. S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Instruction Sheet for Request for First Action Interview (Full Pilot Program)

(Not to be Submitted to the USPTO)

A grantable request must meet the following conditions:

1. The application must be a new non-reissue utility application filed under 35 U.S.C. 111(a) or an international application that has entered the national stage in compliance with 35 U.S.C. 371(c).

2. The application must contain three (3) or fewer independent claims and twenty (20) or fewer total claims. The application may not contain any multiple dependent claims.

3. The request must be filed electronically using the Office's electronic filing system, EFS-Web.

4. The claims must be directed to a single invention. If the Office determines that the claims are directed to multiple inventions (*e.g.*, in a restriction requirement), the applicant must make an election without traverse.

5. The request must be filed at least one day before a first Office action on the merits of the application appears in the Patent Application Information Retrieval (PAIR) system (*i.e.*, at least one day prior to the date when a first Office action on the merits, notice of allowability or allowance, or action under Ex parte Quayle, 1935 Dec. Comm'r Pat. 11 (1935) appears in the PAIR system). Applicant may check the status of the application using the PAIR system.

6. The request for a first action interview must include a statement that applicant agrees not to file a request for a refund of the search fee and any excess claims fees paid in the application after the mailing or notification of the Pre-Interview Communication. Any petition for express abandonment under 37 CFR 1.138(d), and request for a refund of the search fee and any excess claims fees, filed after the mailing or notification of the Pre-Interview Communication will not be granted.

For more information, see notice "Full First Action Interview Pilot Program" available on the USPTO web site at http://www.uspto.gov/patents/init_events/faipp_full.jsp

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Doc Code: FAI.REQ
Document Description: Request First Action Interview

PTO/SB/413C (05-11)
Approved for use through 01/31/2013. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

REQUEST FOR FIRST ACTION INTERVIEW (FULL PILOT PROGRAM)

Attorney Docket Number: SMITH070AG	Application Number (if known): 16/169,961	Filing date: 10/24/2018
First Named Inventor: Michael S Smith	Title: GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT	

APPLICANT HEREBY REQUESTS A FIRST ACTION INTERVIEW IN THE ABOVE-IDENTIFIED APPLICATION. See Instruction Sheet on page 2.

1. The application must contain three (3) or fewer independent claims and twenty (20) or fewer total claims.

2. The application must not contain any multiple dependent claims.

3. By filing this request:

   Applicant is agreeing to make an election without traverse if the Office determines that the claims are not obviously directed to a single invention; and

   Applicant is agreeing not to request for a refund of the search fee and any excess claims fee paid in the application after the mailing or notification of the pre-interview communication prepared by the examiner.

4. Other attachments: _____

Signature /Patrick Caldwell/	Date 11/16/2018
Name (Print/Typed) Patrick Caldwell	Registration Number 44580

Note: *This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.*

☐ *Total of _____ forms are submitted.

The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/SB/413C (05-11)
Approved for use through 07/31/2012 OMB 0651-0031
U.S. Patent and Trademark Office, U. S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Instruction Sheet for Request for First Action Interview (Full Pilot Program)

(Not to be Submitted to the USPTO)

A grantable request must meet the following conditions:

1. The application must be a new non-reissue utility application filed under 35 U.S.C. 111(a) or an international application that has entered the national stage in compliance with 35 U.S.C. 371(c).

2. The application must contain three (3) or fewer independent claims and twenty (20) or fewer total claims. The application may not contain any multiple dependent claims.

3. The request must be filed electronically using the Office's electronic filing system, EFS-Web.

4. The claims must be directed to a single invention. If the Office determines that the claims are directed to multiple inventions (*e.g.*, in a restriction requirement), the applicant must make an election without traverse.

5. The request must be filed at least one day before a first Office action on the merits of the application appears in the Patent Application Information Retrieval (PAIR) system (*i.e.*, at least one day prior to the date when a first Office action on the merits, notice of allowability or allowance, or action under Ex parte Quayle, 1935 Dec. Comm'r Pat. 11 (1935) appears in the PAIR system). Applicant may check the status of the application using the PAIR system.

6. The request for a first action interview must include a statement that applicant agrees not to file a request for a refund of the search fee and any excess claims fees paid in the application after the mailing or notification of the Pre-Interview Communication. Any petition for express abandonment under 37 CFR 1.138(d), and request for a refund of the search fee and any excess claims fees, filed after the mailing or notification of the Pre-Interview Communication will not be granted.

For more information, see notice "Full First Action Interview Pilot Program" available on the USPTO web site at http://www.uspto.gov/patents/init_events/faipp_full.jsp

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Acknowledgement Receipt	
EFS ID:	34340255
Application Number:	16169961
International Application Number:	
Confirmation Number:	7650
Title of Invention:	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT
First Named Inventor/Applicant Name:	Michael S. Smith
Customer Number:	92045
Filer:	Patrick Edgar Caldwell
Filer Authorized By:	
Attorney Docket Number:	SMITH070AG
Receipt Date:	16-NOV-2018
Filing Date:	24-OCT-2018
Time Stamp:	22:59:33
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Preliminary Amendment	SMITH070AG_PrelimAmend_vF_16-Nov-2018.pdf	72252 973e48910fa357778faad8af39abeee132f44eef3	no	14
Warnings:					

Information:					
2	First Action Interview - Enrollment Request	SMITH070AG_FAIPP_vF_16-Nov-2018.pdf	177737 2cea506c450081106e53148f19ce65b3c587e31c1	no	3
Warnings:					
Information:					
			Total Files Size (in bytes):	249989	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	Confirmation No.: 7650
Michael S. Smith	Examiner:
Application No.: 16/169,961	Art Unit: 2621
Filed: 10/24/2018	Atty. Docket No.: SMITH070AG
For: GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT	Date: 11/16/2018

PRELIMINARY AMENDMENT

Mail Stop Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Examiner:

Before substantive examination, please enter the following:

IN THE SUMMARY

Please amend the summary as follows:

In one embodiment, an electronic device is provided, comprising: a display; a touch interface including at least one edge; one or more processors; memory; and one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for: displaying, utilizing the display, a graphical user interface; while the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first portion of the at least one edge and moves inward; in response to the detection of the first gesture that begins in connection with the first portion of the at least one edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including a plurality of first menu items; and when the first menu is displayed including the plurality of first menu items: detecting, utilizing the touch interface, a first pressure on at least one of the first menu items, when the first pressure on the at least one of the first menu items surpasses a first threshold, performing a first operation, and when the first pressure on the at least one of the first menu items surpasses a second threshold, performing a second operation.

In another embodiment, a method is provided, comprising: at an electronic device with a touch interface and a display: displaying, utilizing the display, a graphical user interface; while the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first portion of the at least one edge and moves inward; in response to the detection of the first gesture that begins in connection with the first portion of the at least one edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including a plurality of first menu items; and when the first menu is displayed including the plurality of first menu items: detecting, utilizing the touch interface, a first pressure on at least one of the first menu items, when the first pressure on the at least one of the first menu items surpasses a first threshold, performing a first operation, and when the first pressure on the at least one of the first menu items surpasses a second threshold, performing a second operation.

In yet another embodiment, a non-transitory computer readable storage medium storing one or more programs, the one or more programs comprising instructions which, when executed by an electronic device with a display and a touch interface, cause the electronic device to: display, utilizing the display, a graphical user interface; while the graphical user interface is displayed, detect, utilizing the touch interface, a first gesture that begins at a first portion of the at least one edge and moves inward; in response to the detection of the first gesture that begins at the first portion of the at least one edge and moves inward, display, utilizing the display, a first menu as sliding in and including a plurality of first menu items; and when the first menu is displayed including the plurality of first menu items: detecting, utilizing the touch interface, a first pressure on at least one of the first menu items, when the first pressure on the at least one of the first menu items surpasses a first threshold, performing a first operation, and when the first pressure on the at least one of the first menu items surpasses a second threshold, performing a second operation.

In still yet another embodiment, a system is provided, comprising: touch interface means for: while a graphical user interface is displayed, detecting a first gesture that begins in connection with a first portion of the at least one edge and moves inward; and display means for: in response to the detection of the first gesture that begins in connection with the first portion of the at least one edge and moves inward, displaying a first menu as sliding in and including a plurality of first menu items; said touch interface further for: when the first menu is displayed including the plurality of first menu items: detecting, utilizing the touch interface, a first pressure on at least one of the first menu items, so that, when the first pressure on the at least one of the first menu items surpasses a first threshold, a first operation is caused; and so that, when the first pressure on the at least one of the first menu items surpasses a second threshold, a second operation is caused.

A system, method, and computer program product are provided for operating a mobile device including a touch screen, a memory, and a vibratory feedback mechanism coupled to at least one processor. A plurality of applications including an application is stored, utilizing the memory. Indicia is displayed, utilizing the touchscreen. A first pressure signal indicative of a first magnitude of pressure being applied to the touch screen is identified in connection with the indicia. In response to the first pressure signal indicative of the first magnitude of pressure being applied to the touch screen, a first state is identified, utilizing the at least one processor. In

response to the identification of the first state, an operation is performed, utilizing the at least one processor. A second pressure signal is identified indicative of a second magnitude of pressure being applied to the touch screen that is greater than the first magnitude, in connection with the indicia. In response to the second pressure signal indicative of the second magnitude of pressure being applied to the touch screen, a second state is identified, utilizing the at least one processor. In response to the identification of the second state, the mobile device is vibrated, utilizing the vibratory feedback mechanism. In response to the identification of the second state, another operation is performed. Also identified is a third pressure signal indicative of a pressure being applied to the touch screen that is greater than the first magnitude, in connection with the indicia. In response to the third pressure signal indicative of the pressure being applied to the touch screen that is greater than the first magnitude, a third state is identified. In response to the identification of the third state, the mobile device is vibrated. Also in response to the identification of the third state, content associated with the indicia is opened.

IN THE ABSTRACT

Please amend the abstract as follows:

~~A system, method, and computer program product are provided for operating a mobile device including a touch screen, a memory, and a vibratory feedback mechanism coupled to at least one processor. A plurality of applications including an application is stored, utilizing the memory. Indicia is displayed, utilizing the touchscreen. A first pressure signal indicative of a first magnitude of pressure being applied to the touch screen is identified in connection with the indicia. In response to the first pressure signal indicative of the first magnitude of pressure being applied to the touch screen, a first state is identified, utilizing the at least one processor. In response to the identification of the first state, an operation is performed, utilizing the at least one processor. A second pressure signal is identified indicative of a second magnitude of pressure being applied to the touch screen that is greater than the first magnitude, in connection with the indicia. In response to the second pressure signal indicative of the second magnitude of pressure being applied to the touch screen, a second state is identified, utilizing the at least one processor. In response to the identification of the second state, the mobile device is vibrated, utilizing the vibratory feedback mechanism. In response to the identification of the second state, another operation is performed. Also identified is a third pressure signal indicative of a pressure being applied to the touch screen that is greater than the first magnitude, in connection with the indicia. In response to the third pressure signal indicative of the pressure being applied to the touch screen that is greater than the first magnitude, a third state is identified. In response to the identification of the third state, the mobile device is vibrated. Also in response to the identification of the third state, content associated with the indicia is opened.~~ Apparatuses, methods, and a computer-readable media are provided to: displaying, utilizing a display, a graphical user interface; while the graphical user interface is displayed, detecting, utilizing a touch interface, a first gesture that begins in connection with a first portion of the at least one edge and moves inward; in response to the detection of the first gesture that begins in connection with the first portion of the at least one edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including a plurality of first menu items; and when the first menu is displayed including the plurality of first menu items: detecting, utilizing the touch interface, a

first pressure on at least one of the first menu items, when the first pressure on the at least one of the first menu items surpasses a first threshold, performing a first operation, and when the first pressure on the at least one of the first menu items surpasses a second threshold, performing a second operation.

IN THE CLAIMS

Please amend the claims as follows:

1.-17. (Cancelled)

18. (New) An electronic device, comprising:

a display;

a touch interface including at least one edge;

one or more processors;

memory; and

one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions for:

displaying, utilizing the display, a graphical user interface;

while the graphical user interface is displayed, detecting, utilizing the touch interface, a first gesture that begins in connection with a first portion of the at least one edge and moves inward;

in response to the detection of the first gesture that begins in connection with the first portion of the at least one edge and moves inward, displaying, utilizing the display, a first menu as sliding in and including a plurality of first menu items; and

when the first menu is displayed including the plurality of first menu items:

detecting, utilizing the touch interface, a first pressure on at least one of the first menu items,

when the first pressure on the at least one of the first menu items surpasses a first threshold, performing a first operation, and

when the first pressure on the at least one of the first menu items surpasses a second threshold, performing a second operation.

19. (New) The electronic device of Claim 18, wherein the one or more programs including instructions for:

while the graphical user interface is displayed, detecting, utilizing the touch interface, a second gesture that begins in connection with a second portion of the at least one edge and moves inward;

in response to the detection of the second gesture that begins in connection with the second portion of the at least one edge and moves inward, displaying, utilizing the display, a second menu including a plurality of second menu items.

20. (New) The electronic device of Claim 19, wherein the one or more programs including instructions for:

when the second menu is displayed including the plurality of second menu items:

detecting, utilizing the touch interface, a second pressure on at least one of the second menu items,

when the second pressure on the at least one of the second menu items surpasses the first threshold, performing a third operation, and

when the second pressure on the at least one of the second menu items surpasses the second threshold, performing a fourth operation.

21. (New) The electronic device of Claim 20, wherein the electronic device is configured such that the graphical user interface is displayed in at least one virtual display layer, and at least one of the first menu or the second menu is displayed in at least one other virtual display layer.

22. (New) The electronic device of Claim 21, wherein the electronic device is configured such that at least a portion of the at least one other virtual later is at least partially translucent such that at least a portion of the at least one virtual display layer is visible through the at least one other virtual later.

23. (New) The electronic device of Claim 21, wherein the electronic device is configured such that at least one of:

the display and the touch interface are integrated into a single touch screen;

the display and the touch interface are separate components of a touch screen;

the touch interface includes a hardware interface and the graphical user interface includes a software interface;

the graphical user interface includes an application window;

the graphical user interface includes a home screen, for choosing among a plurality of applications;

the at least one edge includes a single edge;

the at least one edge includes a plurality of different edges;

the at least one edge includes a single edge along a periphery of the touch interface;

the at least one edge includes four edges along different portions of a periphery of the touch interface;

the first portion of the at least one edge and the second portion of the at least one edge are part of the same edge;

the first portion of the at least one edge and the second portion of the at least one edge are part of different edges;

the first gesture begins in connection with the first portion of the at least one edge, by beginning near the first portion of the at least one edge;

the first gesture begins in connection with the first portion of the at least one edge, by beginning at the first portion of the at least one edge;

the first gesture begins in connection with the first portion of the at least one edge, by beginning near the first portion of the at least one edge;

the first gesture begins in connection with the first portion of the at least one edge, by beginning at the first portion of the at least one edge;

the second gesture begins in connection with the first portion of the at least one edge, by beginning near the first portion of the at least one edge;

the second gesture begins in connection with the first portion of the at least one edge, by beginning at the first portion of the at least one edge;

the second gesture begins in connection with the first portion of the at least one edge, by beginning near the first portion of the at least one edge;

the second gesture begins in connection with the first portion of the at least one edge, by beginning at the first portion of the at least one edge;

the first pressure is part of a third gesture including a pressure gesture, and the second pressure is part of a fourth gesture including another pressure gesture;

the first gesture begins in connection with the first portion of the at least one edge and moves inward from the first portion of the at least one edge;

the second gesture that begins in connection with the second portion of the at least one edge and moves inward from the second portion of the at least one edge;

the first gesture and the second gesture move inward in the same direction;

the first gesture and the second gesture move inward in different directions;

the first menu and the second menu are displayed as sliding in via different directions;

the first menu and the second menu are displayed as sliding in via the same direction;

the first menu is displayed as sliding in from the first portion of the at least one edge;

the second menu is displayed as sliding in from the second portion of the at least one edge;

the first menu and the second menu are displayed as sliding in from the at least one edge;

the first menu and the second menu are displayed as sliding in from the same edge;

the first menu and the second menu are displayed as sliding in from different edges;

the first menu is closed by further pulling the first menu and releasing the first menu;

the second menu is closed by further pulling the second menu and releasing the second menu;

the first operation and the second operation are related to the same function; or

the third operation and the fourth operation are related to the same function.

24. (New) A non-transitory computer readable storage medium storing one or more programs, the one or more programs comprising instructions which, when executed by an electronic device with a display and a touch interface including at least one edge, cause the electronic device to:

display, utilizing the display, a graphical user interface;

while the graphical user interface is displayed, detect, utilizing the touch interface, a first gesture that begins at a first portion of the at least one edge and moves inward;

in response to the detection of the first gesture that begins at the first portion of the at least one edge and moves inward, display, utilizing the display, a first menu as sliding in and including a plurality of first menu items; and

when the first menu is displayed including the plurality of first menu items:

detecting, utilizing the touch interface, a first pressure on at least one of the first menu items,

when the first pressure on the at least one of the first menu items surpasses a first threshold, performing a first operation, and

when the first pressure on the at least one of the first menu items surpasses a second threshold, performing a second operation.

25. (New) A system, comprising:

touch interface means for:

while a graphical user interface is displayed, detecting a first gesture that begins in connection with a first portion of at least one edge and moves inward; and

display means for:

in response to the detection of the first gesture that begins in connection with the first portion of the at least one edge and moves inward, displaying a first menu as sliding in and including a plurality of first menu items;

said touch interface further for:

when the first menu is displayed including the plurality of first menu items:

detecting, utilizing the touch interface, a first pressure on at least one of the first menu items, so that, when the first pressure on the at least one of the first menu items surpasses a first threshold, a first operation is caused; and so that, when the first pressure on the at least one of the first menu items surpasses a second threshold, a second operation is caused.

REMARKS

The claims have been clarified.

It is believed that all of the pending issues have been addressed. It should be noted that the absence of a reply to a specific rejection, issue, or comment does not signify agreement with or concession of that rejection, issue, or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Still yet, nothing in this reply should be construed as intention to concede any issue with regard to any claim, except as specifically stated in this reply. Finally, it should be noted that no claim is intended to be construed under 35 U.S.C. 112, paragraph 6.

Respectfully submitted,



Dated: 16 Nov 2018

Patrick E. Caldwell, Esq.
Reg. No. 44,580

The Caldwell Firm, LLC
PO Box 59655
Dallas, Texas 75229-0655
Telephone: (214) 734-2313
pcaldwell@thecaldwellfirm.com

Doc Code: PA..
Document Description: Power of Attorney

PTO/AIA/82B (07-13)
Approved for use through 11/30/2014. OMB 0651-0051
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number

POWER OF ATTORNEY BY APPLICANT

I hereby revoke all previous powers of attorney given in the application identified in either the attached transmittal letter or the boxes below.

Application Number	Filing Date

(Note: The boxes above may be left blank if information is provided on form PTO/AIA/82A.)

☑ I hereby appoint the Patent Practitioner(s) associated with the following Customer Number as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the application referenced in the attached transmittal letter (form PTO/AIA/82A) or identified above: 92045

OR

☐ I hereby appoint Practitioner(s) named in the attached list (form PTO/AIA/82C) as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the patent application referenced in the attached transmittal letter (form PTO/AIA/82A) or identified above. (Note: Complete form PTO/AIA/82C.)

Please recognize or change the correspondence address for the application identified in the attached transmittal letter or the boxes above to:

☑ The address associated with the above-mentioned Customer Number

OR

☐ The address associated with Customer Number:

OR

Firm or Individual Name					
Address					
City		State		Zip	
Country					
Telephone		Email			

I am the Applicant (if the Applicant is a juristic entity, list the Applicant name in the box):

P4TENTS1, LLC

☐ Inventor or Joint Inventor (title not required below)

☐ Legal Representative of a Deceased or Legally Incapacitated Inventor (title not required below)

☑ Assignee or Person to Whom the Inventor is Under an Obligation to Assign (provide signer's title if applicant is a juristic entity)

☐ Person Who Otherwise Shows Sufficient Proprietary Interest (e.g., a petition under 37 CFR 1.46(b)(2) was granted in the application or is concurrently being filed with this document) (provide signer's title if applicant is a juristic entity)

SIGNATURE of Applicant for Patent

The undersigned (whose title is supplied below) is authorized to act on behalf of the applicant (e.g., where the applicant is a juristic entity).

Signature	/Michael S Smith/	Date (Optional)	
Name	Michael S. Smith		
Title	Member & Manager - P4TENTS1, LLC		

NOTE: Signature - This form must be signed by the applicant in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. If more than one applicant, use multiple forms.

☑ Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.131, 1.32, and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/AIA/14 (02-18)
Approved for use through 11/30/2020. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	SMITH070AG
	Application Number	
Title of Invention	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT	

The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76.
This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application.

Secrecy Order 37 CFR 5.2:

☐ Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2 (Paper filers only. Applications that fall under Secrecy Order may not be filed electronically.)

Inventor Information:

Inventor 1 — Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Michael	S	Smith	

Residence Information (Select One) ● US Residency Non US Residency Active US Military Service

City	Palo Alto	State/Province	CA	Country of Residence	US

Mailing Address of Inventor:

Address 1	P4TENTS1, LLC
Address 2	PO BOX 999

City	Los Altos	State/Province	CA
Postal Code	94023-0999	Country	US

All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the **Add** button. Add

Correspondence Information:

Enter either Customer Number or complete the Correspondence Information section below.
For further information see 37 CFR 1.33(a).

☐ **An Address is being provided for the correspondence Information of this application.**

Customer Number	92045		
Email Address	pcaldwell@thecaldwellfirm.com	Add Email	Remove Email

Application Information:

Title of the Invention	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT		
Attorney Docket Number	SMITH070AG	Small Entity Status Claimed	☒
Application Type	Nonprovisional		
Subject Matter	Utility		
Total Number of Drawing Sheets (if any)		Suggested Figure for Publication (if any)	

PTO/AIA/14 (02-18)
Approved for use through 11/30/2020. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	SMITH070AG
	Application Number	
Title of Invention	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT	

Filing By Reference:

Only complete this section when filing an application by reference under 35 U.S.C. 111(c) and 37 CFR 1.57(a). Do not complete this section if application papers including a specification and any drawings are being filed. Any domestic benefit or foreign priority information must be provided in the appropriate section(s) below (i.e., "Domestic Benefit/National Stage Information" and "Foreign Priority Information").

For the purposes of a filing date under 37 CFR 1.53(b), the description and any drawings of the present application are replaced by this reference to the previously filed application, subject to conditions and requirements of 37 CFR 1.57(a).

Application number of the previously filed application	Filing date (YYYY-MM-DD)	Intellectual Property Authority or Country

Publication Information:

☐ Request Early Publication (Fee required at time of Request 37 CFR 1.219)

☒ **Request Not to Publish.** I hereby request that the attached application not be published under 35 U.S.C. 122(b) and certify that the invention disclosed in the attached application **has not and will not** be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing.

Representative Information:

Representative information should be provided for all practitioners having a power of attorney in the application. Providing this information in the Application Data Sheet does not constitute a power of attorney in the application (see 37 CFR 1.32).
Either enter Customer Number or complete the Representative Name section below. If both sections are completed the customer Number will be used for the Representative Information during processing.

Please Select One:	● Customer Number	US Patent Practitioner	○ Limited Recognition (37 CFR 11.9)
Customer Number	92045		

Domestic Benefit/National Stage Information:

This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121, 365(c), or 386(c) or indicate National Stage entry from a PCT application. Providing benefit claim information in the Application Data Sheet constitutes the specific reference required by 35 U.S.C. 119(e) or 120, and 37 CFR 1.78.
When referring to the current application, please leave the "Application Number" field blank.

Prior Application Status	Pending		Remove
Application Number	Continuity Type	Prior Application Number	Filing or 371(c) Date (YYYY-MM-DD)
	Continuation of	15072354	2016-03-16

PTO/AIA/14 (02-18)
Approved for use through 11/30/2020. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	SMITH070AG
	Application Number	
Title of Invention	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT	

Prior Application Status	Patented				Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
15072354	Continuation of	13567004	2012-08-03	9417754	2016-08-16
Prior Application Status	Expired				Remove
Application Number	Continuity Type	Prior Application Number	Filing or 371(c) Date (YYYY-MM-DD)		
13567004	Claims benefit of provisional	61515835	2011-08-05		
Prior Application Status	Expired				Remove
Application Number	Continuity Type	Prior Application Number	Filing or 371(c) Date (YYYY-MM-DD)		
13567004	Claims benefit of provisional	61566577	2011-12-02		
Prior Application Status	Expired				Remove
Application Number	Continuity Type	Prior Application Number	Filing or 371(c) Date (YYYY-MM-DD)		
13567004	Claims benefit of provisional	61569213	2011-12-09		
Prior Application Status	Expired				Remove
Application Number	Continuity Type	Prior Application Number	Filing or 371(c) Date (YYYY-MM-DD)		
13567004	Claims benefit of provisional	61581918	2011-12-30		
Additional Domestic Benefit/National Stage Data may be generated within this form by selecting the **Add** button.					Add

Foreign Priority Information:

This section allows for the applicant to claim priority to a foreign application. Providing this information in the application data sheet constitutes the claim for priority as required by 35 U.S.C. 119(b) and 37 CFR 1.55. When priority is claimed to a foreign application that is eligible for retrieval under the priority document exchange program (PDX)[i] the information will be used by the Office to automatically attempt retrieval pursuant to 37 CFR 1.55(i)(1) and (2). Under the PDX program, applicant bears the ultimate responsibility for ensuring that a copy of the foreign application is received by the Office from the participating foreign intellectual property office, or a certified copy of the foreign priority application is filed, within the time period specified in 37 CFR 1.55(g)(1).

			Remove
Application Number	Country[i]	Filing Date (YYYY-MM-DD)	Access Code[i] (if applicable)
Additional Foreign Priority Data may be generated within this form by selecting the **Add** button.			Add

PTO/AIA/14 (02-18)
Approved for use through 11/30/2020. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	SMITH070AG
	Application Number	
Title of Invention	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT	

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications

☐ This application (1) claims priority to or the benefit of an application filed before March 16, 2013 and (2) also contains, or contained at any time, a claim to a claimed invention that has an effective filing date on or after March 16, 2013.
NOTE: By providing this statement under 37 CFR 1.55 or 1.78, this application, with a filing date on or after March 16, 2013, will be examined under the first inventor to file provisions of the AIA.

PTO/AIA/14 (02-18)
Approved for use through 11/30/2020. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	SMITH070AG
	Application Number	
Title of Invention	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT	

Authorization or Opt-Out of Authorization to Permit Access:

When this Application Data Sheet is properly signed and filed with the application, applicant has provided written authority to permit a participating foreign intellectual property (IP) office access to the instant application-as-filed (see paragraph A in subsection 1 below) and the European Patent Office (EPO) access to any search results from the instant application (see paragraph B in subsection 1 below).

Should applicant choose not to provide an authorization identified in subsection 1 below, applicant **must opt-out** of the authorization by checking the corresponding box A or B or both in subsection 2 below.

NOTE: This section of the Application Data Sheet is **ONLY** reviewed and processed with the **INITIAL** filing of an application. After the initial filing of an application, an Application Data Sheet cannot be used to provide or rescind authorization for access by a foreign IP office(s). Instead, Form PTO/SB/39 or PTO/SB/69 must be used as appropriate.

1. Authorization to Permit Access by a Foreign Intellectual Property Office(s)

A. Priority Document Exchange (PDX) - Unless box A in subsection 2 (opt-out of authorization) is checked, the undersigned hereby **grants the USPTO authority** to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the State Intellectual Property Office of the People's Republic of China (SIPO), the World Intellectual Property Organization (WIPO), and any other foreign intellectual property office participating with the USPTO in a bilateral or multilateral priority document exchange agreement in which a foreign application claiming priority to the instant patent application is filed, access to: (1) the instant patent application-as-filed and its related bibliographic data, (2) any foreign or domestic application to which priority or benefit is claimed by the instant application and its related bibliographic data, and (3) the date of filing of this Authorization. See 37 CFR 1.14(h)(1).

B. Search Results from U.S. Application to EPO - Unless box B in subsection 2 (opt-out of authorization) is checked, the undersigned hereby **grants the USPTO authority** to provide the EPO access to the bibliographic data and search results from the instant patent application when a European patent application claiming priority to the instant patent application is filed. See 37 CFR 1.14(h)(2).

The applicant is reminded that the EPO's Rule 141(1) EPC (European Patent Convention) requires applicants to submit a copy of search results from the instant application without delay in a European patent application that claims priority to the instant application.

2. Opt-Out of Authorizations to Permit Access by a Foreign Intellectual Property Office(s)

☐ A. Applicant **DOES NOT** authorize the USPTO to permit a participating foreign IP office access to the instant application-as-filed. If this box is checked, the USPTO will not be providing a participating foreign IP office with any documents and information identified in subsection 1A above.

☐ B. Applicant **DOES NOT** authorize the USPTO to transmit to the EPO any search results from the instant patent application. If this box is checked, the USPTO will not be providing the EPO with search results from the instant application.

NOTE: Once the application has published or is otherwise publicly available, the USPTO may provide access to the application in accordance with 37 CFR 1.14.

PTO/AIA/14 (02-18)
Approved for use through 11/30/2020. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	SMITH070AG
	Application Number	
Title of Invention	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT	

Applicant Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.

Applicant 1 — Remove

If the applicant is the inventor (or the remaining joint inventor or inventors under 37 CFR 1.45), this section should not be completed. The information to be provided in this section is the name and address of the legal representative who is the applicant under 37 CFR 1.43; or the name and address of the assignee, person to whom the inventor is under an obligation to assign the invention, or person who otherwise shows sufficient proprietary interest in the matter who is the applicant under 37 CFR 1.46. If the applicant is an applicant under 37 CFR 1.46 (assignee, person to whom the inventor is obligated to assign, or person who otherwise shows sufficient proprietary interest) together with one or more joint inventors, then the joint inventor or inventors who are also the applicant should be identified in this section.

Clear

● Assignee	Legal Representative under 35 U.S.C. 117	Joint Inventor
Person to whom the inventor is obligated to assign.	Person who shows sufficient proprietary interest	

If applicant is the legal representative, indicate the authority to file the patent application, the inventor is:

Name of the Deceased or Legally Incapacitated Inventor:

If the Applicant is an Organization check here. ☒

Organization Name	P4TENTS1, LLC		
Mailing Address Information For Applicant:			
Address 1	1201 Orange St.		
Address 2	#600		
City	Wilmington	**State/Province**	DE
Country	US	Postal Code	19899
Phone Number		Fax Number	
Email Address			

Additional Applicant Data may be generated within this form by selecting the Add button. Add

Assignee Information including Non-Applicant Assignee Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.

PTO/AIA/14 (02-18)
Approved for use through 11/30/2020. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	SMITH070AG
	Application Number	
Title of Invention	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT	

Assignee 1

Complete this section if assignee information, including non-applicant assignee information, is desired to be included on the patent application publication. An assignee-applicant identified in the "Applicant Information" section will appear on the patent application publication as an applicant. For an assignee-applicant, complete this section only if identification as an assignee is also desired on the patent application publication.

Remove

If the Assignee or Non-Applicant Assignee is an Organization check here. ☐

Prefix	Given Name	Middle Name	Family Name	Suffix

Mailing Address Information For Assignee including Non-Applicant Assignee:

Address 1			
Address 2			
City		State/Province	
Country i		Postal Code	
Phone Number		Fax Number	
Email Address			

Additional Assignee or Non-Applicant Assignee Data may be generated within this form by selecting the Add button. Add

Signature:

Remove

NOTE: This Application Data Sheet must be signed in accordance with 37 CFR 1.33(b). **However, if this Application Data Sheet is submitted with the INITIAL filing of the application and either box A or B is not checked in subsection 2 of the "Authorization or Opt-Out of Authorization to Permit Access" section, then this form must also be signed in accordance with 37 CFR 1.14(c).**

This Application Data Sheet **must** be signed by a patent practitioner if one or more of the applicants is a **juristic entity** (e.g., corporation or association). If the applicant is two or more joint inventors, this form must be signed by a patent practitioner, **all** joint inventors who are the applicant, or one or more joint inventor-applicants who have been given power of attorney (e.g., see USPTO Form PTO/AIA/81) on behalf of **all** joint inventor-applicants.

See 37 CFR 1.4(d) for the manner of making signatures and certifications.

Signature	/Patrick Caldwell/			Date (YYYY-MM-DD)	2018-10-24
First Name	Patrick	Last Name	Caldwell	Registration Number	44580

Additional Signature may be generated within this form by selecting the Add button. Add

PTO/AIA/14 (02-18)
Approved for use through 11/30/2020. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	SMITH070AG
	Application Number	
Title of Invention	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT	

This collection of information is required by 37 CFR 1.76. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 23 minutes to complete, including gathering, preparing, and submitting the completed application data sheet form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1 The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3 A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent CooperationTreaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

ABSTRACT

A system, method, and computer program product are provided for operating a mobile device including a touch screen, a memory, and a vibratory feedback mechanism coupled to at least one processor. A plurality of applications including an application is stored, utilizing the memory. Indicia is displayed, utilizing the touchscreen. A first pressure signal indicative of a first magnitude of pressure being applied to the touch screen is identified in connection with the indicia. In response to the first pressure signal indicative of the first magnitude of pressure being applied to the touch screen, a first state is identified, utilizing the at least one processor. In response to the identification of the first state, an operation is performed, utilizing the at least one processor. A second pressure signal is identified indicative of a second magnitude of pressure being applied to the touch screen that is greater than the first magnitude, in connection with the indicia. In response to the second pressure signal indicative of the second magnitude of pressure being applied to the touch screen, a second state is identified, utilizing the at least one processor. In response to the identification of the second state, the mobile device is vibrated, utilizing the vibratory feedback mechanism. In response to the identification of the second state, another operation is performed. Also identified is a third pressure signal indicative of a pressure being applied to the touch screen that is greater than the first magnitude, in connection with the indicia. In response to the third pressure signal indicative of the pressure being applied to the touch screen that is greater than the first magnitude, a third state is identified. In response to the identification of the third state, the mobile device is vibrated. Also in response to the identification of the third state, content associated with the indicia is opened.

CLAIMS

What is claimed is:

1. An apparatus, comprising:

a mobile device including a touch screen, a memory, and a vibratory feedback mechanism coupled to at least one processor;

said memory configured to store a plurality of applications including an application;

said touch screen configured to cooperate with the at least one processor to display indicia;

said touch screen configured to cooperate with the at least one processor to receive a first pressure signal indicative of a first magnitude of pressure being applied to the touch screen, in connection with the indicia;

said at least one processor configured to, in response to the first pressure signal indicative of the first magnitude of pressure being applied to the touch screen, identify a first state;

said touch screen configured to cooperate with the at least one processor to, in response to the identification of the first state, performing an operation;

said touch screen configured to cooperate with the at least one processor to receive a second pressure signal indicative of a second magnitude of pressure being applied to the touch screen that is greater than the first magnitude, in connection with the indicia;

said at least one processor configured to, in response to the second pressure signal indicative of the second magnitude of pressure being applied to the touch screen that is greater than the first magnitude, identify a second state;

said vibratory feedback mechanism configured to cooperate with the at least one processor to, in response to the identification of the second state, vibrate the mobile device;

said touch screen configured to cooperate with the at least one processor to, in response to the identification of the second state, performing another operation;

said touch screen configured to cooperate with the at least one processor to receive a third pressure signal indicative of a pressure being applied to the touch screen that is greater than the first magnitude;

said at least one processor configured to, in response to the third pressure signal indicative of the pressure being applied to the touch screen that is greater than the first magnitude, identify a third state;

said vibratory feedback mechanism configured to cooperate with the at least one processor to, in response to the identification of the third state, vibrate the mobile device;

said touch screen configured to cooperate with the at least one processor to, in response to the identification of the third state, open content associated with the indicia.

2. The apparatus of Claim 1, wherein:

said touch screen is configured to cooperate with the at least one processor to receive a slide gesture signal indicative of a slide gesture being applied to the touch screen;

said at least one processor is configured to, in response to the slide gesture signal indicative of the slide gesture being applied to the touch screen, identify an intermediate state;

said touch screen is configured to cooperate with the at least one processor to, in response to the identification of the intermediate state, display at least one menu including a plurality of particular actions;

said touch screen is configured to cooperate with the at least one processor to receive a selection signal indicative of pressure being applied to the touch screen, in connection with at least one of the particular actions; and

said at least one processor configured to, in response to the selection signal, execute the at last one particular action.

3. The apparatus of Claim 2, wherein the apparatus is configured such that the intermediate state is intermediate between the second state and the third state.

4. The apparatus of Claim 2, wherein the apparatus is configured such that the touch screen is configured to cooperate with the at least one processor to receive the slide gesture signal indicative of the slide gesture being applied to the touch screen, after the second pressure signal and before the third pressure signal.

5. The apparatus of Claim 2, wherein the apparatus is configured such that the particular actions include at least one user-specific action.

6. The apparatus of Claim 2, wherein the apparatus is configured such that the at least one menu permits user access to the particular actions associated with the application while avoiding launching the application, at least in part.

7. The apparatus of Claim 2, wherein the apparatus is configured such that the indicia includes a web hyperlink, the application includes a web browser application, and the particular actions include an open action and a copy action associated with the application.

8. The apparatus of Claim 2, wherein the apparatus is configured such that the indicia includes a date hyperlink, the application includes a calendar application, and the particular actions include a create action associated with the application.

9. The apparatus of Claim 2, wherein the apparatus is configured such that the indicia includes at least one hyperlinked aspect of a contact, and the particular actions include a first communication type action and a second communication type action.

10. The apparatus of Claim 2, wherein the apparatus is configured such that the indicia includes a physical address hyperlink, the application includes a navigation application, and the particular actions include showing a physical address utilizing the navigation application.

11. The apparatus of Claim 2, wherein the apparatus is configured such that the indicia includes media, the application includes a media application, and the particular actions include a play action associated with the application.

12. The apparatus of Claim 2, wherein the apparatus is configured such that the indicia includes an e-mail, the application includes an e-mail application, and the particular actions include a reply action and a forward action associated with the application.

13. The apparatus of Claim 2, wherein the apparatus is configured such that the indicia includes content-specific indicia associated with the content, and the content associated with the indicia is opened in response to the identification of the third state utilizing the application.

14. The apparatus of Claim 1, wherein the apparatus is configured such that the third pressure signal is a continuation of the second pressure signal.

15. The apparatus of Claim 1, wherein the apparatus is configured such that the second pressure signal and the third pressure signal are part of the same gesture.

16. The apparatus of Claim 1, wherein the apparatus is configured such that the content is opened in an associated application so that a user is capable of scrolling through the content.

17. The apparatus of Claim 1, wherein the apparatus is configured such that at least one of:

said touch screen includes a touch interface and a display;

said touch screen is a combination of a touch interface and a display;

said touch screen is on a front face of the mobile device;

said states each include a selection state;

said third magnitude is also greater than the second magnitude;

said third magnitude is the same as the second magnitude;

said indicia includes a user interface control widget;

said indicia includes a selectable graphic;

each pressure results from a touch event;

each pressure is in connection with a gesture input; or

said vibratory feedback mechanism includes a vibrator.

GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] The present application is a continuation of and claims priority to U.S. Patent Application No. 15/072,354, filed 03/16/2016 which, in turn, is a continuation of and claims priority to U.S. Patent Application No. 13/567,004, filed 08/03/2012, now U.S. Pat. No.: 9,417,754; which, in turn, claims priority to U.S. Provisional Application No. 61/515,835, filed August 5, 2011, U.S. Provisional Application No. 61/566,577, filed December 2, 2011, U.S. Provisional Application No.61/569,213, filed December 9, 2011, and U.S. Provisional Application No. 61/581,918, filed December 30, 2011, the entire contents of all of which are incorporated herein by reference.

[0002] If any definitions (e.g., figure reference signs, specialized terms, examples, data, information, etc.) from any related material (e.g., parent application, other related application, material incorporated by reference, material cited, extrinsic reference, etc.) conflict with this application (e.g., abstract, description, summary, claims, etc.) for any purpose (e.g., prosecution, claim support, claim interpretation, claim construction, etc.), then the definitions in this application shall apply.

BACKGROUND AND FIELD OF INVENTION

[0003] Embodiments of the present invention generally relate to touch screens.

BRIEF SUMMARY

[0004] A system, method, and computer program product are provided for operating a mobile device including a touch screen, a memory, and a vibratory feedback mechanism coupled to at least one processor. A plurality of applications including an application is stored, utilizing the memory. Indicia is displayed, utilizing the touchscreen. A first pressure signal indicative of a first magnitude of pressure being applied to the touch screen is identified in connection with the indicia. In response to the first pressure signal indicative of the first magnitude of pressure being applied to the touch screen, a first state is identified, utilizing the at least one processor. In response to the identification of the first state, an operation is performed, utilizing the at least one processor. A second pressure signal is identified indicative of a second magnitude of pressure being applied to the touch screen that is greater than the first magnitude, in connection with the indicia. In response to the second pressure signal indicative of the second magnitude of pressure being applied to the touch screen, a second state is identified, utilizing the at least one processor. In response to the identification of the second state, the mobile device is vibrated, utilizing the vibratory feedback mechanism. In response to the identification of the second state, another operation is performed. Also identified is a third pressure signal indicative of a pressure being applied to the touch screen that is greater than the first magnitude, in connection with the indicia. In response to the third pressure signal indicative of the pressure being applied to the touch screen that is greater than the first magnitude, a third state is identified. In response to the identification of the third state, the mobile device is vibrated. Also in response to the identification of the third state, content associated with the indicia is opened.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

[0005] So that the features of various embodiments of the present invention can be understood, a more detailed description, briefly summarized above, may be had by reference to various embodiments, some of which are illustrated in the accompanying drawings. It is to be noted, however, that the accompanying drawings illustrate only embodiments and are therefore not to be considered limiting of the scope of various embodiments of the invention, for the invention may admit to other effective embodiments. The following detailed description makes reference to the accompanying drawings that are now briefly described.

[0006] So that the features of various embodiments of the present invention can be understood, a more detailed description, briefly summarized above, may be had by reference to various embodiments, some of which are illustrated in the accompanying drawings. It is to be noted, however, that the accompanying drawings illustrate only embodiments and are therefore not to be considered limiting of the scope of the invention, for the invention may admit to other effective embodiments. The following detailed description makes reference to the accompanying drawings that are now briefly described.

[0007] Figure 1 illustrates a network architecture, in accordance with one embodiment.

[0008] Figure 2 shows a representative hardware environment that may be associated with the servers and/or clients of Figure 1, in accordance with one embodiment.

[0009] Figure 3 shows a method for altering a user experience based on a received signal, in accordance with one embodiment.

[0010] Figure 4 shows a method for defining a selection made within a user interface based in part on contact pressure, in accordance with one embodiment.

[0011] Figure 5 shows a pressure-sensitive user interface for making a selection, in accordance with one embodiment.

[0012] Figure 6 shows a method for determining the context of a contact pressure-based selection and choosing an appropriate selection function, in accordance with one embodiment.

[0013] Figure 7 shows a device having a backtouch interface, in accordance with one embodiment.

[0014] Figure 8 shows a method for providing feedback to the user of a backtouch interface, in accordance with one embodiment.

[0015] Figure 9 shows a pressure-sensitive user interface for making a selection using a backtouch interface, in accordance with one embodiment.

[0016] Figure 10 shows a user interface for defining settings associated with a backtouch interface, in accordance with one embodiment.

[0017] Figure 11 shows a user interface for defining settings associated with a pressure-sensitive interface, in accordance with one embodiment.

[0018] Figure 12 shows a method for assisting a user in defining touch states, in accordance with one embodiment.

[0019] Figure 13 shows a user interface for assisting a user in defining touch states, in accordance with one embodiment.

[0020] Figure 14 shows a user interface for indicating that a backtouch or pressure-sensitive interface is activated, in accordance with one embodiment.

[0021] Figure 15 shows a user interface for defining a backtouch feedback style, in accordance with one embodiment.

[0022] Figure 16 shows an alternative method for defining a selection made within a user interface based in part on contact pressure, in accordance with one embodiment.

[0023] Figure 17 shows a user interface for performing operations on a selection, in accordance with one embodiment.

[0024] Figure 18 shows a method for utilizing contact pressure-based gestures, in accordance with one embodiment.

[0025] Figure 19 shows an example of a contact pressure-based gesture for scrolling a text field, in accordance with one embodiment.

[0026] Figure 20 shows an example of a multitouch pressure gesture for indicating a direction, in accordance with one embodiment.

[0027] Figure 21 shows an example of a multitouch pressure gesture for indicating a rotation, in accordance with one embodiment.

[0028] Figure 22 shows a 3D layered user interface, in accordance with one embodiment.

[0029] Figure 23 shows exemplary pattern-based gestures, in accordance with one embodiment.

[0030] Figure 24 shows a user interface for defining custom gestures, in accordance with one embodiment.

[0031] While the invention is susceptible to various modifications, combinations, and alternative forms, various embodiments thereof are shown by way of example in the drawings and will herein be described in detail. It should be understood, however, that the accompanying drawings and detailed description are not intended to limit the invention to the particular form disclosed, but on the

contrary, the intention is to cover all modifications, combinations, equivalents and alternatives falling within the spirit and scope of the present invention as defined by the relevant claims.

DETAILED DESCRIPTION

[0032] Terms that are special to the field of the invention or specific to this description may, in some circumstances, be defined in this description. Further, the first use of such terms (which may include the definition of that term) may be highlighted in italics just for the convenience of the reader. Similarly, some terms may be capitalized, again just for the convenience of the reader. It should be noted that such use of italics and/or capitalization and/or other formatting, highlighting etc, by itself, should not be construed as somehow limiting such terms: beyond any given definition, and/or to any specific embodiments disclosed herein, etc.

[0033] In this description there may be multiple figures that depict similar structures with similar parts or components. Thus, as an example, to avoid confusion an Object in Figure 1 may be labeled and/or referenced as "Object (1)" and a similar, but not identical, Object in Figure 2 is labeled and/or referenced as "Object (2)", etc. Again, it should be noted that use of such labeling and reference manner, by itself, should not be construed as somehow limiting such terms: beyond any given definition, and/or to any specific embodiments disclosed herein, etc.

[0034] In the following detailed description and in the accompanying drawings, specific terminology and images are used in order to provide a thorough understanding. In some instances, the terminology and images may imply specific details that are not required to practice all embodiments. Similarly, the embodiments described and illustrated are representative and should not be construed as precise representations, as there are prospective variations on what is disclosed that may be obvious to someone with skill in the art. Thus this disclosure is not limited to the specific embodiments described and shown but embraces all prospective variations that fall within its scope. For brevity, not all steps may be detailed, where such details will be known to someone with skill in the art having benefit of this disclosure.

[0035] In the following detailed description and in the accompanying drawings, some embodiments and their constituent parts may have been simplified for clarity of explanation. In some cases, a complex system may be broken down into its constituent parts and pieces and each part or piece explained separately. The explanations for each part or piece may possibly use a separate figure along with accompanying text to describe variations and alternative implementations. In some cases, complex elements have been simplified to more clearly define their function. In many cases, a system may be comprised of multiple complex elements with each element being a more complex version of a simple part or piece that has been explained separately. It is not possible to describe

every possible combination of complex elements in all possible systems. Thus, the description herein is not limited to just the specific embodiments of parts or pieces described with each figure or in an accompanying explanation, or even those example systems described, but rather the possible combinations of complex elements based on the parts and pieces described.

[0036] Definitions

[0037] A computer system (e.g., a host system, host, computer, etc.) may include one or more storage systems (or storage subsystems, disk systems, disk subsystems, etc.) that may include storage arrays that include storage devices. A storage device may include a solid-state storage device, hard-disk drive (HD or HDD), or other device (e.g., tape, optical media, etc.).

[0038] A solid-state storage device may refer to a solid-state disk (SSD), but the solid-state storage device is not necessarily an SSD. A solid-state storage device may, for example, comprise memory devices such as flash memory devices (e.g., NAND, NOR, MLC, SLC, etc.), but may also comprise other forms of solid-state memory devices or memory components (e.g., SRAM, DRAM, MRAM, volatile memory, non-volatile memory, etc.), a combination of different types of solid-state components and/or other memory devices, or a combination of solid-state memory with other types of storage devices (e.g., hybrid disk, etc.). An SSD may be in a form-factor that is a drop-in replacement for a hard-disk (3.5", 2.5" form factors, etc.) or may be in any other form-factor or with any interface (e.g., Compact Flash CF, MultiMediaCard MMC, miniSD, Memory Stick, SmartMedia, TransFlash, Secure Digital SD, DIMM or other memory module form factor, PCI Express Card, mini PCI-E card, etc.). An SSD may use a standard storage interface (e.g., IDE, SAS, SATA, etc.) or an IO bus interface (e.g., PCI, PCI-E, USB, LightPeak, etc.), a networking interface (e.g., Ethernet, FCoE, Infiniband, etc.), a CPU bus interface (e.g., Intel QPI, HyperTransport, etc.), or other interface (e.g., PCI-E over Ethernet, etc.). An SSD in a storage array may have a capacity of more than 100 Gbytes and contain tens of NAND flash memory chips. A typical 1 Gbit NAND flash memory chip may contain 1024 flash blocks with each flash block containing 64 flash pages and each flash page containing 2 kbytes.

[0039] Storage arrays may also include a combination of SSD and HDD, or combinations of various storage devices (e.g., magnetic, optical, tape, solid-state, etc.).

[0040] A solid-state storage device may use a disk controller (e.g., storage controller, controller, ASIC, other chips component(s), etc.) to provide the computer system with a standard storage (e.g., disk, storage networking, etc.) interface (e.g., IDE, SATA, SAS, Fibre Channel (FC), etc.), a standard peripheral (e.g., IO bus, IO attach, etc.) interface (e.g., PCI-E, USB, PCI Express, PCI,

etc.), other standard interface (e.g., Ethernet, wireless 802.11, etc.), a proprietary (e.g., non-standard, etc.) interface, a combination of these (e.g., PCI-E over Ethernet, FC over Ethernet (FCoE), etc.), or other storage, networking, interconnect interface(s) etc.

[0041] A storage array controller (often also called disk controller, host-bus adapter, etc.) may be logically located between the computer system and one or more SSDs or HDDs in a disk subsystem. In the context of the present description, the use of the term disk controller has been avoided as a term to describe a controller that controls one or more disks. The term storage array controller has been used herein for a controller that controls one or more disks. In some cases, each disk (HDD or SSD etc.) may have its own disk controller, thus causing potential confusion over terms. Alternative terms for storage array controller may include host-bus adapter, host adapter, host controller. However, the term host-bus adapter (often abbreviated HBA) and similar terms have been avoided herein to avoid confusion with HBA used here for host block address.

[0042] An SSD may include its own SSD controller, but, in some cases, a storage array controller may have more resources than an SSD controller. A storage array controller may use resources, such as memory, CPU, logic, non-volatile memory, etc., as well as unique information (e.g., because a storage array controller is higher than the SSD controller in the storage array hierarchy, i.e., further from the storage devices) in order to manage and control a storage array as well as provide information to an SSD controller.

[0043] A computer system typically contains one or more CPUs. A CPU may execute (e.g., run, etc.) an operating system (e.g., Microsoft Windows, Linux, MacOS, etc.). An operating system (OS) typically sees a storage array as a collection of disk sectors or just sectors (and sectors may also be called blocks). Disk sectors may be 512 bytes in length (and typically are in the 2011 timeframe). The sectors or blocks of a storage device are typically addressed as logical blocks using a logical block address (LBA).

[0044] To avoid confusion, the term host block address (HBA) is used herein for the LBA used to address a storage array controller. Unless explicitly stated otherwise, it is assumed that the host block size (HBS) is equal to the disk block size (DBS). The HBA may be a composite or union of a logical unit number (LUN) that identifies a logical portion of the storage array or disk or other device in the storage array; an LBA; the virtual machine (VM), if any; a UserID that identifies the user application; a VolumeID that identifies a logical target volume; and other data that may be used for logical access or management purposes. To simplify the description, clarify the figures, and in

particular to make it clear that operations may be performed on different LUNs, the LUN may be shown separately from HBA in figures.

[0045] A disk number (D) may identify a disk or other storage device in the storage array. A disk logical block address (DBA) is the LBA that identifies the disk sector on the disk or other storage device. An array block address (ABA) is a composite or union of D and DBA, written <D, DBA>. The storage array may be a RAID array, JBOD, or any other particular type of storage array.

[0046] A disk controller for an HDD or SSD maintains the relationship between an ABA (or the DBA portion of the ABA) and the disk sectors that are physically part of a storage device (often called the physical disk sectors or physical sectors).

[0047] To summarize, with just a single disk, the host may provide an LBA directly to the disk; the disk controller may convert the LBA to the physical disk sector (e.g., for an HDD) or to the PBN (e.g.,for an SSD). In the presence of a storage array controller the host may still provide an LBA, but now to the storage array controller (and thus the LBA may be referred to as an HBA to avoid confusion); the storage array controller may then map this HBA to an ABA and may provide the ABA (or possibly just the DBA portion of the ABA) to the disk; the disk (e.g., an HDD or SSD, etc.) may then convert this DBA or ABA (treating the DBA portion of the ABA as though it were just an LBA, which it is) to a physical disk address: either the physical disk sector (e.g., for an HDD) or PBN (e.g., for an SSD).

[0048] In various embodiments, structures and their functions, operations and algorithms (e.g., methods, functions, etc.) may be described in terms of software operations, code and pseudo-code. It should be noted that the algorithms may be performed in hardware; software; firmware; microcode; a combination of hardware, software, firmware or microcode; or in any other manner that performs the same function and/or has the same effect. In various embodiments, the data structures, or parts of the structures, may be stored in the storage array controller in SRAM, DRAM, embedded flash, or other memory. Additionally, the data structures, or parts of them, may be stored outside the storage array controller. For example, the data structures may be stored on any of the storage devices of a storage array (the local storage or remote storage, i.e., remote from the storage array connected to the storage array controller) or on a host system (the local host or a remote host, i.e., remote from the host connected to the storage array controller).

[0049] A storage command may be directed to a storage device and may specify one or more operations, such as read, write, etc. A storage command may be referred to as a disk command or just command. To help prevent such confusion, the term storage command may be used when

referencing commands in general. The term disk command (or disk write, etc.) may be utilized for the command as it arrives at (or is received by) the disk (either SSD or HDD, usually via a standard interface or storage bus, such as SATA, etc.). The term host command (or host write, etc.) may be utilized for the command as it leaves (or is transmitted by) the OS. A disk command may be the same as a host command when there is a direct connection between the OS on a host system and a single disk.

[0050] A storage array controller may perform certain functions instead of (or in addition to) an OS running on a host system; and a storage array controller may also perform certain functions instead of (or in addition to) disk controller(s) in a storage array. A storage array controller may be logically located between a host system and storage array (or disk subsystem, storage subsystem, etc.). Each disk may contain its own disk controller, but a storage array controller may have more resources than a disk controller. The algorithms described here allow a storage array controller and attached storage accelerator units (SAUs) to use resources, such as memory, non-volatile memory, etc., as well as unique information (because a storage array controller is higher than a disk controller in a storage array hierarchy, i.e., further from the storage devices) in order to manage and control a storage array as well as provide information to disk controller(s). For example, a storage array controller may be aware of LUNs but a disk controller may not be aware of LUNs. This hierarchical management approach has advantages and potential uses that are explained throughout this description in the forms of various algorithms that may be employed by themselves or in combination.

[0051] A device driver is typically (though not necessarily) software that may be manufactured with and sold with a storage array controller. In various embodiments, the device driver may be implemented in software, hardware, firmware or a combination, and may be designed, manufactured and/or sold separately.

[0052] In one embodiment, a computer system may comprise multiple virtual machines (VMs), each VM including an operating system, and a hypervisor.

[0053] Each OS may include a file system and one or more storage drivers. The file system (sometimes considered part of an OS) may translate or convert from file-based access (i.e., in terms of directories, file names and offsets, etc.) to disk-based access (i.e., in terms of LBAs etc.). The storage driver (sometimes considered part of an OS) may be responsible for handling a disk or other storage device(s). The storage driver may be separate and distinct from the device driver. The

storage driver may or may not be part of a storage stack, which is the software that controls access to a file system.

[0054] In the context of solid-state storage, typically flash memory, when a flash page (or some other portion) of a storage device is no longer required (i.e., it is obsolete, no longer valid, or is invalid, etc.) that flash page may be marked as dirty. When an entire flash block (e.g., typically between 16 to 256 flash pages) is dirty, the entire flash block may be erased and free space may be reclaimed. If free space on the device is low, a flash block may be chosen that has some dirty flash pages and some clean (i.e., pages that are not dirty, are good, or valid, etc.) flash pages. The clean flash pages may be transferred (i.e., written, moved or copied) to a new flash block. All the original clean flash pages may be marked as dirty and the old flash block may be erased. In the context of solid-state storage, this process of transferring flash pages to new flash blocks and erasing old flash blocks may be referred to as garbage collection

[0055] Example embodiments described in this disclosure include one or more computer systems with one or more central processor units (CPUs) and possibly one or more I/O systems coupled to one or more storage systems that contain one or more storage array controllers and one or more storage devices.

[0056] In one embodiment, the storage system may include one or more bus structures. Depending on the constraints (e.g., signaling methods used, the intended operating frequencies, space, power, cost, and other constraints, etc.) various alternate bus structures may be used. A point-to-point bus may provide the optimal performance in systems requiring high-speed interconnections, due to the reduced signal degradation compared to bus structures having branched signal lines, switch devices, or stubs. However, when used in systems requiring communication with multiple devices or subsystems, a point-to-point or other similar bus will often result in significant added cost (e.g., component cost, board area, increased system power, etc.) and may reduce the potential memory density due to the need for intermediate devices (e.g., buffers, re-drive circuits, etc.).

[0057] Functions and performance similar to that of a point-to-point bus can be obtained by using switch devices. Switch devices and other similar solutions offer advantages (e.g., increased memory packaging density, lower power, etc.) while retaining many of the characteristics of a point-to-point bus. Multi-drop bus solutions provide an alternate solution, and though often limited to a lower operating frequency can offer a cost/performance advantage for many applications. Optical bus solutions permit significantly increased frequency and bandwidth potential, either in point-to-point or multi-drop applications, but may incur cost and space impacts.

[0058] Although not necessarily shown in all the Figures, the storage systems may also include one or more separate control (e.g., command distribution, information retrieval, data gathering, reporting mechanism, signaling mechanism, register read/write, configuration, etc.) buses (e.g., a presence detect bus, an I2C bus, an SMBus, combinations of these and other buses or signals, etc.) that may be used for one or more purposes including the determination of the storage device and/or storage system attributes (generally after power-up), the reporting of fault or other status information to part(s) of the system, calibration, temperature monitoring, the configuration of storage device(s) and/or storage subsystem(s) after power-up or during normal operation or for other purposes. Depending on the control bus characteristics, the control bus(es) might also provide a means by which the valid completion of operations could be reported by storage device(s) to the storage controller(s), or the identification of failures occurring during the execution of storage controller requests, etc.

[0059] As used herein, the term bus refers to one of the sets of conductors (e.g., signals, wires, traces, and printed circuit board traces or connections in an integrated circuit) connecting two or more functional units in a computing system. The data bus, address bus and control signals may also be referred to together as constituting a single bus. A bus may include a plurality of signal lines (or signals), each signal line having two or more connection points that form a main transmission line that electrically connects two or more transceivers, transmitters and/or receivers.

[0060] As used herein, a signal (or line, signal line, etc.) refers to one or more electrical conductors or optical carriers, generally configured as a single carrier or as two or more carriers, in a twisted, parallel, or concentric arrangement, used to transport at least one logical signal. A logical signal may be multiplexed with one or more other logical signals generally using a single physical signal but logical signal(s) may also be multiplexed using more than one physical signal.

[0061] As used herein, memory devices are generally defined as integrated circuits that are composed primarily of memory (e.g., storage, etc.) cells, such as DRAMs (Dynamic Random Access Memories), SRAMs (Static Random Access Memories), FeRAMs (Ferro-Electric RAMs), MRAMs (Magnetic Random Access Memories), Flash Memory (e.g., NAND flash, NOR flash, etc.) and other forms of random access and related memories that store information in the form of electrical, optical, magnetic, chemical, biological, combination(s) of these, and/or in other forms.

[0062] Dynamic memory device types may include FPM DRAMs (Fast Page Mode Dynamic Random Access Memories), EDO (Extended Data Out) DRAMs, BEDO (Burst EDO) DRAMs, SDR (Single Data Rate) Synchronous DRAMs, DDR (Double Data Rate) Synchronous DRAMs,

DDR2, DDR3, DDR4, or any of the expected follow-on devices and related technologies such as Graphics RAMs, Video RAMs, LP RAM (Low Power DRAMs) which are often based on the fundamental functions, features and/or interfaces found on related DRAMs.

[0063] Flash memory device types may include: NAND, NOR, SLC, MLC, TLC using any interface (e.g., standard interface (e.g., ONFI, etc.); non-standard interface; etc.). Flash memory device types may also include any of the expected follow-on devices and related technologies.

[0064] Memory devices may include chips (die) and/or single or multi-chip or multi-die packages of various types, assemblies, forms, and configurations. In multi-chip packages, the memory devices may be packaged with other device types (e.g., other memory devices, logic chips, CPUs, hubs, buffers, intermediate devices, analog devices, programmable devices, etc.) and may also include passive devices (e.g., resistors, capacitors, inductors, etc.). These multi-chip packages may include cooling enhancements (e.g., an integrated heat sink, heat slug, fluids, gases, micromachined structures, micropipes, capillaries, etc.) that may be further attached to the carrier or another nearby carrier or other heat removal or cooling system. Other forms of packaging (e.g., assemblies, modules, cards, units, molding, encapsulation, etc.) for memory devices are also possible.

[0065] Although not necessarily shown in all the Figures, storage and memory support devices (e.g., storage controller(s), network controller(s), chipset(s), adapter(s), expander(s), buffer(s), buffer circuit(s), buffer chip(s), register(s), intermediate circuit(s), power supply regulator(s), VRMs, hub(s), re-driver(s), PLL(s), DLL(s), non-volatile memory, SRAM, DRAM, logic circuits, analog circuits, digital circuits, diodes, switches, LEDs, crystals, active components, passive components, combinations of these and other circuits, etc.) may be comprised of multiple separate chips (e.g., die, dies, dice, integrated circuits, etc.) and/or components, may be combined as multiple separate chips onto one or more substrates, may be combined into a single package (e.g., using die stacking, multi-chip packaging, etc.) or even integrated onto a single device based on tradeoffs such as: technology, power, space, weight, cost, etc.

[0066] One or more of the various passive devices (e.g., resistors, capacitors, inductors, combination(a) of these, etc.) may be integrated into the support chip packages, or into the substrate, board, PCB, or raw card itself, based on tradeoffs such as: technology, power, space, cost, weight, etc. These packages may include an integrated heat sink or other cooling enhancements (e.g., such as those described above, etc.) that may be further attached to the carrier or another nearby carrier or other heat removal or cooling system.

[0067] Memory and storage devices, intermediate devices and circuits, hubs, buffers, registers, clock devices, passives and other memory and storage support devices etc. and/or other components may be attached (e.g., coupled, connected, etc.) to the storage system(s) and/or subsystem(s) and/or other component(s) via various methods including solder interconnects, conductive adhesives, socket structures, pressure contacts, electrical/mechanical/optical and/or other methods that enable communication between two or more devices (e.g., via electrical, optical, wireless, combinations of these, or alternate means, etc.).

[0068] The one or more storage system(s) and/or subsystem(s) and/or other components/devices may be connected (e.g., electrically, optically, wireless, etc.) to the CPU complex, computer system or other system environment via one or more methods such as soldered interconnects, connectors, pressure contacts, conductive adhesives, optical interconnects (e.g., laser, LED, optic fiber, etc.), wireless links (e.g., coupling, coils, etc.) and/or other signal communication and/or power delivery methods. Physical connector systems may include mating connectors (male/female), conductive contacts and/or pins on one carrier mating with a male or female connector, optical connections, pressure contacts (often in conjunction with a retaining, alignment, and/or closure mechanism) and/or one or more of various other communication and power delivery methods. The interconnection(s) may be disposed along one or more edges of an assembly (e.g., module, card, adapter, etc.) and/or placed a distance from the storage or other subsystem depending on such application requirements as ease of upgrade, ease of repair, cost, available space and/or volume, heat transfer constraints, component size and shape and other related physical, electrical, optical, visual/physical access, requirements and constraints, etc. Electrical interconnections on a card are often referred to as contacts, pins, connection pins, tabs, etc. Electrical interconnections on a connector are often referred to as contacts or pins.

[0069] The integrity, reliability, availability, serviceability, performance etc. of a communication path, data storage contents, and all functional operations associated with each element of a storage system or storage subsystem may be improved by using one or more fault detection and/or correction methods. Any or all of the various elements of a storage system or storage subsystem may include error detection and/or correction methods such as CRC (cyclic redundancy code, or cyclic redundancy check), ECC (error-correcting code), EDC (error detecting code, or error detection and correction), LDPC (low-density parity check), parity, checksum or other encoding/decoding methods suited for this purpose. Further reliability enhancements may include operation re-try (e.g., repeat, re-send, etc.) to overcome intermittent or other faults such as those associated with the transfer of

information, the use of one or more alternate, stand-by, or replacement communication paths to replace failing paths and/or lines, complement and/or re-complement techniques or alternate methods used in computer, storage, communication, and related systems.

[0070] Additional functions that may reside local to the storage subsystem and/or storage system include write and/or read buffers, one or more levels of cache, protocol translation, error detection and/or correction circuitry, data scrubbing, local power management circuitry and/or reporting, operational and/or status registers, initialization circuitry, performance monitoring and/or control, and other functions.

[0071] Terminology

[0072] The terminology used herein is for the purpose of describing particular embodiments only and is not intended to be limiting of the invention. As used herein, the singular forms (e.g., a, an, the, etc.) are intended to include the plural forms as well, unless the context clearly indicates otherwise.

[0073] The terms comprises and/or comprising, when used in this specification, specify the presence of stated features, integers, steps, operations, elements, and/or components, but do not preclude the presence or addition of one or more other features, integers, steps, operations, elements, components, and/or groups thereof.

[0074] In the following description and claims, the terms include and comprise, along with their derivatives, may be used, and are intended to be treated as synonyms for each other.

[0075] In the following description and claims, the terms coupled and connected may be used, along with their derivatives. It should be understood that these terms are not necessarily intended as synonyms for each other. For example, connected may be used to indicate that two or more elements are in direct physical or electrical contact with each other. Further, coupled may be used to indicate that that two or more elements are in direct or indirect physical or electrical contact. For example, coupled may be used to indicate that that two or more elements are not in direct contact with each other, but the two or more elements still cooperate or interact with each other.

[0076] The corresponding structures, materials, acts, and equivalents of all means or step plus function elements in the claims below are intended to include any structure, material, or act for performing the function in combination with other claimed elements as specifically claimed. The description of the present invention has been presented for purposes of illustration and description, but is not intended to be exhaustive or limited to the invention in the form disclosed. Many modifications and variations will be apparent to those of ordinary skill in the art without departing from the scope and spirit of the invention. The embodiment was chosen and described in order to

best explain the principles of the invention and the practical application, and to enable others of ordinary skill in the art to understand the invention for various embodiments with various modifications as are suited to the particular use contemplated.

[0077] As will be appreciated by one skilled in the art, aspects of the present invention may be embodied as a system, method or computer program product. Accordingly, aspects of the present invention may take the form of an entirely hardware embodiment, an entirely software embodiment (including firmware, resident software, micro-code, etc.) or an embodiment combining software and hardware aspects that may all generally be referred to herein as a circuit, component, module or system. Furthermore, aspects of the present invention may take the form of a computer program product embodied in one or more computer readable medium(s) having computer readable program code embodied thereon.

[0078] In this description a portable multifunction device (a *device*) is used as an example. It should be understood, however, that one or more of the embodiments described herein may be applied to any device (e.g., consumer device, phone, phone system, cell phone, internet phone, music player, video player, camera, social interaction device, radios, TV, watch, personal communication device, electronic wallet, smart jewelry, personal computer, tablet, laptop computer, computer, server, embedded system, electronic glasses, displays, projector, computer appliance, kitchen appliance, home control appliance, lighting control, network device, router, switch, TiVO, AppleTV, GoogleTV, set-top box, cable box, modem, cable modem, PC, tablet, media box, streaming device, entertainment center, GPS device, automobile system, ATM, toy, gaming system, camera, video camera, music device, storage device, back-up device, exercise machine, e-book reader, PDA, combinations of these, etc.).

[0079] The device may support one or more *applications* e.g., search applications contacts and/or friends applications, messaging applications, telephone applications, video conferencing applications, e-mail applications, communications applications, voice recognition applications, instant messaging (IM) applications, blog and/or blogging applications, photographic applications (e.g., catalog, management, upload, editing, etc.), shopping, payment, digital camera applications, digital video camera applications, web browsing and browser applications, digital music player applications, digital video player applications, cloud applications, office productivity applications, backup and storage applications, other applications or combinations or multiple instances (e.g., versions, etc.) of these, etc.

[0080] Devices themselves may include (e.g., comprise, be capable of including, have features to include, have attachments, communicate with, etc.) one or more devices, e.g., as separate components, working in cooperation, as a collection of devices, as a multi-function device, with sockets or ports for extra devices and/or components, attached (e.g., direct attach, network attached, etc.) devices, upgrade components, expansion devices and/or modules, etc.

[0081] The device may have (e.g., execute, perform, capable of being programmed to perform, etc.) multiple functions (e.g., telephone, video conferencing, e-mail, instant messaging, blogging, digital photography, digital video, web browsing, digital music playing, social interaction, shopping, searching, combinations of these, etc.). Instructions for performing the device functions may be included in a computer readable storage medium or other computer program product configured for execution by one or more processors.

[0082] Language

[0083] The terminology and language used herein is for the purpose of describing particular embodiments only and is not intended to be limiting.

[0084] As used herein, the singular forms (e.g., a, an, the, one, etc.) are intended to include the plural forms as well, unless the context clearly indicates otherwise.

[0085] As used herein, the terms comprises and/or comprising, when used in this specification, specify the presence of stated features, numbers, integers, steps, operations, elements, and/or components, etc. but do not preclude the presence or addition of one or more other features, numbers, integers, steps, operations, elements, components, etc. and/or groups thereof.

[0086] In the following description and claims, the terms include and comprise, along with their derivatives, may be used, and are intended to be treated as synonyms for each other.

[0087] In the following description and claims, the terms coupled and connected may be used, along with their derivatives. It should be understood that these terms are not necessarily intended as synonyms for each other. For example, connected may be used to indicate that two or more elements are in direct physical or electrical contact with each other. Further, coupled may be used to indicate that that two or more elements are in direct or indirect physical or electrical contact. For example, coupled may be used to indicate that that two or more elements are not in direct contact with each other, but the two or more elements still cooperate or interact with each other.

[0088] The corresponding structures, materials, acts, and equivalents of all means or step plus function elements in the following claims are intended to include any structure, material, or act for performing the function in combination with other claimed elements as specifically claimed.

[0089] This description is presented for purposes of illustration and explanation, but is not intended to be exhaustive or limited to the invention in the forms disclosed. Modifications, permutations, combinations, and variations of embodiments will be understood and apparent to those of ordinary skill in the art without departing from the scope and spirit of this description.

[0090] The embodiments chosen and described herein are presented in order to best explain the principles of the embodiments and their practical applications, and to enable others of ordinary skill in the art to understand the embodiments with various modifications as are suited to the particular use contemplated.

[0091] As will be understood and appreciated by one skilled in the art, one or more embodiments described herein may be a system, device, method, or computer program product, etc. Accordingly, one or more embodiments described herein may take the form of an entirely hardware embodiment, an entirely software embodiment (including firmware, resident software, micro-code, etc.) or an embodiment combining software and hardware aspects that may all generally be referred to herein as a circuit, component, module or system. Furthermore, one or more embodiments described herein may take the form of a computer program product embodied in one or more computer readable medium(s) having computer readable program code embodied thereon.

[0092] Figure 1 illustrates a network architecture 100, in accordance with one embodiment. As shown, a plurality of networks 102 is provided. In the context of the present network architecture 100, the networks 102 may each take any form including, but not limited to a local area network (LAN), a wireless network, a wide area network (WAN) such as the Internet, peer-to-peer network, etc.

[0093] Coupled to the networks 102 are servers 104 which are capable of communicating over the networks 102. Also coupled to the networks 102 and the servers 104 is a plurality of clients 106. Such servers 104 and/or clients 106 may each include a desktop computer, lap-top computer, hand-held computer, mobile phone, personal digital assistant (PDA), tablet computer, peripheral (e.g., printer, etc.), any component of a computer, and/or any other type of logic. In order to facilitate communication among the networks 102, at least one gateway 108 is optionally coupled therebetween.

[0094] Figure 2 shows a representative hardware environment that may be associated with the servers 104 and/or clients 106 of Figure 1, in accordance with one embodiment. Such figure illustrates a typical hardware configuration of a mobile device in accordance with one embodiment

having a central processing unit 210, such as a microprocessor, and a number of other units interconnected via a system bus 212.

[0095] The mobile device shown in Figure 2 includes a Random Access Memory (RAM) 214, Read Only Memory (ROM) 216, an I/O adapter 218 for connecting peripheral devices such as disk storage units 220 to the bus 212, a user interface adapter 222 for connecting a keyboard 224, a mouse 226, a speaker 228, a microphone 232, and/or other user interface devices such as a touch screen (not shown) to the bus 212, communication adapter 234 for connecting the mobile device to a communication network 235 (e.g., a data processing network) and a display adapter 236 for connecting the bus 212 to a display device 238.

[0096] The mobile device may have resident thereon any desired operating system. It will be appreciated that an embodiment may also be implemented on platforms and operating systems other than those mentioned. One embodiment may be written using JAVA, C, Objective C, and/or C++ language, or other programming languages, along with an object oriented programming methodology. Object oriented programming (OOP) has become increasingly used to develop complex applications.

[0097] Of course, the various embodiments set forth herein may be implemented utilizing hardware, software, or any desired combination thereof. For that matter, any type of logic may be utilized which is capable of implementing the various functionality set forth herein.

[0098] Figure 3 shows a method 300, in accordance with one embodiment. As an option, the method may be implemented in the context of the architecture and environment of any subsequent Figure(s). Of course, however, the method may be implemented in any desired environment.

[0099] As shown in operation 302, a signal is received in association with a touch interface of a device. In one embodiment, the signal may include a pressure signal which is indicative of a magnitude of pressure. In the context of the present description, such pressure signal may include any signal that is a function of or related to a pressure applied to the device. In one embodiment, such pressure signal may be indicative of a magnitude of pressure being applied to a touch interface of the device. In various embodiments, such pressure signal may be generated by a pressure sensor including, but not limited to those described in the context of subsequently described embodiments, or any other mechanism, for that matter, that is capable of generating the pressure signal.

[00100] In other embodiments, the signal may include a touch signal indicative of a touch interface being touched. In the context of the present description, such touch signal may or may not be indicative of a magnitude of pressure being applied to a touch interface of the device. For

example, such touch signal may, in one embodiment, simply indicate whether applied pressure is sensed, or not, e.g., not necessarily gauge any more than two pressure states, including pressure-sensed and pressure-not-sensed, etc.

[00101] Also in the context of the present description, the aforementioned device may include any device including, but not limited to those described in the context of this and/or subsequently described embodiments. Further, in various embodiments, the touch interface may or may not be combined with a display. For example, if the touch interface is combined with a display, the touch interface may include a touch screen. Thus, the touch interface may, in various embodiments, include, but is not limited to a touch screen or any other interface responsive to touch that is described in the context of this and/or subsequently described embodiments.

[00102] In one optional embodiment, the touch interface may be positioned on a first face of a device that includes a display on a second face thereof. Further, the first face and second face may include any respective faces (e.g., front, back, left side, right side, top side, bottom side, etc.) that are different. Just by way of example, in various embodiments, the first face and the second face may be on opposite faces of the device of the device. Further, the first face may include a side face and the second face may include a front face of the device. Even still, the first face may include a back face and the second face may include a front face of the device. Of course, the touch interface may be positioned on the same face as the display, in other embodiments.

[00103] As indicated in operation 304, a user experience may be altered, utilizing the signal. In the context of the present description, the user experience may include any aspect of the device that is capable of being directly or indirectly experienced by a user including, but not limited to those described in the context of this and/or subsequently described embodiments.

[00104] For example, in the context of an embodiment involving the pressure signal, the user experience may be altered as a function of the magnitude of the pressure being applied to the touch interface, utilizing the pressure signal. Just by way of example, in various embodiments, the user experience may be altered by causing input to the device, by causing output from the device, by causing processing by the device, etc. In other embodiments involving a touch signal, the user experience may be altered in any manner, utilizing the touch signal (dependent or independent of any fluctuation of pressure).

[00105] Of course, the foregoing embodiments may be altered by adding and/or removing various features. For example, in one embodiment, the pressure signal may be received which is indicative of the magnitude of pressure being applied to a touch interface positioned on a first face of a device

that includes a display on a second face thereof. To this end, the user experience may be altered as a function of the magnitude of the pressure being applied to the touch interface, utilizing the pressure signal.

[00106] In another embodiment, a pressure signal may be received which is indicative of a magnitude of pressure being applied to a touch screen. To this end, the user experience may be altered as a function of the magnitude of the pressure being applied to the touch screen, utilizing the pressure signal. In still yet another optional embodiment, a touch signal may be received which is indicative of a touch interface being touched, where the touch interface is positioned on a first face of a device that includes a display on a second face thereof. To this end, the user experience may be altered, utilizing the touch signal. Again, any of the features described above (or hereinafter, for that matter) may or may not be combined in any desired manner.

[00107] More illustrative information will now be set forth regarding various optional architectures and features with which the foregoing techniques discussed in the context of any of the present or previous figure(s) may or may not be implemented, per the desires of the user. For instance, various optional examples and/or options associated with the operations 302 and/or 304, and/or other optional features have been and will be set forth in the context of a variety of possible embodiments. It should be strongly noted, however, that such information is set forth for illustrative purposes and should not be construed as limiting in any manner. Any of such features may be optionally incorporated with or without the inclusion of other features described.

[00108] Figure 4 shows a method 400 for defining a selection made within a user interface based in part on contact pressure, in accordance with one embodiment. As an option, the method 400 may be implemented in the context of the architecture and environment of the previous Figures or any subsequent Figure(s). Of course, however, the method 400 may be carried out in any desired environment. It should also be noted that the aforementioned definitions may apply during the present description.

[00109] As shown, it is determined whether sufficient initial contact pressure is being exerted on an interaction surface. See determination 402.

[00110] In the context of the present description, an interaction surface refers to a surface through which a user may interact with a device. It may take up the majority of a device face, or just a subset. In various embodiments, an interaction surface may be sensitive to one or more types of interaction, including but not limited to, contact, pressure, and/or proximity. In one embodiment, an interaction surface is receptive to multitouch input. In another embodiment, an interaction surface

may be non-planar. In yet another embodiment, an interaction surface may be transparent, and combined with a display. In still another embodiment, an interaction surface may be replaceable. Some embodiments of an interaction surface may have more than one texture, to provide tactile guides to a user when used on the back face of a device. Other embodiments of an interaction surface are non-rectangular.

[00111] In various embodiments, an interaction surface may utilize one or more forms of technology to sense contact. These contact-sensing technologies may include, but are not limited to, capacitive, resistive, optical, surface acoustic wave based, and/or any other contact sensing technologies now known or later developed.

[00112] In various embodiments, an interaction surface may utilize one or more forms of technology to sense proximity. These proximity-sensing technologies may include, but are not limited to, capacitive, resistive, eddy current, optical, ultrasonic, heat, electric field based, and/or any other contact sensing technologies now known or later developed.

[00113] In various embodiments, an interaction surface may utilize one or more forms of technology to sense pressure. These pressure-sensing technologies may include, but are not limited to, conductive, resistive, piezoelectric, and/or any other pressure sensing technologies now known or later developed. In some embodiments, an interaction surface may be able to only detect the total pressure being exerted on the surface. In other embodiments, an interaction surface may be able to discern the contact pressures associated with one or more points or areas of contact.

[00114] In the context of the present description, contact pressure is the pressure associated with one or more contact points or contact areas, the pressure being exerted on an interaction surface. For example, in one embodiment, contact pressure may be the pressure exerted on an interaction surface by a single finger press.

[00115] In the context of the present description, a contact area refers to the area of an interaction surface which is in physical contact with an implement of interaction. In various embodiments, the contact area may be described, stored, and processed, as a collection of cells that are part of an array. In one embodiment, this array may directly correspond to pixels of a display. In another embodiment, the array may correspond to a grid of discrete areas on an interaction surface which sense contact, pressure, or both. In still another embodiment, the contact area is represented as a primitive shape (e.g., circle, square, etc.) which best fits the actual area in contact with an implement of interaction.

[00116] In the context of the present description, an implement of interaction refers to an object which is detectable by an interaction surface in one or more ways (e.g., proximity, contact, pressure, etc.). In various embodiments, implements of interaction may include, but are not limited to, fingers, skin, a stylus, and/or any other object with which a user may interact with a device.

[00117] In the context of the present description, a contact point refers to a single location on an interaction surface which is associated with physical contact with an implement of interaction. In various embodiments, the contact point may be determined from a contact area. For example, in one embodiment, a contact point may be located in the center of its associated contact area. In another embodiment, a contact point may be located on an edge of its associated contact area.

[00118] Determining whether sufficient initial contact pressure is being exerted on an interaction surface depends on a threshold contact pressure. In some embodiments, the smallest degree of contact pressure may be sufficient, such that the definition of a selection may be triggered by any contact. In other embodiments, the definition of a selection does not occur until a non-negligible threshold contact pressure has been detected. In one embodiment, this threshold contact pressure may be defined by the user. In this way, accidental definitions of a selection may be avoided.

[00119] In some embodiments, determination 402 may be performed only after certain events have occurred. For example, in one embodiment, the determination may be made only after receipt of an input or combination of inputs. Possible inputs include, but are not limited to, object proximity to the interaction surface, activation of a hardware switch or button, activation of a software switch or button, and/or any other input capable of being detected. In one embodiment, the determination may not be made until the host device is woken from a sleep state. In another embodiment, the determination itself may also wake the host device from a sleep state.

[00120] If the result of determination 402 is that there is sufficient initial contact pressure being exerted on an interaction surface, the current contact pressure level is determined. See operation 404.

[00121] In the context of the present description, a contact pressure level is the pressure reading generated from the raw data received from a touch sensor. In various embodiments, the contact pressure level may be represented by a number. For example, in some embodiments, the contact pressure level may be represented by an integer. In another embodiment, the contact pressure level may be represented by a floating-point number. In various embodiments, the contact pressure level may be represented by a percentage of the measurable range of contact pressures. In one embodiment, the contact pressure level may be represented by a unit less number. In another

embodiment, the contact pressure level may be represented by an actual measure of the contact pressure, associated with a unit of pressure.

[00122] In various embodiments, the contact pressure level may be represented by a touch state. In the context of the present description, a touch state refers to a predefined subset of the range of measurable contact pressures. For example, in one embodiment, contact pressure levels may be represented as one of four predefined touch states: no touch, light touch, medium touch, and heavy touch. As an option, the lowest touch state may require some form of proximity. In some embodiments, the user may be able to specify how the measurable range of contact pressures is partitioned across a predefined number of touch states. In one embodiment, the number and boundaries of touch states may be defined system-wide, for all applications. In another embodiment, the number and boundaries of touch states may be defined on a per-application basis.

[00123] As shown, the selection area is calculated. See operation 406. In the context of the present description, the selection area refers to a region of the display, or a region of an object pictured on the display, which has been chosen for selection. The calculation of the selection area may be based upon one or more factors, including, but not limited to, a contact pressure level, a touch state, a contact area, a contact point, a selection boundary, a selection boundary geometry, and/or any other information derived from user interaction. In some embodiments, the selection area may be described as the pixels contained within a selection boundary.

[00124] In the context of the present description, a selection boundary describes the boundary of an associated selection area, and is based upon a selection boundary geometry. Additionally, in the context of the present description, a selection boundary geometry refers to the shape of a selection boundary. In some embodiments, a selection boundary geometry may not have reference to actual size or location. For example, in one embodiment, a selection boundary geometry may be described using fractional coordinates on a unit square.

[00125] In various embodiments, a selection area may be described, stored, and/or processed as the area contained within a selection boundary. A selection boundary may be represented by a selection boundary geometry, a screen location, and one or more transformations, such as scale or orientation. In one embodiment, the screen location is the point on which the transformed selection boundary geometry is centered.

[00126] In some embodiments, the selection area may be described, stored, and/or processed, as a collection of cells that are part of an array. In one embodiment, this array may directly correspond to pixels of a display. In another embodiment, the array may correspond to a grid based on a

coordinate system specific to an object being displayed. In still another embodiment, the selection area may be described, stored, and processed as a mathematical function that defines the boundary of the selection area.

[00127] In one embodiment, the shape of a selection boundary may be one of a plurality of selection boundary geometries predefined within an operating system. In another embodiment, the shape of a selection boundary may be predefined within an application, independent of selection boundary geometries defined within the operating system. In yet another embodiment, the selection boundary geometry may be specified by a user. In still another embodiment, the geometry of the selection boundary may depend upon at least one form of user input, including but not limited to contact pressure, number of fingers in contact with the screen, device orientation, location of user fingers, and/or any other form of user input. Finally, in another embodiment, the geometry of a selection boundary may depend upon the content within or near a location associated with the selection (e.g., contact point, finger location, focal point of user's eyes, cursor location, etc.).

[00128] In some embodiments, selection boundaries may have geometries based upon simple shapes, including, but not limited to, ovals, circles, triangles, squares, rectangles, and/or higher order polygons. In other embodiments, selection boundaries may be based upon regular shapes (e.g., a star, a plus sign, etc.). In one embodiment, a selection boundary may be based upon the geometry of a contact area.

[00129] There are numerous ways in which a selection boundary may be described, stored, and/or processed. In various embodiments, a selection boundary may be represented by the combination of an established selection boundary geometry with a location, a scale, and/or a rotation.

[00130] In one embodiment, a selection boundary may be described using the vertex coordinates of a selection boundary geometry, in conjunction with location, scale, and/or rotation factors. For example, a rectangular selection boundary geometry may be described by the coordinates of the four corners. As an option, the vertices of a selection boundary geometry may be described using coordinates within the unit square.

[00131] In another embodiment, a selection boundary may be described using a mathematical function representing an established selection boundary geometry, in conjunction with location, scale, and/or rotation factors. For example, an elliptical selection boundary geometry may be described by an ellipse function whose foci depend upon the scale factor.

[00132] In yet another embodiment, a selection boundary may be described using a spline-based representation of a selection boundary geometry, in conjunction with location, scale, and/or rotation

factors. For example, a curled selection boundary geometry may be described using splines combined with location, scale, and rotation factors.

[00133] In other embodiments, a selection boundary may be described by a bitmap representation of a selection boundary geometry, in conjunction with location, scale, and/or rotation factors. For example, in one embodiment, a bitmap representation of a contact area may be used as a selection boundary geometry associated with a selection boundary. In another embodiment, a bitmap representation of an irregular shape may be used as a selection boundary geometry associated with a selection boundary. In this way, geometries which may be difficult to describe using vertices, formulas, or splines may be used as the bases for a selection boundary.

[00134] The selection area is calculated by determining the selection boundary. In various embodiments, the selection boundary may be determined by transforming an appropriate selection boundary geometry as a function of user input, including but not limited to, contact pressure level, contact point, contact area, number of fingers detected, device orientation, etc. Once the selection boundary has been determined, the selection area is known.

[00135] In various embodiments, the selection boundary may be defined by transforming the scale of an appropriate selection boundary geometry as a function of user input. For example, in one embodiment, a selection boundary with a circular geometry may have a larger radius at higher contact pressure levels. In another embodiment, a rectangular selection boundary geometry may be scaled linearly by a factor proportional to the contact pressure level. In some embodiments, the relationship between selection boundary geometry scale and a contact pressure level is proportional. In other embodiments, the relationship between selection boundary geometry scale and a contact pressure level is inversely proportional, such that higher pressure may make the geometry smaller.

[00136] In various embodiments, the selection boundary may be defined by transforming the orientation of an appropriate selection boundary geometry as a function of user input. For example, in one embodiment, a selection boundary with a star-shaped geometry may be rotated further clockwise at higher contact pressure levels. In some embodiments, the relationship between selection boundary geometry orientation and a contact pressure level is proportional, such that an increase in pressure may result in a clockwise rotation. In other embodiments, the relationship between selection boundary geometry orientation and a contact pressure level is inversely proportional, such that higher pressure may cause a counterclockwise rotation.

[00137] In some embodiments, a selection boundary may have an anchor point. In the context of the present description, an anchor point refers to a point located on or near the selection boundary

geometry which remains fixed as the geometry is transformed. In one embodiment, a selection boundary may have a scaling anchor point, which remains fixed as the geometry is scaled. For example, a square selection boundary may have a scaling anchor point in the upper left corner, causing the square to expand down and to the right, keeping the upper left corner stationary.

[00138] In another embodiment, a selection boundary may have a rotational anchor point, which is used as an axis of rotation as the selection boundary geometry is rotated. For example, a star-shaped selection boundary may have a rotational anchor point located in the center, such that it rotates along an axis of symmetry.

[00139] In various embodiments, the calculation of the selection area may depend upon the context of the selection. Specifically, the selection boundary may be dependent upon the type of content on or near a point or area associated with the selection, including but not limited to, a contact point, a contact area, a cursor, a user focus, etc. In various embodiments, the selection boundary geometry and the manner in which it transforms as a function of user input may be context dependent. For example, in one embodiment, a selection made on or near a text field may cause the selection boundary geometry to be rectangular, with a scaling anchor point located in an upper corner appropriate for the text language (e.g., upper left corner for English, upper right corner for Arabic, etc.). In another embodiment, a selection on or near a text field may cause the rectangular boundary geometry to scale in increments of the same scale as the height and width of the text. In this way, it may be clear to the user which text has been selected, as there may never exist a selection boundary which contains only half a line or character.

[00140] In another embodiment, a selection on or near a text field may result in a rectangular selection boundary geometry which scales proportionally to a contact pressure level in a manner similar to how text is selected using a cursor. In this way, a user may select text in a familiar manner, while only having to vary the pressure being exerted on a contact point, for example. In one embodiment, the text selection begins to increase once a predefined contact pressure level has been achieved. As an option, the rate at which the selection grows may be a function of the contact pressure level, once the predefined contact pressure level has been achieved and the selection grown initiated. In another embodiment, the text selection scaling may be tiered, such that at one touch state, the selection grows character by character, at an intermediate touch state the selection grows word by word, and so on, such that the user is able to enlarge the text selection in increments of characters, words, lines, paragraphs, and pages, depending on the touch state. As an option, the selection may also be incremented by sentences.

[00141] In other embodiments, the above-mentioned methods for selecting text using a selection which expands in the direction the text would be read in may also be applied to the selection of other linear subject matter. For example, in one embodiment, this method may be used to select a video segment. As an option, the selection scaling may be tiered, growing from frame-by-frame to second-by-second to minute-by-minute, and so on. In another embodiment, this method may be used in the selection of a portion of chronologically arranged material. Possible material with a temporal arrangement may include, but is not limited to, a collection of photos, messages in an email account, text messages, web browser history, and/or any other collection of items which may be arranged chronologically.

[00142] In various embodiments, a selection made within a graphic (e.g., photograph, drawing, movie still, bitmapped or rasterized text, etc.) may utilize a default selection boundary geometry with a default scaling anchor point. In one embodiment, the user may be able to predefine the default selection boundary geometry and/or default scaling anchor point, to be used when making a selection within a graphic. In still another embodiment, the default selection boundary geometry and/or default scaling anchor point may be predefined within the operating system. As an option, these defaults may be predefined on a per-application basis.

[00143] In various embodiments, a selection made within a photograph may result in the use of a context-specific selection boundary geometry which transforms in a context specific manner. For example, in one embodiment, a selection made within a photograph containing one or more people may utilize the rough shape of the subjects' faces as a selection boundary geometry. As an option, the selection boundary geometry may be composed of the perimeter of all faces within a certain distance of a point related to the selection (e.g., contact point, user focus, etc.), the distance being proportional to a user input (e.g., contact pressure level, touch state, etc.). Face selection may be used to assist the user in establishing the identity of photographed individuals, allowing future identification to be performed automatically using facial recognition. In one embodiment, facial and other forms of recognition may be performed by a host device, a remote computer, a cloud service, or any other computational resource, or combination of these and other resources.

[00144] In another embodiment, a selection made within a photograph on or near an eye may utilize a rough shape of the eye as a selection boundary geometry. As an option, the exactness of the method used to automatically detect the shape of an eye may vary as a function of a user input, such as contact pressure level. Eye selection may be used to assist the user in removing the "red eye" effect sometimes seen in photographs.

[00145] In one embodiment, a selection made within a graphic may cause the selection boundary geometry to be defined by the collection of pixels near a point associated with the selection (e.g., contact point, user focus, etc.) which are similar in at least one aspect. Possible aspects include, but are not limited to, color, one or more dimensions of an associated color space, brightness, transparency, and/or any other aspect that may be associated with a pixel. As an option, the degree of similarity between pixels required to influence the selection boundary geometry may be a function of a user input, such as a contact pressure level. In this way, a user may be assisted in separating an object within the graphic from a background or other visual elements.

[00146] In various embodiments, there may exist limits to the amount a selection boundary geometry may be transformed as a function of user input. For example, in one embodiment, the selection boundary geometry may increase in size as the contact pressure level increases, until an upper contact pressure threshold is reached. Contact pressure levels beyond the upper threshold may not increase the size of the selection boundary geometry any further. In another embodiment, the scale of the selection boundary geometry may be limited by a lower contact pressure threshold, such that reducing the contact pressure level below the threshold may not reduce the scale of the selection boundary geometry any further. In yet another embodiment, both upper and lower contact pressure thresholds may be implemented. In other embodiments, this concept of thresholds may be applied to other variable aspects of the selection boundary, such as the orientation of the selection boundary geometry, and as a function of other user input, including but not limited to the location of a contact point, the size of a contact area, user focus, and/or any other type of user input.

[00147] In one embodiment, the user may be able to predefine one or more contact pressure thresholds associated with the limits of a transformation of the selection boundary geometry. As an option, the user may also predefine the limits of the transformation, in addition to the maximum and/or minimum contact pressure level which may affect said transformation. In another embodiment, these contact pressure thresholds and/or transformation limits may be predefined within the operating system. In still another embodiment, the contact pressure thresholds may be automatically optimized over time, by observing the typical range of pressures the user exerts in various use scenarios.

[00148] In one embodiment, the selection boundary geometry and/or transformation of the selection boundary geometry may depend upon the proximity of an object to an interaction surface, rather than an aspect of physical contact with an interaction surface.

[00149] In various embodiments, the selection boundary may depend, at least in part, upon the user focus. In the context of the present description, user focus refers to a point or area on a display which is the visual and/or interactive focus of the user. For example, in one embodiment, the user focus may be determined by tracking the eyes of a user with one or more device-mounted cameras, and calculating where the user is looking. This may also be referred to as user gaze, or user gaze tracking. As an option, eye movement may also be monitored, to ascertain the manner in which the user is using the device (e.g., methodically reading text, quickly scanning text, examining a picture, visually searching for an icon, etc.). In another embodiment, the user focus may be defined as the location of a cursor in a text environment. In still another embodiment, the user focus may be established through user input, such as a finger tap.

[00150] Various aspects of the selection boundary may depend upon the user focus. For example, in one embodiment, the user focus may be used to determine the context of a selection. In another embodiment, the user focus may be used to determine the location of a selection, allowing the user to make a selection without having to change the location of a contact point. In still another embodiment, the tracking of eye movement may be used to determine the type of selection (e.g., reading eye movement may trigger a text selection, etc.).

[00151] Once the selection boundary has been determined using an appropriate selection boundary geometry that has been transformed as a function of a user input, the selection area may be calculated.

[00152] As shown, the selection area is displayed. See operation 408. In various embodiments, a selection area may be displayed using one or more selection functions. In the context of the present description, a selection function refers to a function of one or more inputs which determines one or more properties of a selection. For example, in one embodiment, possible selection function inputs may include, but are not limited to, touch state, contact pressure level, selection state, finger locations, device orientation, user focus, pressure uncertainty, touch uncertainty, contact point, contact area, gestures, application type and/or context, application flags, operating system flags, and/or any other form of user or system input.

[00153] Within the context of the present description, pressure uncertainty refers to any data associated with the uncertainty inherent in measuring pressure exerted on an interaction surface. Pressure uncertainty may include, but is not limited to, the uncertainty of a measured contact pressure level, a multidimensional array of values representing the variance of contact pressure measured for each cell/pixel in the vicinity of a contact point, an uncertainty value inherent to a

particular pressure sensor, and/or any other type of data associated with uncertainty in pressure measurement.

[00154] Within the context of the present description, touch uncertainty refers to any data associated with the uncertainty inherent in sensing contact with an interaction surface. Touch uncertainty may include, but is not limited to, the error range associated with the location of a contact point, a multidimensional array of values representing the probabilities of contact measured for each cell/pixel in the vicinity of a contact point, an uncertainty value inherent to a particular touch sensor, and/or any other type of data associated with uncertainty in sensing contact.

[00155] Within the context of the present description, a selection state refers to whether a selection is 'dynamic' and still able to vary as a function of user input, or 'static', and not currently varying as a function of user input.

[00156] In various embodiments, a selection function may determine one or more presentation properties of a selection. For example, possible presentation properties may include, but are not limited to, shading, color, contrast, brightness, line style, animation routine, transparency, pattern, border style, area style, and/or any other visual property that may describe an object on a display. Examples of animation routines include, but are not limited to, "marching ants", changing colors, flashing, simulated optical distortions, pulsing highlights, and/or any other routine which varies location, transparency, color, content, and/or any other graphical property over time. In some embodiments, an animation routine may be a function of user input.

[00157] In various embodiments, a selection function may vary one or more presentation properties as a function of contact pressure. In this way, the user has visual feedback as to the level of pressure they are exerting on the device. For example, in one embodiment, the selection function may indicate the contact pressure level by shading the selection with a color which is somewhere between a pair of colors which represent the extrema of measurable contact pressure levels.

[00158] In various embodiments, a selection function may determine one or more fundamental properties of a selection. Within the context of this description, fundamental selection properties may include, but are not limited to, selection boundary geometry, transformation(s) to be applied to the selection boundary geometry as a function of user input, anchor point(s), and/or any other property which may be associated with a selection area.

[00159] In various embodiments, the application of a selection function may display a secondary boundary. Within the context of this description, a secondary boundary is any boundary, radius, or area associated with a selection area, which is not the selection boundary. For example, in one

embodiment, a secondary boundary may be the area within which facial detection is being performed, as opposed to the selection boundary, which may be the outline of detected faces. In another embodiment, a secondary boundary may be the area within which eye detection is being performed. In yet another embodiment, the secondary boundary may represent the pressure uncertainty or touch uncertainty associated with a contact area.

[00160] In various embodiments, the secondary boundary may be displayed in addition to, or instead of, the selection boundary. For example, in one embodiment where face detection is being performed as part of calculating the selection area, the selection boundary may be indicated with a solid color line while the secondary boundary may be indicated with a thin dotted line.

[00161] In various embodiments, the area unique to the secondary boundary (i.e. the portion of the enclosed area which does not overlap with the selection area) may have presentation properties that differ from the selection area. For example, in one embodiment, a user may make a text selection of which the intended boundaries are uncertain. The portion of the text which was almost certainly intended to be selected may be shaded in green, while the text which may or may not have been selected intentionally may be shaded in red. The user intention may be extrapolated from uncertainty associated with the contact and/or contact pressure used to make the selection, in accordance with one embodiment.

[00162] In various embodiments, the secondary boundary may be used to indicate uncertainty associated with a form of machine recognition including, but not limited to, facial recognition, OCR, and/or any other form of machine recognition. For example, faces within a selection which have been recognized with a threshold degree of confidence may be outlined in green, while faces whose recognition is suspect (i.e. multiple viable matches, etc.) may be outlined in red (i.e. a secondary border).

[00163] As shown, after the selection area has been displayed, it is determined whether the selection establishment conditions have been met. See determination 410.

[00164] Within the context of the present description, selection establishment conditions refer to one or more predefined conditions whose satisfaction may cause the selection state to switch from 'dynamic' to 'static'. For example, in one embodiment, once the selection establishment conditions have been satisfied, the selection may no longer vary with contact pressure levels until determination 402 once again detects sufficient initial contact pressure. In various embodiments, the selection establishment conditions may be defined within a selection function.

[00165] In various embodiments, one or more selection establishment conditions may depend upon changes in the contact pressure level. For example, in some embodiments, selection establishment may be conditioned upon whether the contact pressure level drops below a predefined level. In one embodiment, this threshold contact pressure level may be defined as being a set amount of pressure less than the current contact pressure level. In this way, a user may reduce the contact pressure a small amount to modify their selection, with further reduction causing a selection establishment condition to be satisfied. In another embodiment, the threshold contact pressure level may be a set pressure amount.

[00166] In various embodiments, a selection establishment condition may depend upon contact pressure velocity, or the rate at which the contact pressure level is changing. For example, in one embodiment, a user may be able to satisfy a selection establishment condition by quickly reducing the contact pressure level to a predefined level within a predefined amount of time. In another embodiment, selection establishment may be conditioned upon whether a user has increased the contact pressure level to a predefined level within a predefined amount of time. In yet another embodiment, a selection may be established by exceeding a predefined contact pressure velocity, without regard to the actual pressure levels. As a specific example, a user may establish their selection by a quick pulse of their finger, without having to reach a particular pressure level.

[00167] In various embodiments, a selection establishment condition may depend upon how much time has elapsed since a particular event. For example, in one embodiment, a selection may be established if the user maintains a contact pressure level for a predefined amount of time. As an option, there may be a predefine tolerance level for pressure variations which may not reset this timing, allowing for small fluctuations in contact pressure which may be difficult for a user to control. In another embodiment, a selection establishment condition may be satisfied once a predefined amount of time has elapsed since the satisfaction of determination 402.

[00168] In various embodiments, a selection establishment condition may depend upon forms of user input that are not related to contact pressure. These forms of user input may include, but are not limited to, gestures, a change in the number of fingers in contact with the device, change in device orientation, surpassing a threshold level of accelerations (e.g., wrist flick, etc.), and/or any other form of user input. It should be noted that selection establishment may also be conditioned upon the satisfaction of a combination of any of the previously described conditions.

[00169] If it is determined that the selection establishment conditions have not been met, the selection is updated in a loop through performing operations 404, 406, and 408. The selection may

continue to vary as a function of user input until the selection establishment conditions have been met.

[00170] If it is determined that the selection establishment conditions have been met, the selection state is changed from 'dynamic' to 'static'. See operation 412.

[00171] Setting the selection state to 'static' means the selection is no longer being modified by user input. In various embodiments, the selection function may depend in part on the selection state. For example, in one embodiment, when the selection state is 'static', the secondary boundary may be removed from the display. In another embodiment, a 'static' selection state may cause the selection area to be displayed in a different color, or with a different style of selection boundary. In yet another embodiment, changing a selection state from 'dynamic' to 'static' may cause one or more application and/or operating system flags to be set.

[00172] In various embodiments, changing a selection state from 'dynamic' to 'static' may prompt the user to choose an action to be performed on or with the contents of the selection. For example, in one embodiment, after the desired faces have been highlighted and the user has reduced the contact pressure level below the dynamic selection minimum threshold pressure, they may be prompted to confirm the identity of the selected faces. In another embodiment, after a text selection has been given a 'static' selection state, the user may be prompted with operations that may be performed on the selected text, including but not limited to copy, cut, paste, spell check, style (e.g., bold, underlined, italic, etc.), font, font size, and/or any other operation which may be performed on text.

[00173] In some embodiments, once a selection has become 'static', it can no longer be modified and may be destroyed upon creation of a new selection. In other embodiments, a user may further modify a static selection by first applying a contact pressure sufficient to satisfy determination 402. In one embodiment, satisfying determination 402 with a static selection already in existence may change the selection state of the previous selection from static to dynamic, allowing further variation as a function of user input. In another embodiment, satisfying determination 402 with a static selection already in existence may create a new selection, as a function of user input, which is combined with the previously made selection. In yet another embodiment, a user may chose whether to replace a previously made selection or augment (i.e. add to, subtract from, etc.) a previously made selection with a new selection. As an option, the user choice may be indicated through gesture, voice command, toggling a hardware control, toggling a software control, and/or any other form of user input.

[00174] In various embodiments, method 400 may be adapted to allow for the definition, establishment, and modification of selections through other types of user input. Other types of user input may include, but are not limited to, proximity to an interaction surface, number of contact points, gestures, and/or any other form of user input. For example, in one embodiment, a user may expand a text selection by bringing their finger into proximity to the interaction surface.

[00175] Figure 5 shows a pressure sensitive user interface 500 for making a selection, in accordance with one embodiment. As an option, the user interface 500 may be implemented in the context of the architecture and environment of the previous Figures or any subsequent Figure(s). Of course, however, the user interface 500 may be implemented in any desired environment. The aforementioned definitions may apply during the present description.

[00176] As shown, the user interface 500 may be utilized in making a selection based in part on pressure exerted by the user upon one or more interaction surfaces located on a device. For example, in one embodiment, a user's finger 502 may exert a small amount of force over contact area 504, which is centered on contact point 506 located on a pressure sensitive touch screen. If the contact pressure level is sufficient, then a selection area 508 having a selection boundary 510 is calculated and displayed. As the contact pressure is increased, the selection boundary expands to encompass a larger selection area 512.

[00177] Figure 6 shows a method 600 for determining the context of a contact pressure-based selection and choosing an appropriate selection function, in accordance with one embodiment. As an option, the method 600 may be implemented in the context of the architecture and environment of the previous Figures or any subsequent Figure(s). Of course, however, the method 600 may be implemented in any desired environment. The aforementioned definitions may apply during the present description.

[00178] As shown, the context determination zone is defined. See operation 602. Within the context of the present description, a context determination zone refers to the area that is examined while determining the context of a selection. In various embodiments, the context determination zone may be initially defined as a function of one or more elements of user input upon which the selection itself is based. For example, in one embodiment, the context determination zone may be initially defined to be the contact area. In another embodiment, the context determination zone may be a predefined shape (e.g., circle, square, etc.) of predefined size, centered on the contact point. As an option, the user may be able to specify the initial size and shape of the context determination zone. In yet another embodiment, the context determination zone may be located such that the

contact point is off-center, to provide a more intuitive user experience (e.g., the zone may be offset to compensate for the user's view being obstructed by their finger, etc.).

[00179] In still another embodiment, the context determination zone may have a predefined size. As an option, the predefined initial size for a context determination zone may be chosen such that it is smaller than any user interface elements which may be detected. As an additional option, the predefined initial size may be chosen such that it is large enough to assist a user in distinguishing between potential selection targets which are close to each other.

[00180] As shown, once the context determination zone has been defined, it is then determined whether there is a user interface control widget within the context determination zone. See determination 604.

[00181] Within the context of the present description, a user interface control widget refers to any element within a user interface which may receive user input, which are typically non-textual. For example, in various embodiments, user interface control widgets may include, but are not limited to, buttons, radio boxes, check boxes, drop down lists, sliders, tabs, and/or any other non-textual UI widget.

[00182] In some embodiments, user interface control widgets may also include hyperlinks which are isolated from a text field. For example, text that responds to user interaction like a button, but is not located within a selectable text field. Selectable text fields and hyperlinks embedded within a text field (e.g., links within a web page, links within a word processing document, etc.) are specifically excluded from this definition of user interface control widgets, as they are treated as separate cases within this method.

[00183] In various embodiments, the determination as to whether there is a user interface control widget within the context determination zone begins with determining whether there is a UI control widget located at the contact point upon which the zone is based. In this way, time is not wasted determining the context of a well-aimed contact point.

[00184] If a UI control widget is not located at the contact point, then it may be determined if there is a UI control widget in the vicinity, within the context determination zone. In various embodiments, this determination may be performed using the bounding boxes associated with user interface elements. Within the context of the present description, a bounding box refers to a rectangle within which a user interface control widget may reside. In some embodiments, a bounding box may be the smallest rectangle which may contain a particular user interface control

widget. In this way, detection of user interface control widgets whose shape is not rectangular is simplified.

[00185] For example, in one embodiment, the determination as to whether there is a user interface control widget within the context determination zone may be performed by determining if the boundary of the context determination zone intersects with the bounding box of any user interface control widgets. As an option, if the initial size of the context determination zone is larger than a predefined minimum (e.g., smallest bounding box associated with a typical UI control widget, smallest bounding box present within the present UI, etc.), the determination may also verify the absence of any bounding boxes completely contained within the context determination zone, on the initial pass.

[00186] In another embodiment, the determination may be performed by calculating the distances between the center of the context determination zone and the center of every UI control widget present in the interface, and comparing them with a distance related to the size of the context determination zone.

[00187] If it is determined in 604 that there is at least one user interface control widget within the context determination zone, then a context sensitive UI control widget selection function is chosen. See operation 606. In various embodiments, once an appropriate selection function is chosen, a selection is defined based upon user input. In one embodiment, the selection is defined using method 4.

[00188] Within the context of the present description, a context sensitive selection function refers to a selection function adapted for use in making a selection in a context which has been automatically determined. In various embodiments, a context sensitive selection function may include logic to use a different context sensitive selection function to define the user's selection, based upon user input. In this way, a user may be able to indicate that the initial context determination is not correct, and that another selection function should be used.

[00189] For example, in one embodiment, a context sensitive UI control widget selection function may include logic such that, if the contact pressure level exceeds a predefined limit P_0, further definition of the selection is handled by a different context sensitive selection function, such as one adapted for selecting hyperlinks. In another embodiment, a contact pressure level exceeding P_0 may cause the context determination zone to expand, and the process of choosing an appropriate selection function to resume, ignoring the UI control widget previously detected within the zone. As an option, future determinations may ignore all UI control widgets. In this way, a context-aware user

selection initiated with a contact point in the vicinity of a UI control widget may be redirected to a different type of subject matter without forcing the user to reposition their finger, for example.

[00190] In various embodiments, a context sensitive UI control widget selection function may depend upon the context determination zone. For example, in one embodiment, a context sensitive UI control widget selection function may use the context determination zone as a secondary boundary. In this way, the selection function may be able to continue searching the context determination zone for additional UI control widgets.

[00191] In various embodiments, a context sensitive UI control widget selection function may include logic to handle the case where there is more that one UI control widget within the context determination zone. In one embodiment, the selection function may choose the UI control widget whose center is closest to the center of the context determination zone. In another embodiment, the selection function may choose the UI control widget whose bounding box has greatest overlap with the context determination zone. In still another embodiment, the selection function may choose the UI control widget whose bounding box has an edge or corner closest to the center of the context determination zone.

[00192] In various embodiments, a context sensitive UI control widget selection function may include logic to allow the user to toggle between multiple widgets found within the context determination zone. For example, in one embodiment, the selection function may include a list of all UI control widgets found at least partially within the context determination zone. As an option, the widgets may be arranged in the list in order of distance from the center of the context determination zone. In another embodiment, the selection function may traverse the list sequentially, selecting a different widget. As an option, the list traversal may occur as a function of user input, including but not limited to, gestures, contact pressure velocity, accelerometer data, and/or any other user input. In still another embodiment, switching between different widgets found within the context determination may occur after a predefined amount of time has elapsed, and the selection establishment conditions have not yet been satisfied. In yet another embodiment, a context sensitive UI control widget selection function may use user focus to choose between multiple UI control widgets found within the context determination zone.

[00193] In various embodiments, a context sensitive UI control widget selection function may visually indicate the selection of a widget to the user before the selection has been established. For example, in one embodiment, the selection function may highlight the outline of the widget. In another embodiment, the selection function may shade the widget using a predefined mask of the

widget. In still another embodiment, the selection function may shade and/or outline the widget bounding box. In yet another embodiment, the selection function may change and aspect of text associated with the widget, aspects including but not limited to font, text style, text color, and/or any other text property. As a specific example, a context sensitive UI control widget selection function may cause the name of a button to be displayed in blue italics if it is the current context-based selection derived from user input. In this way, the user may see what control is about to be activated before satisfying the selection establishment conditions.

[00194] In various embodiments, a context sensitive UI control widget selection function may have selection establishment conditions that depend upon the type of user interface control widget that is being selected. Some user interface control widgets are multi-state in nature (e.g., sliders, drop down lists, etc.), while others are bi-state (e.g., buttons, check boxes, etc.). In some embodiments, it may be assumed that when a user satisfies the selection establishment conditions for a bi-state UI control widget, they intend for the state of the widget to be toggled. The selection establishment conditions for multi-state UI control widgets, on the other hand, may include the election of a widget state.

[00195] For example, in one embodiment, the selection establishment conditions for a multi-state widget may include one or more primary conditions to establish that the user intends for that particular multi-state widget to be selected, and a secondary condition, to establish the state of that widget.

[00196] In various embodiments, the secondary condition may be satisfied (and the widget state chosen) through user input which includes, but is not limited to, contact pressure. As an option, after the primary selection establishment conditions have been satisfied, the selection function may disregard pre-established pressure triggers (e.g., P_0, global pressure triggers, etc.) until the secondary selection establishment condition has been satisfied.

[00197] For example, in one embodiment, once the primary conditions for selecting a slider widget have been satisfied, a user may select a slider value by varying the contact pressure level between two predefined threshold pressures which represent the slider state extrema. In another embodiment, the contact pressure level at the time of satisfaction of the primary conditions may be used as a zero point, represented by the middle of the slider values. Increasing the contact pressure may increase the slider value, decreasing the contact pressure may decrease the slider value. In other embodiments, these methods may be used to traverse the items within a drop down list, or any other multi-state UI control widgets which may be assigned a value.

[00198] In various embodiments, the secondary selection establishment conditions may be finally satisfied using methods previously discussed, including but not limited to, a contact pressure velocity trigger.

[00199] Once the selection establishment conditions have been satisfied, the state of the UI control widget may be set. For example, a button may be toggled, a check box may be checked or unchecked, a slider value may be set, etc.

[00200] As a specific example of one embodiment, from a user perspective, a user may make contact with and exert pressure upon an interaction surface, with a contact point near a drop down menu. The user may increase the contact pressure until the drop down menu is highlighted. After maintaining that contact pressure level for a few seconds, the list of menu items becomes visible, after which the user may select an item by varying the contact pressure. Once the desired menu item is highlighted, the user may execute a rapid increase in pressure to finalize the selection of that menu item.

[00201] If it is determined in 604 that there is no user interface control widget within the context determination zone, it is then determined whether there is an embedded hyperlink within the context determination zone. See determination 608.

[00202] Within the context of the present description, an embedded hyperlink refers to a hyperlink which is embedded within a text field. For example, iIn one embodiment, embedded hyperlinks may include, but are not limited to, text or image links within a web page, text or image links within a word processing document, and/or any other type of link which may be contained within a document. It should be noted that any link which may be classified as a hyperlink may fall within this definition of embedded hyperlink, or within the definition of a UI control widget.

[00203] In various embodiments, the determination as to whether there is an embedded hyperlink within the context determination zone begins with determining whether there is an embedded hyperlink located at the contact point upon which the zone is based.

[00204] If an embedded hyperlink is not located at the contact point, then it may be determined if there is an embedded hyperlink in the vicinity, within the context determination zone. In various embodiments, the methods described for locating a UI control widget within the context determination zone may also be applied to determining whether there is an embedded hyperlink in the zone. In one embodiment, the bounding boxes may be handled by the application displaying the document in which an embedded hyperlink may be found. In another embodiment, the bounding boxes may be handled at a lower level, by the operating system.

[00205] If it is determined in 608 that there is at least one embedded hyperlink within the context determination zone, then a context sensitive embedded hyperlink selection function is chosen. See operation 610. In various embodiments, once an appropriate selection function is chosen, a selection may be defined based upon user input. In one embodiment, the selection may be defined using method 4.

[00206] In various embodiments, a context sensitive embedded hyperlink selection function may include logic to use a different context sensitive selection function to define the user's selection, based upon user input. In this way, a user may be able to indicate that the initial context determination is not correct, and that another selection function should be used.

[00207] For example, in one embodiment, a context sensitive embedded hyperlink selection function may include logic such that, if the contact pressure level exceeds a predefined limit P_2, further definition of the selection is handled by a different context sensitive selection function, such as one adapted for selecting text. In another embodiment, a contact pressure level exceeding P_2 may cause the context determination zone to expand, and the process of choosing an appropriate selection function to resume, ignoring the embedded hyperlink previously detected within the zone. As an option, future determinations may ignore all embedded hyperlinks. In this way, a context-aware user selection initiated with a contact point in the vicinity of an embedded hyperlink may be redirected to a different type of subject matter without forcing the user to reposition their finger, for example.

[00208] In various embodiments, a context sensitive embedded hyperlink selection function may depend upon the context determination zone. For example, in one embodiment, a context sensitive embedded hyperlink selection function may use the context determination zone as a secondary boundary. In this way, the selection function may be able to continue searching the context determination zone for additional embedded hyperlinks.

[00209] In various embodiments, a context sensitive embedded hyperlink selection function may include logic similar to that used in a context sensitive UI control widget selection function to handle the case where there is more that one embedded hyperlink within the context determination zone. Additionally, in various embodiments, a context sensitive embedded hyperlink selection function may include logic similar to that used in a context sensitive UI control widget selection function to allow a user to toggle between multiple embedded hyperlinks found within the context determination zone.

[00210] In various embodiments, a context sensitive embedded hyperlink selection function may visually indicate the selection of an embedded hyperlink before the selection has been established.

For example, in one embodiment, the selection function may change the color of an embedded text hyperlink. In another embodiment, the selection function may change the font, style, or font size of an embedded text hyperlink. In yet another embodiment, the selection function may highlight the borders of a linked image. In this way, the user may see which embedded hyperlink is about to be activated before satisfying the selection establishment conditions.

[00211] In various embodiments, a context sensitive embedded hyperlink selection function may have selection establishment conditions which change, depending upon previous user input. For example, in one embodiment, if the contact pressure level surpasses a value of P_1, but not P_2, the selection establishment condition may change to require the selection of an option from a hyperlink contextual menu. The contextual menu may provide options common to web browsers, including but not limited to "open link", "copy link", and/or any other action which may be performed on or with a hyperlink. In various embodiments, the selection of the contextual menu item may be established using methods including, but not limited to, those described for multi-state UI control widgets, or other types of selections.

[00212] In various embodiments, once the selection establishment conditions have been satisfied, the selected embedded hyperlink may be activated.

[00213] If it is determined in 608 that there are no embedded hyperlinks within the context determination zone, it is then determined whether there is a selectable text field within the context determination zone. See determination 612.

[00214] Within the context of the present description, a selectable text field refers to a field of text which a user may select and perform operations upon (e.g., copy, cut, paste, etc.). In one embodiment, a selectable text field may also include any rasterized text which is recognized using an optical character recognition routine.

[00215] In various embodiments, the determination as to whether there is a selectable text field within the context determination zone begins with determining whether there is a selectable text field located at the contact point upon which the zone is based.

[00216] If a selectable text field is not located at the contact point, then it may be determined if there is a selectable text field in the vicinity of the contact point and within the context determination zone. In various embodiments, the methods described for locating a UI control widget within the context determination zone may also be applied to determining whether there is a selectable text field in the zone, including the use of bounding boxes.

[00217] If it is determined in 612 that there is at least one selectable text field intersecting with or within the context determination zone, then a context sensitive selectable text selection function is chosen. See operation 614. In various embodiments, once an appropriate selection function is chosen, a selection may be defined based upon user input. In one embodiment, the selection may be defined using method 4.

[00218] In various embodiments, if there is a selectable text field located at the contact point, the context sensitive selectable text selection function may behave like other text selection functions. For example, in one embodiment, the selection of the text would start at the contact point, and expand with pressure in the direction in which the text would be read.

[00219] In various embodiments, if there is a selectable text field within the context determination zone, but not at the contact point, the selection function may define the selection based upon the entire selectable text field. For example, in one embodiment, the text within selectable text field found in the context determination zone may be selected starting at the beginning of the text field, even if it is not near the contact point. In another embodiment, the selection of the text begins at the location closest to the contact point.

[00220] In various embodiments, a context sensitive selectable text selection function may depend upon the context determination zone. For example, in one embodiment, a context sensitive selectable text selection function may use the context determination zone as a secondary boundary. In this way, the selection function may be able to continue searching the context determination zone for additional selectable text fields.

[00221] In various embodiments, a context sensitive selectable text selection function may include logic to handle the case where there is more than one selectable text field within the context determination zone. In one embodiment, the selection function may choose the selectable text field which is closest to the contact point, the selection not extending beyond that text field. In another embodiment, the selection function may start the text selection in the selectable text field closest to the contact point; once all of the text in that closest field has been selected, the selection may continue to expand into the next closest text field, starting at the beginning of the field. In still another embodiment, the selection function may include logic similar to that used in a context sensitive UI control widget selection function to handle the case where there is more that one selectable text field within the context determination zone. Additionally, in yet another embodiment, a context sensitive selectable text selection function may include logic similar to that used in a

context sensitive UI control widget selection function to allow a user to toggle between multiple selectable text fields found within the context determination zone.

[00222] In various embodiments, a context sensitive selectable text selection function may include logic to use a different context sensitive selection function to define the user's selection, based upon user input. In this way, a user may be able to indicate that the initial context determination is not correct, and that another selection function should be used.

[00223] For example, in one embodiment, a context sensitive selectable text selection function may include logic such that, if the contact pressure level exceeds a predefined limit P_4, further definition of the selection is handled by a different context sensitive selection function, such as one adapted for selecting graphics. In another embodiment, a contact pressure level exceeding P_4 may cause the context determination zone to expand, and the process of choosing an appropriate selection function to resume, ignoring the selectable text field previously detected within the zone. As an option, future determinations may ignore all selectable text fields. In this way, a context-aware user selection initiated with a contact point in the vicinity of a selectable text field may be redirected to a different type of subject matter without forcing the user to reposition their finger, for example.

[00224] In various embodiments, a context sensitive selectable text selection function may visually indicate the selection of a selectable text field before the selection has been established. For example, in one embodiment, the selection function may shade the selected text within a selectable text field. In another embodiment, the selection function may highlight the borders of an entire selectable text field which has been selected.

[00225] In various embodiments, a context sensitive selectable text selection function may have selection establishment conditions which change, depending upon previous user input. For example, in one embodiment, if the contact pressure level surpasses a value of P_3, but not P_4, the selection establishment condition may change to require the selection of an option from a text selection contextual menu. The contextual menu may provide options including, but not limited to, copy, cut, paste, style, send via email, send via SMS, lookup online, and/or any other action which may be performed on selected text. In various embodiments, the selection of the contextual menu item may be established using methods including, but not limited to, those described for multi-state UI control widgets, or other types of selections.

[00226] If it is determined in 612 that there is no text within the context determination zone, it is then determined whether there is a selectable graphic within the context determination zone. See determination 616.

[00227] Within the context of the present description, a selectable graphic refers to an image or display, or a portion of an image or display, which a user is able to select and perform operations upon (e.g., copy, cut, paste, save, etc.). In one embodiment, a selectable graphic may refer to any portion of a user interface which is able to be captured with a screenshot.

[00228] In various embodiments, the determination as to whether there is a selectable graphic within the context determination zone begins with determining whether there is a selectable graphic located at the contact point upon which the zone is based.

[00229] If a selectable graphic is not located at the contact point, then it may be determined if there is a selectable graphic in the vicinity of the contact point and within the context determination zone. In various embodiments, the methods described for locating a UI control widget within the context determination zone may also be applied to determining whether there is a selectable text field in the zone, including the use of bounding boxes. As an option, in addition to determining the boundaries of the bounding boxes within the context determination zone, it may also be determined whether they are able to be selected (e.g., checking a system flag, DRM, copy protection, etc.).

[00230] If it is determined in 616 that there is at least one selectable graphic within the context determination zone, then a context sensitive selectable graphic selection function is chosen. See operation 618. In various embodiments, once an appropriate selection function is chosen, a selection may be defined based upon user input. In one embodiment, the selection may be defined using method 4.

[00231] In various embodiments, if there is a selectable graphic located at the contact point, the context sensitive selectable graphic selection function may behave like other graphic selection functions. For example, in one embodiment, the selection of the graphic may be defined using method 4.

[00232] In various embodiments, if there is a selectable graphic within the context determination zone, but not at the contact point, the selection function may define the selection based upon the entire selectable graphic object. For example, in one embodiment, an image file embedded in a document near the contact point and at least partially within the context determination zone may be selected in its entirety. In another embodiment, said image file may be partially selected, starting at a location within the image that is closest to the contact point, and scaling as a function of user input and in a manner defined by the selection function.

[00233] In various embodiments, a context sensitive selectable graphic selection function may depend upon the context determination zone. For example, in one embodiment, a context sensitive

selectable graphic selection function may use the context determination zone as a secondary boundary. In this way, the selection function may be able to continue searching the context determination zone for additional selectable graphic objects.

[00234] In various embodiments, a context sensitive selectable graphics selection function may include logic to handle the case where there is more than one selectable graphic object within the context determination zone. In one embodiment, the selection function may choose the selectable graphic object which is closest to the contact point.

[00235] In another embodiment, the selection function may include logic similar to that used in a context sensitive UI control widget selection function to handle the case where there is more that one selectable graphic object within the context determination zone. Additionally, in yet another embodiment, a context sensitive selectable graphic selection function may include logic similar to that used in a context sensitive UI control widget selection function to allow a user to toggle between multiple selectable graphic objects found within the context determination zone.

[00236] In various embodiments, a context sensitive selectable graphics function may pass control to another user interface function, depending upon user input. In this way, a user may be able to indicate that the initial context determination is not correct, and that they wish to activate a different user interface routine (e.g., application launcher, favorites list, system settings, etc.).

[00237] For example, in one embodiment, a context sensitive selectable graphic selection function may include logic such that, if the contact pressure level exceeds a predefined limit P_6, further user input is handled by a different context sensitive selection function, such as one adapted for selecting graphics. In another embodiment, a contact pressure level exceeding P_4 may cause the context determination zone to expand, and the process of choosing an appropriate selection function to resume, ignoring the selectable graphic previously detected within the zone. As an option, future determinations may ignore all selectable graphics. In this way, a context-aware user selection initiated with a contact point in the vicinity of a selectable graphic may be redirected to a different type of subject matter without forcing the user to reposition their finger, for example.

[00238] In various embodiments, a context sensitive selectable graphics selection function may visually indicate the selection of a selectable graphic object before the selection has been established. For example, in one embodiment, the selection function may shade the selected graphic object. In another embodiment, the selection function may highlight the borders of a graphic object which has been selected.

[00239] In various embodiments, a context sensitive selectable graphics selection function may have selection establishment conditions which change, depending upon previous user input. For example, in one embodiment, if the contact pressure level surpasses a value of P_5, but not P_6, the selection establishment condition may change to require the selection of an option from a graphic selection contextual menu. The contextual menu may provide options including, but not limited to, copy, cut, paste, set as wallpaper, send via email, send via SMS, and/or any other action which may be performed on selected graphics. In various embodiments, the selection of the contextual menu item may be established using methods including, but not limited to, those described for multi-state UI control widgets, or other types of selections.

[00240] If it is determined in 616 that there is no selectable graphics within the context determination zone, then the determination zone is expanded. See operation 620.

[00241] In one embodiment, the context determination zone may be expanded by a fixed number of pixels. In another embodiment, the determination zone may be expanded by a scaling factor. Once the context determination zone has been expanded, the context determinations are performed again.

[00242] In one embodiment, if the context determination zone reaches a predefined threshold size, the user may be informed that a context could not be determined and a selection cannot be made. Other forms of user feedback indicating a failure to determine context include an alert, a prompt, audio feedback, visual feedback, LED light, and/or any other type of feedback.

[00243] In various embodiments, the user may be able to specify which contexts they wish to be detected automatically. In some embodiments, additional types of subject matter may be detectable, including types of text data, such as dates, email addresses, phone numbers, and/or any other type of text information.

[00244] In some embodiments, contextual selections may be performed using method 600 only in situations where a contact pressure based form of user interaction has not been defined. In other embodiments, contextual selections may be made system wide using method 600 or similar methods.

[00245] Figure 7 shows a device 700 having a backtouch interface, in accordance with one embodiment. As an option, the device 700 may be implemented in the context of the architecture and environment of the previous Figures or any subsequent Figure(s). Of course, however, the device 700 may be implemented out in any desired environment. It should also be noted that the aforementioned definitions may apply during the present description.

[00246] In the context of the present description, a device with a backtouch interface refers to a device with one or more backtouch sensors or backtouch switches. In one embodiment, a device with a backtouch interface may also include one or more other sensors and/or buttons, including but not limited to cameras, hardware buttons, and/or any other type of device or control. A device with a backtouch interface may also be referred to as a backtouch-enabled device.

[00247] Within the context of the present description, a backtouch sensor refers to an interaction surface located on a device which has reduced user visibility while the device is being operated, because it is obscured by the device itself. For example, in one embodiment, a backtouch sensor may be located on the back of the device, facing away from the user as they look at a display on the front side. A backtouch sensor may result in a better user interface experience since the user is able to interact with the device without obscuring the front display with an implement of interaction.

[00248] Additional embodiments may be described using the terms 'front' and 'back', but a backtouch-enabled device is not limited to those having parallel surfaces. Within the context of the present description, the terms 'front' or 'front surface' and 'back' or 'back surface' refer to any two surfaces of any portion, piece, section, slice, component, part, and/or face of a device or its parts.

[00249] In various embodiments, a backtouch interface may also be a display. For example, in one embodiment, a device may have high-resolution touchscreens on the front and back. In another embodiment of a multi-display, backtouch-enabled device, the front face may be a high-resolution touchscreen and the back face may be a low-resolution touchscreen. As an option, one or more of the touch screens in these embodiments may be black and white. In still another embodiment, the front and back displays may utilized different display technologies and/or different display properties. For example, in one embodiment, the front display may be a high-resolution trans missive touchscreen and the back display may be a low-resolution reflective touchscreen.

[00250] As shown, device 700 is an example of one embodiment of a backtouch-enabled device, possessing a backtouch sensor 702 and a display 704. In various embodiments, the display 704 may also be an interaction surface.

[00251] As previously defined, an interaction surface is a surface capable of sensing touch, pressure, proximity, or any combination thereof. In various embodiments, a backtouch sensor may be capable of sensing one or more of touch, pressure, or proximity.

[00252] For example, in one embodiment, a backtouch sensor may be a track pad. Within the context of the present description, a track pad is a touch sensitive pointing device which can detect the motion and position of an implement of interaction (e.g., user finger, stylus, etc.).

[00253] In various embodiments, a backtouch sensor may include a resistive touch sensor. In one embodiment, a resistive touch sensor is made up of two thin, conducting layers separated by a narrow gap. When an implement of interaction presses down on the outer layer, the two layers make contact at that point. A voltage may be applied across the upper layer, from top to bottom. The resistive touch sensor may act as a voltage divider; by measuring the output voltage on the lower layer, the vertical position of the touch position may be sensed. Swapping the voltage to the sides of the upper layer may allow the horizontal touch position to be sensed.

[00254] In various embodiments, a backtouch sensor may include a capacitive touch sensor. In one embodiment, a capacitive touch sensor is made of two layers of parallel conductive lines, separated by an insulator. The layers are arranged such that the conductive lines are perpendicular. When an implement of interaction is placed over the conducting lines, there is a change in capacitance. A high frequency signal may be applied to pairs of conducting lines; the resulting current that passes between the conducting lings is proportional to the capacitance between the conducting lines. This current may be used to sense the touch or proximity of an implement of interaction. A capacitive touch sensor may be capable of detecting more than one contact point or contact area.

[00255] The backtouch-enabled device shown in Figure 7 is one exemplary embodiment. The geometry of a backtouch-enabled device need not be confined to parallel surfaces, with a distinct front and back. For example, in one embodiment, the device may have fold-out sections with interaction surfaces which become backtouch interfaces once the sections are folded out. In another embodiment, the backtouch-enabled device may be composed of curved parts, multiple parts, or complex plan form parts. In still another embodiment, the backtouch-enabled device may not be rectilinear in any outline and/or cross section. In yet another embodiment, the device may have one or more curved or non-planar surfaces, including but not limited to surfaces which are concave or convex. In some embodiments, the device may have one or more surfaces which are rigid or hard. In other embodiments, the device may have one or more surfaces which are soft or flexible. In still other embodiments, the device may change shape, depending on the mode of operation (e.g., slide-out hardware keyboard, plug-in modules, etc.).

[00256] In one embodiment, a backtouch-enabled device may have one or more backtouch sensors located on plane(s) parallel to the plane of a display. For example, see device 700. In another embodiment, a backtouch-enabled device may have one or more backtouch sensors located on plane(s) that are at an angle to the plane of a display.

[00257] In one embodiment, a backtouch sensor may be located on a plane which is completely obscured from the display. In another embodiment, a backtouch sensor may be located on a plane which is partially obscured from the display. For example, a backtouch sensor may be located on the back side of a transparent or translucent display.

[00258] In one embodiment, a backtouch interface is an interaction surface which may be made up of one or more touch sensors, one or more pressure sensors, one or more proximity sensors, one or more switches, or any combination of one or more such sensors or switches. In another embodiment, the switches which are part of a backtouch interface may be real or virtual, displayed or mechanical, soft or hard, or any combination of these properties.

[00259] In various embodiments, gestures and interactions described in terms of a backtouch interface may also be performed on sidetouch (left and right sides of a device) and captouch (top and bottom sides of a device) interfaces.

[00260] Figure 8 shows a method 800 for providing feedback to the user of a backtouch interface, in accordance with one embodiment. As an option, the method 800 may be implemented in the context of the architecture and environment of the previous Figures or any subsequent Figure(s). Of course, however, the method 800 may be implemented in any desired environment. The aforementioned definitions may apply during the present description.

[00261] As shown, it is determined whether the backtouch interface is enabled. See determination 802.

[00262] Within the context of the present description, an enabled interface or surface refers to an interface or surface which is not disabled. Within the context of the present description, a disabled interface or surface refers to an interface or surface which is not passing user input to any process, system, application, or routine. In one embodiment, a disabled interface may continue to sense user input, even though it is not used. In another embodiment, a disabled interface may be able to recognize a predefined form or type of user input which then places the interface in an enabled state. As a specific example, in one embodiment, a disabled backtouch interface may not be used to make a selection until it detects a predefined pattern of increases and decreases of contact pressure. In this way, interfaces may be disabled to avoid unwanted input, and easily enabled when desired.

[00263] It is important to note that in various embodiments, an interface or surface may be enabled with respect to one type of user input, and disabled with respect to another type of user input. For example, it may be possible for an interaction surface to be enabled with respect to touch interactions, and disabled with respect to contact pressure or proximity.

[00264] In various embodiments, a backtouch interface may be enabled in response to user input. For example, in one embodiment, a backtouch interface may be enabled in response to a predefined gesture performed on an interaction surface receptive to touch. In another embodiment, a backtouch interface may be enabled in response to a predefined pattern of increases and decreases of contact pressure exerted upon an interaction surface receptive to pressure. In yet another embodiment, a backtouch interface may be enabled by a predefined series of taps or impacts with the device. As an option, the taps or impacts may be detected by an accelerometer. In still another embodiment, a backtouch interface may be enabled by toggling a hardware or software control (e.g., button, switch, etc.).

[00265] In various embodiments, a backtouch interface may be enabled without specific user input. For example, in one embodiment, a backtouch interface may be enabled by a backtouch-enabled application. In another embodiment, a backtouch interface may be enabled when the device orientation is within a predefined range. In yet another embodiment, a backtouch interface may always be enabled.

[00266] If it is determined that the backtouch interface is enabled, then it is determined whether there is an implement of interaction in proximity of the backtouch interface. See determination 804.

[00267] In various embodiments, there may be a threshold proximity that may be achieved before determination 804 is satisfied. In one embodiment, a user may define the threshold proximity. In another embodiment, the threshold proximity may be predefined within the operating system. In still another embodiment, the threshold proximity may be predefined on a per-application basis.

[00268] If it is determined that an implement of interaction is in proximity to the backtouch interface, a visual indication of the proximity is displayed. See operation 806.

[00269] In various embodiments, the location of the implement of interaction in proximity to the backtouch interface may be indicated to the user. For example, in some embodiments, a point associated with the location of the implement may be displayed. In one embodiment, the point may be the centroid of the area with the highest proximity value. As an option, the point may be represented as a circle, a crosshair, and/or any other shape or icon.

[00270] In one embodiment, the point associated with the location of the implement may be displayed using a predefined color. As an option, the user may be able to select the color used. In yet another embodiment, the point may be displayed by inverting the preexisting contents of the display located at that point.

[00271] In various embodiments, an area associated with the location of the implement may be displayed. For example, in one embodiment, the area may be the area with proximity values above a preset threshold value. In another embodiment, the area may be a circle centered upon the centroid of maximum proximity values. As an option, the size of the circle may be similar to a fingertip.

[00272] In one embodiment, the area associated with the location of the implement may be displayed with colored shading. As an option, the user may preset the color of the shading. In another embodiment, the area may be indicated by increasing the color brightness (e.g., moving towards white within a color space, etc.) of the display content within the area. In yet another embodiment, the area may be displayed by reducing the color brightness (e.g., moving towards black within a color space, etc.) of the display content outside the area. As an option, the area may be displayed with a sharp boundary, or with a softened boundary, creating a glow effect.

[00273] In various embodiments, the degree of proximity of the implement of interaction to the backtouch interface may be indicated to the user. For example, in one embodiment, the color of a point or area being displayed may be given a degree of transparency dependent upon the proximity values, allowing the original display content to be viewed. As an option, the proximity value may be averaged over the area, and a single transparency value given to the color applied. In another embodiment, the color of the content displayed within the area may be given a color brightness based upon the proximity, such that the area is white right before contact is made. In yet another embodiment, the color of the content displayed outside the area may be given a color brightness based upon an inverse relationship with the proximity, such that all but the area is black right before contact is made.

[00274] As shown, it is determined if an implement of interaction is in contact with the backtouch interface. See determination 808. If it is determined that there is no contact, the proximity may continue to be determined and displayed.

[00275] If it is determined that an implement of interaction is in contact with the backtouch interface, a visual indication of the contact is displayed. See operation 810.

[00276] In various embodiments, a visual indication of contact with a backtouch interface may differ from a visual indication of contact with a front display, where the contact point and area is usually obscured by an implement of interaction. For example, in one embodiment, the contact point may be displayed, instead of or in addition to the contact area. In another embodiment, the visual representation of the interior of the contact area may be colored. In yet another embodiment, the contact area may be represented by an iconic version of a fingerprint. In still another embodiment,

the contact area may be distorted so as to appear to bulge out of the display. As an option, this distortion may increase as a function of contact pressure.

[00277] As shown, once the user has been given feedback regarding contact with the backtouch interface, further user interaction is handled by a different routine. See operation 8. For example, methods 4 or 6 may be implemented at this point, utilizing backtouch contact pressure and contact point to define a selection.

[00278] Figure 9 shows a pressure-sensitive user interface 900 for making a selection using a backtouch interface, in accordance with one embodiment. As an option, the user interface 900 may be implemented in the context of the architecture and environment of the previous Figures or any subsequent Figure(s). Of course, however, the user interface 900 may be implemented in any desired environment. The aforementioned definitions may apply during the present description.

[00279] As shown, the user interface 900 may be utilized in making a selection based in part on pressure exerted by the user upon a backtouch interface. For example, in one embodiment, a user's finger 902 may exert a small amount of force over contact area 904, which is centered on contact point 906. In one embodiment, contact area 904 and contact point 906 may be displayed on top of the content already being displayed, to assist the user in making contact at the desired location. In another embodiment, the contact point 906 may be displayed as a symbol, such as a plus sign, which may be rotated to an orientation estimated to match that of the contacting finger. As an option, the finger orientation may be estimated using the size and shape of the contact area, detected location of other fingers, and/or any other user input or observable properties.

[00280] If the contact pressure level is sufficient, then a selection area 908 having a selection boundary 910 and a secondary boundary 912 (indicating uncertainty related to the contact area) is calculated and displayed. As an option, the selection may be defined using method 4 or 6, or any other method of defining a selection based upon contact pressure.

[00281] Figure 10 shows a user interface 1000 for defining settings associated with a backtouch interface, in accordance with one embodiment. As an option, the user interface 1000 may be implemented in the context of the architecture and environment of the previous Figures or any subsequent Figure(s). Of course, however, the user interface 1000 may be implemented in any desired environment. The aforementioned definitions may apply during the present description.

[00282] In one embodiment, the user interface 1000 may include a plurality of check boxes 1002 which represent various types of user interactions detectable by the backtouch interface. The types of interactions may include, but are not limited to, pressure, touch, proximity, and/or any other type

of user interaction. Through these checkboxes, a user may limit a backtouch interface to only certain types of interactions. As an option, the user interface 1000 may only present checkboxes for interaction types detectable by the particular backtouch interface associated with the settings being defined.

[00283] In one embodiment, the user interface 1000 may include a plurality of check boxes 1004 which represent various methods of enabling a backtouch interface. As an option, in one embodiment, more than one method of activation may be selected.

[00284] In one embodiment, the collection of backtouch interface enablement methods 1004 may include a checkbox 1006 which allows the interface to be activated by a gesture. In one embodiment, the gesture may be predefined within an application or operating system. In another embodiment, the user interface 1000 may include a button 1008 to allow a user to specify a gesture to activate the backtouch interface. As an option, the user may be presented with an interface where they may specify the gesture by performing it. In yet another embodiment, the user may choose from a plurality of predefined gestures.

[00285] In one embodiment, the collection of backtouch interface enablement methods 1004 may include a checkbox 1010 which allows the interface to be activated by a grip. In the context of the present description, a grip refers to the set of sensor data associated with a particular manner of holding a device. The sensor data associated with a grip may include, but is not limited to, points and areas of contact on one or more interaction surfaces, device orientation, contact pressure levels exerted in one or more contact areas, proximity data (e.g., proximity to portions of a users hand not in contact with the device, etc.), and/or any other sensor data.

[00286] In one embodiment, the backtouch interface-enabling grip may be predefined within an application or operating system. In another embodiment, the user interface 1000 may include a button 1012 to allow a user to specify a grip to enable the backtouch interface. As an option, the user may be presented with an interface where they may specify the grip by performing it. In yet another embodiment, the user may choose from a plurality of predefined grips.

[00287] In one embodiment, the collection of backtouch interface enablement methods 1004 may include a checkbox 1014 which keeps the backtouch interface enabled whenever the device is powered on, similar to a primary touch screen, for example. In another embodiment, the collection of backtouch interface enablement methods 1004 may include a checkbox 1016 which keeps the backtouch interface disabled.

[00288] In one embodiment, the user interface 1000 may include a check box 1018 which allows the criteria for backtouch interface enablement to be set on a per-application basis. As an option, check box 1018 may allow any application to override the preferences set with the plurality of check boxes 1004.

[00289] In one embodiment, the user interface 1000 may include a plurality of check boxes 1020 which represent various methods of indicating that a backtouch interface is enabled. As an option, in one embodiment, more than one indicator may be selected.

[00290] In one embodiment, the collection of indicator check boxes 1020 may include a checkbox 1022 which indicates that the backtouch interface is enabled by displaying a colored border around the edge of a display. In one embodiment, the colored border may be animated.

[00291] In one embodiment, the collection of indicator check boxes 1020 may include a checkbox 1024 which indicates that the backtouch interface is enabled using an LED. In one embodiment, the LED may indicate the enabled backtouch interface through a specific color, with other colors being reserved for indicating other device states. In another embodiment, the LED may pulse or flash when the backtouch interface is enabled.

[00292] In one embodiment, the collection of indicator check boxes 1020 may include a checkbox 1026 which indicates that the backtouch interface is enabled by displaying a colored border around a status bar (e.g., a minimal bar common to most user interfaces, etc.). In one embodiment, the colored border may be animated.

[00293] In one embodiment, the collection of indicator check boxes 1020 may include a checkbox 1028 which indicates that the backtouch interface is enabled by displaying an icon. In one embodiment, the icon may be located within a status bar.

[00294] In one embodiment, the collection of indicator check boxes 1020 may include a checkbox 1030 which indicates that the backtouch interface is enabled by changing the color of a status bar. In one embodiment, the color change may be animated.

[00295] In one embodiment, the collection of indicator check boxes 1020 may include a checkbox 1032 which allows the backtouch interface to be enabled without any indication to the user. As an option, this preference may be overridden by an application.

[00296] In various embodiments, the user interface 1000 may allow a user to configure the type and style of feedback provided while an enabled backtouch interface is being used. For example, in one embodiment, the user interface 70.0002.3-00 may include a button 1034 which allows a user to specify whether or not feedback is provided while the backtouch interface is being used. As an

option, this preference may be overridden by applications (e.g., an application may be configured such that it provides backtouch interface feedback independent of any system preferences, etc.).

[00297] In one embodiment, the user interface 1000 may include a button 1036, which presents a user interface which allows a user to specify the style of feedback provided when a backtouch interface is being used. For example, a user may configure the feedback provided when an implement of interaction is in proximity to, contact with, and/or exerting pressure on the backtouch interface.

[00298] In one embodiment, the user interface 1000 may include a button 1038, which allows a user to test the style parameters they defined using button 1036. For example, in one embodiment, button 1038 may present a user interface where a user may experiment with a backtouch interface, observing the feedback styles they have configured. As an option, this interface may provide a quick way to reconfigure the feedback style.

[00299] In various embodiments, the user interface 1000 may allow a user to configure the sensitivity of a backtouch interface. In the context of the present description, the sensitivity of a backtouch interface refers to the threshold level of interaction (e.g., proximity, contact, pressure, etc.) which a backtouch interface may receive before treating the interaction as being intentionally made by a user. In this way, backtouch interactions incidental to device usage may be ignored, while intentional backtouch user interactions may be acted upon.

[00300] In one embodiment, the user interface 70.0002.3-00 may include a plurality of checkboxes 1040 that represent a plurality of backtouch interface sensitivity levels. The backtouch interface sensitivity levels may include, but are not limited to, predefined levels (e.g., "high", "standard", "low", etc.), user defined levels, automatically defined levels, and/or any other type of sensitivity level.

[00301] In one embodiment, the user interface 1000 may allow a user to specify the sensitivity levels for particular aspects of a backtouch interface (e.g., proximity, contact, pressure, etc.). As an option, the user interface may provide the user with the ability to save and load user defined backtouch interface sensitivity profiles.

[00302] In the context of the present description, an interface sensitivity profile refers to a collection of sensitivity parameters associated with various aspects of an interaction interface. The sensitivity parameters may include, but are not limited to, an activation threshold, a maximum signal beyond which interaction is ignored, sample rate(s), and/or any other parameter which may be

associated with an interaction interface. As an option, the sensitivity parameters may be specific to particular types of interaction (e.g., proximity, contact, pressure, etc.).

[00303] In the context of the present description, an activation threshold refers to a threshold signal below which interaction is ignored. An activation threshold may be set for different types of user interaction (e.g., pressure, contact, proximity, etc.). For example, in one embodiment, an interaction surface may have a pressure activation threshold of P, below which all pressure interactions are ignored.

[00304] It is important to recognize the distinction between activation and enablement. In various embodiments, activation serves as a filter of incidental interactions, defining the weakest sensor signal which may not be ignored. Enablement serves a similar purpose, to ignore unwanted interactions; a disabled interface may not act upon any sensor signals except those related to enabling the interface. In other words, activation filters sensor signals based on strength, while enablement filters sensor signals based on the signal itself.

[00305] In one embodiment, the plurality of checkboxes 1040 may include an "automatic" checkbox, representing a backtouch interface sensitivity profile automatically determined by the device. As an option, if an automatic sensitivity profile has not been created, the user may be presented with the option of initiating the process of automatically determining an optimal backtouch interface sensitivity profile.

[00306] In one embodiment, the user interface 1000 may include a button 1042 which allows a user to initiate the process of automatically determining an optimal backtouch interface sensitivity profile. In the context of the present description, an optimal interface sensitivity profile refers to a sensitivity profile which would allow an interface to remain enabled all the time, with minimal accidental inputs. In one embodiment, the process of automatically determining an optimal backtouch interface sensitivity profile may include gathering data over a predefined amount of time. As an option, the time remaining may be displayed in user interface 1000. During this learning period, the backtouch enablement preferences specified in checkboxes 1004 may be overridden, and instead the user is required to enable the backtouch interface with a specific method, chosen such that accidental enablement is highly unlikely (e.g., two step activation using gestures, hardware switch with on-screen confirmation, etc.). This facilitates separating intentional interactions from incidental interactions. Once enabled, the backtouch interface may remain enabled for a short period of time. During the learning period, the device may gather data, including but not limited to sensor data from the backtouch interface, changes in orientation, backtouch interface enablements, and/or

any other data related to use of the device. Once the learning period has elapsed, the gathered data may be used to estimate the levels of meaningless, incidental backtouch interaction, such as interaction due to holding the device. As an option, in another embodiment, the user may be able to specify the length of the learning period. In yet another embodiment, the user may be able to specify desired accuracy of the sensitivity level, balancing the reduction of unwanted interactions with a possible increase in intentional interactions being missed.

[00307] In one embodiment, the user interface 1000 may include a button 1044 which allows a user to test the specified sensitivity settings. For example, in one embodiment, button 1044 may present a user interface which provides feedback regarding interactions with the backtouch interface. As an option, the testing user interface may utilize a default set of backtouch feedback settings, if the user had previously turned feedback off. In another embodiment, button 1044 may activate a backtouch interface, and present feedback to the user within user interface 1000. As an option, user interface 1000 may ignore any input received from the backtouch interface, only provide feedback related to the user interactions. In this way, a user may test the settings with the backtouch interface without accidentally interacting with any checkboxes, buttons, or other element of user interface 1000.

[00308] In various embodiments, the interfaces of Figure 10, as well as any other previous or subsequent interfaces, may take the form of webpages displayed utilizing a web browser on any desired computer, handheld device, etc. In such case, any of the parameters or other input disclosed herein may be entered without the use of the host device, whereby such parameters or other input (or derivatives thereof) may be pushed to the device for configuration/updating purposes.

[00309] Figure 11 shows a user interface 1100 for defining settings associated with a pressure-sensitive interface, in accordance with one embodiment. As an option, the user interface 1100 may be implemented in the context of the architecture and environment of the previous Figures or any subsequent Figure(s). Of course, however, the user interface 1100 may be implemented in any desired environment. The aforementioned definitions may apply during the present description.

[00310] In one embodiment, the user interface 1100 may include a checkbox 1102 to allow the user to enable the pressure-receptive aspect of one or more interaction surfaces. In one embodiment, this checkbox may enable all pressure-receptive surfaces. In another embodiment, the user may be able to specify which pressure-receptive surfaces shall be enabled. In various other embodiments, enablement of pressure-receptive surfaces may be accomplished through user input outside of user interface 1100. Pressure-receptive surface enabling user input may include, but is not limited to,

gestures, software buttons, hardware buttons, accelerometer data, contact pressure patterns, and/or any other form of user input.

[00311] In one embodiment, the user interface 1100 may include a plurality of check boxes 1104 which allow a user to specify which types of feedback to provide when the pressure-sensitive interface(s) is activated, if any at all. For example, in one embodiment, the user may specify a sound which plays whenever the pressure-sensitive interface is activated. In another embodiment, the user may specify a form of visual feedback to be given when the pressure-sensitive interface is activated. As an option, the user may select from a plurality of predefined forms of feedback.

[00312] In one embodiment, the user interface 1100 may include a checkbox 1106 which allows a user to specify whether they want visual feedback regarding contact pressure level. As previously described, contact pressure level may be visually represented in a number of ways, including, but not limited to, a color which is part of a two color spectrum, a percentage, a unitless number, and/or any other representation of a value located within a finite range. In one embodiment, user interface 1100 may allow a user to specify the type of contact pressure level feedback. As an option, a separate user interface may be presented to the user to define the form of the feedback.

[00313] In various embodiments, the user interface 1100 may be used to define the pressure activation threshold. In the context of the present description, a pressure activation threshold is the smallest contact pressure level which may not be ignored. In one embodiment, the current pressure activation threshold level 1108 may be displayed within user interface 1100. The current pressure activation threshold level may be displayed as a unitless number, a percentage of the maximum measurable contact pressure level, a color, a scale, and/or any other method of representing a value located within a finite range.

[00314] In one embodiment, the user interface 1100 may include a button 1110 which allows a user to manually specify the pressure activation threshold level. In one embodiment, the user may be presented with an interface where they may enter a specific value to be used as the pressure activation threshold. In another embodiment, the user may be prompted to exert the desired threshold pressure on a pressure-sensitive interface, confirming their selection by maintaining the desired contact pressure for a predefined amount of time. As an option, the user may be prompted to repeat this process more than one time, after which the resulting pressure levels may be averages. In yet another embodiment, the user may be given the chance to test the newly specified pressure activation threshold level.

[00315] In one embodiment, the user interface 1100 may include a button 1112 which resets the pressure activation threshold level to a predefined, default value. As an option, the user may be prompted to confirm this action before the default value is applied.

[00316] In one embodiment, the user interface 1100 may include a button 1114 which initiates a process which determines an optimal pressure activation threshold level. In the context of the present description, an optimal pressure activation threshold level refers to an activation threshold which would allow an interface to remain enabled all the time, with minimal erroneous inputs. In one embodiment, the process of automatically determining an optimal pressure activation threshold level may include gathering data over a predefined amount of time. As an option, the time remaining may be displayed in user interface 1100.

[00317] During this learning period, the pressure activation threshold may temporarily be set to a level sufficiently high that an accidental activation is highly unlikely. This facilitates separating intentional interactions from incidental interactions. During the learning period, the device may gather data, including but not limited to sensor data from the pressure-sensitive interface, changes in orientation, pressure-sensitive interface activations, and/or any other data related to use of the device. Once the learning period has elapsed, the gathered data may be used to estimate the levels of meaningless, incidental pressure interaction, such as interaction due to holding the device. As an option, in another embodiment, the user may be able to specify the length of the learning period. In yet another embodiment, the user may be able to specify desired accuracy of the pressure activation threshold level optimization, balancing the reduction of unwanted interactions with a possible increase in intentional interactions being missed.

[00318] In one embodiment, the user interface 1100 may display the amount of time remaining in an ongoing learning period. See, for example, text field 1116. In various embodiments, the time remaining in the learning period may be displayed in user interfaces other than 1100. User interfaces where the remaining time may be displayed include, but are not limited to, a status bar, a contextual menu, a shortcut menu, a pop-up interface adapted for managing various interaction interfaces, and/or any other user interface.

[00319] In one embodiment, the user interface 1100 may include a plurality of checkboxes 1118 which represent a plurality of forms of feedback associated with the automatic determination of an optimal pressure activation threshold level. During the learning period, it may be helpful to provide the user with feedback every time the pressure-sensitive interface is activated. The forms of feedback include, but are not limited to, a sound, vibration, screen flash, and/or any other form of

feedback. In one embodiment, the feedback associated with the automatic determination of an optimal pressure activation threshold level may override preferences set elsewhere. In another embodiment, the user may specify the parameters of these forms of feedback.

[00320] The user interface 1100 may be used to define and manage touch states. In one embodiment, a preset number of global touch states may be defined, which the operating system and applications may make use of. In another embodiment, the touch states may be defined on a per-application basis.

[00321] In one embodiment, the user interface 1100 may include a button 1120 which presents the user with a user interface that facilitates the definition of touch states. As an option, the user may be able to select from a plurality of predefined touch state definitions. Additionally, the user interface 1100 may display the currently defined touch states. See, for example, text field 1124. The touch states may be represented as a unitless number, a percentage of the range of allowable contact pressure levels, a color, and/or any other representation of a contact pressure level.

[00322] In one embodiment, the user interface 1100 may include a button 1122 which allows the user to reset the touch state definitions to a predefined default definition. As an option, the user may be prompted for confirmation before resetting the touch state definition to default values.

[00323] Figure 12 shows a method 1200 for assisting a user in defining touch states, in accordance with one embodiment. As an option, the method 1200 may be implemented in the context of the architecture and environment of the previous Figures or any subsequent Figure(s). Of course, however, the method 1200 may be implemented in any desired environment. The aforementioned definitions may apply during the present description.

[00324] As shown, the highest touch state is defined. See operation 1202. In one embodiment, the highest touch state may be predefined within the operating system. In another embodiment, the highest touch state may be specified by the user, in the form of a contact pressure value.

[00325] In various embodiments, the highest touch state may be defined through user interaction with a pressure-sensitive interface. For example, in one embodiment, a user may be prompted to exert a level of contact pressure beyond which the highest touch state may be triggered. As an option, the user may be prompted to exert this pressure multiple times, with the resulting values averaged. In another embodiment, the user may be prompted to exert the highest contact pressure level which is comfortable, and then defining the highest touch state using a contact pressure level slightly lower than that being exerted.

[00326] Once the highest touch state has been defined, the remaining spectrum of contact pressures is partitioned into the remaining touch states and displayed. See operation 1204.

[00327] In the context of the present description, the spectrum of contact pressures refers to the range of contact pressure levels a user may exert to interact with the device. For example, in one embodiment, the lower end of a spectrum of contact pressures may be equivalent to the pressure activation threshold level. In various embodiments, there may be multiple contact pressure spectrums defined. For example, in one embodiment, there may exist a distinct spectrum of contact pressures for each pressure-sensitive interaction surface. In another embodiment, there may exist a spectrum of contact pressures which is partitioned into touch states (a touch state spectrum), and a different spectrum of contact pressures for use with contact pressure levels (a contact pressure level spectrum).

[00328] In one embodiment, the touch state spectrum may have extrema defined by the user. As an option, the lower bound of the touch state spectrum may be the same as pressure activation threshold level.

[00329] In one embodiment, the touch state spectrum may be partitioned such that all touch states contain the same fraction of the touch state spectrum. In another embodiment, the touch state spectrum may be partitioned such that all touch states have equal portions of the touch state spectrum except for the highest touch state. In yet another embodiment, the touch state spectrum may be partitioned such that the touch states are weighted, some containing larger fractions of the spectrum than others. As an option, the weight factors may be predefined or may be user definable.

[00330] In one embodiment, the partitioned touch state spectrum may be displayed as a geometric shape (e.g., circle, rectangle, etc.) which has been segmented according to the touch state partitions. In another embodiment, the partitioned touch state spectrum may be displayed as an array of percentages of the total spectrum. In yet another embodiment, the touch state spectrum may be displayed as an array of contact pressure levels associated with the boundaries of the partitions.

[00331] Once the touch state spectrum has been partitioned and displayed, the user is given the opportunity to adjust the touch states. See operation 1206.

[00332] In one embodiment, the user may adjust the contact pressure levels associated with the touch states by specifying the numerical values of specific contact pressure levels. In another embodiment, the user may adjust the touch states by interacting with a graphical representation of the partitioned touch state spectrum. In yet another embodiment, the user may adjust the touch states

by defining new partitions using a pressure-sensitive interface. As an option, the user may exert the desired contact pressure level to set the boundaries of a touch state.

[00333] Once the touch states have been adjusted, the newly partitioned touch state spectrum is verified. See operation 1208.

[00334] In one embodiment, the touch state spectrum may be verified by asking the user to confirm their choice through a user interface. In another embodiment, the user may verify the touch state spectrum by utilizing it in a testing interface. As an option, the user may be given visual feedback regarding the exact contact pressure level being exerted, in addition to the current touch state.

[00335] Figure 13 shows a user interface 1300 for assisting a user in defining touch states, in accordance with one embodiment. As an option, the user interface 1300 may be implemented in the context of the architecture and environment of the previous Figures or any subsequent Figure(s). Of course, however, the user interface 1300 may be implemented in any desired environment. The aforementioned definitions may apply during the present description.

[00336] In one embodiment, the user interface 1300 may include a graphical representation 1302 of a touch state spectrum, hereinafter referred to as touch space spectrum rendering 1302. As another embodiment, the touch space spectrum rendering 1302 may be colored with the spectrum of colors between two colors representing spectrum extrema. As an option, the same colors used to provide pressure dependent feedback to the user of a pressure-sensitive interface may be used here.

[00337] The touch space spectrum rendering 1302 found in user interface 1300 may be broken up into ranges of contact pressure representing touch states. In various embodiments, the touch space spectrum rendering may be partitioned by one or more touch state dividers 1304. In one embodiment, the touch state dividers may simply be a line drawn between two touch states. In another embodiment, the touch state dividers may also display the contact pressure level separating those two touch states.

[00338] In various embodiments, a plurality of touch states may be defined. In one embodiment, the user may specify the number of touch states to define. In another embodiment, the number of touch states may defined within the operating system. In still another embodiment, the number of touch states may be defined on a per-application basis, by the applications themselves or by the user (if so allowed by the application). In yet another embodiment, there may exist a set of default touch states of a fixed number which may be overridden by a different set of touch states defined within an application.

[00339] In various embodiments, the touch space spectrum rendering 1302 found in user interface 1300 may have a labeled scale. For example, in one embodiment, the lower boundary 1306 of the lowest touch state (e.g., the touch state associated with the lowest contact pressures) may be displayed. As an option, the lower boundary of the touch space spectrum may be equivalent to the pressure activation threshold, which the user may define using, for example, user interface 1100.

[00340] In another embodiment, the upper boundary 1308 of the touch space spectrum rendering may be displayed. As an option, upper boundary 1308 may be automatically set to a value slightly higher than the lower boundary of the highest touch state, since the highest touch state is made up of all pressures above that lower boundary. In this way, the scale of the touch space spectrum rendering is not skewed due to the potentially large range of contact pressures making up the highest touch state. In yet another embodiment, the touch space spectrum rendering may change in scale due to user interaction, with upper boundary 1308 being automatically updated.

[00341] In various embodiments, the touch state dividers 1304 found in the user interface 1300 may possess touch state divider handles 1310 with which a user may adjust the partitioning of touch states. For example, in one embodiment, a user may touch and drag a touch state divider handle to change the value of the associated divider. In another embodiment, a user may select a touch state divider handle; after the touch state divider handle has been selected, the divider may be assigned a value equivalent to whatever contact pressure level the user exerts for a predefined amount of time. As a specific example, a user may select a touch state divider handle and then press on an interaction surface. Once the desired contact pressure level is reached, the user maintains the pressure for 3 seconds, after which the value of the touch state divider is updated.

[00342] In one embodiment, the user interface 1300 may include a contact pressure gauge 1312 which reports the contact pressure level currently being exerted, to assist the user in selecting a practical partitioning of the touch state spectrum. In another embodiment, the scale of the contact pressure gauge may match that of touch state spectrum rendering 1302. As an option, the scale of both contact pressure gauge 1312 and touch state spectrum rendering 1302 may be set to accommodate the larger of two values: the current contact pressure level, or a value slightly higher than the lower boundary of the highest touch state.

[00343] In various embodiments, the touch state dividers 1304 found in the user interface 1300 may each be associated with a plurality of icon buttons 1314 which a user may use to lock a touch state divider at a particular value. In one embodiment, adjusting one touch state divider may cause all other unlocked dividers to shift such that the remaining portions of the touch state spectrum are

partitioned as evenly as possible. As an option, the user interface 1300 may include a button to unlock all touch state dividers. In another embodiment, the user interface 1300 may include a button 1316 which distributes all unlocked touch state dividers evenly throughout the remaining parts of the touch state spectrum.

[00344] In one embodiment, the user interface 1300 may include a button 1318 which allows the user to establish the highest touch state boundary through pressure-based user input. In another embodiment, the user may be prompted to establish this touch state boundary as soon as user interface 1300 is displayed, in accordance with method 1200. In one embodiment, the user may only specify the highest touch state, with the remaining touch state spectrum being evenly partitioned across the touch states.

[00345] In one embodiment, the user interface 1300 may include a button 1320 which resets all touch state boundaries to default values. In another embodiment, the highest touch state boundary may be preserved, only able to be reset within the interface used to define it that may be displayed in response to activating button 1318.

[00346] In various embodiments, the user interface 1300 may include a button 1322 which allows a user to test the currently defined touch states. For example, in one embodiment, a user may be asked to achieve various touch states, and maintain them for a certain period of time. In another embodiment, the user may be presented with an interface similar to 1300, but where the touch state spectrum rendering 1302 and the contact pressure gauge 1312 are more predominantly displayed. As an option, a sound may be played every time a touch state boundary is crossed.

[00347] Figure 14 shows a user interface 1400 for indicating that a backtouch and/or pressure-sensitive interface is activated, in accordance with one embodiment. As an option, the user interface 1400 may be implemented in the context of the architecture and environment of the previous Figures or any subsequent Figure(s). Of course, however, the user interface 1400 may be implemented in any desired environment. The aforementioned definitions may apply during the present description.

[00348] In one embodiment, the user interface 1400 may include one or more icons 1402 to indicate that a backtouch and/or pressure-sensitive interface has been activated. As an option, the icons may also indicate whether an interface is enabled. For example, an icon may only be visible if the interface is enabled, and only in color if the interface is activated. In another embodiment, the icons may have a color which depends upon the contact pressure level currently being exerted on that particular interface.

[00349] In various embodiments, the user interface 1400 may include a status bar 1404 which provides the user feedback regarding various device functions, in addition to other information, such as the date and/or time. The status bar itself may be used to indicate whether a backtouch and/or pressure-sensitive interface has been activated. For example, in one embodiment, the status bar may have a shading color which depends upon the contact pressure level currently being exerted on an activated interface. This may be done in conjunction with displaying an icon 1402 to indicate which interface has been activated. In another embodiment, the change in color may be restricted to just the border 1406 of the status bar. In yet another embodiment, the type of interface which has been activated may be indicated through an animation routine, including, but not limited to, a pulsing of the border, a cyclical variation of transparency of the status bar shading, "marching ants" along the status bar border, and/or any other animation routine.

[00350] In one embodiment, the status bar 1404 within the user interface 1400 may include one or more items of textual information 1408. The items of textual information may include, but are not limited to, date, time, network type, battery level, other device or application status information, and/or any other type of textual information.

[00351] In one embodiment, the activation of a backtouch and/or pressure-sensitive interface may be indicated through the presentation properties of the textual information 1408. Presentation properties for textual information which may be altered to indicate the activation of an interface include, but are not limited to, font, style, size, color, animation routine (e.g., flashing text, cycling colors, etc.), and/or any other type of presentation property. In another embodiment, activation of a backtouch and/or pressure-sensitive interface may be indicated by temporarily replacing textual information 1408 with a message, which may include, but is not limited to, the identity of the activated interface.

[00352] In one embodiment, the user interface 1400 may indicate the activation of a backtouch and/or pressure-sensitive interface by displaying a border 1410 around the display. As an option, border 1410 may change color depending upon the current contact pressure level.

[00353] Figure 15 shows a user interface 1500 for defining a backtouch feedback style, in accordance with one embodiment. As an option, the user interface 1500 may be implemented in the context of the architecture and environment of the previous Figures or any subsequent Figure(s). Of course, however, the user interface 1500 may be implemented in any desired environment. The aforementioned definitions may apply during the present description.

[00354] When interacting with a backtouch interface, it may or may not be important to provide the user with some form of feedback regarding the location and/or activity of their chosen implement of interaction. Providing interaction feedback allows the user to interact with the device using an interaction surface they may not be able to see.

[00355] In one embodiment, the user interface 1500 may include a plurality of checkboxes 1502 which represent various types of feedback which may be provided as an implement of interaction is in proximity to the backtouch interface. The types of feedback may include, but are not limited to, visual (e.g., screen flashes, status bar icons, iconic depictions of the location of the implement, etc.), sound, vibration, and/or any other form of feedback. In another embodiment, one or more of these types of feedback may be configured by the user. For example, in one embodiment, the user may select a sound to be played whenever an implement of interaction is in proximity to the backtouch interface. In yet another embodiment, the feedback may be limited to only those instances where the proximity to the backtouch interface appears intentional, rather than incidental. As a specific example, in one embodiment, feedback might be given for a fingertip, but not for a palm which is in proximity to the backtouch interface due to the user's grip.

[00356] In one embodiment, the user interface 1500 may include a plurality of checkboxes 1504 which represent various types of visual feedback that may indicate that an implement of interaction is in proximity to a backtouch interface. The types of visual feedback include, but are not limited to, graphical representation of probable implement location, status bar icon, screen flash, and/or any other type of visual feedback.

[00357] In various embodiments, a backtouch interface may be able to estimate the location of an implement of interaction in proximity to the backtouch interaction surface. This information can be used to provide useful feedback to the user. For example, in one embodiment, a point associated with the location may be displayed. As an option, the point may be the centroid of the area with the highest proximity value within a predefine threshold. In another embodiment, the point may be replaced or combined with an icon, shape, or symbol.

[00358] In another embodiment, the user may be provided with proximity feedback in the form of a visual representation of the proximity data received from the backtouch interface. As an option, the proximity values may be scaled such that the visual representation has the appearance of a glow, centered on the estimated location of the implement.

[00359] In one embodiment, the user interface 1500 may include a plurality of checkboxes 1506 which represent various styles of visual proximity feedback. The styles include, but are not limited

to, dynamic coloring, the feedback described in conjunction with operation 806 of method 800, and/or any other type or style of visual feedback. In the context of the present description, dynamic coloring refers to coloring which varies as a function of proximity to the backtouch interface. For example, in one embodiment, the color of the visual proximity feedback may vary between two colors which represent the least discernable proximity and the greatest proximity before contact. As an option, the colors may include a transparency factor, so the visual feedback does not obstruct display contents any more than necessary.

[00360] In one embodiment, the user interface 1500 may include a plurality of checkboxes 1508 which represent various types of feedback which may be provided as an implement of interaction comes in contact with the backtouch interface. The types of feedback may include, but are not limited to, visual (e.g., screen flashes, status bar icons, iconic depictions of the location of the implement, etc.), sound, vibration, and/or any other form of feedback. In another embodiment, one or more of these types of feedback may be configured by the user. For example, in one embodiment, the user may select a sound to be played whenever an implement of interaction makes contact with the backtouch interface. In yet another embodiment, the feedback may be limited to only those instances where the contact with the backtouch interface is estimated to be intentional, rather than incidental. As a specific example, in one embodiment, feedback might be given for contact with a fingertip, but not for a palm which is in contact with the backtouch interface due to the user's grip.

[00361] In one embodiment, the user interface 1500 may include a plurality of checkboxes 1510 which represent various types of visual feedback indicating contact with the backtouch interface. The types of visual feedback include, but are not limited to, graphical representations of contact location and extent (e.g., contact point, contact area, etc.), a status bar icon, screen flash, and/or any other type of visual feedback, including those described in other embodiments.

[00362] In one embodiment, the user interface 1500 may include a plurality of checkboxes 1512 which cause the visual feedback indicating contact with the backtouch interface to fade after a set amount of time. In another embodiment, the user may specify the amount of time before fading begins, how quickly the fade occurs, and/or the limits of the fade (e.g., completely disappear, fade to 70% transparency, etc.). As an option, the fading of the visual feedback may be reversed if the implement of interaction moves beyond a preset threshold while still in contact with the backtouch interface.

[00363] In one embodiment, the user interface 1500 may include a plurality of checkboxes 1514 which allow the user to specify the style of visual feedback associated with making contact with the

backtouch interface. The styles may include, but are not limited to, shading of a contact area, line style of the border of a contact area, animation routine, and/or any other style aspect of visual feedback, including those described in other embodiments.

[00364] In one embodiment, the user interface 1500 may include a plurality of checkboxes 1516 which represent various types of feedback which may be provided as an implement of interaction exerts pressure on the backtouch interface. The types of feedback may include, but are not limited to, visual (e.g., screen flashes, status bar icons, iconic depictions of the contact pressure of the implement, etc.), sound, vibration, and/or any other form of feedback. In another embodiment, one or more of these types of feedback may be configured by the user. For example, in one embodiment, the user may select a sound to be played whenever an implement of interaction exceeds a predefined contact pressure level with the backtouch interface. In another embodiment, the sound may play whenever there is a change in touch state. In yet another embodiment, the feedback may be limited to only those instances where the contact pressure on the backtouch interface is estimated to be intentional, rather than incidental. As a specific example, in one embodiment, feedback might be given for a finger press, but not for a palm squeeze incidental to the user's grip.

[00365] In one embodiment, the user interface 1500 may include buttons 1518 which allow the user to specify the colors which represent the extrema of measurable contact pressure levels. As an option, the colors may be specified with a transparency value.

[00366] In one embodiment, the user interface 1500 may include a plurality of checkboxes 1520 which represent various venues for presenting visual feedback based upon the current contact pressure level. The venues for pressure-related visual feedback include, but are not limited to, an area equivalent to or based upon the contact area, the contact point, the border of the display, the status bar, and/or any other type or example of visual feedback, including those described in other embodiments.

[00367] In one embodiment, the user interface 7.002.8-00 may include a button 1522 which returns all settings defined within user interface 7.002.8-00 to predefined default values. As an option, the user may be prompted to confirm the reset before restoring the default values.

[00368] In one embodiment, the user interface 7.002.8-00 may include buttons 1524 which allow a user to save and load collections of backtouch feedback settings. As an option, the user may be prompted to confirm loading a new collection of settings before overwriting the current collection.

[00369] In one embodiment, the user interface 1500 may include a button 1526 which allows a user to test the current backtouch feedback style settings. In one embodiment, button 1526 may

enable the backtouch interface (if not already enabled) and allow the user to experience the current backtouch feedback style without being able to interact with user interface 1500 through the backtouch interface. In other words, the user may be able to expose the backtouch interface to a range of proximity, contact, and pressure interactions without accidentally changing any of the settings found within 1500.

[00370] In another embodiment, button 1526 may present to the user a user interface which allows the user to experience the current backtouch feedback style settings within a variety of simulated scenarios. The simulated scenarios may include, but are not limited to, web browsing, photo viewing, an application launcher, an eBook, word processing, and/or any other common use scenario. As an option, the simulated use scenarios may be defined such that the user is able to experience the current feedback style in a wide range of color schemes, subject matter, degrees of screen clutter, etc.

[00371] As a specific example of a backtouch feedback style collection in use, in one embodiment, a user may configure the backtouch interface through user interface 1500 such that having a finger in proximity to the backtouch interface causes a faint blue glow to appear on the display, over the location of the finger. The blue glow becomes brighter as the distance between the finger and the backtouch interface decreases, until contact is made. Upon contact, the display shows a small plus sign at the contact point and a thin "marching ants" border around the contact area. The contact area is not shaded. As the user increases contact pressure, the contact area is shaded red, which becomes more opaque as the pressure increases.

[00372] Figure 16 shows an alternative method 1600 for defining a selection made within a user interface based in part on contact pressure, in accordance with one embodiment. As an option, the method 1600 may be implemented in the context of the architecture and environment of the previous Figures or any subsequent Figure(s). Of course, however, the method 1600 may be carried out in any desired environment. It should also be noted that the aforementioned definitions may apply during the present description.

[00373] As shown, it is determined if a touch event has occurred. See determination 1602.

[00374] In the context of the present description, a touch event refers to an event in which an implement of interaction comes into contact with an interaction surface. For example, in one embodiment, pressing on a pressure-sensitive backtouch interface with a finger may be a touch event. Another example may be making contact with a touch-sensitive display with a stylus.

[00375] If it is determined that a touch event has occurred, then the touch event attributes are determined. See operation 1604.

[00376] In the context of the present description, touch event attributes refer to one or more measurable aspects of the user interaction which resulted in a touch event. The measurable aspects may include, but are not limited to, touch state, contact area, contact point, contact pressure level, pressure uncertainty, touch uncertainty, and/or any other measurable aspect of user interaction.

[00377] As shown, it is determined whether the system is in a selection mode. See determination 1606.

[00378] In the context of the present description, a selection mode refers to a system state where a user may create or modify a selection in a display. In various embodiments, a selection mode may be represented by a system flag. Examples of when a system may be in a selection mode include, but are not limited to, instances where a selection already exists, instances where a user has indicated a desire to create a selection.

[00379] In various embodiments, a system may be placed in a selection mode through user input. For example, in one embodiment, the user may activate a selection mode by performing a predefined gesture on an interaction surface. In another embodiment, a user may activate a selection mode by exerting contact pressure on an interaction surface for a sufficient amount of time, the contact pressure exceeding a predefined threshold.

[00380] If the system is in a selection mode, then a selection is created and/or modified as a function of the touch event attributes, then displayed. See operation 1608.

[00381] In one embodiment, the selection may be created, modified, and/or displayed using one or more selection functions. In another embodiment, a display function may be applied in addition to a selection function, to display the selection.

[00382] In the context of the present description, a display function refers to a function of one or more inputs which determines one or more properties of a display. Properties of a display may include, but are not limited to, color values for individual pixels, brightness of a display backlight or portions of a backlight, and/or any other properties of a display. Display functions may apply to an entire display and/or multiple displays.

[00383] In one embodiment, the selection may be displayed with a secondary boundary representing the uncertainty in the selection. As a specific example, there may be displayed a small, pale green tinged transparent circle to show the area that the device is certain the user selected and a

surrounding pale-red tinged transparent area (a secondary boundary) representing the area where the device thinks the user may have tried to select, but is not certain.

[00384] Operation 1608 may continue to be performed, updating the selection with each iteration, until there is a change in the touch state. See determination 1614.

[00385] If it is determined in 1606 that the system is not in a selection mode, then it is determined if a gesture has been detected. See determination 1610. In one embodiment, a user may be given feedback when a gesture is detected. Possible feedback may include, but is not limited to, sound, flashing display, appearance of an icon, a colored border on the display, and/or any other form of user feedback.

[00386] If a gesture has been detected, then an associated action is performed. See operation 1612. In one embodiment, any gesture may be mapped to any command or operation of the device. In another embodiment, a user may be provided feedback when the action is performed. Possible feedback may include, but is not limited to, sound, flashing display, appearance of an icon, a colored border on the display, and/or any other form of user feedback.

[00387] A gesture may be associated with a variety of different actions. These actions may include, but are not limited to, scrolling a display or user interface element, zooming in or out, modifying the display brightness, and/or any other action. With respect to making or modifying a selection through method 1600, it is important to note that, in one embodiment, a gesture may be associated with placing the system in a selection mode.

[00388]

[00389] Figure 17 shows a user interface 1700 for performing operations on a selection, in accordance with one embodiment. As an option, the user interface 1700 may be implemented in the context of the architecture and environment of the previous Figures or any subsequent Figure(s). Of course, however, the user interface 1700 may be implemented in any desired environment. The aforementioned definitions may apply during the present description.

[00390] After selecting an object, using methods, interfaces, and embodiments described above or others, a user may wish to perform an operation upon the object. Providing easily accessible methods to perform operations on a selected object may enhance the user experience. The availability of multiple interaction surfaces and/or multiple sensitivities increases the number of simple, intuitive ways a user may interact with the device.

[00391] In various embodiments, once a selection is static, a user may perform operations on the selected object. Possible operations include, but are not limited to, replication operations (i.e. copy,

cut, paste, etc.), relocation operations, text-specific operations, image-specific operations, cross-application operations, and/or any other type of operation.

[00392] In various embodiments, a user may perform replication operations on a selected object through simple gestures and other types of user input. For example, in one embodiment, a user may copy a selected object to a clipboard (i.e. temporary storage, etc.) by pressing sharply on a pressure-sensitive front interaction surface, on top of the selected object. In another embodiment, a user may cut a selected object by pinching the object (i.e. applying contact pressure on the object through a front and back interaction surface), then applying greater contact pressure on the front interaction surface than the back interaction surface. In yet another embodiment, a user may perform a paste operation, replacing the selected object with the contents of a clipboard, by pinching the selected object, then applying greater contact pressure on the back interaction surface than the front interaction surface. Of course, in other embodiments, these operations and those following may be assigned to any other gesture, depending upon the location, number, and sensing ability of the host device's interaction surface(s).

[00393] In various embodiments, a user may perform relocation operations on a selected object through simple gestures and other types of user input. For example, in one embodiment, a user may move a selected object by making contact with the object on an interaction surface (front or back) and dragging the contact point to relocate the object. As an option, if the selection was made within a sequential or ordered environment (i.e. word processing document, etc.), the selected object may become transparent or translucent while being relocated, so the user may better see the insertion point (i.e. cursor, etc.). As shown in this example, the same dragging gesture may have different effects, depending on the state of the selection (i.e. static vs. active, etc.).

[00394] In various embodiments, a user may perform text-specific operations on a selected text object using simple gestures and other types of user input. See, for example, user interface 1700 in Figure 17. As shown, a selection 1702 has been made within a block of text 1704. In accordance with one embodiment, a user has temporarily magnified the selected text by bringing a finger into proximity to a back interaction surface, said proximity localized in an area 1706 on the selection. As an option, the degree of magnification may increase as the finger is brought closer to the interaction surface.

[00395] Another example of a text-specific operation is data detection, in accordance with one embodiment. For example, in one embodiment, a user may perform a data detection operation on a selected text object by pressing on the selection with two fingers through a back interaction surface.

In various embodiments, the data detection operation may highlight detectable information found within the selected text including, but not limited to, email addresses, phone numbers, dates and times, addresses, web addresses, and/or any other form of information. In another embodiment, the data detection may only highlight types of information which may be further acted upon by the device, such that after detection, a user may initiation further action by touching the highlighted information. For example, in one embodiment, touching a highlighted phone number may dial the number, touching a highlighted address may activate a navigation application, touching a date may create an appointment in a calendar application, and so forth.

[00396] Other examples of text-specific operations may include, but are not limited to, highlighting, modifying the style (i.e. bold, italic, underline, strikethrough, color, shadow, etc.), modifying the font, modifying the font size, translating to a different language, and/or any other operation which may be performed on text. In one embodiment, a user may perform a gesture, such as a two finger, double press on the selected text, to bring up a menu of different text operations (or any other operation in the present description). In another embodiment, each operation may be assigned a different gesture.

[00397] In various embodiments, a user may perform image-specific operations on a selected object through simple gestures intuitively related to the operation being performed. For example, in one embodiment, a user may apply facial recognition and/or red eye removal by simply tapping (on a front or back interaction surface) on peoples faces within the selection. In another embodiment, a user may resize the selected object using the two finger pinch-to-zoom gesture. In still another embodiment, a user may rotate the selected object by making two points of contact on the object, then twisting the contacting hand. In yet another embodiment, a user may warp or distort a selected object by applying different levels of contact pressure to the selection via a front or back interaction surface. As an option, a front interaction may cause puckering, while a back interaction may cause bulging.

[00398] In various embodiments, a user may perform cross-application operations on a selected object through simple gestures. Cross-application operations may include, but are not limited to, placing the selected object in a new email or SMS message, placing the selected object in a social network posting, sending the object to an application capable of performing further operations (i.e. image editing application, word processing application, etc.), and/or any other operation which may involve another application. In other embodiments, a user may be presented with application-

specific operations in a menu, in addition to cross-application operations, upon performing a predefined gesture.

[00399] Figure 18 shows a method 1800 for utilizing contact pressure-based gestures, in accordance with one embodiment. As an option, the method 1800 may be implemented in the context of the architecture and environment of the previous Figures or any subsequent Figure(s). Of course, however, the method 1800 may be carried out in any desired environment. It should also be noted that the aforementioned definitions may apply during the present description.

[00400] As shown, it is determined if a touch event has occurred. See determination 1802.

[00401] If it is determined that a touch event has occurred, then the initial touch event attributes are determined. See operation 1804.

[00402] As shown, the gesture is identified from gesture input. See operation 1806.

[00403] In the context of the present description, gesture input refers to the collection of inputs, flags, and signals by which a gesture is identified and parameterized. For example, in one embodiment, a two-finger pinch gesture may be identified by two contact points combined with their motion with respect to each other, and parameterized by the extent of the motion. Possible gesture inputs may include, but are not limited to, touch event attributes (both initial and over time), system and/or application flags, switches, buttons, states, sensor data, and/or any other possible input.

[00404] For example, in one embodiment, a gesture may be made up of one or more contact points on an interaction surface, each associated with a different contact pressure level.

[00405] In various embodiments, a gesture may be identified from gesture input. Some gestures may be able to be identified solely from initial touch event attributes. Other gestures may only be identified after the gesture has been performed for some period of time. As a specific example, a two finger pinch gesture and a two finger swipe are indistinguishable based solely on initial touch event attributes. However, once the swipe or pinch motion has begun, the gestures are immediately distinguished from each other.

[00406] In various embodiments, gestures may include one or more contact pressures being exerted upon an interaction surface. In some embodiments, pressure may be used to distinguish between two gestures. For example, in one embodiment, two gestures involving a two finger pinch on the front display and one finger contact with the backtouch interface may be defined based on the contact pressure level exerted on the back touch interface. In other embodiments, pressure may be used to specify one or more dimensions of the operation linked to a gesture. For example, in one embodiment, a swipe gesture to control scrolling of a text field may use contact pressure to

determine the speed of the scrolling (e.g., higher pressure yields faster scrolling, etc.). In still other embodiments, contact pressure may be used to both identify as well as parameterize a gesture.

[00407] Once the gesture has been identified, the corresponding operation is performed. See operation 1808.

[00408] In various embodiments, a gesture may be associated with the modification of one or more device audio settings. For example, in one embodiment, a user may adjust the device volume by applying contact pressure to a back interaction surface, and dragging the contact point up and down to increase or decrease the device volume. As an option, the ringer volume may be adjusted by dragging left and right. In another embodiment, a user may change where audio is sent (i.e. internal speakers, headphone jack, Bluetooth device, etc.) by quickly pressing twice on a back interaction surface, then selecting an audio destination from a pop-up menu presented in response to the rapid double press. In yet another embodiment, a user may mute the audio by applying pressure on front and back interaction surfaces (i.e. a pinching motion), in a predefined corner of the device. In various embodiments, some or all of these device audio related operations may be available through gesture only after the user provides some form of activation input (i.e. touching an icon in the status bar, performing a simple gesture, etc.). In this way, gesture collisions (i.e. assignment of more than one operation to the same gesture, etc.) may be avoided. Of course, these and the following operations may be associated with any gesture or other user input, in various embodiments.

[00409] In various embodiments, a gesture may be associated with the modification of one or more display attributes. For example, in one embodiment, a user may adjust the intensity of a display backlight by applying contact pressure with three fingers on the display of interest. As an option, the backlight intensity may vary as a function of average contact pressure among the three contacts. In another embodiment, a user may activate a "night mode" (i.e. use of a monochrome red/black color space, inverting the display, etc.) by sequentially applying and releasing contact pressure on each corner of a front interaction surface. In various embodiments, some or all of these display attribute related operations may be available through gesture only after the user provides some form of activation input (i.e. touching an icon in the status bar, performing a simple gesture, etc.). In this way, gesture collisions (i.e. assignment of more than one operation to the same gesture, etc.) may be avoided.

[00410] In various embodiments, a gesture may be associated with the modification of one or more device attributes. For example, in various embodiments, a device may have a status bar along

one side of a display which indicates the status of device hardware including, but not limited to, Wi-Fi signal strength, cellular network type and signal strength, Bluetooth status (i.e. on, off, etc.), system volume, battery remaining, etc. In some embodiments, a user may modify the status of these device attributes by interacting with status bar icons. For example, in one embodiment, a user may apply front surface contact pressure, above a predefined threshold for a predefined amount of time, to a status bar icon to turn off the associated device hardware (i.e. Wi-Fi, cellular modem, Bluetooth, etc.). In another embodiment, a user may apply similar pressure via a back interaction surface to a deactivated status bar icon to turn the associated hardware back on. As an option, applying said contact pressure may present the user with a menu of options associated with that device hardware (i.e. Wi-Fi networks to join, Bluetooth devices to pair, activate cellular voice/data/both, etc.).

[00411] In yet another embodiment, a user may apply contact pressure to a status bar battery indicator icon to activate a menu populated with one or more predefined collections of settings for various power scenarios (i.e. extreme cutbacks for low battery, high performance for charged battery, maximum performance while charging, etc.). In this way, a user may activate a power saving mode that allows them to stay connected to a Wi-Fi network while saving power by diming the display (i.e. while web browsing), and a different power saving mode which turns off Wi-Fi without having to dim the display as much (i.e. reading an eBook, etc.).

[00412] In various embodiments, some or all of these device attribute related operations may be available through gesture only after the user provides some form of activation input (i.e. touching an icon in the status bar, performing a simple gesture, etc.). In this way, gesture collisions (i.e. assignment of more than one operation to the same gesture, etc.) may be avoided.

[00413] In various embodiments, a gesture may be associated with application-specific operations. For example, in some embodiments, a user may interact with an email client through multiple interaction surfaces. In one embodiment, a user may scroll through a list of messages and select one for viewing using a back interaction surface. In another embodiment, a user may apply a contact pressure on a back interaction surface, then swipe downward, to forward the current message. In yet another embodiment, a user may apply a contact pressure on a back interaction surface, then swipe upward, to reply to the current message. As an option, a user may perform this gesture using two fingers to reply to all recipients of the message.

[00414] In other embodiments, a user may interact with a web browser through multiple interaction surfaces. In one embodiment, for example, a user may apply contact pressure on a link within a webpage, then perform a quick flicking gesture, in any direction, to open the link in a

background tab or window. In another embodiment, a user may open a link in a new tab or window by pressing on the link through a back interaction surface for a predetermined amount of time.

[00415] In still other embodiments, a user may interact with a camera application through multiple interaction surfaces. For example, in one embodiment, a user may indicate a point to be used for white balancing by making contact with the displayed point through a back interaction surface. In another embodiment, a user may adjust one or more camera properties by applying different amounts of contact pressure on an icon shown on the front display. Possible camera properties may include, but are not limited to, aperture settings, simulated film speed, f-stop, degree of fill flash, and/or any other camera property or setting.

[00416] In even more embodiments, a user may interact with a movie player through a back interaction surface. For example, in one embodiment, a menu may fade into view when a user applies a contact pressure on the back interaction surface. The menu may allow the user to perform one or more movie-related operations, including but not limited to, toggling subtitles, selecting an audio track, selecting a chapter or bookmark, and/or any other movie related operation or setting.

[00417] In other embodiments, a user may interact with a navigation application using a back interaction surface. For example, in one embodiment, a user may cycle through a plurality of map layers by applying different levels of contact pressure on the back interaction surface. Possible map layers may include, but are not limited to, satellite images, street maps, weather maps, traffic maps, points of interest, navigational route, and/or any other type of map or navigational information.

[00418] In various embodiments, some or all of these application-specific operations may be available through gesture only after the user provides some form of activation input (i.e. touching an icon in the status bar, performing a simple gesture, etc.). In this way, gesture collisions (i.e. assignment of more than one operation to the same gesture, etc.) may be avoided.

[00419] In various embodiments, gestures may be associated with operations that are carried out as functions of the gesture input, when the gesture is performed and identified.

[00420] In various embodiments, the operations associated with a gesture may be carried out as a function of the associated gesture dynamics. In the context of the present description, gesture dynamics are aspects of a gesture that may vary without changing the identity of the gesture. Possible aspects may include, but are not limited to, contact point velocity, contact point acceleration, contact pressure velocity, contact pressure acceleration, time to complete gesture, and/or any other aspect which may be associated with a gesture.

[00421] In various embodiments, the association between gesture and operation may be context-dependent. In some embodiments, the association depends on application context (e.g., which application is active, etc.). For example, in one embodiment, a gesture which scrolls a text field in one application may turn a page when performed in a different application.

[00422] In other embodiments, the association may depend on application or state context (e.g., whether or not there is an active selection, whether or not a control has been activated, etc.). For example, in one embodiment, a gesture which may be used to select text may move text if performed when text has already been selected.

[00423] In other embodiments, the association may be independent of context, such that performing the gesture may cause the same operation to be carried out, regardless of what application is active. For example, a gesture which brings up an interface to adjust screen brightness and volume may be defined such that it is always available.

[00424] In various embodiments, a user may be given feedback as a gesture is performed. For example, in one embodiment, a representation of the gesture may be temporarily displayed as the gesture is performed. In this way, a user may be more aware of the form of the gesture they are performing. As an option, the geometry of the displayed gesture may be smoothed or otherwise modified.

[00425] Figure 19 shows an exemplary contact pressure-based gesture 1900 for scrolling a text field, in accordance with one embodiment. As an option, the gesture 1900 may be implemented in the context of the architecture and environment of the previous Figures or any subsequent Figure(s). Of course, however, the gesture 1900 may be carried out in any desired environment. It should also be noted that the aforementioned definitions may apply during the present description.

[00426] In one embodiment of a pressure-based gesture, the display properties of one or more display(s) may be altered by the gesture, including the scroll speeds of one or more scrollable objects (e.g., text fields, images, cover art, etc.). Scrolling is a common operation, and is often assigned to a gesture in touch-based devices.

[00427] In one embodiment of a pressure-based gesture, one or more inputs may alter the scrolling speeds of one or more areas on the display. As a specific example, a user may wish to scroll quickly through a very large collection of objects (e.g., contact names, pages of text, photographs, etc.), and desires to control the speed of scrolling in a simple fashion. While performing a classic swipe gesture to scroll through the collection, the user may also apply increasing contact pressure to a pressure-sensitive surface as a means of controlling the scroll speed

(e.g., increased contact pressure yields increased scroll speed, etc.). A swipe, slide or other simple gesture may be used.

[00428] See, for example, exemplary pressure-based gesture 1900. As shown, the gesture starts at touch event 1902, which involves a single finger is making contact at location L1, at time T1, while exerting contact pressure P1, in accordance with one embodiment. The gesture ends at touch event 1904, with touch event attributes L2, T2, and P2. In one embodiment, the sliding motion from L1 to L2 may be described as a swipe gesture.

[00429] As shown in plot 1906, as the contact pressure increases from P1 to P2, the scroll speed increases as well, from S1 to S2. In one embodiment, scroll speed may be a display function (in this case, a function of contact pressure). As an option, pressure-dependent display functions may be step-wise, changing in response to changes in discrete touch states, or continuous functions of a contact pressure level.

[00430] In various embodiments, pressure-based gestures may be classified as either dynamic gestures or static gestures. In the context of the present description, a dynamic gesture is a gesture that requires movement across or in proximity to an interaction surface. For example, in one embodiment, a swipe gesture may be classified as a dynamic gesture.

[00431] In the context of the present description, a static gesture refers to a gesture which does not involve movement across or in proximity to an interaction surface. Examples of static gestures may include, but are not limited to, button presses (real or virtual), multi-finger taps, operating a mechanical switch, a squeeze, and/or any other gesture which does not require motion.

[00432] In one embodiment of a pressure-based gesture that alters display properties, a scroll speed display function may be defined such that scroll speed increases in a non-linear fashion with respect to the contact pressure exerted in a swipe gesture.

[00433] In various embodiments, pressure-based gestures may be associated with different operations. For example, in one embodiment, pressure-based gestures may alter one or more display properties. Display properties may include, but are not limited to, backlight intensity, pixel color, scroll bar sensitivity, slideshow rate, and/or any other property associated with a display or its contents. As a specific example, a device may be in a sleep mode with the display and backlight inactive. A user may move his finger into proximity of a backtouch sensor in order to activate the display and the display backlight intensity to a low intensity level. By increasing the pressure on the backtouch sensor, the backlight intensity may be increased. Alternatively, the backlight intensity

may be initially activated at a high level (e.g., depending on ambient light sensor etc.). In this case increasing pressure on the backtouch display may dim the backlight.

[00434] In one embodiment of a pressure-based gesture that alters a scroll speed, as the gesture magnitude is increased, the rate of scroll speed increase is increased. In other words, the scroll acceleration is increased.

[00435] In the context of the present description, gesture magnitude refers to the magnitude of the associated gesture dynamics. For example, in one embodiment, the gesture magnitude of a swipe gesture may include the length of the swipe and/or the contact pressure exerted during the swipe.

[00436] In one embodiment of a pressure-based gesture to control scroll acceleration, the scroll acceleration may depend on the gesture acceleration. Thus, if the contact is such that the contact point is accelerating with time (e.g., positive contact point acceleration), the scroll acceleration may be positive. In another embodiment, if the contact point acceleration is negative then the scroll acceleration may be negative (e.g., scroll speed decreased, etc.).

[00437] In one embodiment of a pressure-based gesture to control scroll acceleration, the scroll acceleration may be both positive and negative, depending on the contact point movement.

[00438] In one embodiment of a pressure-based gesture to control scroll acceleration, other display functions may also be altered. Possible display functions include, but are not limited to, selection(s), color, shape, image and/or text magnification, indicator(s) to provide feedback to user, and/or any other display function.

[00439] The addition of pressure dependence to already established touch gestures may facilitate user interactions with the device. Often, the efficacy of a gesture is limited by the size of the device. For example, on a device which uses the pinch-to-zoom gesture, zooming far in or out may require repetition of the gesture multiple times, due to screen size.

[00440] In one embodiment, the pinch-to-zoom touch gesture may be enhanced as a pressure-based gesture; after performing the pinch motion, the user exerts pressure on the two contact points. So long as the pressure remains above a predefined threshold, the zoom operation may continue inward/outward without requiring additional pinch motions. As an option, the speed of the zooming may be modified by changing the contact pressure level. As another option, any differences in contact pressure level between the two contact points may be dealt with by using the average pressure.

[00441] In another embodiment, the swipe to scroll touch gesture may be enhanced as a pressure-based gesture; after performing the swipe, the user exerts pressure on the contact point without

further motion. So long as the pressure remains above a predefined threshold, the scroll operation may continue without requiring additional swiping motions. As an option, the scroll speed may vary as a function of the contact pressure level.

[00442] Figure 20 shows an exemplary multitouch pressure gesture 2000 for indicating a direction, in accordance with one embodiment. As an option, the gesture 2000 may be implemented in the context of the architecture and environment of the previous Figures or any subsequent Figure(s). Of course, however, the gesture 2000 may be carried out in any desired environment. It should also be noted that the aforementioned definitions may apply during the present description.

[00443] As previously discussed, touch gestures may sometimes be modified to be pressure-dependent. In various embodiments, multitouch gestures may also be modified to depend upon pressure. As an option, the modified multitouch gestures may depend upon contact pressure differences between different contact points. In the context of the present description, a multitouch pressure gesture refers to a multitouch gesture whose definition relies in part on differences in contact pressure between different contacts. The definition of multitouch pressure gestures may rely on a variation in pressure differences over time, but it is not required of all multitouch pressure gestures.

[00444] See, for example, multitouch pressure gesture 2000 shown in Figure 20. This static gesture is based upon two points of contact, 2002 and 2004. In various embodiments, this gesture may be used to indicate a direction. As depicted in Figure 20, this multitouch pressure gesture is indicating a left-to-right direction, in accordance with one embodiment. In other embodiments, this gesture may be associated with any other operation, function, or action.

[00445] In various embodiments, multitouch pressure gesture 2000 may be performed by first exerting a contact pressure upon contact point 2002 which exceeds a contact pressure being exerted upon contact point 2004. As an option, various embodiments may require that both of these initial contact pressures exceed a predefined threshold contact pressure level. The gesture is completed by altering the contact pressures on the two contact points such that the pressure exerted on 2004 now exceeds that being exerted on 2002. As an option, a user may be required to maintain this pressure inequality for a predefined amount of time. When this gesture is performed using two digits on the same hand, the user's hand may appear to be rocking from left to right. A right to left direction may be indicated by changing the order of the pressures. This type of multitouch pressure gesture is hereinafter referred to as a rocker pressure gesture.

[00446] In various embodiments, a rocker pressure gesture may be preferable over simply indicating a side of the device through touch or pressure because it is less likely to be accidentally performed.

[00447] In various embodiments, a rocker pressure gesture may be used to modify a selection. For example, in one embodiment, a text selection may be expanded in a particular direction by performing a rocker pressure gesture in the desired direction, and maintaining the contact pressure difference between the two contact points until the text selection is the desired size. As an option, the speed at which the selection expands may be increased/decreased by increasing/decreasing the contact pressure differential. In another embodiment, this gesture may be used to modify the shape of a selection. For example, it may be used to modify the aspect ratio of the selection boundary geometry associated with the selection.

[00448] In various embodiments, a rocker pressure gesture may be used in conjunction with a user interface adapted for the visually impaired. For example, in one embodiment, the rocker pressure gesture may be used to move a selection from one UI element (e.g., button, slider, drop down menu, etc.) to the next. When a UI element is selected, the assistive interface may speak the object name and/or magnify it such that the visually impaired user understands. In this way, a visually impaired user may operate a user interface displayed on a screen which often provides zero tactile feedback.

[00449] In various embodiments, a rocker pressure gesture may be used to facilitate interaction with the operating system. For example, in one embodiment, this gesture may be used to traverse a list of applications running in a multi-tasking environment. In another embodiment, this gesture may be used to switch between windows in a windowed user environment. In yet another embodiment, a rocker pressure gesture may be used to increase/decrease system settings such as volume and display brightness.

[00450] In various embodiments, a rocker pressure gesture may be advantageous in an application environment. For example, in one embodiment, a rocker pressure gesture may be used to turn the pages of an electronic book, or other multipage document displayed as a book. Using a rocker pressure gesture would allow a user to hold the device with both hands while reading, thumbs in contact with the screen, without danger of accidentally triggering a page turn, nor requiring movement of hands or fingers to turn the page.

[00451] Figure 21 shows an exemplary multitouch pressure gesture 2100 for indicating a rotation, in accordance with one embodiment. As an option, the gesture 2100 may be implemented in the

context of the architecture and environment of the previous Figures or any subsequent Figure(s). Of course, however, the gesture 2100 may be carried out in any desired environment. It should also be noted that the aforementioned definitions may apply during the present description.

[00452] In various embodiments, multitouch gestures may enhance the user experience with the addition of pressure sensitivity. For example, in one embodiment, the measured difference in contact pressure levels among different contact points associated with a gesture may determine one or more parameters associated with the gesture. As an option, the one or more parameters may vary as a function of the pressure differential. Possible parameters may include, but are not limited to, speed of transformation, direction of transformation, stringency of a color matching selection, and/or any other parameter which may be associated with any type of action, command, or operation.

[00453] In another embodiment, the presence of a pressure differential among contact points associated with a gesture may change the identity of the gesture itself. For example, see Figure 21.

[00454] As shown, multitouch pressure gesture 2100 is a static gesture based upon two points of contact, 2102 and 2104. In various embodiments, this gesture may be used to indicate a rotation. As depicted in Figure 21, this multitouch pressure gesture is indicating a clockwise rotation, in accordance with one embodiment. In other embodiments, this gesture may be associated with any operation, function, or action.

[00455] In various embodiments, multitouch pressure gesture 2100 may be performed by exerting contact pressure upon contact points 2102 and 2104 such that there is a pressure differential. For example, as seen in Figure 21, the contact pressure associated with contact point 2104 is greater than that associated with contact point 2102. As an option, various embodiments may require that both of these contact pressures exceed a predefined threshold contact pressure level. The gesture is completed by ending one or both contacts, or by performing a different gesture. As an option, a user may be required to maintain this pressure inequality for a predefined amount of time. This type of multitouch pressure gesture is hereinafter referred to as a tipping pressure gesture.

[00456] In various embodiments, a tipping pressure gesture may be used to rotate an object or element on a display. For example, in one embodiment, an image or selected portion of an image may be rotated by performing a tipping pressure gesture. As an option, the speed of rotation may depend upon the pressure differential between the two contact points. In another embodiment, the speed of rotation may vary as a function of the distance between the two contact points.

[00457] In one embodiment, the rotation may be performed in small angular increments, continuing until the tipping pressure gesture has ended. In another embodiment, the rotation is

performed in 90° increments (e.g., changing the orientation of photographs, etc.), independent of gesture length or pressure differential. In some embodiments, the rotation may be performed using one of the contact points as the axis of rotation.

[00458] In some embodiments, a tipping pressure gesture may only cause a rotation in one direction (e.g., clockwise, etc.). In other embodiments, the direction of rotation caused by a tipping pressure gesture may depend on the positions of the two contact points with respect to each other. For example, in one embodiment, if the high pressure contact point is to the right of the low pressure contact point, the rotation may be in a clockwise direction, and in a counterclockwise direction otherwise. See, for example, multitouch pressure gesture 2100. In one embodiment, the axis used to make the left/right determination may be the horizontal axis as defined by the current device orientation. In another embodiment, the horizontal axis used to make the left/right determination is defined by device geometry, and is orientation independent. In still other embodiments, the axis used to determine left/right may be independent of device geometry or orientation (e.g., display diagonal, vertical, etc.).

[00459] In various embodiments, a tipping pressure gesture may be used to interact with user interface elements. For example, in one embodiment, a tipping pressure gesture may be used to increase/decrease the value of a selected slider or scale. In another embodiment, a tipping pressure gesture may be used to cycle through options on a circular pop-up menu. In still another embodiment, a tipping pressure gesture may be used to quickly scroll through a list of items. Possible items may include, but are not limited to, email messages, songs or videos, files, photos, and/or any other object or data.

[00460] In some embodiments, there may exist two or more gestures which are the same or similar in execution. For example, see multitouch pressure gestures 2000 and 2100. While performing a tipping pressure gesture, if a user allows the contact pressure differential to switch sign (i.e. low pressure contact point becomes the high pressure contact point, and visa versa), a rocker pressure gesture may be recognized by the device. In various embodiments, constraints may be placed upon gestures to assist the operating system in differentiating between similar gestures.

[00461] In various embodiments, similar or identical gestures may be distinguished from each other through the context of their use. For example, in one embodiment, the recognition of a tipping pressure gesture may be limited to instances where there is a rotatable object selected; the rocker pressure gesture would be available in all other instances. By ensuring similar gestures are not recognizable in the same context, user confusion and erroneous gestures may be reduced. These

contexts may include, but are not limited to, selection status, device state, active application, system flags, selection subject matter, and/or any other property or attribute by which contexts may be defined.

[00462] In various embodiments, similar or identical gestures may be distinguished from each other by the positions of points of interaction, relative to a common axis system. In the context of the present description, a point of interaction refers to any point on an interaction surface where user interaction may be localized. Points of interaction include, but are not limited to, contact points, localized proximity and/or any other localized user interaction.

[00463] In the context of the present description, a common axis system refers to an axis system upon which all gesture data may be evaluated. For example, in one embodiment, the common axis system may be tied to the device geometry (i.e. the "horizontal" axis is always parallel to the long edge of the main display, etc.). In another embodiment, the common axis system may be tied to device orientation, such that the axis system changes depending on accelerometer data (though it is still common to all gestures).

[00464] Using a common axis system, an examination of the relative positions of points of interaction associated with a gesture may facilitate differentiation. For example, in one embodiment, rocker pressure gestures may only be recognized if a line between the two contact points is within a predefined deviation from the common horizontal axis (and the tipping pressure gesture available in all other cases). In another embodiment, the similar gestures may all be available at all times, but the location of points of interaction with respect to the common axis system may be used to give priority to certain gestures over others in certain situations.

[00465] In various embodiments, similar or identical gestures may be distinguished from each other through the timing associated with their execution. For example, in one embodiment, the performance of a rocker pressure gesture may have to be done within a certain amount of time, otherwise it may be interpreted as multiple tipping pressure gestures. In another embodiment, a tipping pressure gesture may have to be held for a certain amount of time before being recognized, such that the beginning of a rocker pressure gesture may not be identified as a tipping pressure gesture.

[00466] In various embodiments, one or more pressure-based gestures may be combined with other multi-touch and/or pressure-based gestures, such that a user may give multiple gesture-based instructions without breaking contact with one or more interaction surfaces. For example, suppose a user finger is at 3 o'clock and a user thumb at 9 o'clock and finger and thumb are one inch apart,

both on a front touchscreen. The user may slide finger and thumb further apart. In one embodiment, this may result in an increase in selection area, for example. The user may then increase finger pressure. This may result in the increased selection area being rotated.

[00467] In other embodiments, other combinations and permutations of various inputs and gestures on various surfaces and using various sensors may be used to simplify the user interface and make pressure-based gestures more intuitive. As an option, such gestures may be pre-programmed, or programmed by the user, or a combination of both.

[00468] Pattern-based gestures may be simple to perform and easy for a user to remember. For this reason, they are well suited to a number of applications. One of the most basic pattern-based gestures is the finger press. In various embodiments, a pattern-based gesture made up of one or more fluctuations of contact pressure between a low level and a higher level at a single contact point may be associated with often used operations. For example, in one embodiment, a double press (i.e. increase then decrease contact pressure twice) may activate an interface to switch between active applications in a multitasking environment. In another embodiment, a triple press may activate a pop-up menu populated with iconic representations of the user's preferred actions, contacts, applications, and scripts. In one embodiment, these gestures may be surface agnostic. For example, the application switching interface may be activated no matter which interaction surface received the double press. In another embodiment, these gestures may be surface specific, allowing other system processes and applications to assign operations to these simple gestures without colliding with a system-wide gesture. For example, a triple press on a side surface may activate a pop-up favorites menu, while a triple press on a back surface may activate an application-specific contextual menu.

[00469] Another simple pattern-based gesture is the pinch gesture. In various embodiments, this gesture is performed by making simultaneous contact with two different interaction surfaces such a line connecting the two contact points is roughly parallel to the force vectors being applied at said points. An example is pinching a device between a finger and a thumb, the finger and thumb contacting different interaction surfaces. In another embodiment, this gesture may be pressure based. Variations on this gesture may incorporate multiple pinches (i.e. fluctuations of contact pressure between a low level and a higher level, similar to the finger presses previously described).

[00470] These simple gestures may be associated with often used operations, including but not limited to, activating device interfaces (i.e. backtouch interface, proximity sensitivity, pressure sensitivity, etc.), displaying a common system interface (i.e. application launcher, system settings, etc.), displaying a menu of user defined "favorites" (i.e. applications, contacts, songs, movies, web

bookmarks, recently used documents, etc.), mute volume, and/or any other often used interface or operation. Of course, in other embodiments, these gestures may be associated with any operation, function, or interface.

[00471] Building off the previous gesture, a pinch slide gesture is an example of a pattern-based generalized gesture which combines a pinch with a sliding motion. In some embodiments, it may be described as a 1-6 gesture, though it is not limited to just front/back interaction. In various embodiments, this gesture may be performed by pinching the device, then sliding the pinch across the interaction surfaces while maintaining contact. In one embodiment, a contact pressure above a predefined threshold may also be required. This gesture mimics the tactile experience of pushing or pulling an object such as a lever or cord.

[00472] In one embodiment, a pinch slide gesture may be used to quickly move through an alphabetical list, similar to using tabs to quickly find a contact quickly in a paper address book. In another embodiment, this operation may be adopted to moving quickly through other sorted lists of items, including but not limited to song lists, application lists, eBooks, and/or any other collection of organized data. As an option, the display may invite the use of this gesture by displaying virtual tabs (i.e. the alphabet, numbers, etc.) along a side of the display where the gesture would be performed.

[00473] In another embodiment, a pinch slide gesture may be used to quickly select text. For example, in one embodiment, a selection may be initiated by pinching at the desired location. The selection may be expanded by sliding the pinch to the desired selection end. In another embodiment, this method of selection may be adapted to selecting a portion of an image or graphic (i.e. pinch at one corner of desired selection bounding box and sliding to opposite corner, etc.).

[00474] In another embodiment, a pinch slide may be used to move quickly through a large document (i.e. word processing document, web page, image, etc.). For example, in one embodiment, the user may slide a pinch up and down the device, changing the displayed portion of the document relative to the position of the pinch (i.e. the top of the device represents the start of the document, the bottom of the device represents the end, and the relative location of the pinch becomes the portion of the document displayed. In another embodiment, the pinch slide may have to be initiated at a particular location to activate this document navigation functionality. For example, a web browser may have an icon near the top of the display that activates pinch slide navigation when the gesture is initiated on the icon. This functionality may be adapted to two dimensional navigation in a large image, displaying the portion of the image represented by the relative location of the pinch.

[00475] In yet another embodiment, a pinch slide gesture may be used to display menus of common operations or applications. For example, in one embodiment, a pinch slide gesture which begins near an edge of a display and then moves inward may cause a menu or window to slide in from that edge of the display. As an option, the menu or window may remain visible until a selection is made. In another embodiment, there may be different menus or windows associated with each edge of a display. In still another embodiment, a window may be closed (i.e. slid back out of view) by using a pinch slide to pull it out a bit farther, then releasing it, similar to rolling up a window shade.

[00476] In one embodiment, a user interface may be utilized to present a context based menu for the user. In one embodiment, a user may interact with a display element by exerting contact pressure on a front interaction surface over contact area. At the same time, the user may be in contact with a back interaction surface, over contact area. In various embodiments, contextual menu may be displayed near the backtouch contact, after the user performs a predefined static gesture within contact area. The user may then select a menu item using small movements and contact pressure applied on the back interaction surface.

[00477] In one embodiment, the user interface may be utilized to provide easy, quick access to a plurality of favorite operations, applications, contacts, documents, and/or other types of objects. In various embodiments, favorites panel may be displayed in response to a gesture, the selection of a hardware or software button, voice command, accelerometer input (i.e. shaking the device, flicking the users wrist, etc.), and/or any other form of user input. In one embodiment, once favorites panel is displayed, a user may select an item using a slide pad located on the side of the device.

[00478] In one embodiment, a user may configure which items are displayed in the favorites panel. In another embodiment, the favorites panel may be automatically populated by the device, based upon factors which may include, but are not limited to, historical usage, date of last use, frequency of use, popularity information obtained from a remote system, and/or any other factors.

[00479] In the various embodiments described above, different combinations of user input have been associated with different actions. It should be understood that the described user inputs may be associated with any action, function, operation or interface, just as the described actions may be triggered by any combination of user inputs, according to different embodiments.

[00480] In the context of the present description, a cue refers to feedback, visual or otherwise, which is provided to the user. Examples of cues include, but are not limited to, the display logic within selection functions, visual representation of contact point movement, proximity feedback,

contact pressure level feedback, and/or any other form of user feedback. For example, in one embodiment, the anchor object may be highlighted (e.g., change of color, text highlight, 3D representation, flashing or other dynamic selection area behavior, etc.)

[00481] In various embodiments, cues may include 3D or pseudo-3D effects. For example, in one embodiment, the anchor object may be made to appear to be floating above a background image, using 3D cues.

[00482] In various embodiments, a cue may modify a 2D representation into a pseudo-3D representation responsive to user inputs such as device orientation. For example, in one embodiment, the shadow of an object may be adjusted according to device orientation, to provide the illusion that an object is floating above a background. In another embodiment, the pseudo-3D representation may be responsive to user focus (including, in some embodiments, user gaze).

[00483] Figure 22 shows a 3D layered user interface 2200, in accordance with one embodiment. As an option, the user interface 2200 may be implemented in the context of the architecture and environment of the previous Figures or any subsequent Figure(s). Of course, however, the user interface 2200 may be implemented in any desired environment. The aforementioned definitions may apply during the present description.

[00484] In the context of the present description, a 3D layered user interface refers to a user interface in which displayed objects may exist in one of a plurality of layers. For example, see Figure 22.

[00485] As shown, user interface 2200 is comprised of two layers, a front layer 2202 and a back layer 2204. These layers are depicted in a staggered arrangement, to illustrate the depth; it should be noted that in various embodiments, the layers would be aligned. Object 2206 exists in the front layer, while object 2208 exists in the back layer. In various embodiments, a user may interact with the layers separately.

[00486] In various embodiments, a 3D layered user interface may be implemented in a layered display device. In the context of the present description, a layered display device refers to a device with at least one display that is made up of a plurality of overlapping display layers, each layer able to display content independent of other layers, with all layers facing the same direction. For example, in one embodiment of a layered display device, the device may have a display made up of a transparent display located on top of a second display, both facing forward. In another embodiment, the display layers may be separated by a non-opaque material, to enhance the layered appearance.

[00487] In another embodiment of a layered display device, the display layers may include one or more e-ink layers. In yet another embodiment, the display layers may include one or more LCD layers. In still another embodiment, the display layers may include both e-ink and LCD layers. Other embodiments may include any combination of layers embodying any display technology.

[00488] In various embodiments, a 3D layered user interface may be implemented in a device having single layer displays through the use of virtual display layers. In the context of the present description, a virtual display layer refers to a collection of display elements which have all been assigned the same apparent depth within the 3D layered user interface. In various embodiments, a 3D layered user interface may make use of multiple virtual display layers. For example, in one embodiment, a 3D layered user interface may have a virtual foreground display layer and a virtual background display layer.

[00489] Additionally, in the context of the present description, a display element refers to the region of the display allotted to an identifiable visual object. Identifiable visual objects may include, but are not limited to, digital objects (i.e. images, text boxes, UI control widgets, selections, etc.), subject matter objects (i.e. people within a photograph, letters and/or words within text, etc.), and/or any other type of identifiable visual object. When located in a virtual display layer, display elements may be referred to as 3D display elements.

[00490] In various embodiments, virtual display layers may be given the appearance of depth through the use of 3D depth cues. In the context of the present description, a 3D depth cue refers to an effect, manipulation, transformation, animation, or operation which gives a visual indication of simulated depth. For example, in one embodiment, a 3D depth cue may be a blur operation, such that layers located at successively greater depths may appear blurrier than those closer to the user. In various embodiments, one or more 3D depth cues may be used to give the appearance of depth to one or more virtual display layers. In one embodiment, different 3D depth cues may be used for different virtual display layers. In another embodiment, 3D depth cues may be used in conjunction with a 3D layered user interface implemented in a layered display device, to enhance the layered appearance.

[00491] In one embodiment, a 3D depth cue may include the addition of a shadow element to display elements located within a virtual display layer, making them to appear to float above the next virtual display layer. As an option, the location of the light source(s) casting the shadows may be based in part on data obtained from one or more cameras located on the host device.

[00492] In one embodiment, a 3D depth cue may include the addition of a depth-based fog, giving the appearance that the layers exist in an environment with a thin, uniform fog. In this way, distant objects may be "foggier" than objects close to the user.

[00493] In one embodiment, a 3D depth cue may include a depth-based apparent rate of movement. For example, in a situation where a user is swiping through multiple screens of layered content, the layers closer to the user may appear to move faster than those more distant, giving the appearance of depth.

[00494] In one embodiment, a 3D depth cue may include a time-dependent visual transformation. For example, in one embodiment, a background layer may be transformed such that it appears to be below rippling water, while the foreground layer appears to be floating on the surface. In another embodiment, the visual transformation may be static.

[00495] In one embodiment, a 3D depth cue may include animated visual elements which appear to exist in between layers. Elements may include, but are not limited to, birds or insects flying, shooting stars, tiny people walking, grass blowing in the wind, and/or any other visual element.

[00496] In one embodiment, a 3D depth cue may include moving and/or transforming display elements within a virtual display layer based upon detected user gaze and/or head position. For example, in one embodiment, display elements may be compressed and virtual display layers spread apart if the device determines the user is viewing the display from an angle, the degree of transformation varying with estimated viewing angle. In another embodiment, display elements located on different virtual display layers may be slide around within their respective layers as the user changes their angle of viewing, allowing them to "look around a corner" to see display elements that would be obscured when viewed head on.

[00497] In one embodiment, a 3D depth cue may include moving and/or transforming display elements within a virtual display layer based upon changes in device orientation detected through one or more hardware interfaces (i.e. accelerometer, tilt sensor, compass, etc.).

[00498] In one embodiment of a 3D layered user interface, the 3D cues may be implemented such that the user interface has an apparent depth equal to the thickness of the device. In another embodiment, the 3D cues may be implemented such that the user interface has an apparent depth equal to the distance between a front display and a backtouch interface.

[00499] In various embodiments, a user may interact with the layers separately. For example, in one embodiment, a front interaction surface may be used to interact with display elements in a

foreground display layer, and a back interaction surface may be used to interact with display elements in a background display layer. See, for example, Figure 22.

[00500] User interface 2200 is being implemented in a device having front and back touch-sensitive interaction surfaces. As shown, a user may manipulate display element 2206, located in front layer 2202, through a gesture 2210 performed on the front interaction surface. At the same time, a user may manipulated display element 2208, located in back layer 2204, through a gesture 2212 performed on the back interaction surface. In one embodiment, the manipulation of one of these display elements may be done completely independent of the other display element.

[00501] In one embodiment of a 3D layered user interface, a front input interface may be used to move display elements on a virtual foreground display layer. In another embodiment of a 3D layered user interface, a rear input interface may be used to move display elements on a virtual background display layer.

[00502] In various embodiments, there may be display layers with which a user may not interact. For example, in one embodiment, there may be an emphasis display layer situated in front of all other display layers. In the context of the present description, an emphasis display layer refers to a display layer (virtual or physical) which is used to provide visual emphasis to one or more display elements without providing independent means of user interaction. In other words, when a user interacts with a display element located in an emphasis display layer, they might also interact with one or more other layers. For example, in one embodiment, an emphasis display layer may be used to indicate results of a text search within a document (i.e. target words appear to float above the document, etc.). Although located on a different display layer, any text selection made by the user may incorporate text from both the emphasis display layer and the display layer housing the document. In another embodiment, an emphasis display layer may cause hyperlinks within a webpage to appear to float above the rest of the page, though still able to be selected along with non-hyperlink text.

[00503] In another embodiment, an emphasis display layer may be used to display user avatars floating above the text of a chat session; the user may not interact with the avatars. Other examples of the use of an emphasis display layer may include, but are not limited to, a status bar floating at the top of a display, pop-up volume indicators which appear when the volume is changed, icons within the status bar, and/or any other circumstance where visual emphasis is desired.

[00504] Another example of a display layer with which a user may not interact is an ambiance display layer. In the context of the present description, an ambiance display layer refers to a display

layer (virtual or physical) which is used to display decorative display elements with which a user may not directly interact with. For example, in one embodiment, one or more ambiance display layers may be used to create the appearance of three-dimensional structure within the 3D layered user interface (i.e. walls, shelves, backdrop, etc.). In another embodiment, an ambiance display layer may be used to display a wallpaper or some other backdrop which is present behind the elements and controls of the user interface. In yet another embodiment, a user may customize one or more ambiance display layers through a separate user interface, but not through direct interaction.

[00505] In one embodiment of a 3D layered user interface, a rear touch input may be used to control display elements located on a virtual display layer. In another embodiment, a rear touch input may be used together with a front touch input to control one or more display elements on one or more virtual display layers.

[00506] In other embodiments of a 3D layered user interface, a user may interact with one of a plurality of layers through a back interaction surface, the layer being selected using a pressure-sensitive front interface. For example, in one embodiment, a user may select one of a plurality of display layers by applying a predefined level of contact pressure on the front interaction surface, and interact with the selected layer using a back interaction surface. As an option, 3D depth cues may be used to indicate "moving" through the display layers as the contact pressure is changed (i.e. magnifying and fading display layers as they are passed by, sharpening previously blurry display layers as they grow closer, etc.).

[00507] In one embodiment, one or more display layers associated with a 3D layered user interface may only be interacted with through coordinated user input on multiple interaction surfaces. For example, in one embodiment, a touch input on the front of the device together with a touch input on the back of the device may control the overlap between two or more virtual display layers.

[00508] In one embodiment, display elements may be assigned to virtual display layers, just as they may be assigned to physical display layers in a layered display device. In another embodiment, the process of assigning display elements to virtual display layers may be the same as the process of assigning display elements to physical display layers in a layered display device. In yet another embodiment, a 3D layered user interface may be designed such that it may take advantage of physical display layers, if present, or use virtual display layers if only single layer displays are available. It should be understood that all functionality and embodiments described with respect to virtual display layers may also be implemented in a layered display device.

[00509] In various embodiments, a 3D layered user interface for augmented reality may use 3D depth cues to visually differentiate augmenting display elements associated with physical locations near the user from those associate with distant physical locations. In one embodiment, 3D depth cues may be used to give augmenting display elements an apparent distance from the user roughly equal to the physical location with which they are associated. In another embodiment, 3D depth cues may be used to augment the video signal such that it has a three dimensional appearance.

[00510] Figure 23 shows exemplary pattern-based gestures 2300, in accordance with one embodiment. As an option, the gesture 2300 may be implemented in the context of the architecture and environment of the previous Figures or any subsequent Figure(s). Of course, however, the gesture 2300 may be carried out in any desired environment. It should also be noted that the aforementioned definitions may apply during the present description.

[00511] In the context of the present description, a pattern-based gesture refers to a gesture defined, at least in part, by a path through a phase space of one or more dimensions. See, for example, the pattern-based gestures 2300.

[00512] In some embodiments, pattern-based gestures may be based upon paths through a phase space whose dimensions do not include any measure of location on an interaction surface. In other words, in these embodiments, pattern-based gestures may not depend upon the location or movement of user interaction across an interaction surface. In one embodiment, these gestures may act as gesture components, which may be combined with other gesture components to form generalized gestures which may or may not be based upon location on or movement across an interaction surface.

[00513] See, for example, the pattern-based gesture 2302, described by a phase space path which represents the time evolution of the touch state associated with a contact point located on a front interaction surface. The location of the contact point upon the interaction surface is of no importance.

[00514] Pattern-based gesture 2302 is based upon three touch state transitions. At time t1, the contact point changes from touch state s0 to s1. Similar changes of state occur at t2 and t3. In various embodiments, these touch state transitions may be represented by ordered 2-tuples. For example, the first transition may be represented as (s1, t1). The pattern-based gesture itself may be represented as an ordered sequence of state transitions. For example, pattern-based gesture 2302 may be represented as {(s1,t1),(s2,t2),(s0,t3)}.

[00515] In other embodiments, pattern-based gestures may be based upon paths through a phase space that may include one or more measures of physical location upon an interaction surface. In other words, there may exist paths through the phase space that describe motion across an interaction surface.

[00516] In various embodiments, a pattern-based gesture may be based upon paths through a phase space which does not include time as a dimension. For example, in one embodiment, a pattern-based gesture may be defined by a series of transitions between touch states, where it does not matter how long the individual touch states are maintained.

[00517] In other embodiments, a pattern-based gesture may depend upon time to the extent that the entire path through phase space may be completed within a predefined amount of time (though still independent of how much time is spent at each state along the path). In still other embodiments, the gesture may be defined, in part, by the time spent on each leg of the path through phase space.

[00518] In one embodiment, a time-independent pattern-based gesture may be combined with a dynamic touch gesture (i.e. a one finger swipe, etc.) to form a generalized gesture.

[00519] In various embodiments, a touch state may be associated with a specific contact point upon a pressure-sensitive interaction surface. In other embodiments, the device may not be able to resolve the specific source of pressure exerted upon an interaction surface; in such cases, the pressure may be represented by surface touch states. In the context of the present description, a surface touch state is a partitioning of the range of measurable pressures exerted upon a surface (similar to touch states associated with contact points, but not contact point specific).

[00520] In various embodiments, there may exist a subset of generalized gestures referred to as pattern-based generalized gestures. In the context of the present description, a pattern-based generalized gesture refers to a pattern-based gesture which includes input from multiple sources. For example, see pattern-based gesture 2306, which is represented by a path through a two-dimensional phase space.

[00521] As shown, gesture 2306 is a pattern-based generalized gesture based upon the evolution of a touch state on a front interaction surface and a back interaction surface of a device, in accordance with one embodiment. The pattern-based gesture components are 2302 and 2304.

[00522] As depicted, gesture 2306 is represented by a state transition matrix of touch states, with transitions between touch states marked by directional arrows, in accordance with one embodiment. In the context of the present description, a state transition matrix refers to an iconic depiction of a path through a phase space.

[00523] As shown, 2306 represents the phase space made up of all nine possible combinations of the three possible front and back touch states. In one embodiment, these nine combinations may be referred to as touch state points. In another embodiment, the representation may also be shown as three-dimensional, with time as the third dimension.

[00524] It should be noted that the use of descriptors such as "front" and "back" in this example are for the sake of simplicity. In various embodiments, gesture 2306 may be performed using any two surfaces on a device, even if the device does not have distinct front and back surfaces. Additionally, in other embodiments, pattern-based generalized gestures such as 2306 may include any number of additional dimensions, each describing a form of user input and/or time.

[00525] In various embodiments, a pattern-based generalized gesture may be represented as an ordered sequence of n-tuples. For example, in one embodiment, the gesture 2306 may be represented as a sequence of 2-tuples, (front touch state, back touch state). Specifically, gesture 2306 may be represented as {(s1,s0), (s2,s2),(s0,s1)}. In another embodiment, gesture 2306 may be represented as a sequence of 3-tuples, of the form (front touch state, back touch state, time).

[00526] While exemplary gesture 2306 is based on a path through a touch state phase space, pattern-based gestures may also be based upon types and sources of user input which are not broken into discrete states (i.e. contact pressure level, etc.). Additionally, in some embodiments, pattern-based gestures may be defined in terms of the relative states of input, rather than exact. For example, in one embodiment, a pattern-based gesture may be defined in terms of relative pressure. In other words, rather than require that a fixed pressure be achieved, a user may simply cause a particular change in pressure to occur. In one embodiment, such a pattern-based gesture may be defined in terms of gesture attributes, including derived input such as pressure velocity.

[00527] In various embodiments, the use of pattern-based gestures based upon relative states may be used to trigger some form of user assistance. These patterns are well suited to trigger some form of user assistance, as they may be performed and recognized in the middle of performing a different gesture. For example, in one embodiment, a pattern-based gesture defined as a rapid 20% decrease and increase of contact pressure of any contact, done three times, may present to the user an interface providing help specific to what the user was doing at the time. Possible contexts include, but are not limited to, providing a list of possible gestures when help is requested during performance of a gesture, application help or manual depending on what application is active, a detailed explanation of a user interface control which was being selected when help was requested, and/or any other scenario where a user is operating the device.

[00528] In some embodiments, pattern-based gestures may be recognized in the form of an ordered sequence of tuples using a decision tree. The use of a decision tree, or similar form of logic, has the advantage of being computationally inexpensive. This method may be more appropriate for pattern-based gestures which are represented by paths through an easily enumerated phase space. For example, this method of gesture recognition may be more appropriate for a gesture like 2306 than a similar gesture based upon contact pressure levels, rather than touch states.

[00529] In other embodiments, the pattern-based gestures may be recognized using pattern recognition or pattern matching. For example, in one embodiment, pattern-based gestures may be recognized using the methods, or similar methods, as those used to determine a gesture shape in a gesture component. In various embodiments, the pattern-matching algorithms and methods may search for a match within a predefined margin of error.

[00530] In one embodiment, pattern recognition or pattern matching to identify pattern-based gestures may be performed by the device. As an option, this functionality may be part of the operating system. In another embodiment, the pattern recognition or pattern matching may be performed using compute resources other than those of the device. Alternative compute resources include, but are not limited to, a similar device, computing resources on a local network, cloud computing resources, and/or any other computing resource. In yet another embodiment, the pattern recognition or pattern matching may be performed using device and/or alternative computing resources combined with help from the user.

[00531] In one embodiment, pattern recognition algorithms and methods may search for a match between input and predefined patterns, within a certain probability. In another embodiment, the pattern recognition algorithms may be probabilistic and use statistical inference to find the best pattern match for a given set of input.

[00532] In one embodiment, probabilistic pattern recognition algorithms may output a probability that the input being described by a given pattern. In one embodiment, this probability may be reported to the user, either specifically (i.e. displayed as a number or percentage, etc.) or in summary (i.e. a label, a color coded border, an icon, etc.). In another embodiment, this probability may be used to alter or modify a selection. In yet another embodiment, this probability may be used to alter or modify one or more display properties.

[00533] In various embodiments, probabilistic pattern recognition algorithms may also determine the n best matches for the given input. In one embodiment, a user may specify the value of n. In another embodiment, these best matches may be reported to the user as a list of gesture names and/or

iconic representations of the gestures. As an option, the associated probabilities may be reported as well.

[00534] In another embodiment, this list of probable gestures may be displayed to the user in response to a user input, such as a gesture associated with user assistance. In yet another embodiment, this list of probable gestures may be displayed to the user if the recognition algorithms were not able to recognize a gesture with a probability above a predefined threshold. The user may be able to select the intended gesture from the list; upon selection, the associated operation may be performed. As an option, one or more aspects of the list items may depend upon the associated probability of recognition. Possible aspects may include, but are not limited to, text size, button size, color, and/or any other aspect or property that may be associated with the list.

[00535] As a specific example, in one embodiment, the user may be typing on a soft keyboard and performs a gesture. The device then determines with probability 80% the gesture corresponds to pressing the letter W, with probability 15% the gesture corresponds to pressing Q, and with probability 5% that the user intended to press E. In this situation, the device may enlarge the W key by a large amount, enlarge the W key by a smaller amount, and enlarge the Q key by a still smaller amount.

[00536] In addition to gesture recognition, various embodiments may also perform user intent prediction. In the context of the present description, gesture prediction refers to a process of estimating user intent by assigning probabilities to candidate gestures based upon historical and real time use data. For example, in one embodiment,

[00537] In various embodiments, the process of gesture recognition may include the computation of the probability of user intent. In the context of the present description, computation of the probability of user intent refers to the process of assigning probabilities to potential user actions, inputs, and intentions, based upon historical and current use data. Examples of historical data include, but are not limited to, often misspelled words, actions consistently followed by a correction, utilization of particular gestures in different use scenarios, and/or any other data which may establish a use pattern.

[00538] The estimation of user intent may enhance the user experience by making the device more responsive to user input. In various embodiments, computation of the probability of user intent may facilitate the entry of text though an interaction surface. For example, in one embodiment, frequently made spelling mistakes may be automatically corrected. In another embodiment, the user may be prompted with the word determined to be most likely to be what the user is intending to type.

[00539] As an option, the user may be able to accept or decline proposed word completions or proposed spelling corrections through a pressure-based gesture. For example, in one embodiment, a user may accept or decline a proposed completion or correction with a series of taps on a backtouch interface (i.e. one tap for accept, two taps for decline), in addition to keyboard based methods. In another embodiment, a user may be presented with a plurality of possible words to be used for auto completion. As an option, these words may be ordered depending upon a probability based upon historical usage. The words may be presented to the user in a line, with one word highlighted as a selection. In another embodiment, a user may cycle through proposed words with a backtouch gesture, such as a single finger swipe in the direction the words should be cycled in. Of course, these actions may be associated with any other type of gesture, including pattern-based gestures.

[00540] In various embodiments, gesture recognition may be enhanced by computation of the probability of user intent. For example, in one embodiment, probabilities may be assigned to potential gestures based upon historical gesture usage with similar context (i.e. application, selection mode, etc.). In another embodiment, estimated user intent may give weight to certain gestures during the recognition process. In this way, the gesture recognition process may be performed more efficiently, by considering the most likely gestures early in the process.

[00541] In various embodiments, the computation of the probability of user intent may affect the user interface. In various embodiments, the user interface may adapt in response to the user's intended form of interaction. For example, in one embodiment, upon determining that the probability that the user is performing a virtual control knob gesture has exceeded a predefined probability, and certain context requirements have been satisfied, a virtual control knob may appear for the user to interact with. In this way, the user is given visual feedback that their input is being received in the manner they intended. Examples of context requirements may include, but are not limited to, the user performing the gesture in the vicinity of a user interface object which may be controlled via a virtual control knob (i.e. slider, date, time, etc.), the virtual control knob gesture has not been reassigned to a different function by the active application, and/or any other requirement to ensure that a virtual control knob only appears when the user so intends.

[00542] Pattern-based gestures may be simple to perform and easy for a user to remember. For this reason, they are well suited to a number of applications. One of the most basic pattern-based gestures is the finger press. In various embodiments, a pattern-based gesture made up of one or more fluctuations of contact pressure between a low level and a higher level at a single contact point may be associated with often used operations. For example, in one embodiment, a double press (i.e.

increase then decrease contact pressure twice) may activate an interface to switch between active applications in a multitasking environment. In another embodiment, a triple press may activate a pop-up menu populated with iconic representations of the user's preferred actions, contacts, applications, and scripts. In one embodiment, these gestures may be surface agnostic. For example, the application switching interface may be activated no matter which interaction surface received the double press. In another embodiment, these gestures may be surface specific, allowing other system processes and applications to assign operations to these simple gestures without colliding with a system-wide gesture. For example, a triple press on a side surface may activate a pop-up favorites menu, while a triple press on a back surface may activate an application-specific contextual menu.

[00543] Another simple pattern-based gesture is the pinch gesture. In various embodiments, this gesture is performed by making simultaneous contact with two different interaction surfaces such a line connecting the two contact points is roughly parallel to the force vectors being applied at said points. An example is pinching a device between a finger and a thumb, the finger and thumb contacting different interaction surfaces. In another embodiment, this gesture may be pressure based. Variations on this gesture may incorporate multiple pinches (i.e. fluctuations of contact pressure between a low level and a higher level, similar to the finger presses previously described).

[00544] These simple gestures may be associated with often used operations, including but not limited to, activating device interfaces (i.e. backtouch interface, proximity sensitivity, pressure sensitivity, etc.), displaying a common system interface (i.e. application launcher, system settings, etc.), displaying a menu of user defined "favorites" (i.e. applications, contacts, songs, movies, web bookmarks, recently used documents, etc.), mute volume, and/or any other often used interface or operation. Of course, in other embodiments, these gestures may be associated with any operation, function, or interface.

[00545] Building off the previous gesture, a pinch slide gesture is an example of a pattern-based generalized gesture which combines a pinch with a sliding motion. In some embodiments, it may be described as a 1-6 gesture, though it is not limited to just front/back interaction. In various embodiments, this gesture may be performed by pinching the device, then sliding the pinch across the interaction surfaces while maintaining contact. In one embodiment, a contact pressure above a predefined threshold may also be required. This gesture mimics the tactile experience of pushing or pulling an object such as a lever or cord.

[00546] In one embodiment, a pinch slide gesture may be used to quickly move through an alphabetical list, similar to using tabs to quickly find a contact quickly in a paper address book. In

another embodiment, this operation may be adopted to moving quickly through other sorted lists of items, including but not limited to song lists, application lists, eBooks, and/or any other collection of organized data. As an option, the display may invite the use of this gesture by displaying virtual tabs (i.e. the alphabet, numbers, etc.) along a side of the display where the gesture would be performed.

[00547] In another embodiment, a pinch slide gesture may be used to quickly select text. For example, in one embodiment, a selection may be initiated by pinching at the desired location. The selection may be expanded by sliding the pinch to the desired selection end. In another embodiment, this method of selection may be adapted to selecting a portion of an image or graphic (i.e. pinch at one corner of desired selection bounding box and sliding to opposite corner, etc.).

[00548] In another embodiment, a pinch slide may be used to move quickly through a large document (i.e. word processing document, web page, image, etc.). For example, in one embodiment, the user may slide a pinch up and down the device, changing the displayed portion of the document relative to the position of the pinch (i.e. the top of the device represents the start of the document, the bottom of the device represents the end, and the relative location of the pinch becomes the portion of the document displayed. In another embodiment, the pinch slide may have to be initiated at a particular location to activate this document navigation functionality. For example, a web browser may have an icon near the top of the display that activates pinch slide navigation when the gesture is initiated on the icon. This functionality may be adapted to two dimensional navigation in a large image, displaying the portion of the image represented by the relative location of the pinch.

[00549] In yet another embodiment, a pinch slide gesture may be used to display menus of common operations or applications. For example, in one embodiment, a pinch slide gesture which begins near an edge of a display and then moves inward may cause a menu or window to slide in from that edge of the display. As an option, the menu or window may remain visible until a selection is made. In another embodiment, there may be different menus or windows associated with each edge of a display. In still another embodiment, a window may be closed (i.e. slid back out of view) by using a pinch slide to pull it out a bit farther, then releasing it, similar to rolling up a window shade.

[00550] The pinch slide gesture is well adapted for providing input where one of a plurality of values may be chosen; it is also easily combined with a pinch gesture. For example, in one embodiment, a user may activate a system and/or ringer volume slider with a double press pinch gesture, and then select a volume by sliding the pinch up and down the device. In another

embodiment, a similar operation may be performed for backlight brightness. In yet another embodiment, a user may cycle between system volume, ringer volume, and system brightness sliders with a pinch gesture, and be able to interact with said sliders using a pinch slide. In still another embodiment, the selection of system/ringer volume or brightness may be determined by where on the device the pinch slide is being performed (i.e. left, middle, right, etc.).

[00551] A subset of pinch gestures are the side pinch gestures. In various embodiments, the side pinch gesture is performed by applying contact pressure beyond a threshold value to opposite sides of the device, the sides being those other than the front and back. As an option, the user may choose the predefined threshold value. In one embodiment, the pressure may be applied at contact points located on the sides such that a line connecting the contact points is roughly normal to the sides. In another embodiment, the side pinch gesture may also incorporate "presses" similar to the pinch and finger press gestures.

[00552] The side pinch gesture is a simple gesture well adapted for use with often used operations. For example, in one embodiment, a side pinch gesture may toggle the device mute, or activate an application launcher.

[00553] A variation on the side pinch gesture is the squeeze gesture. In various embodiments, a squeeze gesture is performed by applying contact pressure beyond a predefined threshold to one or more contact points located on opposite sides of the device. For example, in one embodiment, the gesture may be performed by holding the device in one hand, in a natural grip, and applying pressure to two opposite sides by squeezing. As an option, the squeeze gesture may incorporate "presses", similar to the finger press and pinch gestures.

[00554] The squeeze gesture is one of the easiest gestures to perform, and may be reserved for operations which are to be available system wide, independent of what application is running. In various embodiments, the squeeze gesture may be associated with commonly used operations. For example, in one embodiment, a double press squeeze gesture may be used to answer a phone call. In another embodiment, a double press squeeze gesture may be used to indicate an affirmative response to any on screen query (i.e. accept proposed auto correction, accept proposed auto completion, activate "ok" button in dialog boxes, etc.). As an option, a complementary negative response gesture may be defined as well, a gesture such as the combination of a single or double tap on the top side while squeezing the left and right sides.

[00555] In another embodiment, applying a squeeze gesture for a predefined amount of time may be associated with a delete operation, to be performed upon any selected or active object. As an

option, the delete operation may be accompanied by a "crumpling paper" animation routine, as well as a prompt for user confirmation. In one embodiment, a user may not use a squeeze gesture to confirm an operation triggered by a squeeze operation (i.e. to prevent accidental implementation, etc.).

[00556] Another class of pattern-based gestures are the "no contact" pressure-based gestures. In some embodiments, the touch sensitive interaction surfaces require an implement of interaction which has a certain degree of conductivity in order to register contact. This class of gestures may be implemented in such devices, which are also pressure-sensitive. In various embodiments, the "no contact" pressure-based gestures may be used to interact with the device in situations where direct contact is not possible (i.e. device is in case, device is in pocket, device is in purse, etc.).

[00557] In various embodiments, the "no contact" pressure-based gestures may include variations of the finger press, pinch, and squeeze gestures, in addition to others. In some embodiments, "no contact" pressure-based gestures may require that the pressures being exerted do not create a contact point (i.e. pressure is exerted, but touch contact is not registered). These gestures are well adapted to situations where contact is not feasible. For example, in one embodiment, a user may silence a ringing phone by performing a rapid, one-finger double press on an interaction surface while the device is in the user's pocket, purse, or any other flexible or semi-flexible vessel. In another embodiment, a user may perform a predefined pattern-based gesture to cause the most recently received communication (i.e. voice mail, email, SMS message, etc.) to be reported to the user through a Bluetooth audio device.

[00558] In various embodiments, gestures may be used to trigger a variety of activities.

[00559] Figure 24 shows a user interface 2400 for defining custom gestures, in accordance with one embodiment. As an option, the user interface 2400 may be implemented in the context of the architecture and environment of the previous Figures or any subsequent Figure(s). Of course, however, the user interface 2400 may be implemented in any desired environment. The aforementioned definitions may apply during the present description.

[00560] In various embodiments, gestures may be programmed by the user. In other embodiments, gestures may be learned by the device.

[00561] As shown, the user interface 2400 may be utilized to define a custom gesture. For example, in one embodiment, the user interface may include a gesture name and/or an iconic representation of the gesture. In another embodiment, the iconic representation may be automatically chosen by the system, depending upon defined gesture parameters. In yet another

embodiment, the user interface may contain a plurality of buttons 2402 which allow a user to save, load, copy, and/or delete custom gestures. The user interface may also contain a list 2404 of all defined custom gestures. As an option, the custom gestures may be grouped by context within the list.

[00562] In various embodiments, the user interface 2400 may contain a button 2406 to allow the user to define a custom gesture. In one embodiment, selecting button 2406 may initiate a gesture recording session. In the context of the present description, a gesture recording session refers to a period of time wherein the device monitors and records all observable user and system input. In another embodiment, selecting button 2406 may present to the user an interface with instructions before initiating a gesture recording session. Instructions may include, but are not limited to, how to record the gesture, a list of all forms of input upon which a gesture may depend, how to end the recording, and/or any other information which may assist the user. In yet another embodiment, the user may be presented with a short countdown before the gesture recording session is initiated, to give the user time to prepare for the recording. As an option, the device may give some form of visual or auditory feedback to the user to indicate that the recording session has begun.

[00563] In various embodiments, a gesture recording session may be terminated by user input. For example, in one embodiment, a gesture recording session may be terminated by the user through a vocal command, recognized by the system. In another embodiment, a gesture recording session may be terminated by the user through an sound which exceeds a predefined volume. In yet another embodiment, a gesture recording session may be terminated by the user by performing a gesture. As an option, the termination gesture may be a reserved gesture.

[00564] In the context of the present description, a reserved gesture refers to a gesture which may not be reassigned by a user, application, or process. For example, in one embodiment, there may be a set of gestures, chosen for their simplicity, which are reserved for operations fundamental to the user experience (i.e. a gesture to cycle through active applications running in a multitasking environment, etc.).

[00565] In still another embodiment, a gesture recording session may be terminated automatically after a predefined amount of time has elapsed. As an option, in one embodiment the user may specify the amount of time before the recording session begins.

[00566] In one embodiment, after the termination of a gesture recording session, the user may be prompted to repeat the gesture one or more times. As an option, the user may not have to indicate when the gesture is complete after the first recording session. In another embodiment, the repeated

performance of the gesture may be used to better define the gesture parameters. For example, in one embodiment, gesture aspects which do not appear in every performance of the gesture may be indicated to the user as potentially irrelevant. In another embodiment, the system may use each iteration to improve the recorded description of the gesture. For example, the system may calculate the probability of correct recognition, using methods previously discussed, after each performance. As an option, the user may be prompted to repeat the gesture until the calculated probability of correct recognition has exceeded a predefined threshold.

[00567] In various embodiments, the user interface 2400 may include a button 2408 to allow a user to view a depiction of the performance of the custom gesture as currently defined. For example, in one embodiment, selecting button 2408 may display an animated recreation of the gesture in the context of a wireframe model of the device. In another embodiment, different forms of user input may be represented by different colors (i.e. pressure is red, touch is blue, proximity is green, etc.). As an option, changes in contact pressure level may be represented by changes in the color representing pressure. In another embodiment, the device surfaces may be displayed flattened into a two dimensional plane. In still another embodiment, the gesture replay may also include one or more plots which depict the time evolution of various gesture inputs, such as contact pressure or proximity associated with individual contacts or implements of interaction.

[00568] In various embodiments, the user interface 2400 may include a list 2410 displaying all components of the currently defined gesture. For example, in one embodiment, list 2410 may be a nested hierarchical list, grouped by "expected implement of interaction" and input type (i.e. contact 1, contact 2, proximity 1, etc.). In another embodiment, list 2410 may visually indicate (i.e. italicized, colored, underlined, etc.) recorded gesture aspects which were determined to be potentially irrelevant to the gesture. In yet another embodiment, list 2410 may break down the input from each "expected implement of interaction" into basic input categories. Categories may include, but are not limited to, pressure, touch, surface identity, proximity, proximity location, and/or any other aspect or type of user input.

[00569] The user interface 2400 may be utilized to specifically define or modify aspects of a custom gesture. For example, in one embodiment, the user interface 2400 may include a button 2412 to edit a gesture aspect selected in list 2410. In another embodiment, selecting button 2412 may present an interface to the user which may allow them to review and alter associated gesture aspects. This method of defining the gesture may not be as intuitive as teaching the system the

gesture through repeated performance, but it does allow much greater control over the gesture aspects.

[00570] In one embodiment, the user interface 2400 may include a plurality of buttons 2414 which allow a user to copy, create, and delete gesture aspects associated with the current gesture. In another embodiment, the creation of a new gesture aspect may prompt the user to specify the input type to create, and with which "expected implement of interaction" it should be associated. As an option, a user may create a new "expected implement of interaction".

[00571] In one embodiment, the user interface 2400 may include a collection of check boxes 2416 which allow a user to specify the context in which the custom gesture may be performed. The contexts may include, but are not limited to, universal (i.e. available at all times), text (i.e. active text field, on-screen keyboard visible, etc.), application-specific, home (i.e. application chooser, etc.), selection (i.e. an active selection of an object exists), and/or any other type of context.

[00572] When defining a custom gesture, the associated action may be established. As shown, user interface 2400 may be utilized to specify and configure the action to be associated with the present gesture. For example, in one embodiment, the user interface may include a collection of checkboxes 2418 representing different actions which may be associated with the custom gesture.

[00573] In one embodiment, the collection of actions 2418 may include a checkbox 2420 to indicate that the gesture may trigger the insertion of a text snippet, as defined in a nearby text field. In another embodiment, the user interface may include a collection of buttons 2422 which may be used to format the text snippet. As an option, the text snippet may be defined as plain text, without formatting.

[00574] In another embodiment, the collection of actions 2418 may include a checkbox 2424 to indicate that the gesture may cause an application to launch. The user interface 2400 may also include a button which allows the user to specify which application should be launched when the gesture is performed.

[00575] In another embodiment, the collection of actions 2418 may include a checkbox 2426 to indicate that the gesture may set the system volume to a specified level. As an option, the user may be able to specify whether the gesture sets the system volume or a ringer volume. The user interface 2400 may also include a slider which allows the user to specify the volume to be associated with the present gesture.

[00576] In another embodiment, the collection of actions 2418 may include a checkbox 2428 to indicate that the gesture may trigger the creation of a new email message. In yet another

embodiment, the user interface 2400 may include a checkbox 2430 to indicate, if the gesture is performed while an object is selected, whether the selected object should be inserted into the new email message. Possible objects may include, but are not limited to, images, text, video, files, and/or any other selectable media, file, or other kind of object. In still another embodiment, the user interface 2400 may also include a checkbox 2432 to indicate that the new email message should be addressed to a particular contact. As an option, the user may be able to choose the email address from a list of the user's contacts.

[00577] In another embodiment, the collection of actions 2418 may include a checkbox 2434 to indicate that the gesture may trigger the creation of a new SMS message. In yet another embodiment, the user interface 2400 may include checkboxes 2436 and 2438 to indicate the inclusion of a selected object and/or specific destination for the message, similar to the "new email message" action previously described. As an option, if a specific recipient is not specified, the new SMS message may be directed to the most recent SMS message sender.

[00578] In another embodiment, the collection of actions 2418 may include a checkbox 2440 to indicate that the gesture may take advantage of functionality provided by third party applications. In various embodiments, developers of third party applications may be able to provide functionality hooks that may be implemented by other applications or the operating system. For example, in one embodiment, a social networking application may allow the user to associate the custom gesture with the creation of a new posting within the social network.

[00579] In other embodiments, possible actions which may be associated with a user defined gesture may include, but are not limited to, a favorite contact (i.e. gesture displays a pop-up interface with buttons representing different methods of communicating with the contact, including but not limited to telephone, email, SMS, social networks, etc.), a predefine energy saving profile, a predefined set of application preferences, and/or any often repeated activity.

[00580] The user interface 2400 may be utilized to determine whether the custom gesture may conflict with already established gestures. For example, in various embodiments, the user interface may include a list 2442 of conflicting gestures. In one embodiment, the list of conflicts may be made up of other custom gestures, as well as system defined gestures. In another embodiment, the list may also include application specific gestures.

[00581] In yet another embodiment, items in the conflict list may be formatted to indicate their severity. For example, conflicting reserved gestures may be highlighted in red, while conflicting gestures which only exist in a single application may be slightly greyed out. In various

embodiments, the conflict list may be created using pattern recognition methods previously discussed, or other methods and algorithms capable of matching patterns and/or data.

[00582] The user interface 2400 may be utilized to test a custom gesture, in accordance with one embodiment. For example, in various embodiments, the user interface may include a button 2444 which presents the user with an interface which allows them to test the custom gesture as it is currently defined. In one embodiment, the gesture testing interface may provide the user with a plurality of forms of feedback. Feedback may include, but is not limited to, current contact pressure level associated with each contact point, current touch state associated with each contact point, probability of correct gesture recognition, current gesture time, a visual representation of previous contact points, and/or any other form of user feedback.

[00583] In one embodiment, user interface 2400 may include statistics collected as a result of the gesture testing process. These statistics may include, but are not limited to, number of tests run with the current gesture configuration, average probability of correct gesture recognition, best probability of correct gesture recognition, identity of next most likely identified gesture (i.e. next closest gesture), minimum gesture performance time, maximum gesture performance time, average gesture performance time, and/or any other statistic related to the testing process.

[00584] In some embodiments, user defined gestures may be recognized in any context they were intended for. In other embodiments, a user may have to perform a predefined activation gesture before using a custom gesture.

[00585] As a specific example of how custom gestures may be utilized, in one embodiment, a user may define a gesture which is comprised of a triple finger press on a top side, followed by a singer finger swipe across a back interaction surface. The user may associate this gesture with a favorite contact. Upon performing this gesture, the user may be presented with a window showing a picture of the contact in addition to buttons linked to their telephone number and email address. In this way, communication may be established with this contact, at any time, with nothing more than a gesture and a button press.

[00586] The various embodiments set forth herein may be implemented in a variety of devices including, but not limited to, consumer devices, phones, cell phones, internet phones, music players, video players, cameras, social interaction devices, radios, TVs, watches, personal communication devices, electronic wallets, smart jewelry, personal computers, tablets, laptop computers, embedded systems, electronic glasses, and/or any other device that includes one or more sensors or inputs. Possible inputs may include, but are not limited to, keyboard, mouse, touchscreen(s), touchpad(s),

interaction surfaces, a joystick, touchwheel, touchknob, touchbutton, touchball, trackball, scroll wheel, thumb-mouse, switch, button, wheel, knob, ball, pedal, voice recognition, audio command, audio prompt, gaze control, eye tracking, head position sensing, facial and/or gestural and/or postural expression recognition, and/or other inputs and combinations of these. Possible sensors may include, but are not limited to, range sensors, scanners, magnetometers, GPS receivers, accelerometers, cameras, depth sensors, light-field cameras, ambient light sensors, pressure sensors, infra-red (IR) sensors, UV sensors, touch and/or proximity sensor(s), grasp sensors, material sensors, chemical sensors, physical sensors, electrical sensors, biological sensors, weight sensors, force sensors, mass sensors, gas sensors, vapor sensors, particle sensors, wireless sensors, RF and other electromagnetic sensors, and/or other sensors and combinations of these.

[00587] In various embodiments, the device may include one or more different forms of displays and/or other outputs including, but not limited to, physical or other actuators, motors, tactile feedback or other tactile output, weight or mass feedback, force feedback or other force outputs, mechanical outputs, audio outputs, alarms, horns, bells, indicators, dials, meters, barcodes and/or other display patterns, vibrations, ultrasonic outputs, wireless and RF outputs, optical and light outputs, avatars, visual outputs, multiscreen displays, multilayer displays, 3D displays, holographic projections and outputs, laser displays and other laser outputs, projection systems, heads-up displays, and/or other outputs or combinations of these.

[00588] In various embodiments, the device may support one or more types of applications including, but not limited to, search applications, contacts and/or friends applications, messaging applications, telephone applications, video conferencing applications, e-mail applications, communications applications, voice recognition applications, instant messaging (IM) applications, blog and/or blogging applications, photographic applications, shopping applications, payment applications, digital camera applications, digital video camera applications, web browsing and browser applications, digital music player applications, digital video player applications, cloud applications, office productivity applications, and/or other types of applications or combinations or multiple instances of these.

[00589] In other embodiments, different applications on the device may use one or more interface devices that may be physical interface devices or virtual interface devices including, but not limited to, touchscreens, touchpads, soft inputs, hard inputs, keyboards, buttons, knobs, sliders, switches, and/or any other kind of interface device.

[00590] In various embodiments, the device may have a common physical architecture (i.e. display, touchscreen, etc.) such that the device may be used with different applications with one or more common user interfaces with one or more common properties (i.e. easy to use, simple, intuitive, transparent, etc.).

[00591] In various embodiments, user interfaces may include one or more physical interface devices (i.e. keyboard, joysticks, buttons, sliders, switches, knobs, other hard inputs, etc.) and/or one or more virtual or soft interface devices (i.e. soft keyboard, programmable buttons, UI sliders, UI knobs, check boxes, text fields, other soft inputs, etc.).

[00592] In various embodiments, the device may implement one or more types of keyboard (i.e. soft keyboard, physical keyboard, virtual keyboard, keypad, etc.). In one embodiment, the keyboard(s) may include standard keyboard arrangements (i.e. QWERTY configurations, etc.), and/or non-standard arrangements and/or symbols on the keys (i.e. soft keys, buttons, pixels, displayed icons etc.). In another embodiment, the keyboard(s) may include a reduced number of symbols (i.e. letters, icons, soft keys, etc.) compared to the number of keys on a conventional physical keyboard. In yet another embodiment, one or more alternative keyboards may make it easier for users to select one or more symbols in the keyboard, and thus, one or more corresponding representations (i.e. letter, number, special symbol, graphics, emoticon, abbreviation, slang, acronym, etc.). In still another embodiment, one or more keyboards and their associated contents and/or layouts may be modified. For example, in one embodiment, one or more displayed symbols on the keyboard may be modified in accordance with application, application state, device state, settings (i.e. language, etc.), and/or user actions.

[00593] In various embodiments, one or more keyboards may be customized to one or more applications and/or users. For example, in one embodiment, one or more keyboard embodiments may be customized to one or more users based on factors including, but not limited to, application states, stored application history, web cookies, a word usage history (i.e. lexicography, slang, individual usage, etc.), language, country, and/or any other factor. In another embodiment, one or more keyboards may be modified to reduce the probability of user error when selecting one or more keys when using the soft keyboards.

[00594] In various embodiments, the device may have multiple functions or roles including, but not limited to, telephone, video conferencing, e-mail, instant messaging, blogging, digital photography, digital video, web browsing, digital music playing, social interaction, shopping, searching, and/or any other function or role. As an option, instructions for performing the device

functions may be included in a computer readable storage medium, or as a computer program product configured for execution by one or more processors.

[00595] In various optional embodiments, the features, capabilities, and/or technology, etc. of the tablets, mobile devices, computing devices, networks, hardware, and/or software, etc. disclosed in the following patents/applications may or may not be incorporated into any of the embodiments disclosed herein: US7479949; US7748634; US20060017692; US20100188268; US20110145692; US7954101; US20070103454; US20100210329; US20070091825; US20060013219; US7916166; US20090213205; US20070296805; US20100205148; US20100188473; US7441196; US7894641; US7966578; US7479949; US Provisional Application NO. 61/470.336, filed 03-31-2011, titled "SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR UTILIZING IMAGE RECOGNITION TO PERFORM AN ACTION"; US Provisional Application NO. 61/470,391, filed 03-31-2011, titled "SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR ENABLING A PERIPHERAL DEVICE TO UTILIZE FUNCTIONALITY ASSOCIATED WITH A MOBILE DEVICE"; and US Provisional Application NO. 61/569,213, filed 12-09-2011, titled "SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR MODIFYING CONTENT." Each of the foregoing patents/applications are hereby incorporated by reference in their entirety for all purposes.

[00596] (1) U.S. patent application Ser. No. 10/188,182 (US 2003-0076306 A1), "Touch Pad For Handheld Device," filed Jul. 1, 2002; (2) U.S. patent application Ser. No. 10/722,948 (US 2005-0110768 A1), "Touch Pad For Handheld Device," filed Nov. 25, 2003; (3) U.S. patent application Ser. No. 10/643,256 (US 2005-0052425 A1), "Movable Touch Pad With Added Functionality," filed Aug. 18, 2003; (4) U.S. patent application Ser. No. 10/654,108, "Ambidextrous Mouse," filed Sep. 2, 2003; (5) U.S. patent application Ser. No. 10/840,862 (US 2006-0097991 A1), "Multipoint Touchscreen," filed May 6, 2004; (6) U.S. patent application Ser. No. 10/903,964 (US 2006-0026521 A1), "Gestures For Touch Sensitive Input Devices," filed Jul. 30, 2004; (7) U.S. patent application Ser. No. 11/038,590 (US 2006-0026535 A1), "Mode-Based Graphical User Interfaces For Touch Sensitive Input Devices" filed Jan. 18, 2005; (8) U.S. patent application Ser. No. 11/057,050 (US 2006-0181517 A1), "Display Actuator," filed Feb. 11, 2005; (9) U.S. Provisional Patent Application No. 60/658,777, "Multi-Functional Hand-Held Device," filed Mar. 4, 2005; (10) U.S. patent application Ser. No. 11/367,749 (US 2006-0197753 A1), "Multi-Functional Hand-Held Device," filed Mar. 3, 2006; and (11) U.S. patent application Ser. No. 29/281,695, "Icons, Graphical

User Interfaces, and Animated Graphical User Interfaces For a Display Screen or Portion Thereof," filed Jun. 28, 2007. All of these applications are incorporated by reference herein in their entirety.

[00597] The soft keyboard embodiments may include standard (QWERTY) and/or non-standard configurations of symbols on the displayed icons of the keyboard, such as those described in U.S. patent application Ser. Nos. 11/459,606 (US 2007-0152978 A1), "Keyboards For Portable Electronic Devices," filed Jul. 24, 2006, and 11/459,615 (US 2007-0152980 A1), "Touch Screen Keyboards For Portable Electronic Devices," filed Jul. 24, 2006, the contents of which are hereby incorporated by reference in their entirety.

[00598] A quick press of the push button may disengage a lock of the touch screen or begin a process that uses gestures on the touch screen to unlock the device, as described in U.S. patent application Ser. No. 11/322,549 (US 2007-0150842 A1), "Unlocking a Device by Performing Gestures on an Unlock Image," filed Dec. 23, 2005, which is hereby incorporated by reference in its entirety.

[00599] A touch-sensitive display in some embodiments of the touch screen may be analogous to the multi-touch sensitive tablets described in the following U.S. patents: U.S. Pat. Nos. 6,323,846 (Westerman et al.), 6,570,557 (Westerman et al.), and/or 6,677,932 (Westerman), and/or U.S. Patent Publication 2002/0015024A1, each of which is hereby incorporated by reference in its entirety.

[00600] A touch-sensitive display in some embodiments of the touch screen may be as described in the following applications: (1) U.S. patent application Ser. No. 11/381,313 (US 2007-0257890 A1), "Multipoint Touch Surface Controller," filed May 2, 2006; (2) U.S. patent application Ser. No. 10/840,862 (US 2006-0097991 A1), "Multipoint Touchscreen," filed May 6, 2004; (3) U.S. patent application Ser. No. 10/903,964 (US 2006-0026521 A1), "Gestures For Touch Sensitive Input Devices," filed Jul. 30, 2004; (4) U.S. patent application Ser. No. 11/048,264 (US 2006-0026536 A1), "Gestures For Touch Sensitive Input Devices," filed Jan. 31, 2005; (5) U.S. patent application Ser. No. 11/038,590 (US 2006-0026535 A1), "Mode-Based Graphical User Interfaces For Touch Sensitive Input Devices," filed Jan. 18, 2005; (6) U.S. patent application Ser. No. 11/228,758 (US 2006-0033724 A1), "Virtual Input Device Placement On A Touch Screen User Interface," filed Sep. 16, 2005; (7) U.S. patent application Ser. No. 11/228,700 (US 2006-0053387 A1), "Operation Of A Computer With A Touch Screen Interface," filed Sep. 16, 2005; (8) U.S. patent application Ser. No. 11/228,737 (US 2006-0085757 A1), "Activating Virtual Keys Of A Touch-Screen Virtual Keyboard," filed Sep. 16, 2005; and (9) U.S. patent application Ser. No. 11/367,749 (US 2006-

0197753 A1), "Multi-Functional Hand-Held Device," filed Mar. 3, 2006. All of these applications are incorporated by reference herein in their entirety.

[00601] The proximity sensor may perform as described in U.S. patent application Ser. Nos. 11/241,839 (US 2006-0161871 A1), "Proximity Detector In Handheld Device"; 11/240,788 (US 2006-0161870 A1), "Proximity Detector In Handheld Device"; 11/620,702 (US 2008-0167834 A1), "Using Ambient Light Sensor To Augment Proximity Sensor Output"; 11/586,862 (US 2007-0075965 A1), "Automated Response To And Sensing Of User Activity In Portable Devices"; and 11/638,251 (US 2008-0140868 A1), "Methods And Systems For Automatic Configuration Of Peripherals," which are hereby incorporated by reference in their entirety.

[00602] The accelerometer may perform as described in U.S. Patent Publication No. 20050190059, "Acceleration-based Theft Detection System for Portable Electronic Devices," and U.S. Patent Publication No. 20060017692, "Methods And Apparatuses For Operating A Portable Device Based On An Accelerometer," both of which are which are incorporated by reference herein in their entirety.

[00603] Additional description of the online video application can be found in U.S. Provisional Patent Application No. 60/936,562, "Portable Multifunction Device, Method, and Graphical User Interface for Playing Online Videos," filed Jun. 20, 2007, and U.S. patent application Ser. No. 11/968,067 (US 2008-0320391 A1), "Portable Multifunction Device, Method, and Graphical User Interface for Playing Online Videos," filed Dec. 31, 2007, the content of which is hereby incorporated by reference in its entirety.

[00604] Processes that use gestures on the touch screen to unlock the device are described in U.S. patent application Ser. Nos. 11/322,549 (US 2007-0150842 A1), "Unlocking A Device By Performing Gestures On An Unlock Image," filed Dec. 23, 2005, and 11/322,550 (US 2007-0150826 A1), "Indication Of Progress Towards Satisfaction Of A User Input Condition," filed Dec. 23, 2005, which are hereby incorporated by reference in their entirety.

[00605] In some embodiments, a user may rearrange the icons in UI, e.g., using processes described in U.S. patent application Ser. No. 11/459,602 (US 2007-0157089 A1), "Portable Electronic Device With Interface Reconfiguration Mode," filed Jul. 24, 2006, which is hereby incorporated by reference in its entirety.

[00606] In some embodiments, UI includes a gauge (not shown) that displays an updated account usage metric for an account associated with usage of the device (e.g., a cellular phone account), as described in U.S. patent application Ser. No. 11/322,552 (US 2007-0149252 A1), "Account

Information Display For Portable Communication Device," filed Dec. 23, 2005, which is hereby incorporated by reference in its entirety.

[00607] Additional description of insertion marker positioning can be found in U.S. patent application Ser. No. 11/553,436 (US 2008-0259040 A1), "Method, System, And Graphical User Interface For Positioning An Insertion Marker In A Touch Screen Display," filed Oct. 26, 2006, and U.S. Provisional Patent Application No. 60/947,382, "Portable Multifunction Device, Method, and Graphical User Interface for Adjusting an Insertion Point Marker," filed Jun. 29, 2007, and U.S. patent application Ser. No. 11/923,453 (US 2008-0165142 A1), "Portable Multifunction Device, Method, and Graphical User Interface for Adjusting an Insertion Point Marker," filed Oct. 24, 2007, the contents of which are hereby incorporated by reference herein in their entirety.

[00608] Additional description of instant messaging on portable electronic devices can be found in U.S. Provisional Patent Application Nos. 60/883,819, "Portable Electronic Device For Instant Messaging," filed Jan. 7, 2007, and 60/946,969, "Portable Electronic Device For Instant Messaging," filed Jun. 28, 2007, and U.S. patent application Ser. No. 11/848,208 (US 2008-0055269 A1), "Portable Electronic Device for Instant Messaging," filed Aug. 30, 2007, the contents of which are hereby incorporated by reference in their entirety.

[00609] Additional description of deletion gestures on portable electronic devices can be found in U.S. Provisional Patent Application Nos. 60/883,814, "Deletion Gestures On A Portable Multifunction Device," filed Jan. 7, 2007 and 60/936,755, "Deletion Gestures On A Portable Multifunction Device," filed Jun. 22, 2007, and U.S. patent application Ser. No. 11/850,642 (US 2008-0094371 A1), "Deletion Gestures on a Portable Multifunction Device," filed Sep. 5, 2007, the contents of which are hereby incorporated by reference in their entirety.

[00610] As described in U.S. patent application Ser. Nos. 11/322,547 (US 2007-0150830 A1), "Scrolling List With Floating Adjacent Index Symbols," filed Dec. 23, 2005; 11/322,551 (US 2007-0146337 A1), "Continuous Scrolling List With Acceleration," filed Dec. 23, 2005; and 11/322,553 (US 2007-0132789 A1), "List Scrolling In Response To Moving Contact Over List Of Index Symbols," filed Dec. 23, 2005, which are hereby incorporated by reference in their entirety, the user may scroll through the contact list using vertically upward and/or vertically downward gestures 814 on the touch screen.

[00611] Additional descriptions of word suggestion can be found in U.S. patent application Ser. No. 11/620,641 (US 2008-0167858 A1), "Method, System, And Graphical User Interface For Providing Word Recommendations for Text Input," filed Jan. 5, 2007) and U.S. patent application

Ser. No. 11/620,642 (US 2008-0168366 A1), "Method, System, And Graphical User Interface For Providing Word Recommendations," filed Jan. 5, 2007, the contents of which are hereby incorporated by reference in their entirety.

[00612] Additional description of image management can be found in U.S. Provisional Patent Application Nos. 60/883,785, "Portable Electronic Device For Photo Management," filed Jan. 6, 2007, and 60/947,118, "Portable Electronic Device For Photo Management," filed Jun. 29, 2007, and U.S. patent application Ser. No. 11/848,210 (US 2008-0052945 A1), "Portable Electronic Device For Photo Management," filed Aug. 30, 2007, the contents of which are hereby incorporated by reference in their entirety.

[00613] Additional description of a video player and manager can be found in U.S. Provisional Patent Application Nos. 60/883,784, "Video Manager For Portable Multifunction Device," filed Jan. 6, 2007, and 60/946,973, "Video Manager For Portable Multifunction Device," filed Jun. 28, 2007, and U.S. patent application Ser. No. 11/850,008 (US 2008-0055272 A1), "Video Manager For Portable Multifunction Device," filed Sep. 4, 2007, the contents of which are hereby incorporated by reference in their entirety.

[00614] Additional description of configuring and displaying widgets can be found in U.S. Provisional Patent Application No. 60/946,975, "Portable Multifunction Device, Method, and Graphical User Interface for Configuring and Displaying Widgets," filed Jun. 28, 2007, and U.S. patent application Ser. No. 11/850,010 (US 2008-0082930 A1), "Portable Multifunction Device, Method, and Graphical User Interface for Configuring and Displaying Widgets," filed Sep. 4, 2007, the content of which is hereby incorporated by reference in its entirety.

[00615] As described in U.S. patent application Ser. No. 11/322,547 (US 2007-0150830 A1), "Scrolling List With Floating Adjacent Index Symbols," filed Dec. 23, 2005, which is hereby incorporated by reference in its entirety, the user may scroll through the contact list using vertically upward and/or vertically downward gestures 2602 on the touch screen.

[00616] Additional description of the reordering of user-configurable lists can be found in U.S. Provisional Patent Application No. 60/883,808, "System And Method For Managing Lists," filed Jan. 7, 2007, and U.S. patent application Ser. No. 11/770,725 (US 2008-0165136 A1), "System and Method for Managing Lists," filed Jun. 28, 2007, the contents of which are hereby incorporated by reference in their entirety.

[00617] Additional description of missed call management can be found in U.S. Provisional Patent Application No. 60/883,782, "Telephone Call Management For A Portable Multifunction

Device," filed Jan. 6, 2007, and U.S. patent application Ser. No. 11/769,694 (US 2008-0057926 A1), "Missed Telephone Call Management for a Portable Multifunction Device," filed Jun. 27, 2007, the contents of which are hereby incorporated by reference in their entirety.

[00618] Additional description of location-based dialing can be found in U.S. Provisional Patent Application No. 60/883,800, "Method, Device, And Graphical User Interface For Location-Based Dialing," filed Jan. 7, 2007, and U.S. patent application Ser. No. 11/769,692 (US 2008-0167083 A1), "Method, Device, and Graphical User Interface for Location-Based Dialing," filed Jun. 27, 2007, the contents of which are hereby incorporated by reference in their entirety.

[00619] Additional description of conference calling can be found in U.S. Provisional Patent Application No. 60/947,133, "Portable Multifunction Device, Method, and Graphical User Interface for Conference Calling," filed Jun. 29, 2007, and U.S. patent application Ser. No. 11/960,673 (US 2008-0168361 A1), "Portable Multifunction Device, Method, and Graphical User Interface for Conference Calling," filed Dec. 19, 2007, the content of which is hereby incorporated by reference in its entirety.

[00620] Additional description of application switching can be found in U.S. Provisional Patent Application No. 60/883,809, "Portable Electronic Device Supporting Application Switching," filed Jan. 7, 2007, and U.S. patent application Ser. No. 11/969,908 (US 2008-0168379 A1) , "Portable Electronic Device Supporting Application Switching," filed Jan. 6, 2008, the content of which is hereby incorporated by reference in its entirety.

[00621] Additional description of user interfaces for handling incoming calls can be found in U.S. Provisional Patent Application No. 60/883,783, "Incoming Telephone Call Management For A Portable Multifunction Device," filed Jan. 6, 2007, and U.S. patent application Ser. No. 11/769,695 (US 2008-0055263 A1), "Incoming Telephone Call Management For A Portable Multifunction Device," filed Jun. 27, 2007, the contents of which are hereby incorporated by reference in their entirety.

[00622] Additional description of the voicemail system can be found in U.S. Provisional Patent Application No. 60/883,799, "Voicemail Manager For Portable Multifunction Device," filed Jan. 7, 2007; U.S. patent application Ser. No. 11/770,720 (US 2008-0055264 A1), "Voicemail Manager for Portable Multifunction Device," filed Jun. 28, 2007; and 60/947,348, "Voicemail Set-Up on a Portable Multifunction Device," filed Jun. 29, 2007; and U.S. patent application Ser. No. 11/961,716 (US 2008-0168353 A1), "Voicemail Set-Up on a Portable Multifunction Device," filed Dec. 20, 2007, the contents of which are hereby incorporated by reference in their entirety.

[00623] Edit icon that when activated (e.g., by a finger tap on the icon) initiates display of a user interface for deleting emails (e.g., as described in U.S. Provisional Patent Application Nos. 60/883,814, "Deletion Gestures On A Portable Multifunction Device," filed Jan. 7, 2007, and 60/936,755, "Deletion Gestures On A Portable Multifunction Device," filed Jun. 22, 2007, and U.S. patent application Ser. No. 11/850,642 (US 2008-0094371 A1), "Deletion Gestures On A Portable Multifunction Device," filed Sep. 5, 2007, the contents of which are hereby incorporated by reference in their entirety).

[00624] In some embodiments, in response to detecting a horizontal swipe gesture on a particular email message in a the list of emails messages, a process for deleting the particular email message is initiated (e.g., as described in U.S. Provisional Patent Application Nos. 60/883,814, "Deletion Gestures On A Portable Multifunction Device," filed Jan. 7, 2007, and 60/936,755, "Deletion Gestures On A Portable Multifunction Device," filed Jun. 22, 2007, and U.S. patent application Ser. No. 11/850,642 (US 2008-0094371 A1), "Deletion Gestures On A Portable Multifunction Device," filed Sep. 5, 2007, the contents of which are hereby incorporated by reference in their entirety).

[00625] Additional description of an email client can be found in U.S. Provisional Patent Application No. 60/883,807, "Email Client For A Portable Multifunction Device," filed Jan. 7, 2007, and U.S. patent application Ser. No. 11/850,630 (US 2008-0094369 A1), "Email Client For A Portable Multifunction Device," filed Sep. 5, 2007, the content of which is hereby incorporated by reference in its entirety.

[00626] Methods for efficiently fetching email messages can be found in U.S. Provisional Patent Application No. 60/947,395, "Email Fetching System and Method in a Portable Electronic Device," filed Jun. 29, 2007, and U.S. patent application Ser. No. 11/968,070 (US 2009-0006570 A1), "Email Fetching System and Method in a Portable Electronic Device," filed Dec. 31, 2007, the content of which is hereby incorporated by reference in its entirety.

[00627] Methods for automatically selecting email ports and email security can be found in U.S. Provisional Patent Application No. 60/947,396, "Port Discovery and Message Delivery in a Portable Electronic Device," filed Jun. 29, 2007, and U.S. patent application Ser. No. 11/968,076 (US 2009-0006644 A1), "Port Discovery and Message Delivery in a Portable Electronic Device," filed Dec. 31, 2007, the content of which is hereby incorporated by reference in its entirety.

[00628] Additional description of displaying structured electronic documents (e.g., web pages) can be found in U.S. Provisional Patent Application No. 60/946,715, "Portable Electronic Device, Method, and Graphical User Interface for Displaying Structured Electronic Documents," filed Jun.

27, 2007, and U.S. patent application Ser. No. 11/850,013 (US 2008-0094368 A1), "Portable Electronic Device, Method, and Graphical User Interface for Displaying Structured Electronic Documents," filed Sep. 4, 2007, the content of which is hereby incorporated by reference in its entirety.

[00629] Additional description of adding windows to an application can be found in U.S. patent application Ser. No. 11/620,647 (US 2008-0168401 A1), "Method, System, And Graphical User Interface For Viewing Multiple Application Windows," filed Jan. 5, 2007, the content of which is hereby incorporated by reference in its entirety.

[00630] Additional description of displaying inline multimedia content can be found in U.S. Provisional Patent Application No. 60/947,155, "Portable Electronic Device, Method, and Graphical User Interface for Displaying Inline Multimedia Content," filed Jun. 29, 2007, and U.S. patent application Ser. No. 11/961,773 (US 2008-0165148 A1), "Portable Electronic Device, Method, and Graphical User Interface for Displaying Inline Multimedia Content," filed Dec. 20, 2007, the content of which is hereby incorporated by reference in its entirety.

[00631] Additional description of interacting with user input elements can be found in U.S. Provisional Patent Application No. 60/947,127, "Portable Multifunction Device, Method, and Graphical User Interface for Interacting with User Input Elements in Displayed Content," filed Jun. 29, 2007, and U.S. patent application Ser. No. 11/960,394 (US 2008-0165143 A1), "Portable Multifunction Device, Method, and Graphical User Interface for Interacting with User Input Elements in Displayed Content," filed Dec. 19, 2007, the content of which is hereby incorporated by reference in its entirety.

[00632] Additional description of displaying and activating hyperlinks using interfaces can be found in U.S. patent application Ser. No. 11/620,644 (US 2008-0165133 A1), "Method, System, And Graphical User Interface For Displaying Hyperlink Information," filed Jan. 5, 2007, and in U.S. patent application Ser. No. 11/620,646 (US 2008-0259041 A1), "Method, System, And Graphical User Interface For Activating Hyperlinks," filed Jan. 5, 2007, the contents of which are hereby incorporated by reference in their entirety.

[00633] Additional description of translating displayed content can be found in U.S. Provisional Patent Application No. 60/946,976, "Portable Multifunction Device, Method, and Graphical User Interface for Translating Displayed Content," filed Jun. 28, 2007, and U.S. patent application Ser. No. 11/960,675 (US 2008-0168405 A1), "Portable Multifunction Device, Method, and Graphical

User Interface for Translating Displayed Content," filed Dec. 19, 2007, the content of which is hereby incorporated by reference in its entirety.

[00634] Additional description of "rubber band-like" scrolling and translation behavior can be found in U.S. Provisional Patent Application Nos. 60/883,801, "List Scrolling And Document Translation On A Touch-Screen Display," filed Jan. 7, 2007; 60/945,858, "List Scrolling and Document Translation on a Touch-Screen Display," filed Jun. 22, 2007, and 60/946,971, "List Scrolling and Document Translation on a Touch-Screen Display," filed Jun. 28, 2007, and U.S. patent application Ser. No. 11/956,969 (US 2008-0168404 A1), "List Scrolling and Document Translation, Scaling, and Rotation on a Touch-Screen Display," filed Dec. 14, 2007, the contents of which are hereby incorporated by reference in their entirety.

[00635] Additional description of scrolling is described in U.S. patent application Ser. Nos. 11/322,547 (US 2007-0150830 A1), "Scrolling List With Floating Adjacent Index Symbols," filed Dec. 23, 2005; 11/322,551 (US 2007-0146337 A1), "Continuous Scrolling List With Acceleration," filed Dec. 23, 2005; and 11/322,553 (US 2007-0132789 A1), "List Scrolling In Response To Moving Contact Over List Of Index Symbols," filed Dec. 23, 2005, which are hereby incorporated by reference in their entirety.

[00636] Additional description of user interface object reconfiguration can be found in U.S. Provisional Patent Application No. 60/937,990, "Portable Multifunction Device, Method, and Graphical User Interface Supporting User Navigations of Graphical Objects on a Touch Screen Display," filed Jun. 29, 2007, and U.S. patent application Ser. No. 11/969,809 (US 2008-0165153 A1), "Portable Multifunction Device, Method, and Graphical User Interface Supporting User Navigations of Graphical Objects on a Touch Screen Display," filed Jan. 4, 2008, the content of which is hereby incorporated by reference in its entirety.

[00637] U.S. Provisional Patent Application No. 60/936,562, "Portable Multifunction Device, Method, and Graphical User Interface for Playing Online Videos," filed Jun. 20, 2007, and U.S. patent application Ser. No. 11/968,067 (US 2008-0320391 A1), "Portable Multifunction Device, Method, and Graphical User Interface for Playing Online Videos," filed Dec. 31, 2007, the content of which is hereby incorporated by reference in its entirety, describes a way that major online video content categories can be rearranged by a user to correspond to the user's preferred (favorite) categories. The teachings in that application are also applicable here to rearranging major music and/or video categories.

[00638] Cover flow mode and other image modes are described in U.S. Provisional Patent Application No. 60/843,832, "Techniques And Systems For Browsing Media Content," filed Sep. 11, 2006; U.S. patent application Ser. No. 11/519,460 (US 2008-0066016 A1), "Media Manager With Integrated Browsers," filed Sep. 11, 2006; and U.S. Provisional Patent Application No. 60/878,746 "Electronic Device With Image Based Browsing," filed Jan. 5, 2007, which are hereby incorporated by reference in their entirety.

[00639] Additional description of mode changes based on device orientation can be found in U.S. Provisional Patent Application No. 60/947,300, "Modal Change Based on Orientation of a Portable Multifunction Device," filed Jun. 29, 2007, and U.S. patent application Ser. No. 11/969,800 (US 2008-0165152 A1), "Modal Change Based on Orientation of a Portable Multifunction Device," filed Jan. 4, 2008, the content of which is hereby incorporated by reference in its entirety.

[00640] Additional description of portrait-landscape rotation heuristics can be found in U.S. Provisional Patent Application No. 60/947,132, "Portrait-Landscape Rotation Heuristics for a Portable Multifunction Device," filed Jun. 29, 2007, and U.S. patent application Ser. No. 11/960,671 (US 2008-0165144 A1), "Portrait-Landscape Rotation Heuristics for a Portable Multifunction Device," filed Dec. 19, 2007, the content of which is hereby incorporated by reference in its entirety.

[00641] Additional description of adaptive user interface displays can be found in U.S. Provisional Patent Application No. 60/937,992, "Portable Multifunction Device, Method, and Graphical User Interface for Displaying User Interface Objects Adaptively," filed Jun. 29, 2007, and U.S. patent application Ser. No. 11/961,760 (US 2008-0165147 A1), "Portable Multifunction Device, Method, and Graphical User Interface for Displaying User Interface Objects Adaptively," filed Dec. 20, 2007, the content of which is hereby incorporated by reference in its entirety.

[00642] Additional description of artwork can be found in U.S. Provisional Patent Application No. 60/883,818, "Creating Digital Artwork Based On Content File Metadata," filed Jan. 7, 2007, and U.S. patent application Ser. No. 11/960,674 (US 2008-0168365 A1), "Creating Digital Artwork Based On Content File Metadata," filed Dec. 19, 2007, the content of which is hereby incorporated by reference in its entirety.

[00643] Additional description of positioning a slider icon can be found in U.S. Provisional Patent Application No. 60/947,304, "Positioning a Slider Icon on a Portable Multifunction Device," filed Jun. 29, 2007, and U.S. patent application Ser. No. 11/968,064 (US 2008-0168395 A1), "Positioning a Slider Icon on a Portable Multifunction Device," filed Dec. 31, 2007, the content of which is hereby incorporated by reference in its entirety.

[00644] Additional description of word suggestion can be found in U.S. patent application Ser. No. 11/620,641 (US 2008-0167858 A1), "Method And System For Providing Word Recommendations For Text Input," filed Jan. 5, 2007, and U.S. patent application Ser. No. 11/620,642 (US 2008-0168366 A1), "Method, System, And Graphical User Interface For Providing Word Recommendations," filed Jan. 5, 2007, the contents of which are hereby incorporated by reference in their entirety.

[00645] Additional description of calendars can be found in U.S. Provisional Patent Application No. 60/883,820, "System And Method For Viewing And Managing Calendar Entries," filed Jan. 7, 2007, and U.S. patent application Ser. No. 11/969,786 (US 2008-0165151 A1), "System and Method for Viewing And Managing Calendar Entries," filed Jan. 4, 2008, the content of which is hereby incorporated by reference in its entirety.

[00646] Additional description of inputting date and time information can be found in U.S. Provisional Patent Application No. 60/947,146, "System, Method, and Graphical User Interface for Inputting Date and Time Information on a Portable Multifunction Device," filed Jun. 29, 2007, and U.S. patent application Ser. No. 11/968,051 (US 2008-0165149 A1), "System, Method, and Graphical User Interface for Inputting Date and Time Information on a Portable Multifunction Device," filed Dec. 31, 2007, the content of which is hereby incorporated by reference in its entirety.

[00647] Additional description of user created widgets can be found in U.S. Provisional Patent Application Nos. 60/883,805, "Web Clip Widgets On A Portable Multifunction Device," filed Jan. 7, 2007, and 60/946,712, "Web Clip Widgets on a Portable Multifunction Device," filed Jun. 27, 2007, and U.S. patent application Ser. No. 11/850,011 (US 2008-0055273 A1), "Web Clip Widgets On a Portable Multifunction Device," filed Sep. 4, 2007, the contents of which are hereby incorporated by reference in their entirety.

[00648] Additional description of providing maps and directions can be found in U.S. Provisional Patent Application No. 60/936,725, "Portable Multifunction Device, Method, and Graphical User Interface for Providing Maps and Directions," filed Jun. 22, 2007, and U.S. patent application Ser. No. 11/969,211 (US 2008-0168396 A1), "Portable Multifunction Device, Method, and Graphical User Interface for Providing Maps and Directions," filed Jan. 3, 2008, the content of which is hereby incorporated by reference in its entirety.

[00649] Additional description of displaying notification information for missed communications can be found in U.S. Provisional Patent Application No. 60/883,804, "System And Method For Displaying Communication Notifications," filed Jan. 7, 2007 and U.S. patent application Ser. No.

11/770,718 (US 2008-0220752 A1), "Portable Multifunction Device, Method, and Graphical User Interface for Managing Communications Received While in a Locked State," filed Jun. 28, 2007, the contents of which are hereby incorporated by reference in their entirety.

[00650] Additional description of methods for silencing a portable device can be found in U.S. Provisional Patent Application No. 60/883,802, "Portable Electronic Device With Alert Silencing," filed Jan. 7, 2007 and U.S. patent application Ser. No. 11/770,727 (US 2008-0165022 A1), "Portable Electronic Device with Alert Silencing," filed Jun. 28, 2007, the contents of which are hereby incorporated by reference in their entirety.

[00651] Additional description of methods for turning off a portable device can be found in U.S. Provisional Patent Application No. 60/883,786, "Power-Off Methods For Portable Electronic Devices," filed Jan. 6, 2007, and U.S. patent application Ser. No. 11/770,722 (US 2008-0168290 A1), "Power-Off Methods For Portable Electronic Devices," filed Jun. 28, 2007, the contents of which are hereby incorporated by reference in their entirety.

[00652] Additional description of determining a cursor position from a finger contact can be found in U.S. Provisional Patent Application No. 60/946,716, "Methods for Determining a Cursor Position from a Finger Contact with a Touch Screen Display," filed Jun. 27, 2007, and U.S. patent application Ser. No. 11/850,015 (US 2008-0094356 A1), "Methods for Determining a Cursor Position from a Finger Contact with a Touch Screen Display," filed Sep. 4, 2007, the content of which is hereby incorporated by reference in its entirety.

[00653] Additional description of the horizontal and vertical bars can be found in U.S. Provisional Patent Application No. 60/947,386, "Portable Electronic Device, Method, and Graphical User Interface for Displaying Electronic Documents and Lists," filed Jun. 29, 2007, and U.S. patent application Ser. No. 11/968,059 (US 2008-0168349 A1), "Portable Electronic Device, Method, and Graphical User Interface for Displaying Electronic Documents and Lists," filed Dec. 31, 2007, the content of which is hereby incorporated by reference in its entirety.

[00654] Additional description of gestures can be found in U.S. Provisional Patent Application Nos. 60/883,817, "Portable Electronic Device Performing Similar Operations For Different Gestures," filed Jan. 7, 2007, and 60/946,970, "Screen Rotation Gestures on a Portable Multifunction Device," filed Jun. 28, 2007, and U.S. patent application Ser. Nos. 11/850,638 (US 2008-0094370 A1), "Portable Electronic Device Performing Similar Operations For Different Gestures," filed Sep. 5, 2007, and 11/960,667 (US 2008-0211778 A1), "Screen Rotation Gestures on

a Portable Multifunction Device," filed Dec. 19, 2007, the contents of which are hereby incorporated by reference in their entirety.

[00655] Additional description of interpreting a finger gesture can be found in U.S. Provisional Patent Application No. 60/946,977, "Portable Multifunction Device, Method, and Graphical User Interface for Interpreting a Finger Gesture on a Touch Screen Display," filed Jun. 28, 2007, and U.S. patent application Ser. No. 11/969,796 (US 2008-0165160 A1), "Portable Multifunction Device, Method, and Graphical User Interface for Interpreting a Finger Gesture on a Touch Screen Display," filed Jan. 4, 2008, the content of which is hereby incorporated by reference in its entirety.

[00656] Additional description of interpreting a finger swipe gesture can be found in U.S. Provisional Patent Application No. 60/947,140, "Portable Multifunction Device, Method, and Graphical User Interface for Interpreting a Finger Swipe Gesture," filed Jun. 29, 2007, and U.S. patent application Ser. No. 11/961,700 (US 2008-0165145 A1), "Portable Multifunction Device, Method, and Graphical User Interface for Interpreting a Finger Swipe Gesture," filed Dec. 20, 2007, the content of which is hereby incorporated by reference in its entirety.

[00657] Additional description of heuristics can be found in U.S. Provisional Patent Application No. 60/937,991, "Touch Screen Device, Method, and Graphical User Interface for Determining Commands by Applying Heuristics," filed Jun. 29, 2007, and U.S. patent application Ser. No. 11/850,635 (US 2008-0122796 A1), "Touch Screen Device, Method, and Graphical User Interface for Determining Commands by Applying Heuristics," filed Sep. 5, 2007, the content of which is hereby incorporated by reference in its entirety.

[00658] Additional description of soft keyboards can be found in U.S. Provisional Patent Application No. 60/946,714, "Portable Multifunction Device with Soft Keyboards," filed Jun. 27, 2007, and U.S. patent application Ser. No. 11/961,663 (US 2008-0098331 A1), "Portable Multifunction Device with Soft Keyboards," filed Dec. 20, 2007, the content of which is hereby incorporated by reference in its entirety.

[00659] Additional description of keyboards can be found in U.S. Provisional Patent Application No. 60/883,806, "Soft Keyboard Display For A Portable Multifunction Device," filed Jan. 7, 2007, and U.S. patent application Ser. No. 11/850,641 (US 2008-0082934 A1), "Soft Keyboard Display For A Portable Multifunction Device," filed Sep. 5, 2007, the content of which is hereby incorporated by reference in its entirety.

[00660] Additional description of airplane mode indicators can be found in U.S. Provisional Patent Application No. 60/947,315, "Airplane Mode Indicator on a Portable Multifunction Device,"

filed Jun. 29, 2007, and U.S. patent application Ser. No. 11/961,743 (US 2008-0165146 A1), "Airplane Mode Indicator on a Portable Multifunction Device," filed Dec. 20, 2007, the content of which is hereby incorporated by reference in its entirety.

[00661] Additional description of dimming techniques can be found in U.S. Provisional Patent Application No. 60/883,821, "Portable Electronic Device With Auto-Dim Timers," filed Jan. 7, 2007, and U.S. patent application Ser. No. 11/960,677 (US 2008-0218535 A1), "Portable Electronic Device With Auto-Dim Timers," filed Dec. 19, 2007, the content of which is hereby incorporated by reference in its entirety.

[00662] Additional description of settings-related techniques can be found in U.S. Provisional Patent Application No. 60/883,812, "Portable Electronic Device With A Global Setting User Interface," filed Jan. 7, 2007, and U.S. patent application Ser. No. 11/960,669 (US 2008-0222545 A1), "Portable Electronic Device With A Global Setting User Interface," filed Dec. 19, 2007, the content of which is hereby incorporated by reference in its entirety.

[00663] In accordance with various embodiments, a toolbox window is contemplated to have the functionality similar to that set forth in U.S. Pat. No. 7,600,193 to Gunderson entitled "A METHOD OF TRACKING DUAL MODE DATA OBJECTS USING RELATED THUMBNAILS AND TOOL ICONS IN A PALETTE WINDOW," the disclosure of which is wholly incorporated by reference herein.

[00664] U.S. Patent Application titled "Video Conferencing System Transcoder", Ser. No. 11/252,238 (US 2006-0087553 A1), which was filed Oct. 17, 2005, whose inventors are Michael L. Kenoyer and Michael V. Jenkins, is hereby incorporated by reference in its entirety as though fully and completely set forth herein.

[00665] Similarly, the conference may be a videoconference, and the videoconference may be established according to any of a variety of methods, e.g., the one described in patent application Ser. No. 11/252,238 (US 2006-0087553 A1), which was incorporated by reference above.

[00666] A proximity sensor may perform as described in U.S. patent application Ser. No. 11/241,839 (US 2006-0161871 A1), "Proximity Detector In Handheld Device," filed Sep. 30, 2005; Ser. No. 11/240,788 (US 2006-0161870 A1), "Proximity Detector In Handheld Device," filed Sep. 30, 2005; Ser. No. 11/620,702 (US 2008-0167834 A1), "Using Ambient Light Sensor To Augment Proximity Sensor Output"; Ser. No. 11/586,862 (US 2007-0075965 A1), "Automated Response To And Sensing Of User Activity In Portable Devices," filed Oct. 24, 2006; and Ser. No. 11/638,251

(US 2008-0140868 A1), "Methods And Systems For Automatic Configuration Of Peripherals," which are hereby incorporated by reference in their entirety.

[00667] In some embodiments, a user may rearrange the icons in UI, e.g., using processes described in U.S. patent application Ser. No. 11/459,602 (US 2007-0157089 A1), "Portable Electronic Device With Interface Reconfiguration Mode," filed Jul. 24, 2006, which is hereby incorporated by reference in its entirety. For example, a user may move application icons in and out of tray 408 using finger gestures.

[00668] While various embodiments have been described above, it should be understood that they have been presented by way of example only, and not limitation. Thus, the breadth and scope of a preferred embodiment should not be limited by any of the above-described exemplary embodiments, but should be defined only in accordance with the following claims and their equivalents.

PTO/AIA/01 (06-12)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of Invention	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT

As the below named inventor, I hereby declare that:

This declaration is directed to:

- [x] The attached application, or
- [ ] United States application or PCT international application number _____ filed on _____.

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

LEGAL NAME OF INVENTOR

Inventor: Michael Smith Date (Optional) :_____

Signature: /Michael Smith/

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

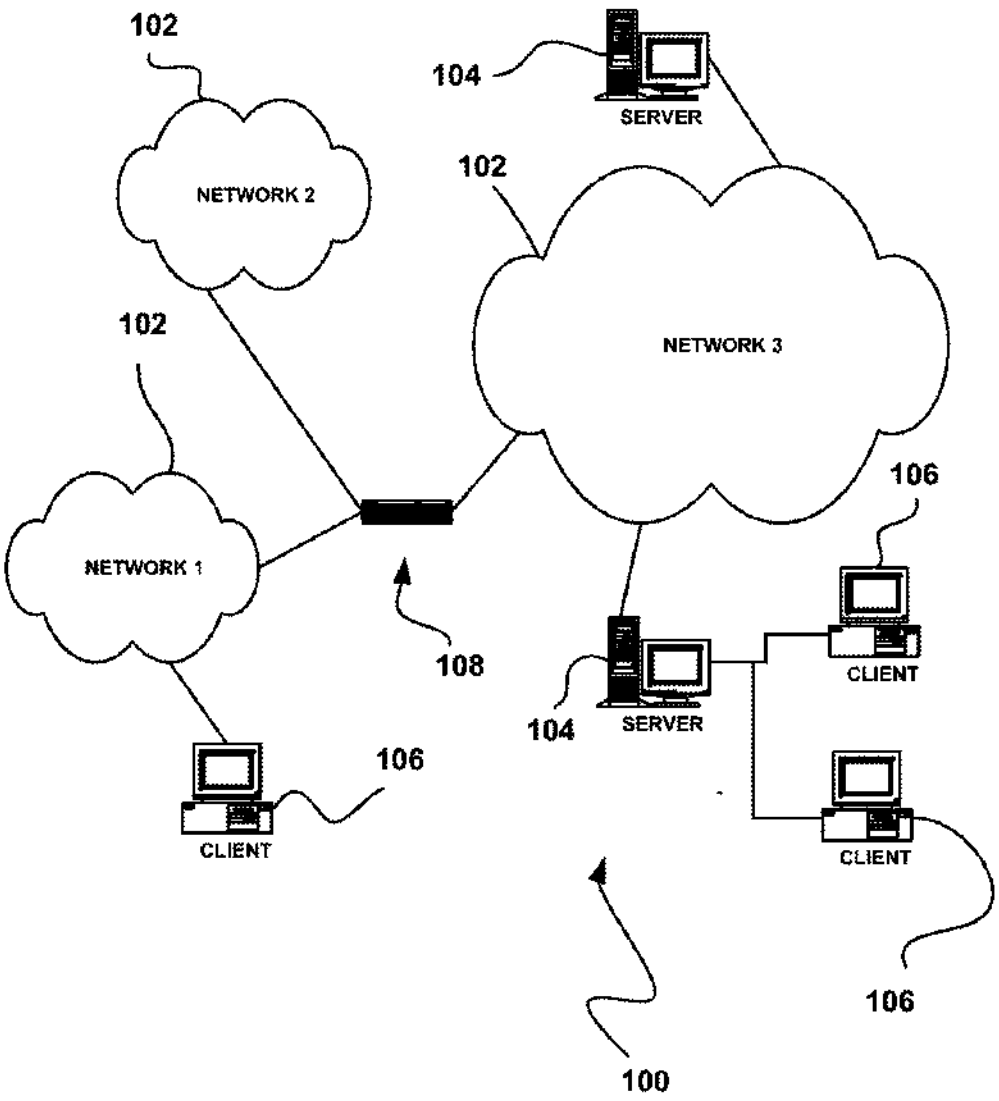

102
104
SERVER
NETWORK 2
102
102
NETWORK 3
NETWORK 1
106
108
104
SERVER
CLIENT
106
CLIENT
CLIENT
106
100

FIGURE 1

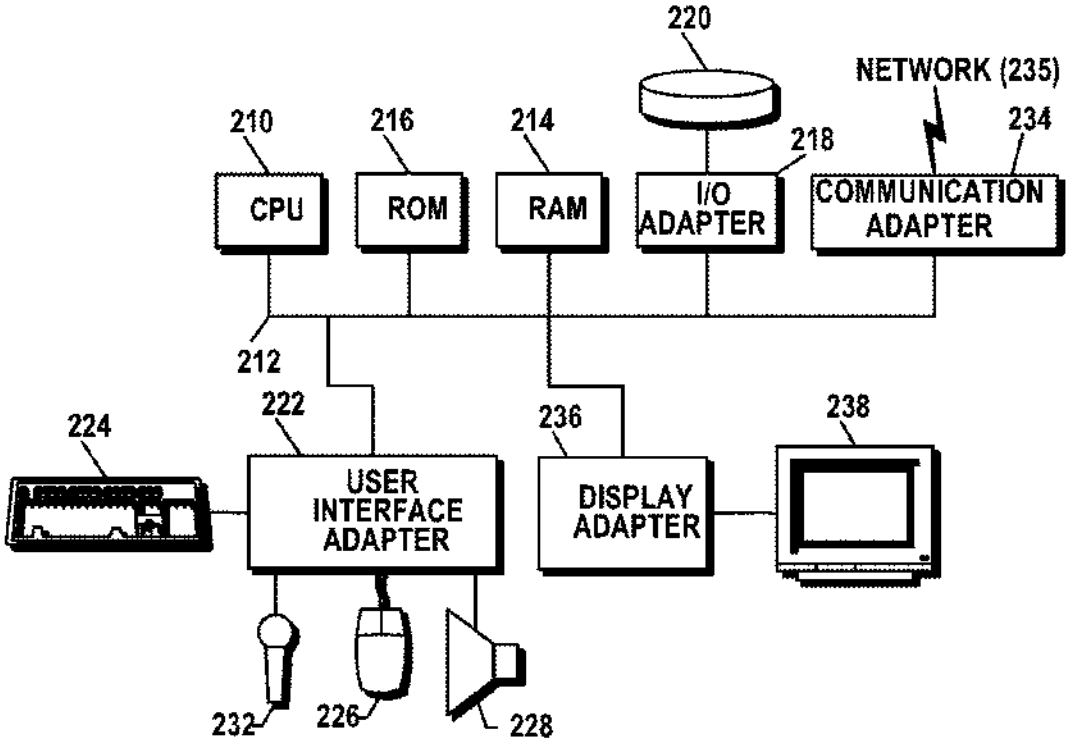

220
NETWORK (235)
210
216
214
218
234
CPU
ROM
RAM
I/O ADAPTER
COMMUNICATION ADAPTER
212
222
224
236
238
USER INTERFACE ADAPTER
DISPLAY ADAPTER
232
226
228

FIGURE 2

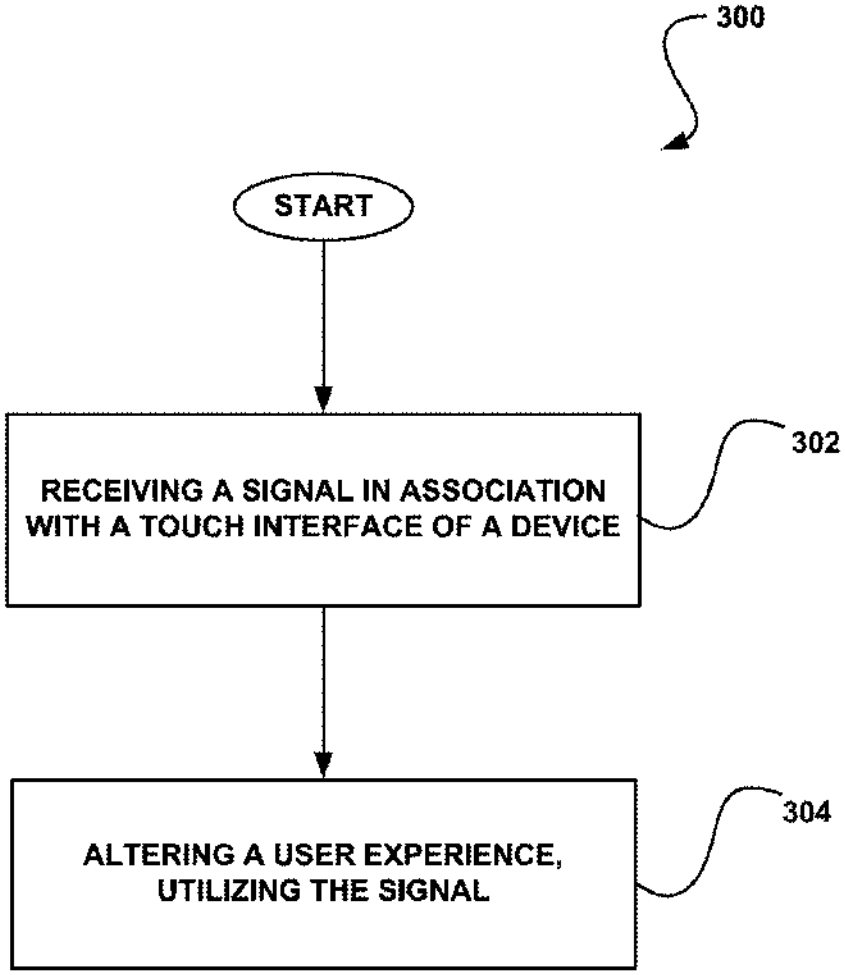

300
START
RECEIVING A SIGNAL IN ASSOCIATION WITH A TOUCH INTERFACE OF A DEVICE
302
ALTERING A USER EXPERIENCE, UTILIZING THE SIGNAL
304

FIGURE 3

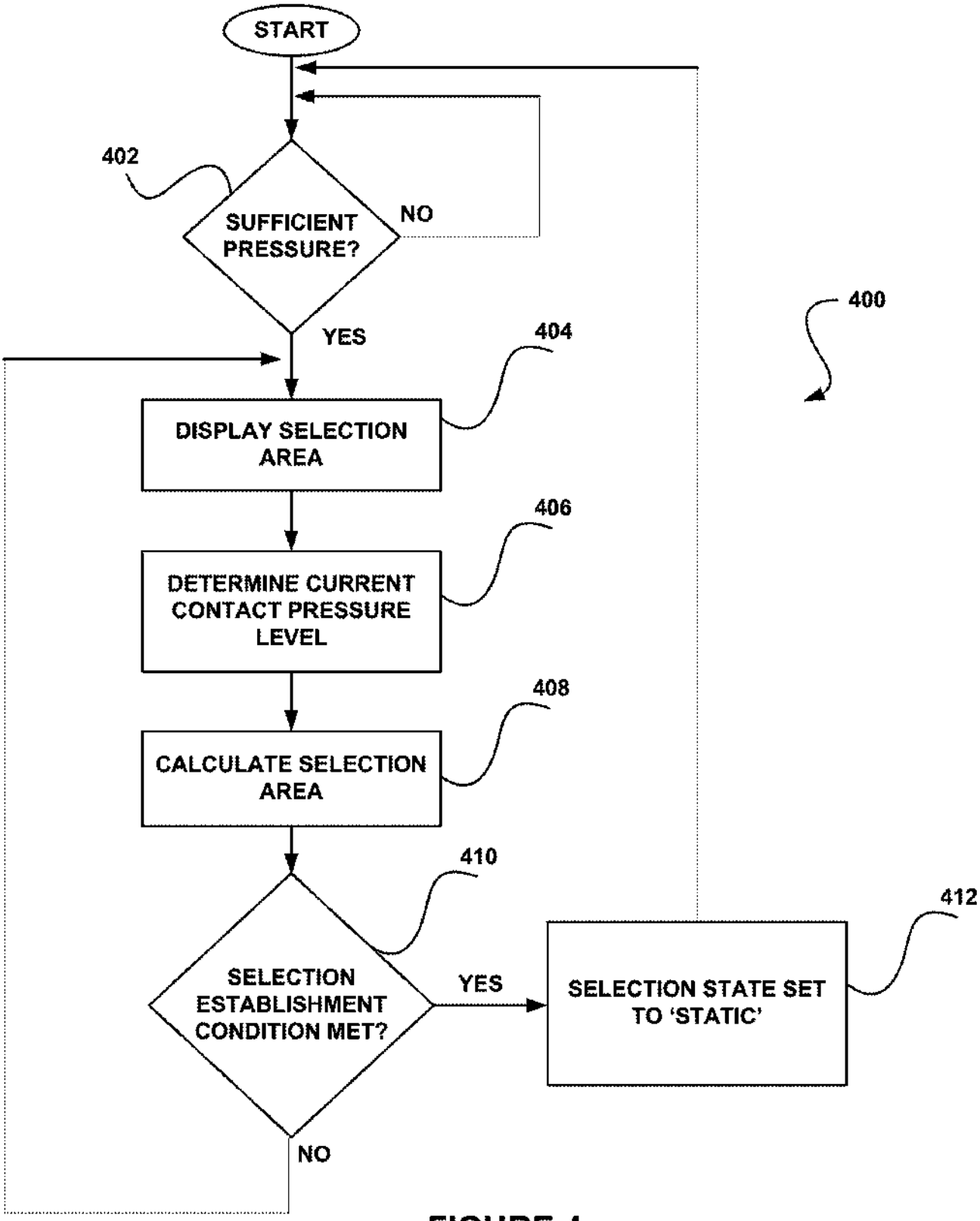

START
402
SUFFICIENT PRESSURE?
NO
YES
400
404
DISPLAY SELECTION AREA
406
DETERMINE CURRENT CONTACT PRESSURE LEVEL
408
CALCULATE SELECTION AREA
410
SELECTION ESTABLISHMENT CONDITION MET?
YES
412
SELECTION STATE SET TO 'STATIC'
NO

FIGURE 4

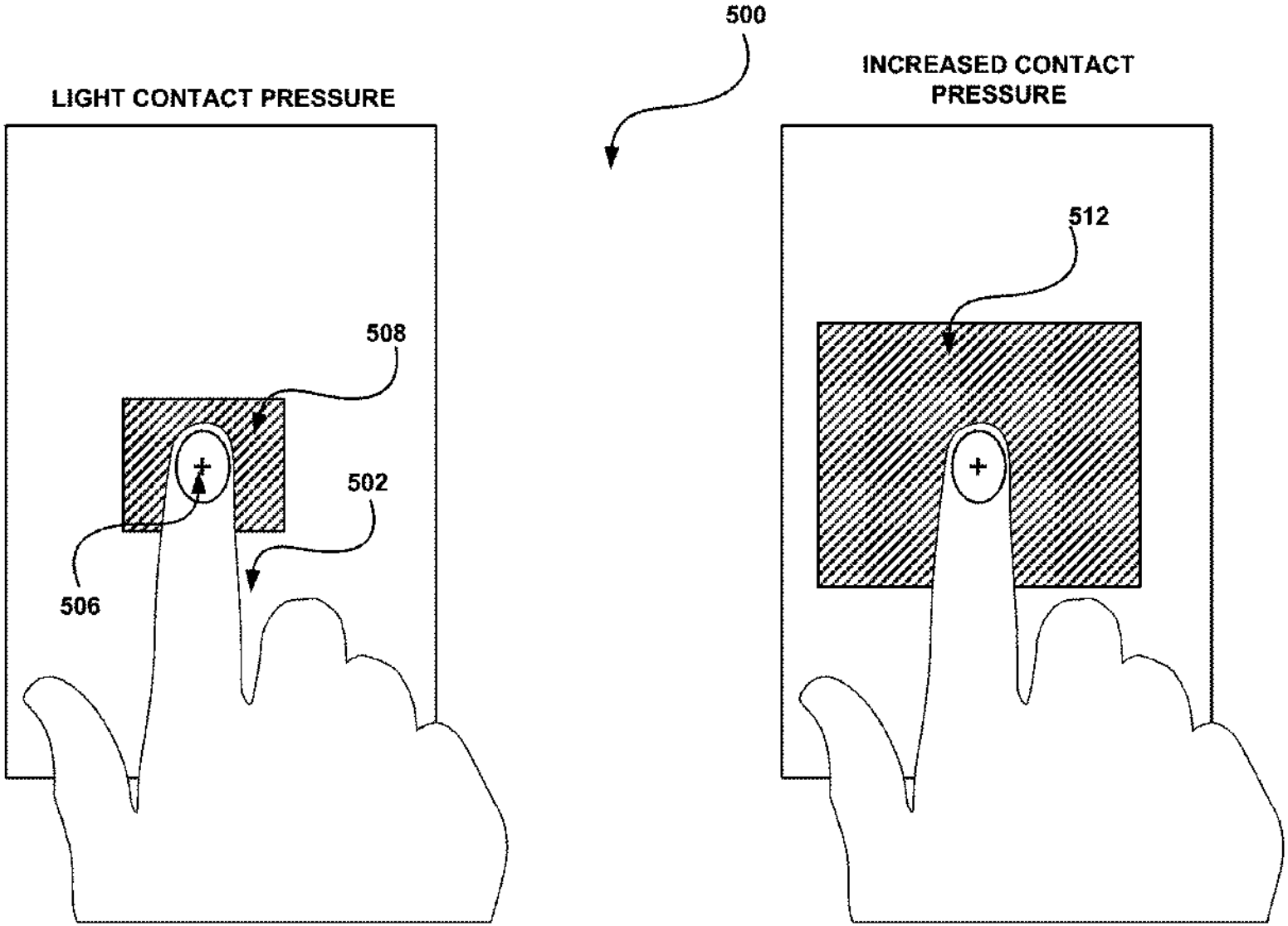

500
LIGHT CONTACT PRESSURE
INCREASED CONTACT PRESSURE
508
502
506
512

FIGURE 5

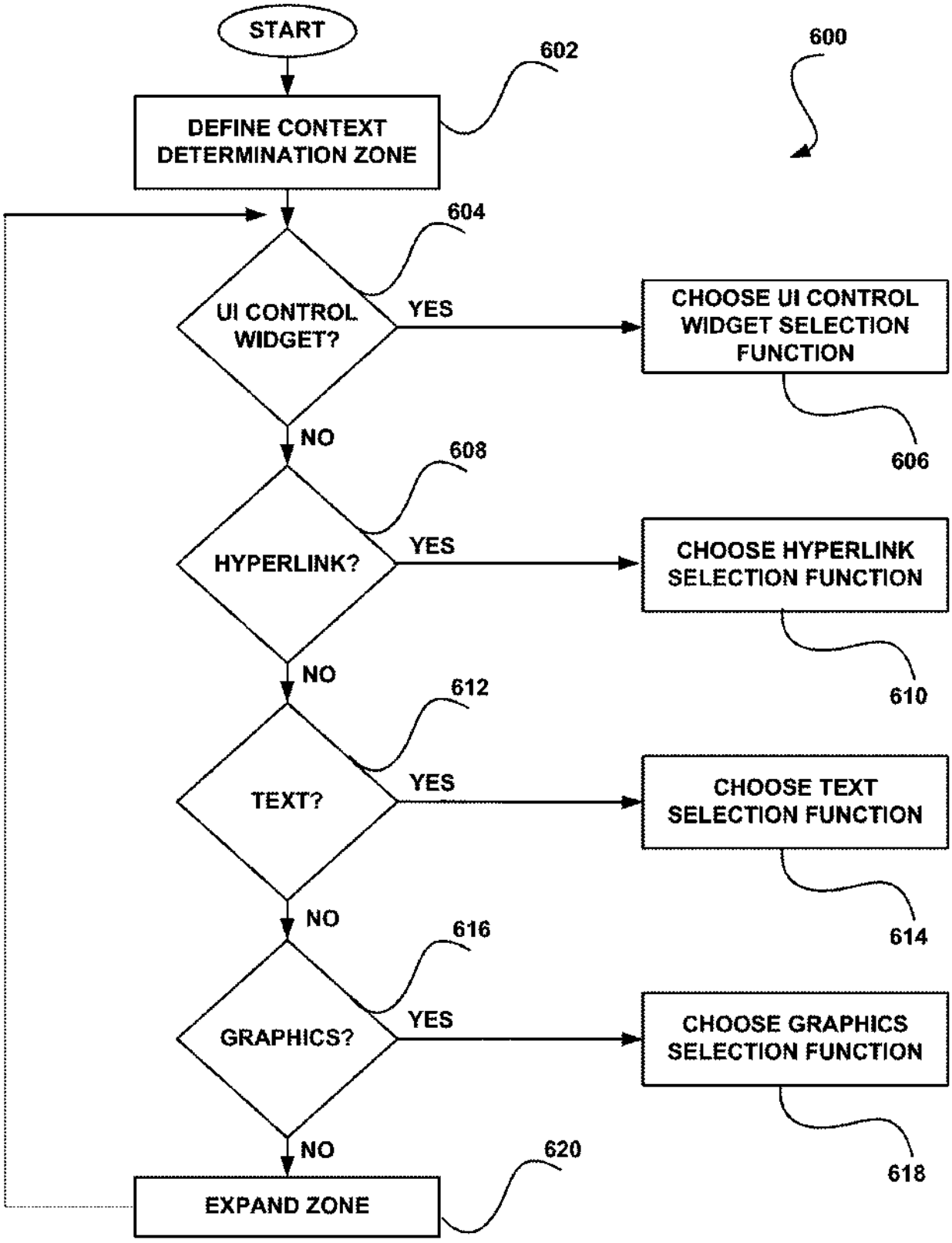

START
600
602
DEFINE CONTEXT DETERMINATION ZONE
604
UI CONTROL WIDGET?
YES
CHOOSE UI CONTROL WIDGET SELECTION FUNCTION
606
NO
608
HYPERLINK?
YES
CHOOSE HYPERLINK SELECTION FUNCTION
610
NO
612
TEXT?
YES
CHOOSE TEXT SELECTION FUNCTION
614
NO
616
GRAPHICS?
YES
CHOOSE GRAPHICS SELECTION FUNCTION
618
NO
620
EXPAND ZONE

FIGURE 6

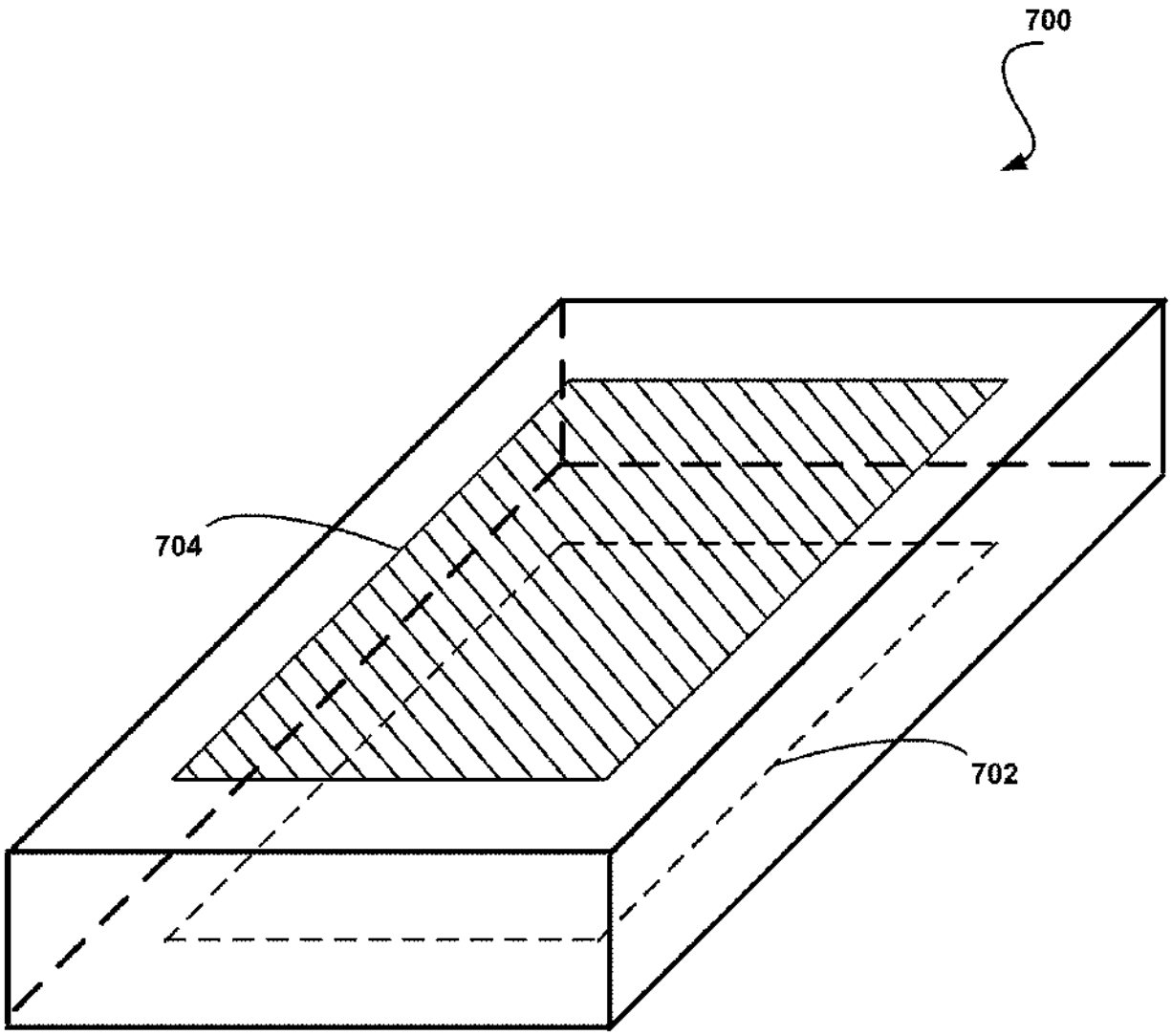


FIGURE 7

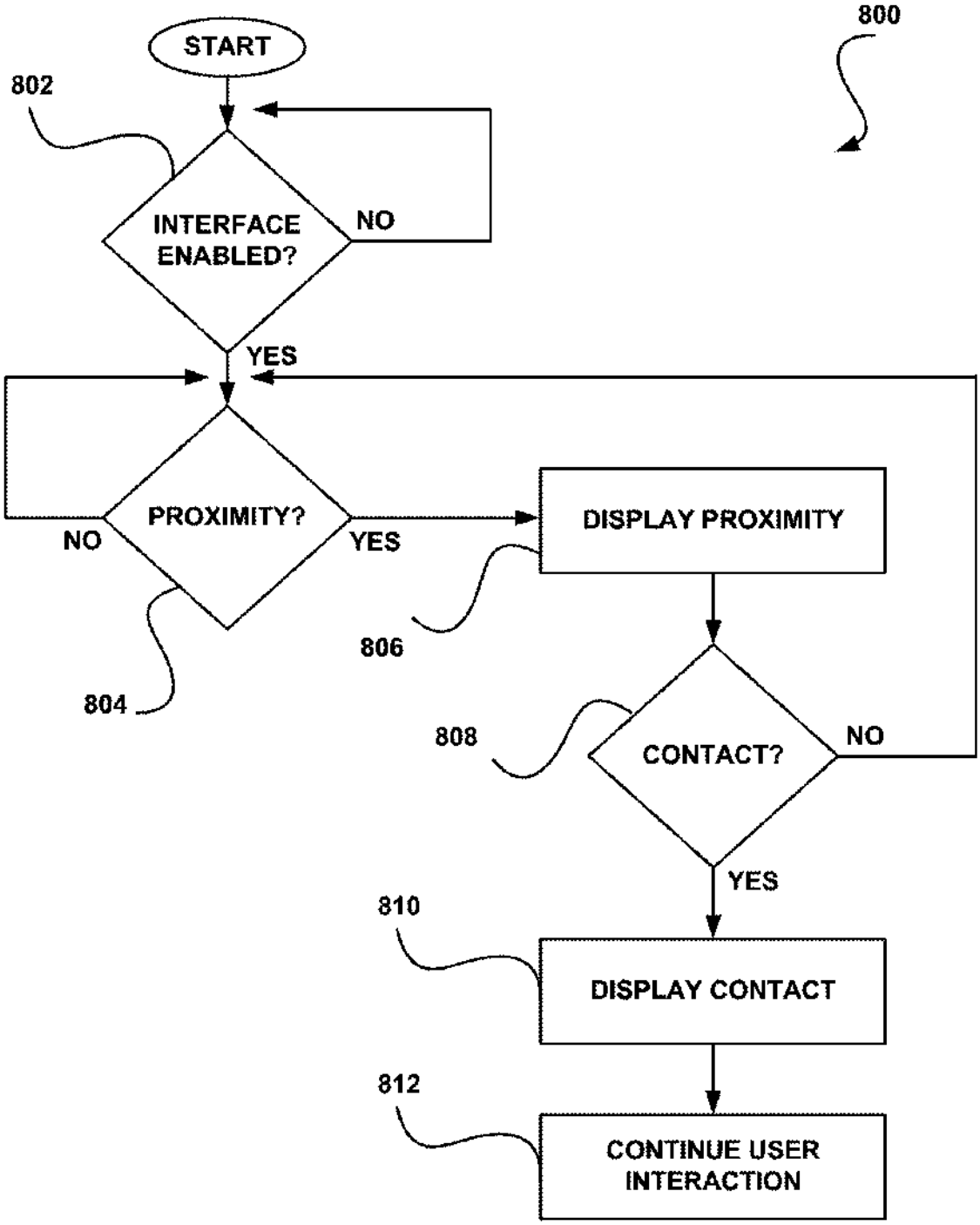

800
START
802
INTERFACE ENABLED?
NO
YES
PROXIMITY?
NO
YES
804
DISPLAY PROXIMITY
806
808
CONTACT?
NO
YES
810
DISPLAY CONTACT
812
CONTINUE USER INTERACTION

FIGURE 8

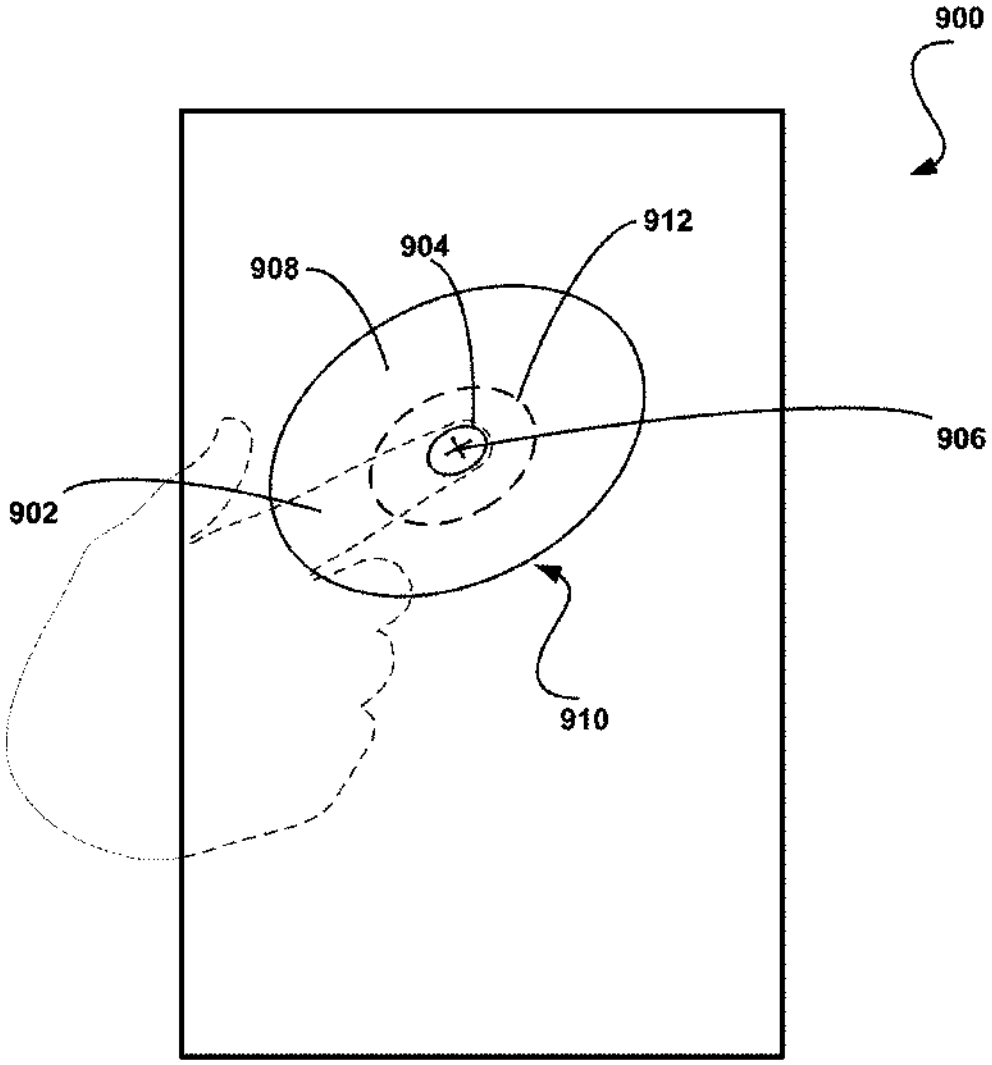


FIGURE 9

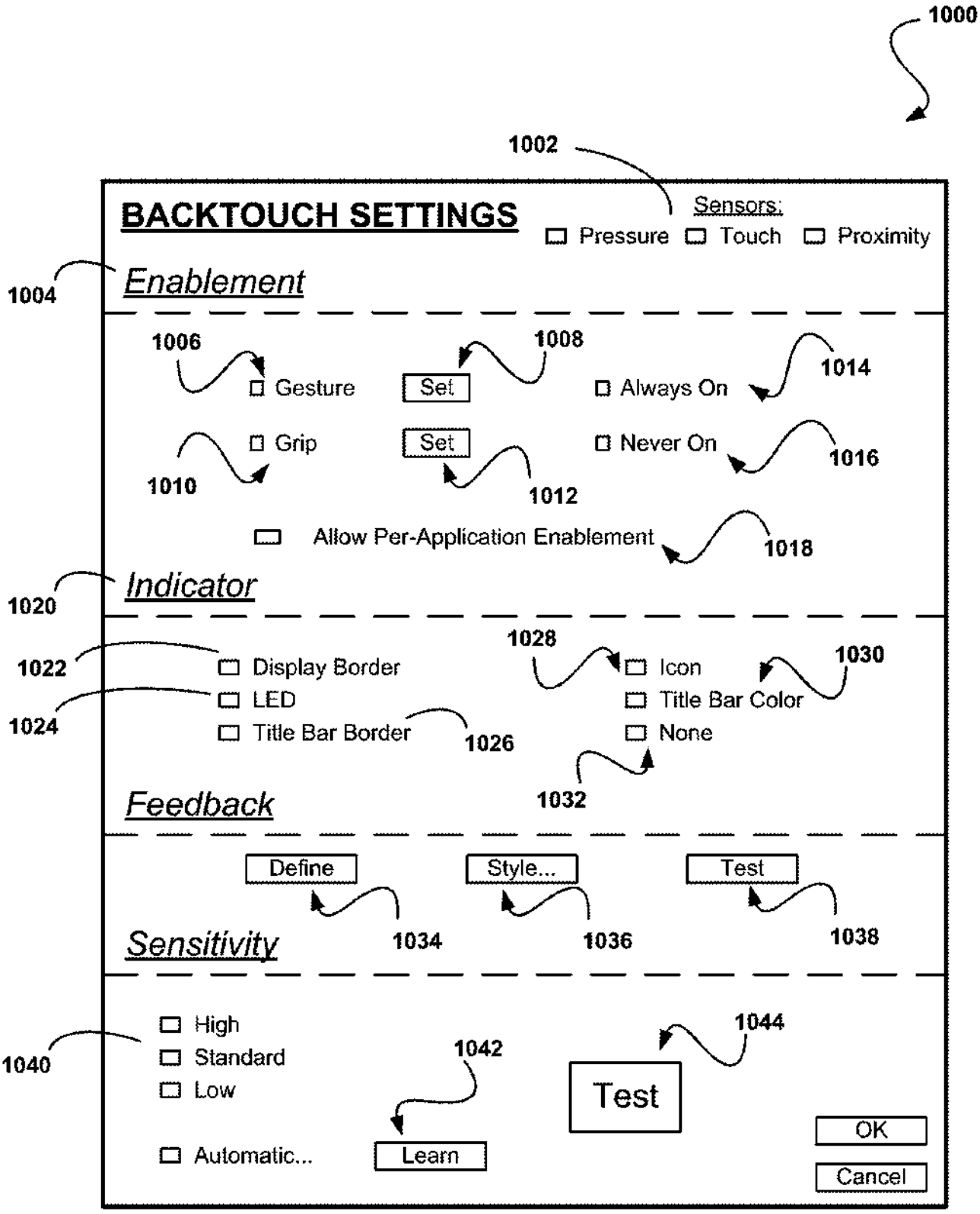

1000
1002
BACKTOUCH SETTINGS
Sensors:
Pressure
Touch
Proximity
1004
Enablement
1006
Gesture
Set
1008
Always On
1014
Grip
Set
Never On
1016
1010
1012
Allow Per-Application Enablement
1018
1020
Indicator
1022
Display Border
1028
Icon
1030
1024
LED
Title Bar Color
Title Bar Border
1026
None
1032
Feedback
Define
Style...
Test
Sensitivity
1034
1036
1038
1040
High
Standard
Low
1042
1044
Test
Automatic...
Learn
OK
Cancel

FIGURE 10

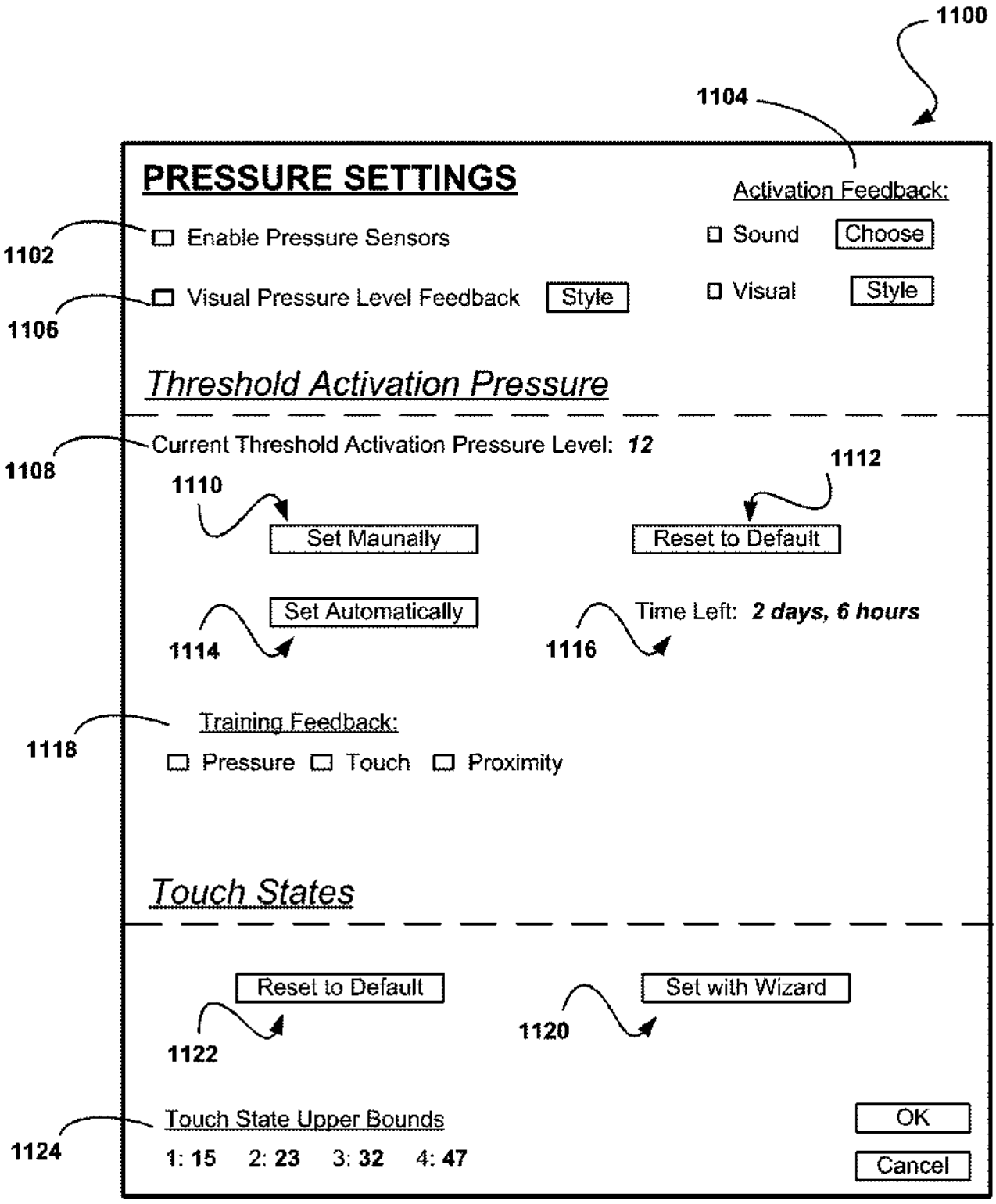

1100
1104
PRESSURE SETTINGS
Activation Feedback:
1102
Enable Pressure Sensors
Sound
Choose
1106
Visual Pressure Level Feedback
Style
Visual
Style
Threshold Activation Pressure
1108
Current Threshold Activation Pressure Level: 12
1110
1112
Set Maunally
Reset to Default
Set Automatically
1114
1116
Time Left: 2 days, 6 hours
1118
Training Feedback:
Pressure
Touch
Proximity
Touch States
Reset to Default
Set with Wizard
1122
1120
1124
Touch State Upper Bounds
1: 15 2: 23 3: 32 4: 47
OK
Cancel

FIGURE 11

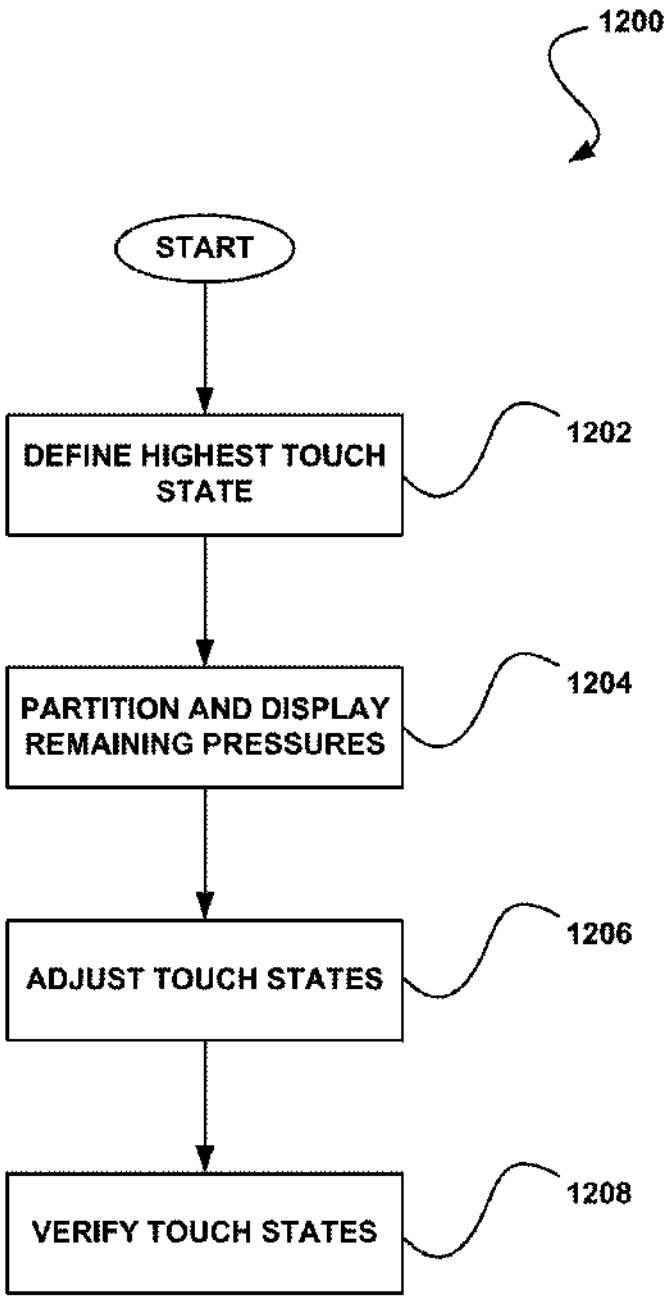

1200
START
DEFINE HIGHEST TOUCH STATE
1202
PARTITION AND DISPLAY REMAINING PRESSURES
1204
ADJUST TOUCH STATES
1206
VERIFY TOUCH STATES
1208

FIGURE 12

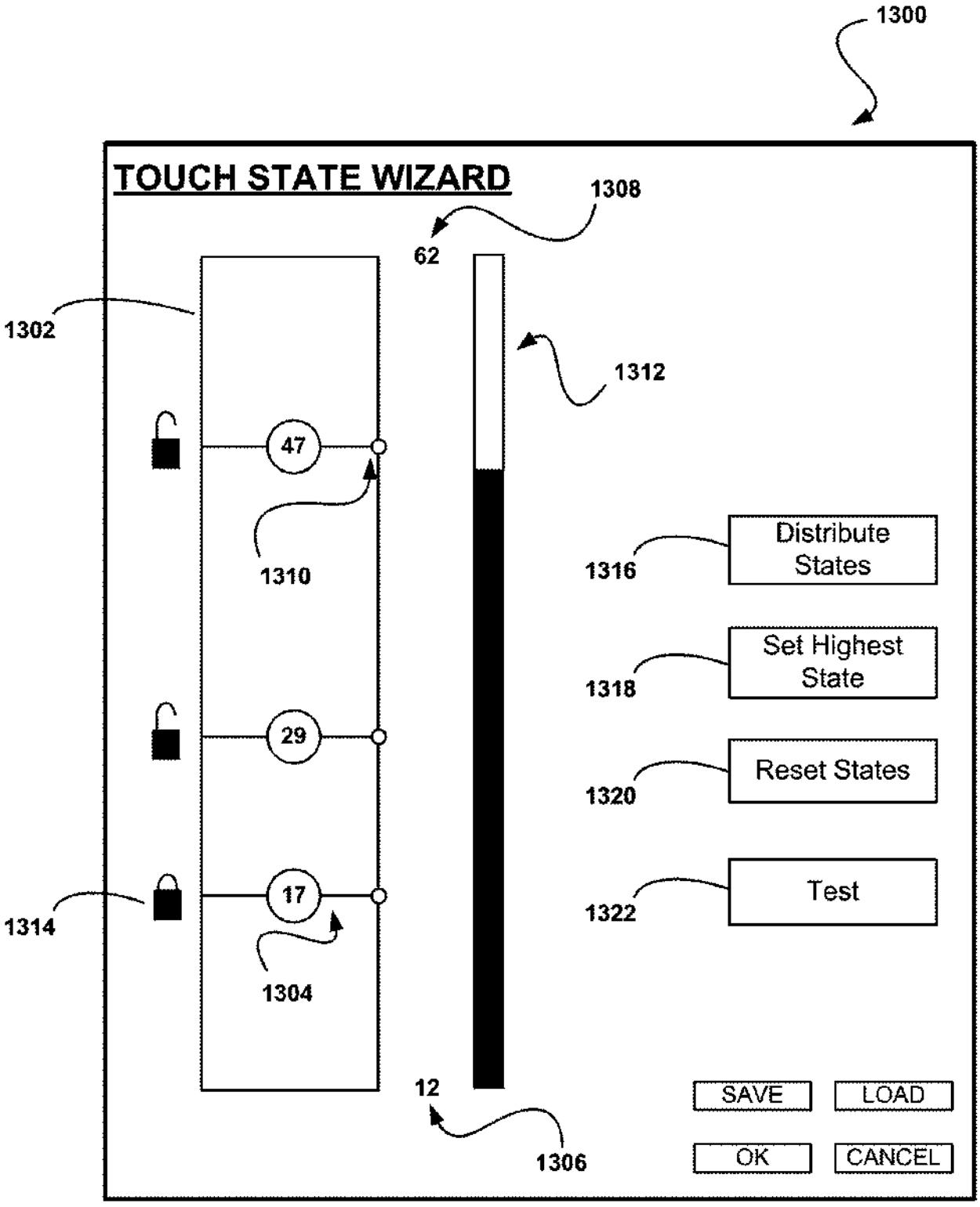

1300
TOUCH STATE WIZARD
1308
62
1302
1312
47
1310
Distribute States
1316
Set Highest State
1318
29
Reset States
1320
Test
1322
1314
17
1304
12
1306
SAVE
LOAD
OK
CANCEL

FIGURE 13

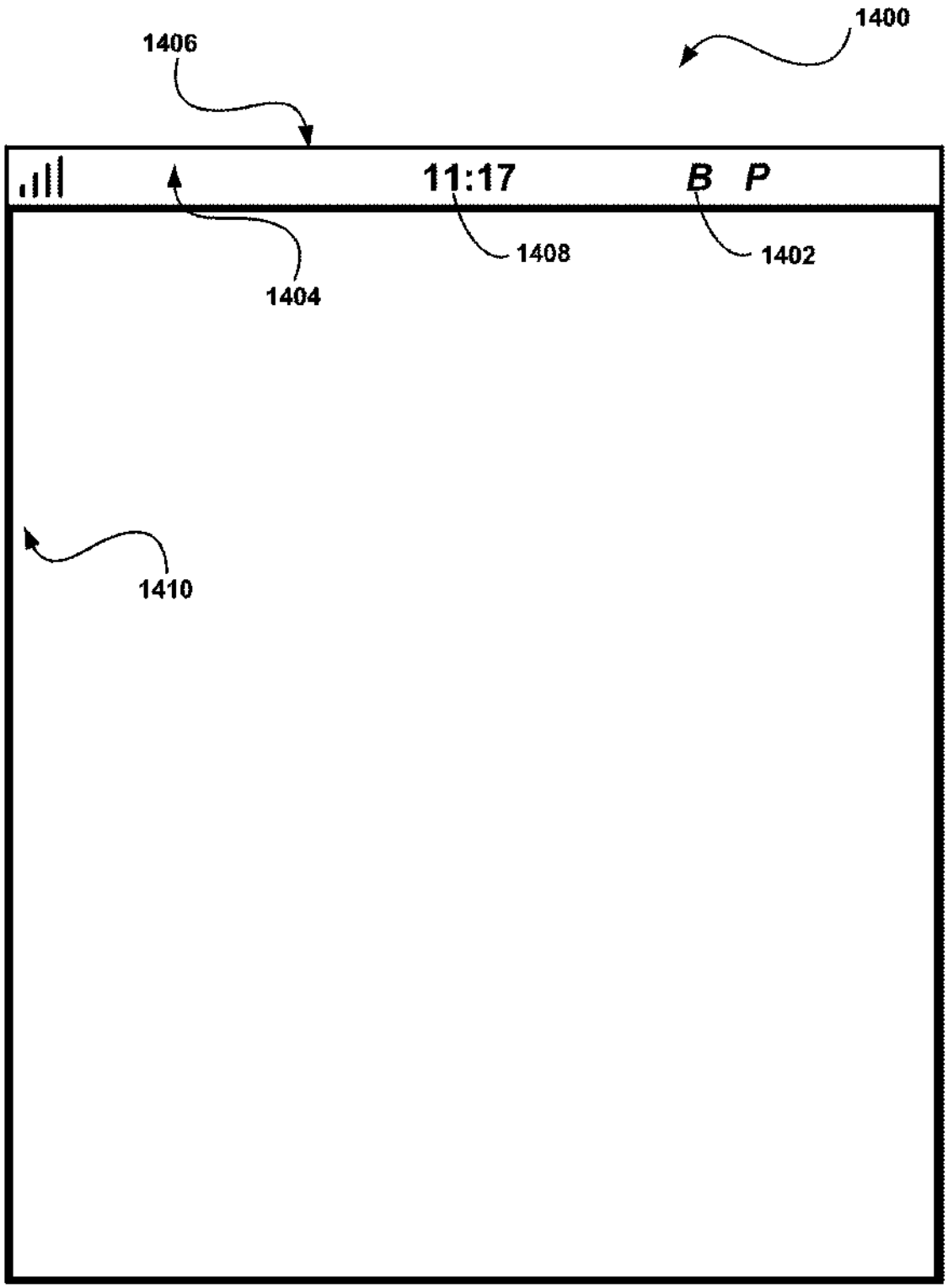


FIGURE 14

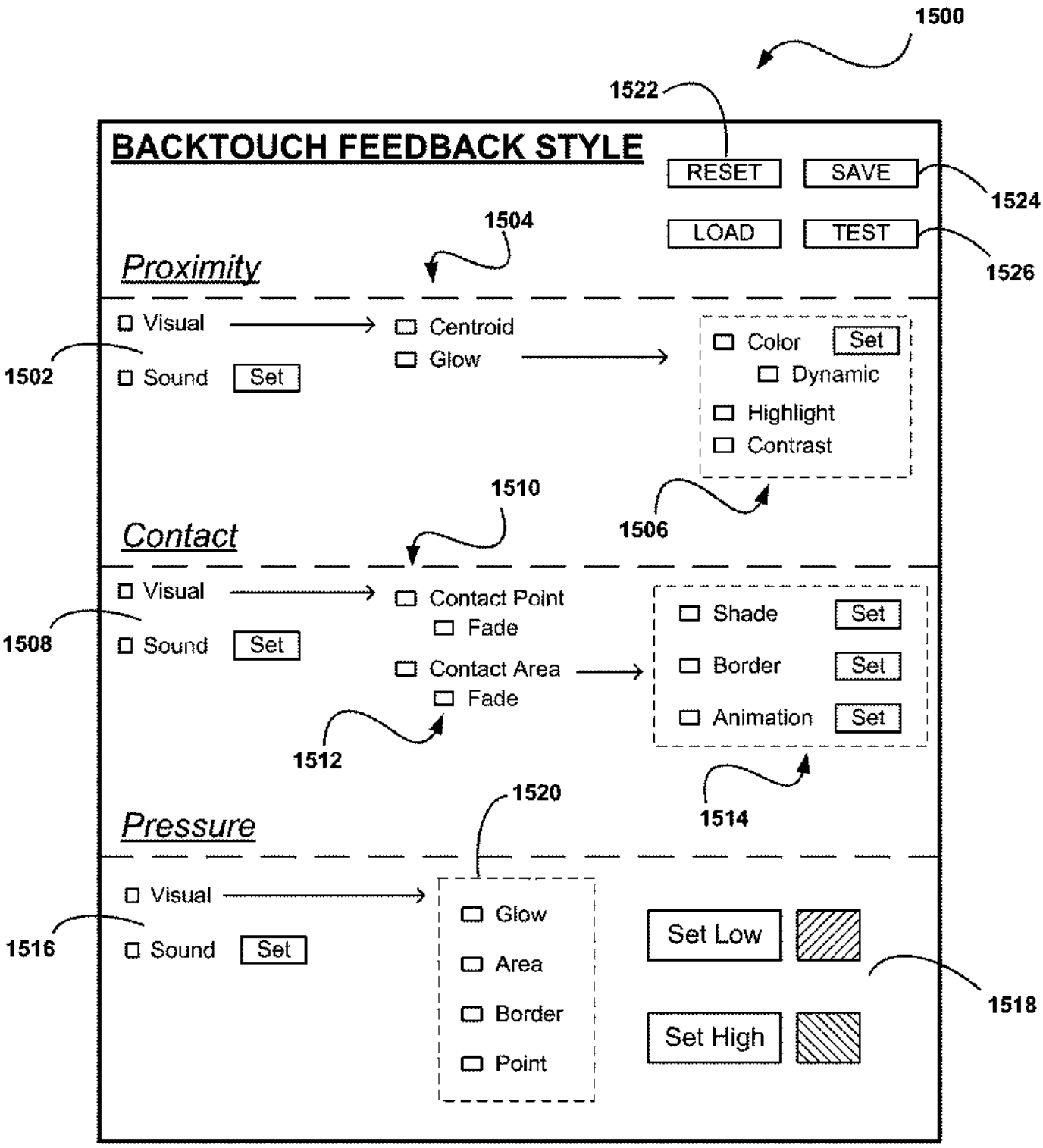

1500
1522
BACKTOUCH FEEDBACK STYLE
RESET
SAVE
1524
LOAD
TEST
1526
1504
Proximity
Visual
Sound
Set
1502
Centroid
Glow
Color
Set
Dynamic
Highlight
Contrast
1506
1510
Contact
Visual
Sound
Set
1508
Contact Point
Fade
Contact Area
Fade
1512
Shade
Set
Border
Set
Animation
Set
1514
1520
Pressure
Visual
Sound
Set
1516
Glow
Area
Border
Point
Set Low
Set High
1518

FIGURE 15

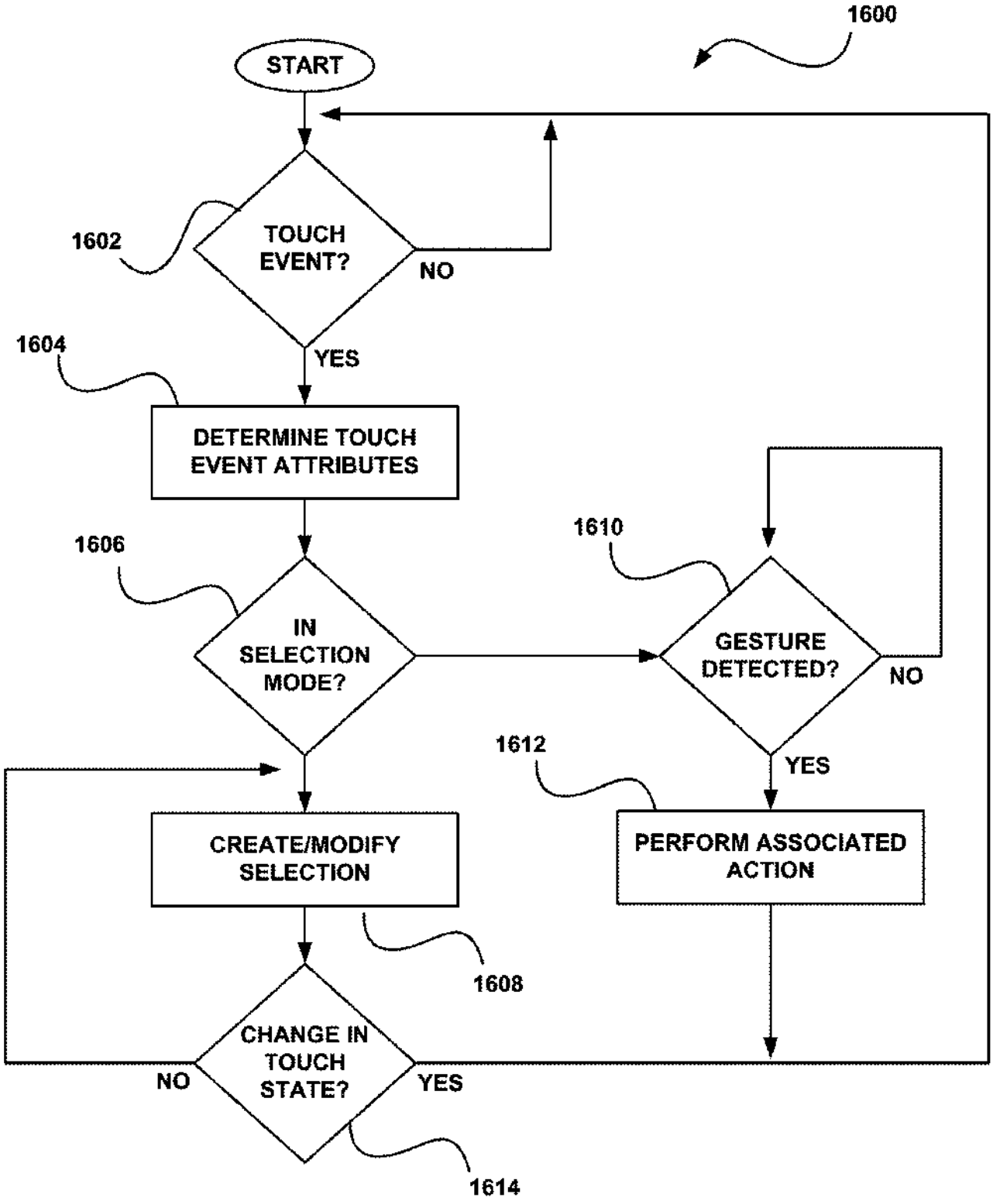

1600
START
1602
TOUCH EVENT?
NO
YES
1604
DETERMINE TOUCH EVENT ATTRIBUTES
1606
IN SELECTION MODE?
1610
GESTURE DETECTED?
NO
YES
1612
CREATE/MODIFY SELECTION
PERFORM ASSOCIATED ACTION
1608
CHANGE IN TOUCH STATE?
NO
YES
1614

FIGURE 16

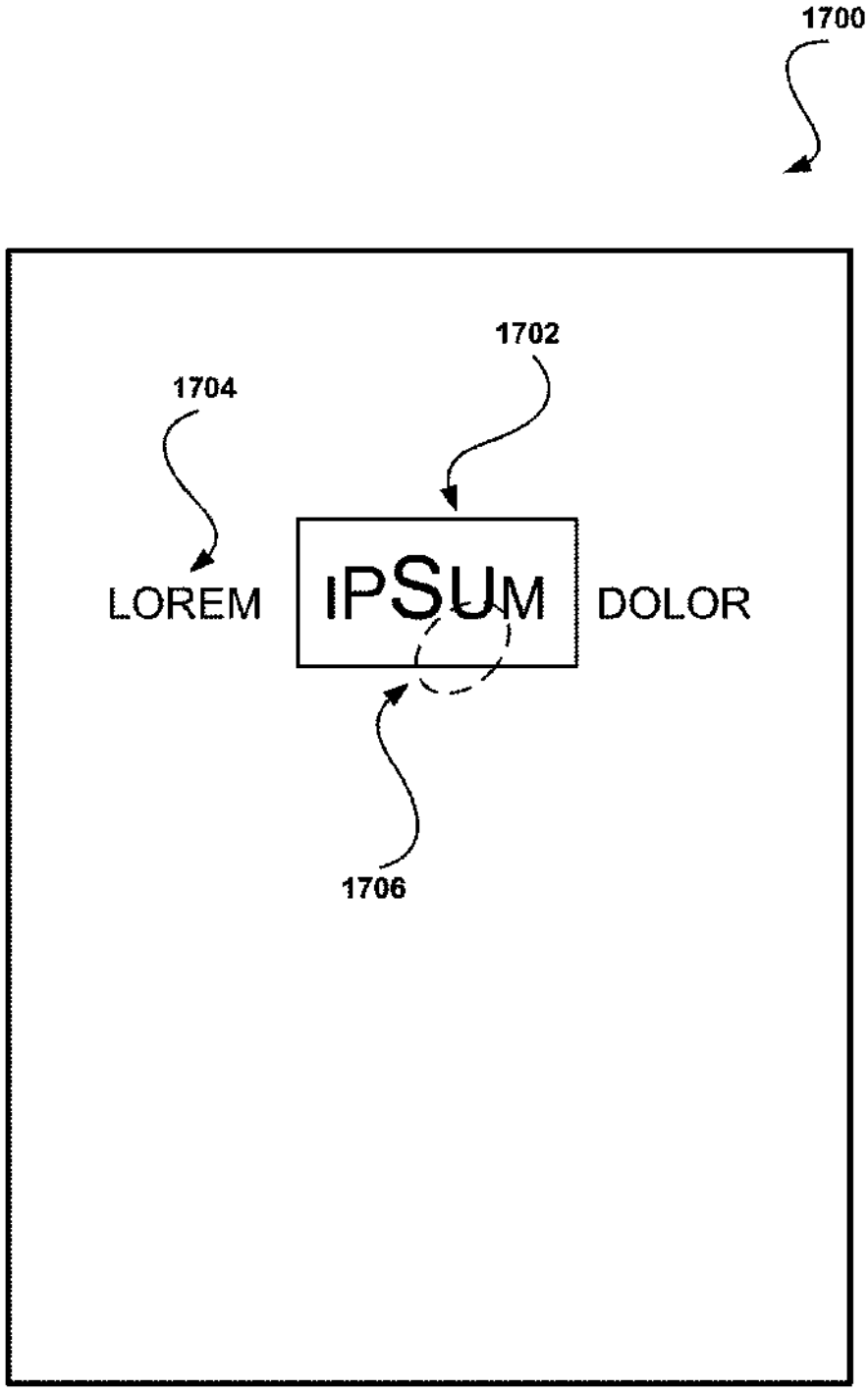


FIGURE 17

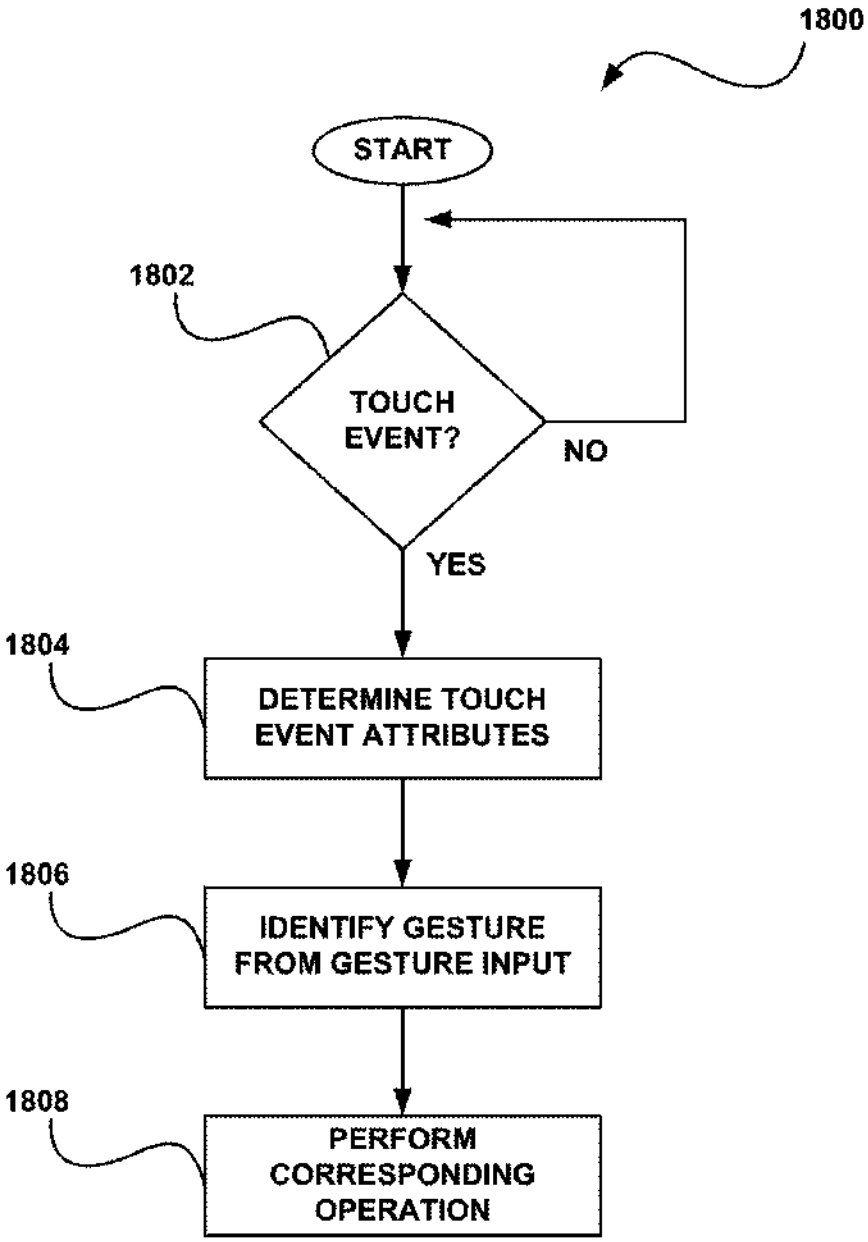

1800
START
1802
TOUCH EVENT?
NO
YES
1804
DETERMINE TOUCH EVENT ATTRIBUTES
1806
IDENTIFY GESTURE FROM GESTURE INPUT
1808
PERFORM CORRESPONDING OPERATION

FIGURE 18

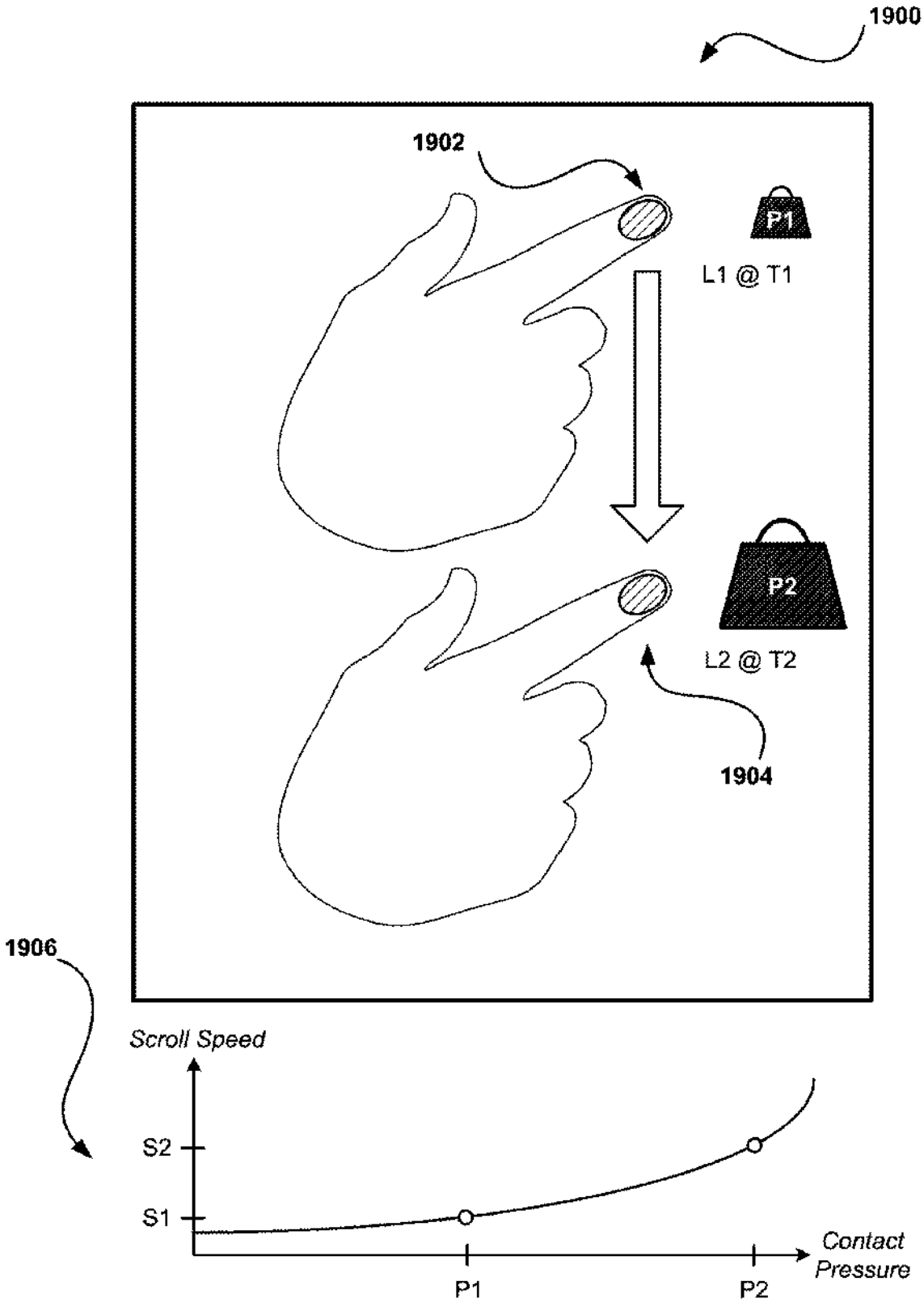

1900
1902
P1
L1 @ T1
P2
L2 @ T2
1904
1906
Scroll Speed
S2
S1
P1
P2
Contact Pressure

FIGURE 19

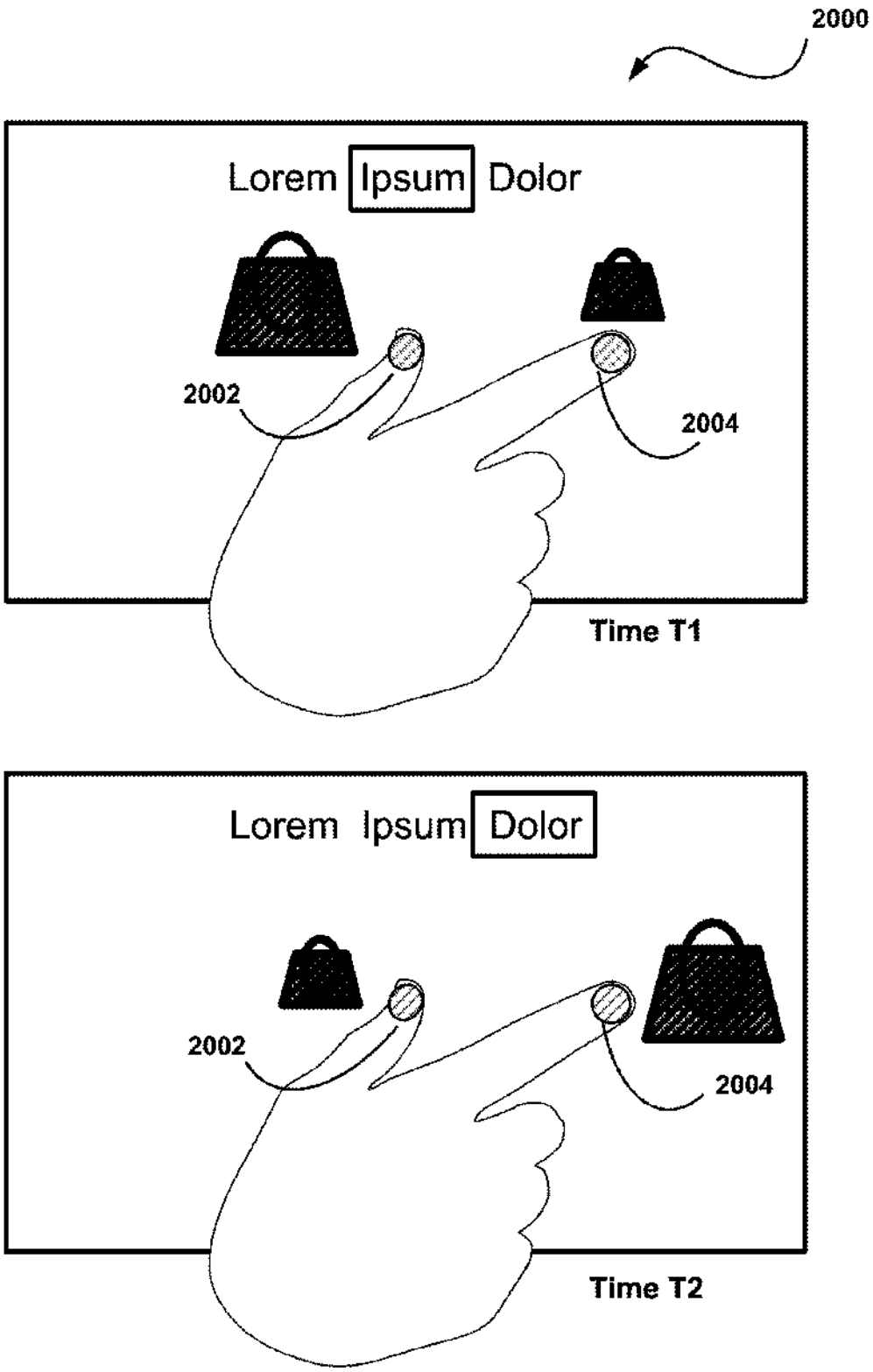

2000
Lorem Ipsum Dolor
2002
2004
Time T1
Lorem Ipsum Dolor
2002
2004
Time T2

FIGURE 20

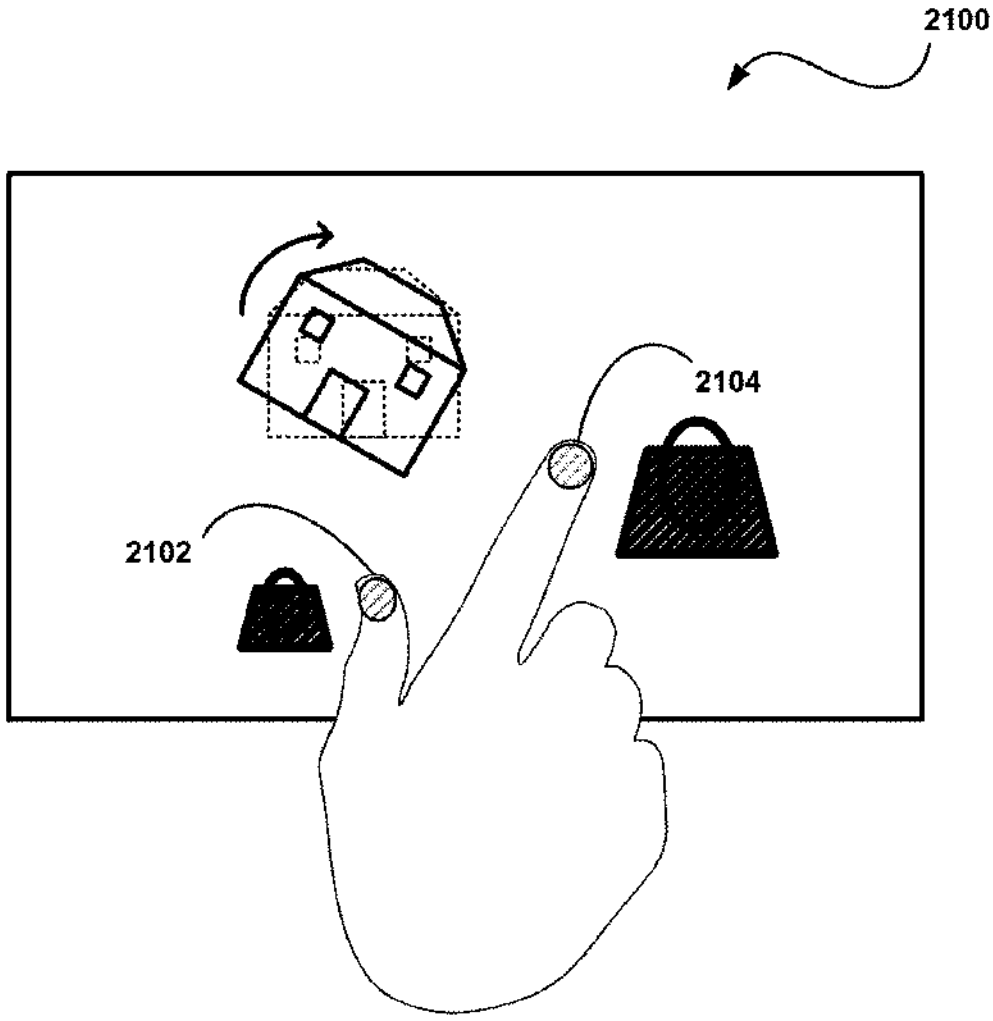


FIGURE 21

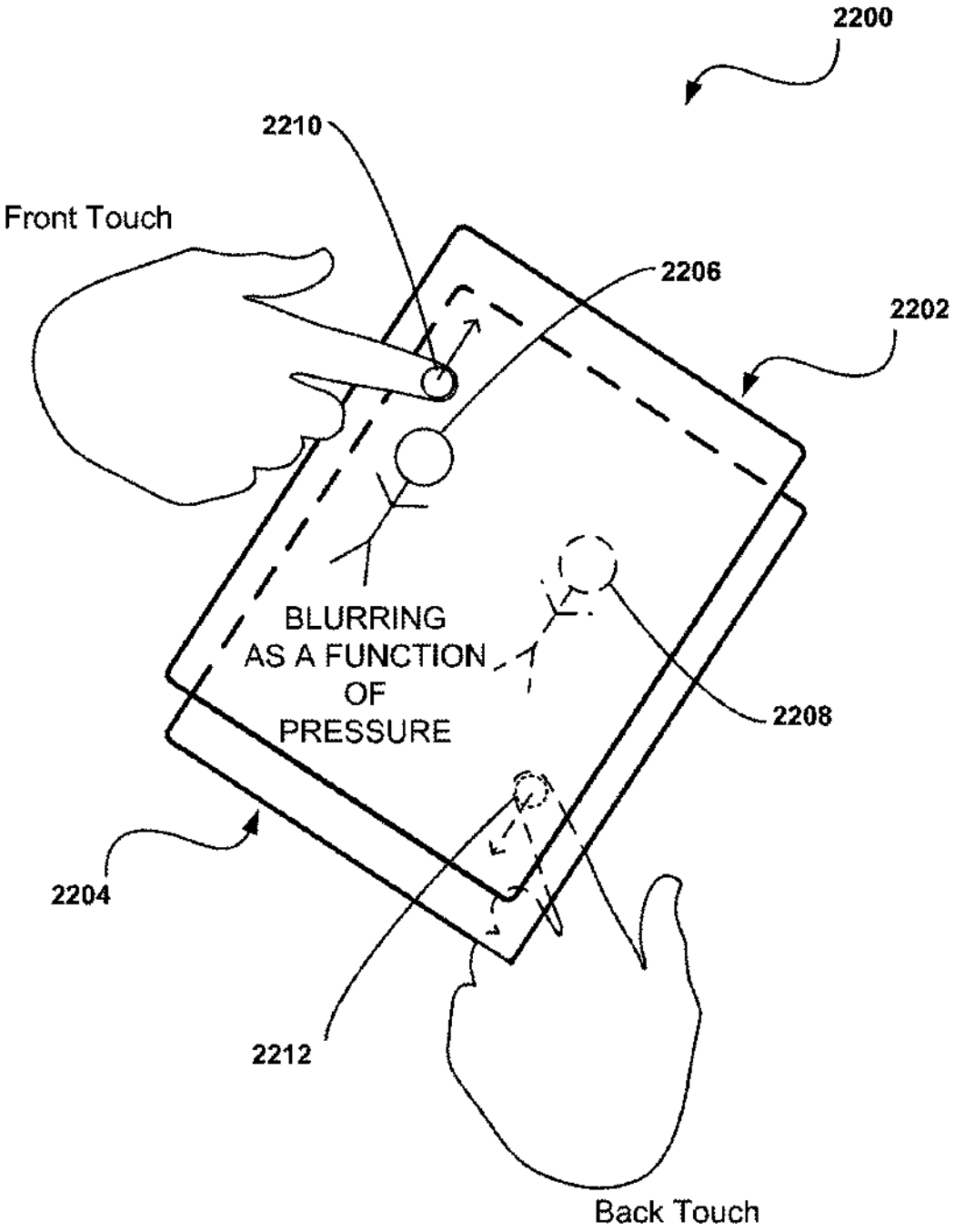

2200
2210
Front Touch
2206
2202
BLURRING
AS A FUNCTION
OF
PRESSURE
2208
2204
2212
Back Touch

FIGURE 22

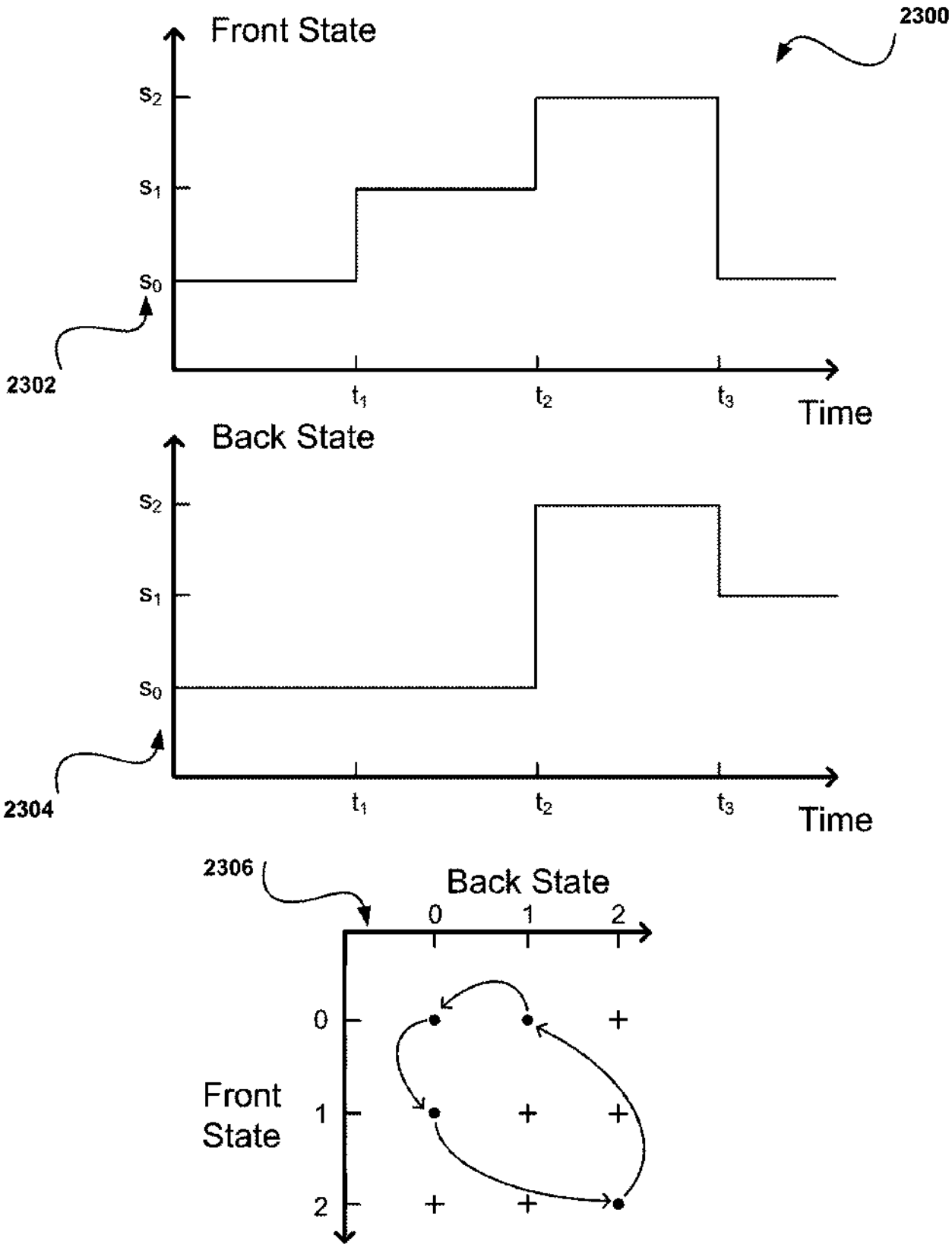

2300
Front State
s_2
s_1
s_0
2302
t_1
t_2
t_3
Time
Back State
s_2
s_1
s_0
2304
t_1
t_2
t_3
Time
2306
Back State
0
1
2
0
1
2
Front State
+
+
+
+
+

FIGURE 23

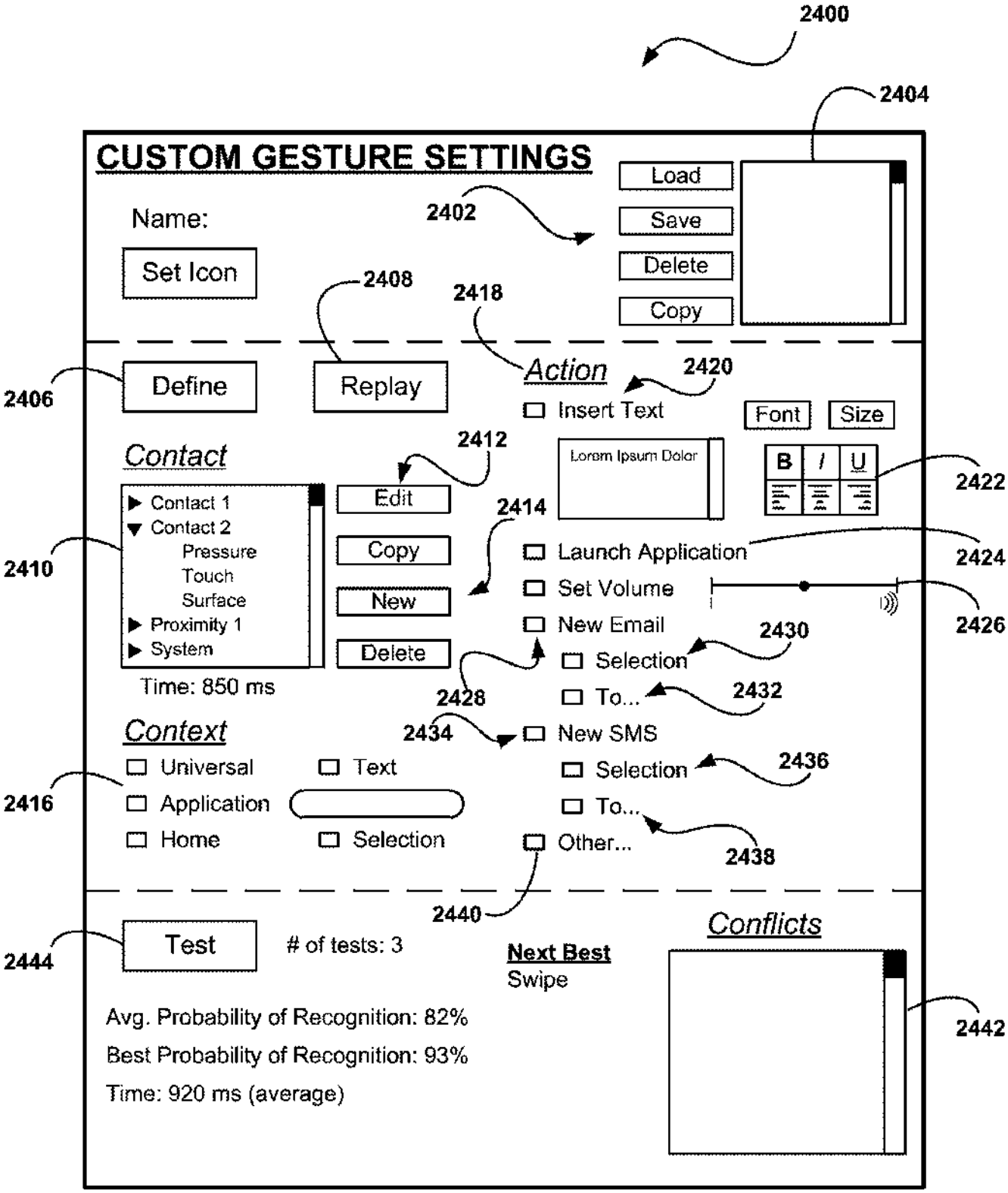

2400
2404
CUSTOM GESTURE SETTINGS
Load
Save
Delete
Copy
Name:
2402
Set Icon
2408
2418
Define
Replay
Action
2420
2406
Insert Text
Font
Size
Contact
2412
Lorem Ipsum Dolor
B
I
U
2422
Edit
Contact 1
Contact 2
Pressure
Touch
Surface
Proximity 1
System
2410
2414
Copy
Launch Application
2424
New
Set Volume
2426
New Email
2430
Delete
Selection
2428
To...
2432
Time: 850 ms
2434
Context
New SMS
Universal
Text
Selection
2436
2416
Application
To...
Home
Selection
Other...
2438
2440
Conflicts
2444
Test
of tests: 3
Next Best
Swipe
2442
Avg. Probability of Recognition: 82%
Best Probability of Recognition: 93%
Time: 920 ms (average)

FIGURE 24

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (03-15)
Approved for use through 07/31/2016. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99**)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20010005692	A1	2001-06-28	Song	
	2	20010043291	A1	2001-11-22	Kono et al.	
	3	20010175805		2011-07-21	Benjamin A. Rottler et al.	
	4	20020002629	A1	2002-01-03	Fukushima	
	5	20020002662	A1	2002-01-03	Olarig et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	6	20020005111	A1	2002-01-17	Ludwig	
	7	20020008691	A1	2002-01-24	Hanajima et al.	
	8	20020033919	A1	2002-03-21	Sanelle et al.	
	9	20020045854	A1	2002-04-18	Royo et al.	
	10	20020085952	A1	2002-07-04	Ellingboe et al.	
	11	20020086711	A1	2002-07-04	Flannery	
	12	20020116959	A1	2002-08-29	Ohta et al.	
	13	20020118180	A1	2002-08-29	Martin	
	14	20020129315	A1	2002-09-12	Onvural et al.	
	15	20020130832	A1	2002-09-19	Baucom et al.	
	16	20020180763	A1	2002-12-05	Kung	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	17	20030117408	A1	2003-06-26	Forsline et al.	
	18	20030123328	A1	2003-07-03	Guanter	
	19	20030147041	A1	2003-08-07	Oh et al.	
	20	20030151589	A1	2003-08-14	Bensen et al.	
	21	20030217972	A1	2003-11-27	Connell et al.	
	22	20030232192	A1	2003-12-18	Kishioka et al.	
	23	20030235452	A1	2003-12-25	Kraus et al.	
	24	20040084372	A1	2004-05-06	Connell et al.	
	25	20040108995	A1	2004-06-10	Hoshino et al.	
	26	20040109788	A1	2004-06-10	Li et al.	
	27	20040121855	A1	2004-06-24	Giegerich	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	28	20040191509	A1	2004-09-30	Kishioka et al.	
	29	20040207542	A1	2004-10-21	Chang et al.	
	30	20040212598	A1	2004-10-28	Kraus et al.	
	31	20040212599	A1	2004-10-28	Cok et al.	
	32	20040239624	A1	2004-12-02	Ramian	
	33	20040263488	A1	2004-12-30	Martin	
	34	20050018495	A1	2005-01-27	Bhakta et al.	
	35	20050027928	A1	2005-02-03	Avraham et al.	
	36	20050045540	A1	2005-03-03	Connell et al.	
	37	20050094465	A1	2005-05-05	Gervasi et al.	
	38	20050099403	A1	2005-05-12	Kraus et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	39	20050102444	A1	2005-05-12	Cruz	
	40	20050128853	A1	2005-06-16	Ayukawa et al.	
	41	20050182893	A1	2005-08-18	Suh	
	42	20050204091	A1	2005-09-15	Kilbuck et al.	
	43	20050231461	A1	2005-10-20	Raap et al.	
	44	20050242034	A1	2005-11-03	Connell et al.	
	45	20050251617	A1	2005-11-10	Sinclair et al.	
	46	20050264521	A1	2005-12-01	Liu et al.	
	47	20050270037	A1	2005-12-08	Haynes et al.	
	48	20050280746	A1	2005-12-22	North et al.	
	49	20060001654	A1	2006-01-05	Smits	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	50	20060001800	A1	2006-01-05	Sanelle et al.	
	51	20060007222	A1	2006-01-12	Uy	
	52	20060022955	A1	2006-02-02	Kennedy	
	53	20060033701	A1	2006-02-16	Wilson	
	54	20060075402	A1	2006-04-06	Neiger et al.	
	55	20060077186	A1	2006-04-13	Park et al.	
	56	20060085757	A1	2006-04-20	Andre et al.	
	57	20060107719	A1	2006-05-25	Carnpian	
	58	20060138630	A1	2006-06-29	Bhakta	
	59	20060138983	A1	2006-06-29	Lee et al.	
	60	20060146032	A1	2006-07-06	Kajimoto et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	61	20060167400	A1	2006-07-27	Ellingboe et al.	
	62	20060179088	A1	2006-08-10	Kang	
	63	20060195064	A1	2006-08-31	Plahey et al.	
	64	20060197736	A1	2006-09-07	Baucom et al.	
	65	20060197737	A1	2006-09-07	Baucom et al.	
	66	20060203899	A1	2006-09-14	Gee	
	67	20060209039	A1	2006-09-21	Destura et al.	
	68	20060238495	A1	2006-10-26	Davis	
	69	20060260711	A1	2006-11-23	Fry et al.	
	70	20060262099	A1	2006-11-23	Destura et al.	
	71	20060274050	A1	2006-12-07	Lii	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	72	20060284874	A1	2006-12-21	Wilson	
	73	20060294295	A1	2006-12-28	Fukuzo	
	74	20070008064	A1	2007-01-11	Donohue	
	75	20070035526	A1	2007-02-15	Takenaka et al.	
	76	20070040814	A1	2007-02-22	Lee et al.	
	77	20070070047	A1	2007-03-29	Jeon et al.	
	78	20070085837	A1	2007-04-19	Ricks et al.	
	79	20070097151	A1	2007-05-03	Rosenberg	
	80	20070103454	A1	2007-05-10	Elias	
	81	20070137901	A1	2007-06-21	Chen	
	82	20070146313	A1	2007-06-28	Newman et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	83	20070148371	A1	2007-06-28	Kazama	
	84	20070153215	A1	2007-07-05	Lee	
	85	20070176902	A1	2007-08-02	Newman et al.	
	86	20070182864	A1	2007-08-09	Stoneham et al.	
	87	20070192563	A1	2007-08-16	Rajan et al.	
	88	20070195029	A1	2007-08-23	Jeon et al.	
	89	20070204075	A1	2007-08-30	Rajan et al.	
	90	20070204079	A1	2007-08-30	Wu	
	91	20070229477	A1	2007-10-04	Ludwig	
	92	20070237170	A1	2007-10-11	Proctor et al.	
	93	20070246494	A1	2007-10-25	Kim et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	94	20070262967	A1	2007-11-15	RHO	
	95	20070291009	A1	2007-12-20	Wright et al.	
	96	20080007675	A1	2008-01-10	Sanelle et al.	
	97	20080010435	A1	2008-01-10	Smith et al.	
	98	20080018613	A1	2008-01-24	Kim et al.	
	99	20080024712	A1	2008-01-31	Kim	
	100	20080025108	A1	2008-01-31	Rajan et al.	
	101	20080025122	A1	2008-01-31	Schakel et al.	
	102	20080025123	A1	2008-01-31	Rajan et al.	
	103	20080025124	A1	2008-01-31	Rajan et al.	
	104	20080025136	A1	2008-01-31	Rajan et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	105	20080025137	A1	2008-01-31	Rajan et al.	
	106	20080026803	A1	2008-01-31	Demuynck	
	107	20080027697	A1	2008-01-31	Rajan et al.	
	108	20080027702	A1	2008-01-31	Rajan et al.	
	109	20080027703	A1	2008-01-31	Rajan et al.	
	110	20080028135	A1	2008-01-31	Rajan et al.	
	111	20080028136	A1	2008-01-31	Schakel et al.	
	112	20080028137	A1	2008-01-31	Schakel et al.	
	113	20080031030	A1	2008-02-07	Rajan et al.	
	114	20080031072	A1	2008-02-07	Rajan et al.	
	115	20080037353	A1	2008-02-14	Rajan et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	116	20080056014	A1	2008-03-06	Rajan et al.	
	117	20080060854	A1	2008-03-13	Perlin	
	118	20080062169	A1	2008-03-13	Heesemans et al.	
	119	20080062773	A1	2008-03-13	Rajan et al.	
	120	20080068343	A1	2008-03-20	Hoshino et al.	
	121	20080082763	A1	2008-04-03	Rajan et al.	
	122	20080094367	A1	2008-04-24	De et al.	
	123	20080098331	A1	2008-04-24	Novick et al.	
	124	20080100584	A1	2008-05-01	Hague et al.	
	125	20080103753	A1	2008-05-01	Rajan et al.	
	126	20080104314	A1	2008-05-01	Rajan et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	127	20080104344	A1	2008-05-01	Shimozono et al.	
	128	20080105600	A1	2008-05-08	Connell et al.	
	129	20080109206	A1	2008-05-08	Rajan et al.	
	130	20080109595	A1	2008-05-08	Rajan et al.	
	131	20080109597	A1	2008-05-08	Schakel et al.	
	132	20080109598	A1	2008-05-08	Schakel et al.	
	133	20080109629	A1	2008-05-08	Karamcheti et al.	
	134	20080115006	A1	2008-05-15	Smith et al.	
	135	20080120443	A1	2008-05-22	Rajan et al.	
	136	20080123459	A1	2008-05-29	Rajan et al.	
	137	20080126687	A1	2008-05-29	Rajan et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	138	20080126688	A1	2008-05-29	Rajan et al.	
	139	20080126689	A1	2008-05-29	Rajan et al.	
	140	20080126692	A1	2008-05-29	Rajan et al.	
	141	20080130910	A1	2008-06-05	Jobling et al.	
	142	20080133825	A1	2008-06-05	Rajan et al.	
	143	20080136790	A1	2008-06-12	Hio	
	144	20080150911	A1	2008-06-26	Harrison	
	145	20080158171	A1	2008-07-03	Wong et al.	
	146	20080165255	A1	2008-07-10	Christie et al.	
	147	20080174570	A1	2008-07-24	Jobs et al.	
	148	20080204427	A1	2008-08-28	Heesemans et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	149	20080210843	A1	2008-09-04	Han et al.	
	150	20080211786	A1	2008-09-04	Park et al.	
	151	20080215192	A1	2008-09-04	Hardman et al.	
	152	20080239857	A1	2008-10-02	Rajan et al.	
	153	20080239858	A1	2008-10-02	Rajan et al.	
	154	20080240223	A1	2008-10-02	Badalone	
	155	20080250408	A1	2008-10-09	Tsui et al.	
	156	20080252607	A1	2008-10-16	Jong et al.	
	157	20080252616	A1	2008-10-16	Chen	
	158	20080272478	A1	2008-11-06	Anderson et al.	
	159	20080290435	A1	2008-11-27	Oliver et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	160	20080295839	A1	2008-12-04	Habashi	
	161	20080297487	A1	2008-12-04	Hotelling et al.	
	162	20080298113	A1	2008-12-04	Liu et al.	
	163	20080304431	A1	2008-12-11	Karaoguz	
	164	20080308946	A1	2008-12-18	Pratt	
	165	20090002312	A1	2009-01-01	Son	
	166	20090014876	A1	2009-01-15	Youn et al.	
	167	20090022256	A1	2009-01-22	Fitzgerald	
	168	20090024789	A1	2009-01-22	Rajan et al.	
	169	20090026600	A1	2009-01-29	Koon et al.	
	170	20090036111	A1	2009-02-05	Danford et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	171	20090036176	A1	2009-02-05	Ure	
	172	20090039492	A1	2009-02-12	KANG et al.	
	173	20090045489	A1	2009-02-19	Koon et al.	
	174	20090046110	A1	2009-02-19	Sadler et al.	
	175	20090051659	A1	2009-02-26	Mickelborough	
	176	20090052218	A1	2009-02-26	KANG	
	177	20090065948	A1	2009-03-12	Wang	
	178	20090066660	A1	2009-03-12	Ure	
	179	20090067256	A1	2009-03-12	Bhattacharyya et al.	
	180	20090073138	A1	2009-03-19	Lee et al.	
	181	20090085225	A1	2009-04-02	Park	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	182	20090085608	A1	2009-04-02	Alzheimer	
	183	20090086420	A1	2009-04-02	Stockham et al.	
	184	20090090950	A1	2009-04-09	Forbes et al.	
	185	20090091536	A1	2009-04-09	Callaghan	
	186	20090091962	A1	2009-04-09	Chung et al.	
	187	20090103675	A1	2009-04-23	Moghaddam et al.	
	188	20090127668	A1	2009-05-21	Choi	
	189	20090128991	A1	2009-05-21	Mauritzson	
	190	20090143652	A1	2009-06-04	Warburton et al.	
	191	20090158152	A1	2009-06-18	Kodimer et al.	
	192	20090160781	A1	2009-06-25	Henderson et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	193	20090166846	A1	2009-07-02	Pratt et al.	
	194	20090180257	A1	2009-07-16	Park et al.	
	195	20090197394	A1	2009-08-06	Parekh	
	196	20090206431	A1	2009-08-20	Bolken et al.	
	197	20090213066	A1	2009-08-27	Hardacker et al.	
	198	20090224822	A1	2009-09-10	Alzheimer et al.	
	199	20090225053	A1	2009-09-10	HU	
	200	20090237970	A1	2009-09-24	Chung	
	201	20090255705	A1	2009-10-15	Pratt	
	202	20090259806	A1	2009-10-15	Kilzer et al.	
	203	20090261457	A1	2009-10-22	Pratt	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	204	20090271731	A1	2009-10-29	Lin et al.	
	205	20090285031	A1	2009-11-19	Rajan et al.	
	206	20090289912	A1	2009-11-26	Chen et al.	
	207	20090295747	A1	2009-12-03	Hsieh et al.	
	208	20090300314	A1	2009-12-03	LaBerge et al.	
	209	20090300444	A1	2009-12-03	Jeddeloh	
	210	20090302484	A1	2009-12-10	Lee et al.	
	211	20090309142	A1	2009-12-17	Akram	
	212	20090319703	A1	2009-12-24	Chung	
	213	20090321861	A1	2009-12-31	Oliver et al.	
	214	20090321947	A1	2009-12-31	Pratt	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	215	20090323206	A1	2009-12-31	Oliver et al.	
	216	20100005390	A1	2010-01-07	Bong	
	217	20100017872	A1	2010-01-21	Goertz et al.	
	218	20100020039	A1	2010-01-28	Ricks et al.	
	219	20100026640	A1	2010-02-04	Kim et al.	
	220	20100035656	A1	2010-02-11	Pan	
	221	20100045612	A1	2010-02-25	Mölne	
	222	20100053103	A1	2010-03-04	NO et al.	
	223	20100053532	A1	2010-03-04	LAI	
	224	20100066764	A1	2010-03-18	Refai	
	225	20100077829	A1	2010-04-01	Batista et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	226	20100079398	A1	2010-04-01	Shen et al.	
	227	20100085500	A1	2010-04-08	Kim	
	228	20100097347	A1	2010-04-22	Lin	
	229	20100110748	A1	2010-05-06	Best	
	230	20100134429	A1	2010-06-03	You et al.	
	231	20100134448	A1	2010-06-03	Park et al.	
	232	20100149101	A1	2010-06-17	Guo et al.	
	233	20100149124	A1	2010-06-17	Kim et al.	
	234	20100164745	A1	2010-07-01	Migos et al.	
	235	20100164884	A1	2010-07-01	Chiu et al.	
	236	20100188353	A1	2010-07-29	Yoon et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	237	20100188365	A1	2010-07-29	Tamaki et al.	
	238	20100194709	A1	2010-08-05	Tamaki et al.	
	239	20100201651	A1	2010-08-12	Baucom et al.	
	240	20100206560	A1	2010-08-19	Atencio	
	241	20100207900	A1	2010-08-19	Kung et al.	
	242	20100208082	A1	2010-08-19	Buchner et al.	
	243	20100214499	A1	2010-08-26	Sanelle et al.	
	244	20100222735	A1	2010-09-02	Plahey et al.	
	245	20100225608	A1	2010-09-09	ZHOU et al.	
	246	20100240390	A1	2010-09-23	Russ et al.	
	247	20100257304	A1	2010-10-07	Rajan et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	248	20100259490	A1	2010-10-14	Lee	
	249	20100271888	A1	2010-10-28	Rajan et al.	
	250	20100277432	A1	2010-11-04	Tsai	
	251	20100281280	A1	2010-11-04	Rajan et al.	
	252	20100293460	A1	2010-11-18	Budelli	
	253	20100332635	A1	2010-12-30	ROGEL et al.	
	254	20110001706	A1	2011-01-06	Sanford et al.	
	255	20110007023	A1	2011-01-13	Abrahamsson et al.	
	256	20110012921	A1	2011-01-20	Cholewin et al.	
	257	20110016250	A1	2011-01-20	Lee et al.	
	258	20110025969	A1	2011-02-03	Chen et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	259	20110035540	A1	2011-02-10	Fitzgerald et al.	
	260	20110037726	A1	2011-02-17	Lee	
	261	20110044064	A1	2011-02-24	Hu et al.	
	262	20110050576	A1	2011-03-03	Forutanpour et al.	
	263	20110050591	A1	2011-03-03	Kim et al.	
	264	20110050592	A1	2011-03-03	Kim et al.	
	265	20110050593	A1	2011-03-03	Kim et al.	
	266	20110050594	A1	2011-03-03	Kim et al.	
	267	20110050608	A1	2011-03-03	Homma et al.	
	268	20110051334	A1	2011-03-03	Griffith et al.	
	269	20110066790	A1	2011-03-17	Mogul et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	270	20110080417	A1	2011-04-07	Lin et al.	
	271	20110088416	A1	2011-04-21	Koethler	
	272	20110095783	A1	2011-04-28	Ferolito et al.	
	273	20110102336	A1	2011-05-05	SEOK et al.	
	274	20110102347	A1	2011-05-05	LIM et al.	
	275	20110109573	A1	2011-05-12	Deslippe et al.	
	276	20110109829	A1	2011-05-12	Mathew et al.	
	277	20110110047	A1	2011-05-12	Pauley et al.	
	278	20110113208	A1	2011-05-12	Jouppi et al.	
	279	20110115738	A1	2011-05-19	Suzuki et al.	
	280	20110117968	A1	2011-05-19	Eromaki	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	281	20110118029	A1	2011-05-19	Lukas et al.	
	282	20110122084	A1	2011-05-26	Jeon et al.	
	283	20110152739	A1	2011-06-23	Roncadi et al.	
	284	20110164047	A1	2011-07-07	Pance	
	285	20110169745	A1	2011-07-14	Fang et al.	
	286	20110169775	A1	2011-07-14	Liaw et al.	
	287	20110175844	A1	2011-07-21	Berggren	
	288	20110175845	A1	2011-07-21	Honda et al.	
	289	20110175902	A1	2011-07-21	Mahowald	
	290	20110181552	A1	2011-07-28	Goertz et al.	
	291	20110205446	A1	2011-08-25	Hardacker et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	292	20110210942	A1	2011-09-01	Kitamori et al.	
	293	20110210943	A1	2011-09-01	Zaliva	
	294	20110227836	A1	2011-09-22	Li et al.	
	295	20110227877	A1	2011-09-22	Chen	
	296	20110239110	A1	2011-09-29	Garrett et al.	
	297	20110248941	A1	2011-10-13	Abdo et al.	
	298	20110254793	A1	2011-10-20	Ban et al.	
	299	20110260994	A1	2011-10-27	Saynac et al.	
	300	20110273394	A1	2011-11-10	Young et al.	

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	1	2005114369	WO	A2	2005-12-01	Hotelling et al.		
	2	2008037275	WO	A1	2008-04-03	Laitinen		
	3	2008131058	WO	A2	2008-10-30	Best		
	4	2008131058	WO	A2	2008-10-30	Best		
	5	2011100444	WO	A2	2011-08-18	Nakanishi et al.		
	6	2011126893	WO	A2	2011-10-13	Keeth et al.		
	7	2012149911	WO	A1	2012-11-08	Hou		

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T5
	1	3D Packing Newsletter on 3D IS, TSV, WLP & Embedded Technologies, December 2009, pp. 1-16	
	2	AKHSHABI, SAAMER et al., "An Experimental Evaluation of Rate-Adaptation Algorithms in Adaptive Streaming over HTTP," February 23, 2011, pp. 1-12	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	3	ALTERA, "Using Pre-Emphasis and Equalization with Stratix GX," White Paper, September 2003, ver. 1.0, pp. 1-11	
	4	AMO, "BIOS and Kernel Developer's Guide (BKDG) for AMO Family 14h Models OOh-OFh Processors," BKDG for AMO Family 14h Models OOh-OFh Processors, February 16, 2011, Rev. 3.04, pp. 1-403	
	5	AMP, "DDR2 DIMM 25 Degree Imm CL 240 position," DDR2 DIMM 25 Degree 240 -Solder tail, 2005, p. 1	
	6	AMP, "DDR2 DIMM Socket Imm CL 240 position," DDR2 DIMM 240 -Solder tail, 1998, p. 1	
	7	ANALUI, B., "Signal Integrity Issues in High-Speed Wireline Links: Analysis and Integrated System Solutions," Thesis, 2005, pp. 1-194	
	8	ARM, "The ARM Architecture," 2010, pp. 1-43	
	9	ARORA, A., "Sensing by the people, for the people & of the people," April 21, 2008, 48 pages	
	10	AVISSAR, 0. et al., "Heterogeneous Memory Management for Embedded Systems," CASES '01, November 16-17, 2001, pp. 1-10	
	11	BAHAR, BARUS et al., "Mobile-Phone Based Gesture Recognition," Proceedings of the Enterface '07, 2007, PP. 1-8	
	12	BAKER, BONNIE C. et al., "The Power Behind Resistive Touch Screens," Texas Instruments, 2007, pp. 1-9	
	13	BALAKRISHNAN, H., "Background: Single-Link Communication," Fall 2001, September 5, 2001, pp. 1-6	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	14	BALASUBRAMANIAN, NIRANJAN et al., "Energy Consumption in Mobile Phones: A Measurement Study and Implications for Network Applications," University of Massachusetts Amherst, November 4, 2009, pp. 1-14	
	15	BAR-NIV, A., "Balanced equalization: The 10GBASE-KX4 formula for error-free transmission over backplanes," Networking Solutions, March 2005, pp. 1-4	
	16	BARR, T. W. et al., "Translation Caching: Skip, Don't Walk (the Page Table)," ISCA '1O, June 19-23, 2010, pp. 1-12	
	17	BEN-YEHUDA, MULi et al., "IBM Research Report, the Turtles Project: Design and Implementation of Tested Virtualization," IBM Research Division, January 9, 2010, pp 1-15	
	18	BEN-YEHUDA, MULi et al., "The Turtles Project: Design and Implementation of Nested Virtualization," IBM Research, October 2010, slides 1-92	
	19	BHARDWAJ, RISHI et al., "A Choices Hypervisor on the ARM Architecture," University of Illinois, April, 2006, pp. 1-5	
	20	BICKFORD, JEFFERY et al., "Rootkits on Smart Phones: Attacks, Implication and Opportunities," June 10, 2010, pp. 1-6	
	21	BIEN, F., "Reconfigurable Equalization for 10-Gb/sec Serial Data Links in a 0.18-?m CMOS Technology," Dissertation, December 2006, pp. 1-121	
	22	BIHLMAYR, WOLFGANG et al., "OLEO Display Driver for the HCS08 Family," Freescale Semiconductor Application Note, March 2007, pp. 1-42	
	23	BORNSTEIN, D., "ANDROID- Dalvik VM Internals," 58 pages	
	24	BORNSTEIN, D., "ANDROID- Dalvik VM Internals," 58 pages, November 2011	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	25	BORNSTEIN, DAN, "Android Dalvik VM Internals," May 29, 2008, slides 1-58	
	26	BRASH, DAVID, "Extensions to the ARMv7-A Architecture," August 2010, pp. 1-21	
	27	BRUECK et al., "Certificate of Correction," US Pat No. 7,818,444B2. Oct. 19, 2010	
	28	BUCHALI, F. et al., "Fast Eye Monitor for 10 Gbit/s and its Application for Optical PMD Compensation," 2000 Optical Society of America, pp. 1-4	
	29	BUCHALI, S. et al., "Fast eye monitor for 10 Gbit/s and its application for optical PMD compensation", Conf. Opt. Fiber Commun. (OFC) 2001, vol. 2, March 2001	
	30	BUCKWALTER, J. F., "Deterministic Jitter in Broadband Communication," Thesis, 2006, pp. 1-220	
	31	BUNGALE, PARASHANTH, "ARM Virtualization: CPU & MMU Issues," VMware, 2010, slides 1-16	
	32	BURDACH, M., "Physical Memory Forensics," 53 slides	
	33	BURDACH, M., "Physical Memory Forensics," 53 slides, Black Hat USA (2006), 1 August 2006	
	34	CARROLL, AARON et al., "An Analysis of Power consumption in a Smartphone," 2010 USENIX Conference, 2010, pp. 1-14	
	35	CASIEZ, GERY et al., "RubberEdge: Improved Interaction with Mobile Devices via Elastic-Edged Touchpads," April 2008, pp. 1-1	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	36	Cellphone Hardware Applications, pages 1-24	
	37	CHANDRAMOULI, S., "A BROADBAND PASSIVE DELAY LINE STRUCTURE IN 0.18 MICRON CMOS FOR A GIGABIT FEED FORWARD EQUALIZER," Thesis, 2004, pp. 1-52	
	38	CHANDRASEKARAN, DIN ESH et al., "Hardware-assisted Secure Virtualization," 2009 pp. 1-8	
	39	CHAPMAN, MATTHEW et al., "MagiXen: Combining Binary Translation and Virtualization," HP Enterprise Systems and Software Laboratory, May 4, 2007, pp 1-15	
	40	CHAUDHARY, VIPIN et al., "TECHNIQUES FOR MIGRATING COMPUTATIONS ON THE GRID," 2006, pp. 1-19	
	41	CHEN, J. et al., "High Speed Signaling Design: from 1 Gbps to 10 Gbps," DesignCon East 2004, pp. 1-17	
	42	CHEN, JUINN-YEU et al., "On Static Binary Translation and Optimization for ARM based Applications," April 6, 2008, pp. 1-10	
	43	CHEN, WEI et al., "An Emulator for Executing IA-32 Application on ARM-Based Systems," Journal of Computers, vol. 5, July 7, 2010, pp1133-1141	
	44	CHEN, Y.-H., "Ad-ST AC & 3DIC Technology of ITRI," 2010, pp. 1-14	
	45	CHI POU NOV, VITALY et al., "Dynamically Translating x86 to LLVM using QEMU," 2010, pp. 1-5	
	46	CHUN, BYUNG-GON et al., "Augmented Smartphone Applications Through Clone Cloud Execution," Intel Research Berkeley, May 18, 2009, pp. 1-5	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	47	CHUN, BYUNG-GON et al.," CloneCloud: Elastic Execution between Mobile Device and Cloud," 2011, pp. 1-14	
	48	CIS 501: Introduction to Computer Architecture, Unit 4: Memory Hierarchy II: Main Memory, CIS 501 (Martin/Roth): Main Memory, pp, 1-12	
	49	CIS 501: Introduction to Computer Architecture, Unit 4: Memory Hierarchy II: Main Memory, CIS 501 (Martin/Roth): Main Memory, pp, 1-12, Sept 2005	
	50	CITRIX, "The 'Nirvana Phone,' Concept Specification and Draft Reference Architecture," 2010, pp. 1-10	

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Patrick Caldwell/	Date (YYYY-MM-DD)	2018-10-24
Name/Print	Patrick Caldwell/	Registration Number	44580

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (03-15)
Approved for use through 07/31/2016. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99**)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

U.S.PATENTS						Remove
Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	3524169	A	1970-08-11	K et al.	
	2	3633322	A	1972-01-11	Morcom	
	3	3659229	A	1972-04-25	T	
	4	3738166	A	1973-06-12	Fisher	
	5	3772685	A	1973-11-13	Masi	
	6	3777222	A	1973-12-04	Harris	
	7	4067060	A	1978-01-03	Poussart et al.	
	8	4091418	A	1978-05-23	Ciciora	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	9	4152649	A	1979-05-01	Choquet	
	10	4293734	A	1981-10-06	William Pepper	
	11	4296756	A	1981-10-27	Dunning et al.	
	12	4302011	A	1981-11-24	William Pepper	
	13	4353552	A	1982-10-12	William Pepper	
	14	4524421	A	1985-06-18	Searby et al.	
	15	4554419	A	1985-11-19	King et al.	
	16	4636632	A	1987-01-13	Ando	
	17	4644101	A	1987-02-17	Jin et al.	
	18	4694468	A	1987-09-15	Cullum	
	19	4770281	A	1988-09-13	Hanks	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	20	5205173	A	1993-04-27	Allen	
	21	5241308	A	1993-08-31	Young	
	22	5247434	A	1993-09-21	Peterson et al.	
	23	5257413	A	1993-10-26	Warner et al.	
	24	5276787	A	1994-01-04	Searby	
	25	5285474	A	1994-02-08	Chow et al.	
	26	5305423	A	1994-04-19	Clynes	
	27	5309172	A	1994-05-03	Fox	
	28	5311302	A	1994-05-10	Berry et al.	
	29	5343650	A	1994-09-06	Swan	
	30	5371760	A	1994-12-06	Allen et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	31	5386219	A	1995-01-31	Greanias et al.	
	32	5448263	A	1995-09-05	Martin	
	33	5483557	A	1996-01-09	Webb	
	34	5486286	A	1996-01-23	Peterson et al.	
	35	5487827	A	1996-01-30	Peterson et al.	
	36	5557653	A	1996-09-17	Paterson et al.	
	37	5566096	A	1996-10-15	Wodlinger et al.	
	38	5581505	A	1996-12-03	Lee	
	39	5596638	A	1997-01-21	Paterson et al.	
	40	5680160	A	1997-10-21	LaPointe	
	41	5687733	A	1997-11-18	McKown	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	42	5729612	A	1998-03-17	Abel et al.	
	43	5742894	A	1998-04-21	Jambhekar et al.	
	44	5743859	A	1998-04-28	Wodlinger et al.	
	45	5744027	A	1998-04-28	Connell et al.	
	46	5794163	A	1998-08-11	Paterson et al.	
	47	5805950	A	1998-09-08	Inglese et al.	
	48	5825873	A	1998-10-20	Duncan et al.	
	49	5838244	A	1998-11-17	Schmidt et al.	
	50	5856822	A	1999-01-05	Du et al.	
	51	5859522	A	1999-01-12	Theobald	
	52	5884191	A	1999-03-16	Karpus et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	53	5889236	A	1999-03-30	Gillespie et al.	
	54	5925942	A	1999-07-20	Theobald	
	55	5947334	A	1999-09-07	Rudick et al.	
	56	5953674	A	1999-09-14	James A. Hutchison	
	57	5970092	A	1999-10-19	Currivan	
	58	5983100	A	1999-11-09	Johansson et al.	
	59	5999892	A	1999-12-07	Fan	
	60	6012105	A	2000-01-04	Rubbmark et al.	
	61	6038457	A	2000-03-14	Barkat	
	62	6040933	A	2000-03-21	Khaleghi et al.	
	63	6045512	A	2000-04-04	Roteliuk et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	64	6081724	A	2000-06-27	Wilson	
	65	6097943	A	2000-08-01	Nordwall	
	66	6108064	A	2000-08-22	Minoura et al.	
	67	6118435	A	2000-09-12	Fujita et al.	
	68	6119022	A	2000-09-12	Osborn et al.	
	69	6138036	A	2000-10-24	Breanndan O'Cinneide	
	70	6138245	A	2000-10-24	Son et al.	
	71	6141000	A	2000-10-31	Martin	
	72	6163690	A	2000-12-19	Lilja	
	73	6169538	B1	2001-01-02	Nowlan et al.	
	74	6192238	B1	2001-02-20	Piirainen	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	75	6193152	B1	2001-02-27	Fernando et al.	
	76	6259729	B1	2001-07-10	Seki	
	77	6283763	B1	2001-09-04	Matsuzaki et al.	
	78	6284131	B1	2001-09-04	Hogard et al.	
	79	6285890	B1	2001-09-04	Panian	
	80	6330247	B1	2001-12-11	Chang et al.	
	81	6337681	B1	2002-01-08	Martin	
	82	6351271	B1	2002-02-26	Mainwaring et al.	
	83	6366530	B1	2002-04-02	Sluiter et al.	
	84	6371923	B1	2002-04-16	Roteliuk et al.	
	85	6377825	B1	2002-04-23	Kennedy et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	86	6380581	B1	2002-04-30	Noble et al.	
	87	6385463	B1	2002-05-07	Lieberman et al.	
	88	6392638	B2	2002-05-21	Hanajima et al.	
	89	6417845	B1	2002-07-09	Chen et al.	
	90	6441807	B1	2002-08-27	Yamaguchi	
	91	6449492	B1	2002-09-10	Kenagy et al.	
	92	6456517	B2	2002-09-24	Kim et al.	
	93	6473630	B1	2002-10-29	Baranowski et al.	
	94	6476795	B1	2002-11-05	Derocher et al.	
	95	6477390	B1	2002-11-05	Gum et al.	
	96	6480149	B1	2002-11-12	Sutherland et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	97	6496854	B1	2002-12-17	Hagersten et al.	
	98	6509847	B1	2003-01-21	Anderson	
	99	6523124	B1	2003-02-18	Lunsford et al.	
	100	6526315	B1	2003-02-25	Inagawa et al.	
	101	6529744	B1	2003-03-04	Birkler et al.	
	102	6533757	B1	2003-03-18	Lampropoulos et al.	
	103	6546262	B1	2003-04-08	Freadman	
	104	6549790	B1	2003-04-15	Rubbmark et al.	
	105	6564285	B1	2003-05-13	Mills et al.	
	106	6567102	B2	2003-05-20	Kung	
	107	6590568	B1	2003-07-08	Astala et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	108	6603986	B1	2003-08-05	Bozoukov	
	109	6626013	B2	2003-09-30	Ohta et al.	
	110	6636203	B1	2003-10-21	Wong et al.	
	111	6636749	B2	2003-10-21	Holmes et al.	
	112	6636918	B1	2003-10-21	Aguilar et al.	
	113	6665803	B2	2003-12-16	Lunsford et al.	
	114	6670234	B2	2003-12-30	Hsu et al.	
	115	6689947	B2	2004-02-10	Ludwig	
	116	6714802	B1	2004-03-30	Barvesten	
	117	6721019	B2	2004-04-13	Kono et al.	
	118	6738514	B1	2004-05-18	Shin et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	119	6747636	B2	2004-06-08	Martin	
	120	6751113	B2	2004-06-15	Bhakta et al.	
	121	6765812	B2	2004-07-20	Anderson	
	122	6776546	B2	2004-08-17	Kraus et al.	
	123	6791640	B1	2004-09-14	Okamoto et al.	
	124	6801211	B2	2004-10-05	Forsline et al.	
	125	6804146	B2	2004-10-12	Johnson	
	126	6829297	B2	2004-12-07	Xia et al.	
	127	6873534	B2	2005-03-29	Bhakta et al.	
	128	6879318	B1	2005-04-12	Chan et al.	
	129	6880998	B2	2005-04-19	Kraus et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	130	6888537	B2	2005-05-03	Benson et al.	
	131	6892270	B2	2005-05-10	Roohparvar	
	132	6917282	B2	2005-07-12	Giegerich	
	133	6919927	B1	2005-07-19	Hyodo	
	134	6928110	B2	2005-08-09	Ougi et al.	
	135	6928299	B1	2005-08-09	Rinne et al.	
	136	6928512	B2	2005-08-09	Ayukawa et al.	
	137	6930900	B2	2005-08-16	Bhakta et al.	
	138	6930903	B2	2005-08-16	Bhakta et al.	
	139	6933991	B2	2005-08-23	Sanelle et al.	
	140	6954495	B2	2005-10-11	Piirainen	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	141	6956562	B1	2005-10-18	Responte et al.	
	142	6961015	B2	2005-11-01	Kernahan et al.	
	143	6967903	B2	2005-11-22	Guanter	
	144	6968208	B2	2005-11-22	Kacines	
	145	6975853	B2	2005-12-13	Fang et al.	
	146	6983169	B2	2006-01-03	Vogel et al.	

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20110273396	A1	2011-11-10	CHUNG	
	2	20110291945	A1	2011-12-01	Richard Alan Ewing et al.	
	3	20110291953	A1	2011-12-01	Cheok et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	4	20120007821	A1	2012-01-12	Zaliva	
	5	20120008436	A1	2012-01-12	Rajan et al.	
	6	20120011310	A1	2012-01-12	Rajan et al.	
	7	20120011386	A1	2012-01-12	Rajan et al.	
	8	20120013566	A1	2012-01-19	CHUNG	
	9	20120018871	A1	2012-01-26	Lee et al.	
	10	20120019448	A1	2012-01-26	Pitkanen et al.	
	11	20120023450	A1	2012-01-26	Noto et al.	
	12	20120032876	A1	2012-02-09	Tabe	
	13	20120034954	A1	2012-02-09	Tabe	
	14	20120037878	A1	2012-02-16	Liu	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	15	20120038045	A1	2012-02-16	Lee	
	16	20120042204	A1	2012-02-16	Smith et al.	
	17	20120044172	A1	2012-02-23	Ohki et al.	
	18	20120056846	A1	2012-03-08	Zaliva	
	19	20120059976	A1	2012-03-08	Rosenband et al.	
	20	20120059978	A1	2012-03-08	Rosenband et al.	
	21	20120063194	A1	2012-03-15	Baek et al.	
	22	20120069647	A1	2012-03-22	Kramer et al.	
	23	20120070973	A1	2012-03-22	Sandhu et al.	
	24	20120074584	A1	2012-03-29	Lee et al.	
	25	20120077314	A1	2012-03-29	Park et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	26	20120086670	A1	2012-04-12	Teil et al.	
	27	20120105367	A1	2012-05-03	Son et al.	
	28	20120105370	A1	2012-05-03	Moore	
	29	20120106228	A1	2012-05-03	Lee	
	30	20120109037	A1	2012-05-03	Ellingboe et al.	
	31	20120109621	A1	2012-05-03	Rajan et al.	
	32	20120124281	A1	2012-05-17	Rajan et al.	
	33	20120126883	A1	2012-05-24	Juengling	
	34	20120127685	A1	2012-05-24	Corisis et al.	
	35	20120135567	A1	2012-05-31	Akram et al.	
	36	20120135569	A1	2012-05-31	Corisis	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	37	20120138927	A1	2012-06-07	KANG	
	38	20120140583	A1	2012-06-07	CHUNG	
	39	20120147684	A1	2012-06-14	Schakel et al.	
	40	20120154328	A1	2012-06-21	Kono	
	41	20120162087	A1	2012-06-28	Hou	
	42	20120180043	A1	2012-07-12	Tsirkin et al.	
	43	20120182249	A1	2012-07-19	Endo et al.	
	44	20120194461	A1	2012-08-02	Lim	
	45	20120194462	A1	2012-08-02	Lim	
	46	20120201088	A1	2012-08-09	Rajan et al.	
	47	20120203958	A1	2012-08-09	Jones et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	48	20120203993	A1	2012-08-09	Virgin et al.	
	49	20120204079	A1	2012-08-09	Takefman et al.	
	50	20120206165	A1	2012-08-16	Ferolito et al.	
	51	20120223900	A1	2012-09-06	JIYAMA et al.	
	52	20120226924	A1	2012-09-06	Rajan et al.	
	53	20120229403	A1	2012-09-13	Jong et al.	
	54	20120229404	A1	2012-09-13	Jong et al.	
	55	20120229405	A1	2012-09-13	Jong et al.	
	56	20120231853	A1	2012-09-13	Takahashi et al.	
	57	20120239874	A1	2012-09-20	Lee et al.	
	58	20120240044	A1	2012-09-20	Johnson et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	59	20120242610	A1	2012-09-27	Yasumatsu	
	60	20120244348	A1	2012-09-27	Park et al.	
	61	20120250386	A1	2012-10-04	Lee et al.	
	62	20120254519	A1	2012-10-04	Ellis	
	63	20120254747	A1	2012-10-04	Bocirnea	
	64	20120266072	A1	2012-10-18	Karaoguz	
	65	20120271990	A1	2012-10-25	Chen et al.	
	66	20120274662	A1	2012-11-01	Kim et al.	
	67	20120293449	A1	2012-11-22	Dietz	
	68	20120306764	A1	2012-12-06	Kamibeppu	
	69	20120306765	A1	2012-12-06	Moore	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	70	20120306766	A1	2012-12-06	Moore	
	71	20120313888	A1	2012-12-13	Lee et al.	
	72	20120317433	A1	2012-12-13	Ellis et al.	
	73	20130002610	A1	2013-01-03	Ho et al.	
	74	20130007399	A1	2013-01-03	Smith et al.	
	75	20130009869	A1	2013-01-10	Wilensky	
	76	20130019076	A1	2013-01-17	Amidi et al.	
	77	20130021285	A1	2013-01-24	Kimura et al.	
	78	20130021295	A1	2013-01-24	Kimura et al.	
	79	20130027350	A1	2013-01-31	Liaw et al.	
	80	20130027358	A1	2013-01-31	Liaw et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	81	20130054881	A1	2013-02-28	Ellis et al.	
	82	20130055134	A1	2013-02-28	Knor	
	83	20130060994	A1	2013-03-07	Higgins et al.	
	84	20130061019	A1	2013-03-07	Fitzpatrick et al.	
	85	20130061101	A1	2013-03-07	Fitzpatrick et al.	
	86	20130063364	A1	2013-03-14	Moore	
	87	20130063389	A1	2013-03-14	Moore	
	88	20130076941	A1	2013-03-28	Palanciuc et al.	
	89	20130082970	A1	2013-04-04	Frey et al.	
	90	20130082979	A1	2013-04-04	Rabu et al.	
	91	20130085215	A1	2013-04-04	SHITARA et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	92	20130086309	A1	2013-04-04	Lee et al.	
	93	20130093687	A1	2013-04-18	Papakipos et al.	
	94	20130100070	A1	2013-04-25	Zheng et al.	
	95	20130100087	A1	2013-04-25	Liaw et al.	
	96	20130102371	A1	2013-04-25	Silva	
	97	20130103377	A1	2013-04-25	Rajan et al.	
	98	20130103897	A1	2013-04-25	Rajan et al.	
	99	20130106802	A1	2013-05-02	Liaw et al.	
	100	20130109928	A1	2013-05-02	Menzel	
	101	20130120284	A1	2013-05-16	Chen et al.	
	102	20130120302	A1	2013-05-16	Kang et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	103	20130124993	A1	2013-05-16	Daisy	
	104	20130125322	A1	2013-05-23	Sakashita et al.	
	105	20130127765	A1	2013-05-23	Behdasht et al.	
	106	20130132661	A1	2013-05-23	Schakel et al.	
	107	20130132779	A1	2013-05-23	Smith et al.	
	108	20130132838	A1	2013-05-23	Daisy	
	109	20130141388	A1	2013-06-06	Ludwig et al.	
	110	20130181928	A1	2013-07-18	Li	
	111	20130181931	A1	2013-07-18	Kinoshita	
	112	20130188336	A1	2013-07-25	Yuan et al.	
	113	20130188424	A1	2013-07-25	Rajan et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	114	20130191585	A1	2013-07-25	Rajan et al.	
	115	20130205102	A1	2013-08-08	Jones et al.	
	116	20130215064	A1	2013-08-22	Cholewin et al.	
	117	20130238849	A1	2013-09-12	Amer et al.	
	118	20130254456	A1	2013-09-26	Chen et al.	
	119	20130254497	A1	2013-09-26	Chen et al.	
	120	20130275795	A1	2013-10-17	Ellis et al.	
	121	20130282962	A1	2013-10-24	Rub et al.	
	122	20130307809	A1	2013-11-21	Sudou	
	123	20130307827	A1	2013-11-21	Reisman et al.	
	124	20130321317	A1	2013-12-05	Hirukawa	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	125	20130332796	A1	2013-12-12	Ellis	
	126	20130332876	A1	2013-12-12	Johnson et al.	
	127	20130335357	A1	2013-12-19	Hou	
	128	20140028601	A1	2014-01-30	Moore	
	129	20140040568	A1	2014-02-06	Lee et al.	
	130	20140040569	A1	2014-02-06	Solomon et al.	
	131	20140057102	A1	2014-02-27	Park et al.	
	132	20140066139	A1	2014-03-06	Ure	
	133	20140095769	A1	2014-04-03	Borkenhagen	
	134	20140096092	A1	2014-04-03	Johnson	
	135	20140099235	A1	2014-04-10	Ellingboe et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	136	20140104219	A1	2014-04-17	Ludwig	
	137	20140104220	A1	2014-04-17	Ludwig	
	138	20140132548	A1	2014-05-15	Ludwig	
	139	20140132549	A1	2014-05-15	Ludwig	
	140	20140134433	A1	2014-05-15	Park et al.	
	141	20140134434	A1	2014-05-15	Park et al.	
	142	20140139473	A1	2014-05-22	Kang et al.	
	143	20140156919	A1	2014-06-05	Chen et al.	
	144	20140156920	A1	2014-06-05	Chen et al.	
	145	20140168128	A1	2014-06-19	Reisman et al.	
	146	20140191962	A1	2014-07-10	Kim	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	147	20140208248	A1	2014-07-24	Davidson	
	148	20140210786	A1	2014-07-31	Ludwig	
	149	20140340358	A1	2014-11-20	MARTINOLI	
	150	20140368455	A1	2014-12-18	Croisonnier et al.	
	151	20150068526	A1	2015-03-12	Habashi	
	152	20150197670	A1	2015-07-16	SHITARA et al.	
	153	20150234518	A1	2015-08-20	Teller et al.	
	154	20150253609	A1	2015-09-10	ZHOU et al.	

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

NON-PATENT LITERATURE DOCUMENTS			Remove
Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T5
	1	CLARK, CHISTOPHER, "Live Migration of Virtual Machines," 2005, pp. 1-14	
	2	COOK, H. et al., "Virtual Local Stores: Enabling Software-Managed Memory Hierarchies in Mainstream Computing Environments," Technical Report No. UCB/EECS-2009-131, September 24, 2009, pp. 1-24	
	3	COX, LANDON P. et al., "Pocket Hypervisors: Opportunities and Challenges," March 8, 2007, pp 1-6	
	4	DALL, CHRISTOFFER et al., "KVM for ARM," Columbia University, 12th annual Linux Symposium, 2010, pp. 1-12	
	5	D'AMBROSIA, J. et al. "40 Gigabit Ethernet and 100 Gigabit Ethernet Technology Overview," November 2008, pp. 1-16	
	6	DATE, MUNEKAZU et al., "Small-Depth-Error Display Using Depth Fused 30 (DFD)," February 2009, pp. 1-4	
	7	DEERING, MICHAEL F., "The Limits of Human Vision," Sun Microsystems, 1998, PP. 1-6	
	8	DESHANE, TODD et al., "Xen Hypervisor Deployment, Management, and Cloud Computing Tools," Clarkson University, 2010, slides 1-151	
	9	DESHANE, TODD, "An Attack-Resistant and Rapid Recovery Desktop System," Clarkson University, Dissertation, August 2010, pp.1-130	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	10	DH I MAN, G. et al., "PDRAM: A Hybrid PRAM and DRAM Main Memory System," DAC '09, July 26-31, 2009, pp. 1-6	
	11	DOUDALIS, IOANNIS et al., "HARE++: Hardware Assisted Reverse Execution Revisited," Georgia Institute of Technology, March 2011, pp. 1-8	
	12	DOWNS, RICK, "Using Resistive touch screens for human/machine interface," 2005, pp. 1-6	
	13	EBCIOGLU, KERNAL et al., "A JAVA ILP Machine Based on Fast Dynamic Compilation," IBM T.J. Watson Research Center, 1997, pp. 1-13	
	14	ENCODING- 116 slides	
	15	ENCODING- 116 slides, University of Illinois, Urbana Champaign, COURSE CS 438, March 2008	
	16	ERICSON, FINN, "Interactive Handheld Phantograms," KTH Computer Science and Communication, Thesis, 2010, pp. 1-38	
	17	File Wrapper from U.S. Application No. 11/226,061	
	18	File Wrapper from U.S. Application No. 11/226,061, filed 09-13-2005	
	19	File Wrapper from U.S. Application No. 11/449,435	
	20	File Wrapper from U.S. Application No. 11/449,435, filed 06-07-2006	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	21	FITZROY-DALE, NICHOLAS, "Architecture Optimization," University of new South Wales, March 2010, pp. 1-152	
	22	FOSTER, G., "Measurements of Pre-Emphasis on Altera® Stratix® GX with the BERTScope 12500A," Ver. 1, June 2005, pp. 1-7	
	23	FUJITSU, "125Gbps Parallel CDR Transceiver (0.18um)," 2002, pp. 1-2	
	24	GALLOWAY, P. et al., "Using Creative Silicon Technology to Extend the Useful Life of Backplane and Card Substrates at 3.125 Gbps and Beyond," DesignCon 2001, 2001 High-Performance System Design Conference, pp. 1-7	
	25	GARLAN, DAVID et al., "Project Aura: Toward Distraction-Free Pervasive Computing," IEEE, 2002, pp. 1-10	
	26	GARLEPP, B. W. et al., "A Portable Digital DLL for High-Speed CMOS Interface Circuits," IEEE Journal Of Solid-State Circuits, Vol. 34, No. 5, May 1999, pp. 632-644	
	27	GESLER, WILSON S., "Physical Limits of Acuity and Hyperacuity," University of Texas, October 26, 1983, pp. 1-8	
	28	GILBERT, BENJAMIN et al., "Pocket ISR: Virtual Machines Anywhere," Carnegie Mellon University, March 2010, pp. 1-19	
	29	GONDI, S. et al., "A 10-Gb/s CMOS Merged Adaptive Equalizer/CDR Circuit for Serial-Link Receivers," 2006 Symposium on VLSI Circuits Digest ofTechnical Papers, IEEE, 2006, pp. 1-2	
	30	GONDI, S. et al., "A IOGb/s CMOS Adaptive Equalizer for Backplane Applications," 2005 IEEE International Solid-State Circuits Conference, 2005, pp. 1-3	
	31	GOODACRE, JOHN et al., "Virtualization Across the ARM Ecosystem," ARM, September 9, 2009, pp. 1-9	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	32	GROZING, M. et al., "Sampling Receive Equalizer with Bit-Rate Flexible Operation up to 10 Gbit/s," IEEE, 2006, pp. 516-519	
	33	GRUNDY, K. et al., "Designing Scalable IOG Backplane Interconnect Systems Utilizing Advanced Verification Methodologies," DesignCon 2006, pp. 1-20	
	34	GUSTLIN, M., "40 and 100 Gigabit Ethernet PCS and PMA Overview," Ethernet Summit, February 2010, pp. 1-15	
	35	HARTIG, HERMANN, "The L4 Microkernel," ARTIST Summer School in Europe, September 2010, slides 1-99	
	36	HEISER, GERNOT et al., "The OKL4 Microvisor: convergence Point of Microkernels and Hypervisors," August 30, 2010, pp. 1-5	
	37	HEISER, GERNOT, "Hypervisors for Consumer Electronics," University of New South Wales, 2009, pp. 1-5	
	38	HERTZUM, MORTEN et al., "TouchGrid: Touchpad pointing by recursively mapping taps to smaller display regions," Behaviour and Information Technology, vol, 24, no. 5, 2005, pp. 1-18	
	39	HIRAISHI, A. et al., "Preferable Improvements and Changes to FB-DIMM High-Speed Channel for 9.6Gbps Operation," ELPIDA, January 26, 2007, pp. 1-35	
	40	HOE, J.C., "18-447 Lecture 21: Virtual Memory: Page Tables and TLBs," April 13, 2009, pp. 1-11	
	41	HOFER, HEIDI et al., "Organization of the Human Trichromatic Cone Mosaic," Oct 19, 2005, pp.1-11	
	42	HOLLIS, T. et al., "Reduction of Duty Cycle Distortion through Band- Pass Filtering," 2005, pp. 1-4	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	43	HOLLIS, T. M. et al., "Mitigating ISi Through Self-Calibrating Continuous-Time Equalization," IEEE Transactions On Circuits And Systems-I: Regular Papers, Vol. 53, No. 10, October 2006, pp. 2234-2245	
	44	HOLLIS, T. M. et al., "Self-Calibrating Continuous-Time Equalization Targeting Inter-symbol Interference," 2006, pp. 1-4	
	45	HOLLIS, T. M., "CIRCUIT AND MODELING SOLUTIONS FOR HIGH-SPEED CHIP-TO-CHIP COMMUNICATION," Dissertation, April 2007, pp. 1-225	
	46	HOLLIS, T. M., "Inter-symbol Interference in Manchester Encoded Data," pp. 1-7	
	47	HOLLIS, T. M., "Inter-symbol Interference in Manchester Encoded Data," pp. 1-7, Oct 2006	
	48	HOLLIS, T., "Mitigating ISi through Self-Calibrating Continuous-Time Equalization," 36 slides	
	49	HOLLIS, T., "Mitigating ISi through Self-Calibrating Continuous-Time Equalization," 36 slides, Oct. 2006	
	50	Hong, Seongcheol, "NANO Flash-based Disk Cache Using SLC/MLC Combined Flash Memory," SNAPI 2010, 25 pages	

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Patrick Caldwell/	Date (YYYY-MM-DD)	2018-10-24
Name/Print	Patrick Caldwell	Registration Number	44580

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

PTO/SB/08a (03-15)
Approved for use through 07/31/2016. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99**)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

U.S.PATENTS						Remove
Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	6990044	B2	2006-01-24	Kang	
	2	7003316	B1	2006-02-21	Elias et al.	
	3	7006851	B2	2006-02-28	Holmes et al.	
	4	7010325	B1	2006-03-07	Oh	
	5	7020488	B1	2006-03-28	Bleile et al.	
	6	7024230	B2	2006-04-04	Curtiss et al.	
	7	7030854	B2	2006-04-18	Baucom et al.	
	8	7031670	B2	2006-04-18	May	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	9	7050783	B2	2006-05-23	Curtiss et al.	
	10	7062260	B2	2006-06-13	Vuori	
	11	7062261	B2	2006-06-13	Goldstein et al.	
	12	7064748	B2	2006-06-20	Cok	
	13	7097903	B2	2006-08-29	Kishioka et al.	
	14	7098776	B2	2006-08-29	Chang et al.	
	15	7122149	B2	2006-10-17	Li et al.	
	16	7123936	B1	2006-10-17	Rydbeck et al.	
	17	7138984	B1	2006-11-21	Miles	
	18	7149511	B1	2006-12-12	Edward F. Bachner et al.	
	19	7149552	B2	2006-12-12	Lair	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	20	7155254	B2	2006-12-26	Pinder	
	21	7171239	B2	2007-01-30	Tan et al.	
	22	7184794	B2	2007-02-27	Hess et al.	
	23	7190720	B2	2007-03-13	Fimoff et al.	
	24	7205983	B2	2007-04-17	Raap et al.	
	25	7224992	B2	2007-05-29	Patino et al.	
	26	7240836	B2	2007-07-10	Vrotsos et al.	
	27	7254036	B2	2007-08-07	Pauley et al.	
	28	7254973	B2	2007-08-14	Campian	
	29	7269708	B2	2007-09-11	Ware	
	30	7280849	B1	2007-10-09	Bailey	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	31	7286436	B2	2007-10-23	Bhakta et al.	
	32	7289113	B2	2007-10-30	Martin	
	33	7289386	B2	2007-10-30	Bhakta et al.	
	34	7296107	B2	2007-11-13	Lunsford et al.	
	35	7303680	B2	2007-12-04	Connell et al.	
	36	7312784	B2	2007-12-25	Baucom et al.	
	37	7312791	B2	2007-12-25	Hoshino et al.	
	38	7315336	B2	2008-01-01	North et al.	
	39	7318892	B2	2008-01-15	Connell et al.	
	40	7343177	B2	2008-03-11	Seshadri et al.	
	41	7343439	B2	2008-03-11	Mills et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	42	7360022	B2	2008-04-15	Tian et al.	
	43	7363054	B2	2008-04-22	Elias et al.	
	44	7375970	B2	2008-05-20	Pauley et al.	
	45	7386656	B2	2008-06-10	Rajan et al.	
	46	7392338	B2	2008-06-24	Rajan et al.	
	47	7398105	B2	2008-07-08	Kalogeropoulos	
	48	7403743	B2	2008-07-22	Welch	
	49	7405779	B2	2008-07-29	Sanelle et al.	
	50	7423557	B2	2008-09-09	Kang	
	51	7424312	B2	2008-09-09	Pinder et al.	
	52	7435636	B1	2008-10-14	Hanafi	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	53	7437221	B2	2008-10-14	Hardman et al.	
	54	7442050	B1	2008-10-28	Bhakta et al.	
	55	7472220	B2	2008-12-30	Rajan et al.	
	56	7492890	B2	2009-02-17	Milani	
	57	7493109	B2	2009-02-17	Munje et al.	
	58	7523035	B2	2009-04-21	Rokusek et al.	
	59	7526317	B2	2009-04-28	Pinder et al.	
	60	7529872	B1	2009-05-05	Schubert et al.	
	61	7532492	B2	2009-05-12	Dobyns et al.	
	62	7532537	B2	2009-05-12	Solomon et al.	
	63	7535463	B2	2009-05-19	Wilson	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	64	7555318	B2	2009-06-30	Seshadri et al.	
	65	7558130	B2	2009-07-07	Grunzke	
	66	7558529	B2	2009-07-07	Seshadri et al.	
	67	7558894	B1	2009-07-07	Lydon et al.	
	68	7565179	B2	2009-07-21	Hyatt	
	69	7565458	B2	2009-07-21	Thijssen	
	70	7571295	B2	2009-08-04	Sakarda et al.	
	71	7580312	B2	2009-08-25	Rajan et al.	
	72	7581127	B2	2009-08-25	Rajan et al.	
	73	7590796	B2	2009-09-15	Rajan et al.	
	74	7598607	B2	2009-10-06	Chung et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	75	7603148	B2	2009-10-13	Michalak	
	76	7609567	B2	2009-10-27	Rajan et al.	
	77	7612436	B1	2009-11-03	Lee et al.	
	78	7619893	B1	2009-11-17	Yu	
	79	7619912	B2	2009-11-17	Bhakta et al.	
	80	7620433	B2	2009-11-17	Bodley	
	81	7622365	B2	2009-11-24	Parekh	
	82	7622895	B1	2009-11-24	Griffin	
	83	7623667	B2	2009-11-24	Sander et al.	
	84	7626579	B2	2009-12-01	Hague et al.	
	85	7626594	B1	2009-12-01	Witehira et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	86	7627128	B2	2009-12-01	Sander et al.	
	87	7627307	B2	2009-12-01	Droste et al.	
	88	7627352	B2	2009-12-01	Daniel M. Gauger et al.	
	89	7630202	B2	2009-12-08	Pauley et al.	
	90	7633963	B1	2009-12-15	Anderson et al.	
	91	7636274	B2	2009-12-22	Solomon et al.	
	92	7639239	B2	2009-12-29	Kajimoto et al.	
	93	7643642	B2	2010-01-05	Patino et al.	
	94	7649577	B2	2010-01-19	Sanelle et al.	
	95	7649605	B2	2010-01-19	Kim	
	96	7650168	B2	2010-01-19	Bailey	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	97	7659885	B2	2010-02-09	Kraus et al.	
	98	7675580	B2	2010-03-09	RHO	
	99	7680490	B2	2010-03-16	Bloebaum et al.	
	100	7680514	B2	2010-03-16	Cook et al.	
	101	7689168	B2	2010-03-30	House	
	102	7692627	B2	2010-04-06	Wilson	
	103	7692637	B2	2010-04-06	Davis	
	104	7701329	B2	2010-04-20	Donohue	
	105	7705824	B2	2010-04-27	Baucom et al.	
	106	7715831	B2	2010-05-11	Wakefield	
	107	7715873	B1	2010-05-11	Biere et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	108	7716411	B2	2010-05-11	Panabaker et al.	
	109	7724589	B2	2010-05-25	Rajan et al.	
	110	7730338	B2	2010-06-01	Rajan et al.	
	111	7738068	B2	2010-06-15	Lee	
	112	7755612	B2	2010-07-13	Park et al.	
	113	7760187	B2	2010-07-20	Kennedy	
	114	7761724	B2	2010-07-20	Rajan et al.	
	115	7769187	B1	2010-08-03	Farrar et al.	
	116	7777581	B2	2010-08-17	Pfaff et al.	
	117	7778601	B2	2010-08-17	Seshadri et al.	
	118	7779185	B2	2010-08-17	Schubert et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	119	7796652	B2	2010-09-14	Reitlingshoefer et al.	
	120	7811097	B1	2010-10-12	Bhakta et al.	
	121	7813715	B2	2010-10-12	McKillop et al.	
	122	7814287	B2	2010-10-12	Pratt	
	123	7818036	B2	2010-10-19	Lair et al.	
	124	7818037	B2	2010-10-19	Lair et al.	
	125	7826318	B2	2010-11-02	Holden et al.	
	126	7835809	B2	2010-11-16	Paul P. Griffin	
	127	7839643	B1	2010-11-23	Yu	
	128	7839645	B2	2010-11-23	Pauley et al.	
	129	7855931	B2	2010-12-21	LaBerge et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	130	7857225	B2	2010-12-28	Challa et al.	
	131	7864627	B2	2011-01-04	Bhakta et al.	
	132	7869608	B2	2011-01-11	Sander et al.	
	133	7881150	B2	2011-02-01	Solomon et al.	
	134	7889786	B2	2011-02-15	Lapointe	
	135	7902886	B2	2011-03-08	Pfaff et al.	
	136	7903096	B2	2011-03-08	Jeon et al.	
	137	7916574	B1	2011-03-29	Solomon et al.	
	138	7932893	B1	2011-04-26	Berthaud	
	139	7940839	B2	2011-05-10	Lapointe et al.	
	140	7941591	B2	2011-05-10	Aviles	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	141	7952566	B2	2011-05-31	Poupyrev et al.	
	142	7965578		2011-06-21	Bhakta et al.	
	143	7965579		2011-06-21	Solomon et al.	
	144	7966578	B2	2011-06-21	Tolmasky et al.	
	145	7973777	B2	2011-07-05	Lee et al.	
	146	7973778	B2	2011-07-05	Chen	
	147	7978721	B2	2011-07-12	Jeddeloh et al.	
	148	7982721	B2	2011-07-19	Hio	
	149	7999795	B2	2011-08-16	Hamblin et al.	
	150	8001434	B1	2011-08-16	Lee et al.	
	151	8018723	B1	2011-09-13	Yu et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	152	8019589	B2	2011-09-13	Rajan et al.	
	153	8022933	B2	2011-09-20	Hardacker et al.	
	154	8033836	B1	2011-10-11	Bhakta et al.	
	155	8041881	B2	2011-10-18	Rajan et al.	
	156	8055833	B2	2011-11-08	Danilak et al.	
	157	8057419	B2	2011-11-15	Ellingboe et al.	
	158	8060774	B2	2011-11-15	Smith et al.	
	159	8068021	B1	2011-11-29	Donohue	
	160	8072430	B2	2011-12-06	Kim et al.	
	161	8072837	B1	2011-12-06	Solomon et al.	
	162	8077535	B2	2011-12-13	Schakel et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	163	8081474	B1	2011-12-20	Zohni et al.	
	164	8081535	B2	2011-12-20	Bhakta et al.	
	165	8081536	B1	2011-12-20	Solomon et al.	
	166	8081537	B1	2011-12-20	Bhakta et al.	
	167	8081677	B2	2011-12-20	Badalone	
	168	8089795	B2	2012-01-03	Rajan et al.	
	169	8090897	B2	2012-01-03	Rajan et al.	
	170	8093702	B2	2012-01-10	Lua et al.	
	171	8094134	B2	2012-01-10	Suzuki et al.	
	172	8094673	B2	2012-01-10	Proctor et al.	
	173	8102496	B2	2012-01-24	Kim	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	174	8103928	B2	2012-01-24	Hargan	
	175	8106491	B2	2012-01-31	Corisis et al.	
	176	8106520	B2	2012-01-31	Keeth et al.	
	177	8111534	B2	2012-02-07	Walker	
	178	8111566	B1	2012-02-07	Wang et al.	
	179	8112266	B2	2012-02-07	Rajan et al.	
	180	8115291	B2	2012-02-14	Baek et al.	
	181	8120044	B2	2012-02-21	Cho et al.	
	182	8122207	B2	2012-02-21	Rajan et al.	
	183	8127185	B2	2012-02-28	Jeddeloh	
	184	8127204	B2	2012-02-28	Hargan	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	185	8130527	B2	2012-03-06	Keeth	
	186	8130560	B1	2012-03-06	Rajan et al.	
	187	8134378	B2	2012-03-13	Keeth	
	188	8135900	B2	2012-03-13	Kunimatsu et al.	
	189	8143710	B2	2012-03-27	Cho	
	190	8148763	B2	2012-04-03	Kim et al.	
	191	8148807	B2	2012-04-03	Lee et al.	
	192	8154901	B1	2012-04-10	Lee et al.	
	193	8154935	B2	2012-04-10	Rajan et al.	
	194	8158967	B2	2012-04-17	Tang et al.	
	195	8169233	B2	2012-05-01	Ferolito et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	196	8169841	B2	2012-05-01	Johnson et al.	
	197	8173507	B2	2012-05-08	Lim et al.	
	198	8174105	B2	2012-05-08	Kwang et al.	
	199	8174115	B2	2012-05-08	Chung	
	200	8180954	B2	2012-05-15	Kilzer et al.	
	201	8181048	B2	2012-05-15	Rajan et al.	
	202	8184228	B2	2012-05-22	Han et al.	
	203	8185778	B2	2012-05-22	Kilzer et al.	
	204	8187901	B2	2012-05-29	Sheen	
	205	8188982	B2	2012-05-29	You et al.	
	206	8189328	B2	2012-05-29	Kanapathippillai et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	207	8193646	B2	2012-06-05	Wood et al.	
	208	8199116	B2	2012-06-12	Jeon et al.	
	209	8207945	B2	2012-06-26	Jong et al.	
	210	8209479	B2	2012-06-26	Rajan et al.	
	211	8209628	B1	2012-06-26	Davidson	
	212	8218705	B2	2012-07-10	Moghaddam et al.	
	213	8223799	B2	2012-07-17	Karaoguz	
	214	8228309	B2	2012-07-24	Tamaki et al.	
	215	8244971	B2	2012-08-14	Rajan et al.	
	216	8253699	B2	2012-08-28	Son	
	217	8261041	B2	2012-09-04	Kunimatsu	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	218	8264903	B1	2012-09-11	Lee et al.	
	219	8269731	B2	2012-09-18	Mölne	
	220	8269733	B2	2012-09-18	HU	
	221	8270148	B2	2012-09-18	Griffith et al.	
	222	8279361	B2	2012-10-02	Chen et al.	
	223	8279690	B1	2012-10-02	Wang et al.	
	224	8280714	B2	2012-10-02	Rajan et al.	
	225	8286102	B1	2012-10-09	Wilensky	
	226	8287291	B1	2012-10-16	Bhakta et al.	
	227	8296496	B2	2012-10-23	Mogul et al.	
	228	8301833	B1	2012-10-30	Chen et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	229	8310452	B2	2012-11-13	Takenaka et al.	
	230	8315349	B2	2012-11-20	Badalone	
	231	8319743	B2	2012-11-27	NO et al.	
	232	8325143	B2	2012-12-04	Destura et al.	
	233	8327104	B2	2012-12-04	Smith et al.	
	234	8334835	B2	2012-12-18	Shen et al.	
	235	8334850	B2	2012-12-18	Tsai	
	236	8340953	B2	2012-12-25	Rajan et al.	
	237	8345018	B2	2013-01-01	Jong et al.	
	238	8345427	B2	2013-01-01	Pauley et al.	
	239	8349228	B2	2013-01-08	Kazama	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	240	8359187	B2	2013-01-22	Rajan et al.	
	241	8359501	B1	2013-01-22	Lee et al.	
	242	8359600	B2	2013-01-22	KANG et al.	
	243	8370566	B2	2013-02-05	Danilak et al.	
	244	8373675	B2	2013-02-12	Jeon et al.	
	245	8380263	B2	2013-02-19	Murakami et al.	
	246	8384674	B1	2013-02-26	Slothower et al.	
	247	8386833	B2	2013-02-26	Smith et al.	
	248	8387045	B2	2013-02-26	Yasutaka et al.	
	249	8397013	B1	2013-03-12	Rosenband et al.	
	250	8407412	B2	2013-03-26	Rajan et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	251	8411039	B2	2013-04-02	Guo et al.	
	252	8416210	B2	2013-04-09	Jong et al.	
	253	8417870	B2	2013-04-09	Lee et al.	
	254	8424599	B2	2013-04-23	Atencio	
	255	8427434	B1	2013-04-23	Merolla	
	256	8446781	B1	2013-05-21	Rajan et al.	
	257	8451238	B2	2013-05-28	Kim et al.	
	258	8452917	B2	2013-05-28	Amer et al.	
	259	8458436	B2	2013-06-04	Kunimatsu et al.	
	260	8471824	B2	2013-06-25	Kim et al.	
	261	8473670	B2	2013-06-25	Sareen et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	262	8477111	B2	2013-07-02	Lim	
	263	8479110	B2	2013-07-02	Johnson et al.	
	264	8487900	B2	2013-07-16	Chiu et al.	
	265	8488325	B1	2013-07-16	Yu	
	266	8489837	B1	2013-07-16	Lee	
	267	8493384	B1	2013-07-23	Reisman et al.	
	268	8497884	B2	2013-07-30	Cholewin et al.	
	269	8508494	B2	2013-08-13	Moore	
	270	8516185	B2	2013-08-20	Lee et al.	
	271	8516187	B2	2013-08-20	Chen et al.	
	272	8516188	B1	2013-08-20	Solomon et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	273	8542193	B2	2013-09-24	Hardacker et al.	
	274	8542209	B2	2013-09-24	Lim	
	275	8553012	B2	2013-10-08	Baucom et al.	
	276	8564559	B2	2013-10-22	Hou	
	277	8566505	B2	2013-10-22	Kilzer et al.	
	278	8566516	B2	2013-10-22	Schakel et al.	
	279	8566556	B2	2013-10-22	Rajan et al.	
	280	8587542	B2	2013-11-19	Moore	
	281	8589639	B2	2013-11-19	Nakai et al.	
	282	8595419	B2	2013-11-26	Rajan et al.	
	283	8599634	B1	2013-12-03	Lee et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	284	8601204	B2	2013-12-03	Rajan et al.	
	285	8607003	B2	2013-12-10	Bland et al.	
	286	8611123	B2	2013-12-17	Koh	
	287	8615679	B2	2013-12-24	Smith et al.	
	288	8619452	B2	2013-12-31	Rajan et al.	
	289	8624851	B2	2014-01-07	Kim et al.	
	290	8624867	B2	2014-01-07	Tamaki et al.	
	291	8631193	B2	2014-01-14	Smith et al.	
	292	8631220	B2	2014-01-14	Smith et al.	
	293	8638311	B2	2014-01-28	Kang et al.	
	294	8648839	B2	2014-02-11	Liaw et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	295	8654104	B2	2014-02-18	Reisman et al.	
	296	8667312	B2	2014-03-04	Rajan et al.	
	297	8671243	B2	2014-03-11	Chen et al.	
	298	8671244	B2	2014-03-11	Rajan et al.	
	299	8674947	B2	2014-03-18	Henderson et al.	
	300	8675429	B1	2014-03-18	Wang et al.	

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T5
	1	HUANG, H. et al., "Design and Implementation of Power-Aware Virtual Memory," 2003, pp. 1-14	
	2	HUNG, PERRY L., "Varmosa: Just-in-time Binary Translation of Operating System Kernels," June, 2009, pp. 1-58	
	3	HUR, Y. S. et al., "Equalization and Near-End Crosstalk (NEXT) Noise Cancellation for 20- Gbit/sec 4 PAM Backplane Serial 1/0 Interconnections," Dissertation, December 2005, pp. 1-143	
	4	hynix, "1/0 INTERFACE DESIGN TECHNOLOGY USING ADS," 2005, 41 slides	
	5	HYSER, CHRIS et al., "Autonomic Virtual Machine Placement in the Data Center," February 26, 2008, pp. 1-11	
	6	MIS™ - Intimate Memory Interface Specification," Revision 1.0, June 1, 2008, pp. 1-33	
	7	MMERSION "Creating the HD Haptic Experience in Mobile Devices," 2011, pp. 1-3	
	8	MMERSION, "TouchSense System for Mobile Devices," 2010, pp. 1-8	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	9	Intel, "Intel PXA27x Processor Family," Memory Subsystem, July 2004, pp. 1-138	
	10	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 1: Basic Architecture, Order Number: 253665-037US, January 2011, pp. 1-540	
	11	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 2A: Instruction Set Reference, A-M, Order Number: 253666-037US, January 2011, pp. 1-848	
	12	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3A: System Programming Guide, Part 1, Order Number: 253668-037US, January 2011, pp. 1-842	
	13	INTEL, "Intel® 64 and IA-32 Architectures Software Developer's Manual," Volume 3B: System Programming Guide, Part 2, Order Number: 253669-034US, March 2010, pp. 1-936	
	14	Intel, "Intel® GW80314 1/0 Companion Chip," Datasheet, Order Number: 273757-003US, November 2004, pp. 1-88	
	15	Interfacing 4-wire and 5-wire resistive touchscreens to the LPC247x, Nov. 13, 2008	
	16	INTERNATIONAL TECHNOLOGY ROADMAP FOR SEMICONDUCTORS," 2009 Edition, ASSEMBLY AND PACKAGING, pp. 1-70	
	17	IPHONE, "How the I phone works," HowStuffWorks, 2007, pp. 1-4	
	18	IQBAL, ASIF et al., "An Overview of Microkernel, Hypervisor and Microvisor Virtualization Approaches for Embedded Systems," Lund University, 2009, pp. 1-15	
	19	IS& T /SPI E, "Electronic Imaging," Hyatt Regency Hotel, January 2011, pp. 1-153	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	20	JACOBSSON, SARAH, "Nexus one's Screen is Gorgeous, But With Issues," PCWorld, February 32, 2010, pp 1-5	
	21	JEDEC STANDARD, DDR3 SDRAM Standard, JESD79-3D, Revision of JESD79-3C, November 2008, September 2009, pp. 1-220	
	22	JEONG, JAE-WOO et al.," PARFAIT: A New Scheduler Framework supporting Heterogeneous Xen-ARM schedulers," Jan 2011, pp. 1-5	
	23	JIANG, HAI et al., "Data Conversion for Process/Thread Migration and Checkpointing," Wayne State University, 2003 International Conference on Parallel Processing (ICPP'03), 2003, pp. 1-8	
	24	KALADY, SAIDALAVI et al., "Implementation of a Purley Hardware-assisted VMM for x86 Architecture," Preceedings of the World congress on Engineering 2009 Vol. 1, 2009, pp. 1-5	
	25	KALLA, NAVEEN et al., "Embedded VMM for Portable Virtual Machines," pp. 1-11	
	26	KARTHICK, A. R., "Memory Management and RMAP VM of 2.6," 14 slides	
	27	KARTHICK, A. R., "Memory Management and RMAP VM of 2.6," 14 slides, January 2004	
	28	KASER, DOMINIK et al., "FingerGlass: Efficient Multiscale Interaction on Multitouch Screens," 2011, pp. 1-10	
	29	KING, SAMUEL T. et al.," Operating Systems Extensions to Support Host Based Virtual Machines," Department of Electrical Engineering and Computer Science, University of Michigan, 2002, pp. 1-14	
	30	KISHAN, "Virtual Memory Exercises," Windows Internals Course, University of Tokyo, July 2003, pp. 1-3	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	31	KLARE, B. et al., "Assessment of H.264 Video Compression on Automated Face Recognition Performance in Surveillance and Mobile Video Scenarios," 8 pages, April 2010	
	32	KLARE, B. et al., "Assessment of H.264 Video Compression on Automated Face Recognition Performance in Surveillance and Mobile Video Scenarios," 8 pages	
	33	KLOSTER, J. F. et al., "On the Feasibility of Memory Sharing," June 2006, pp. 1-132	
	34	KLOSTER, JACOB FABER et al., "Efficient Memory Sharing in the Xen Virtual Machine Monitor," Aalborg University, January 2006, pp. 1-86	
	35	KOTZMANN, THOMAS et al., "Design of the Java Hotspot Client Complier for Java 6," May 2008, pp. 1-32	
	36	KOZUCH, MICHAEL A. et al., "Migration without Virtualization," Intel Research Pittsburg, 2005, pp. 1-5	
	37	KOZUCH, MICHAEL et al., "Internet Suspend/Resume," Carnegie Mellon University and Intel Research Pittsburgh, 2002, pp. 1-7	
	38	KRATZ, SVEN et al., "Extending the Virtual Trackball Metaphor to Rear Touch Input," 2010, PP. 1-4	
	39	KRATZ, SVEN et al., "Gesture Recognition Using Motion Estimation on Mobile Phones," 2007, pp. 1-5	
	40	KRAUSE, MIKE et al., "Implementing PCI I/O Virtualization Standards," April 6, 2011, pp. 1-8	
	41	LAGAR-CAVILLA, ANDRES et al., "Interactive Resource-Intensive Applications Made Easy," 2007 pp. 1-21	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	42	LANMAN, SOUGLAS et al., "Content-Adaptive Parallax Barriers: Optimizing Dual-layer 3D Displays using Low-Rank Light Field Factorization," 2010, pp. 1-10	
	43	LEE, C. J. et al., "DRAM-Aware Last-Level Cache Writeback: Reducing Write-Caused Interference in Memory Systems," April 2010, pp. 1-21	
	44	LI, J., "A Nanosensor Device for Cellphone Integration and Chemical Sensing Network," OHS CELL-ALL Phase II Workshop, July 29, 2010, 22 pages	
	45	LIEBERGELD, STEFFEN, "Efficient Virtualization on ARM Platforms," Techishe Universitat Dresden, May 6, 2009, pp. 1-52	
	46	LIN, M. et al., "Testable Design for Advanced Serial-Link Transceivers," 2007, pp. 1-6	
	47	LIN, X. et al., "A 2.5- to 3.5-Gb/s Adaptive FIR Equalizer With Continuous-Time Wide- Bandwidth Delay Line in 0.25-?m CMOS, IEEE Journal Of Solid-State Circuits, Vol. 41, No. 8, August 2006 pp. 1908-1918	
	48	LIU, C. Y. et al., "Comparison of Signaling and Equalization Schemes in High Speed SerDes (10-25Gbps)," DesignCon 2007, pp. 1-23	
	49	LIU, J. et al., "Equalization in High-Speed Communication Systems," IEEE CIRCUITS AND SYSTEMS MAGAZINE, 2004, pp. 1-14	
	50	LOWELL, DAVIDE. et al., "Devirtualizable Virtual Machines Enabling General, Single-Node, Online Maintenance," Hewlett-Packard Laboratories, Oct. 7, 2004, pp. 1-13	

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Patrick Caldwell/	Date (YYYY-MM-DD)	2018-10-24
Name/Print	Patrick Caldwell	Registration Number	44580

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (03-15)
Approved for use through 07/31/2016. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99**)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

U.S.PATENTS						Remove
Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	8677060	B2	2014-03-18	Chen et al.	
	2	8689064	B1	2014-04-01	Lee et al.	
	3	8692815	B2	2014-04-08	Deslippe et al.	
	4	8698777	B2	2014-04-15	Endo et al.	
	5	8700834	B2	2014-04-15	Horn et al.	
	6	8705239	B1	2014-04-22	Yu et al.	
	7	8707104	B1	2014-04-22	Jean	
	8	8710862	B2	2014-04-29	Ferolito et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	9	8711116	B2	2014-04-29	Papakipos et al.	
	10	8713357	B1	2014-04-29	Jean et al.	
	11	8713379	B2	2014-04-29	Takefman et al.	
	12	8717303	B2	2014-05-06	Ludwig	
	13	8723826	B2	2014-05-13	Chen et al.	
	14	8727557	B2	2014-05-20	Yuan et al.	
	15	8738851	B2	2014-05-27	Kunimatsu et al.	
	16	8738853	B2	2014-05-27	Amer et al.	
	17	8743076	B1	2014-06-03	Ludwig	
	18	8745321	B2	2014-06-03	Rajan et al.	
	19	8745514	B1	2014-06-03	Davidson	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	20	8751732	B2	2014-06-10	Danilak et al.	
	21	8754862	B2	2014-06-17	Zaliva	
	22	8756364	B1	2014-06-17	Bhakta et al.	
	23	8760408	B2	2014-06-24	Heesemans et al.	
	24	8760936	B1	2014-06-24	Rajan et al.	
	25	8773937	B2	2014-07-08	Schakel et al.	
	26	8780089	B2	2014-07-15	Yuan et al.	
	27	8782350	B2	2014-07-15	Lee et al.	
	28	8787060	B2	2014-07-22	Lee	
	29	8816993	B2	2014-08-26	Yuan et al.	
	30	8831687	B1	2014-09-09	Kotab	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	31	8854317	B2	2014-10-07	Homma et al.	
	32	8866785	B2	2014-10-21	Ludwig	
	33	8872798	B2	2014-10-28	Rabu et al.	
	34	8878809	B1	2014-11-04	Kim et al.	
	35	8878810	B2	2014-11-04	Ludwig	
	36	8884913	B2	2014-11-11	Saynac et al.	
	37	8896575	B2	2014-11-25	Goertz et al.	
	38	8913031	B2	2014-12-16	Honda et al.	
	39	8917262	B2	2014-12-23	Liaw et al.	
	40	8947381	B2	2015-02-03	IIYAMA et al.	
	41	8970540	B1	2015-03-03	Hebenstreit et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	42	8976128	B2	2015-03-10	Moore	
	43	8982081	B2	2015-03-17	Li	
	44	8988364	B2	2015-03-24	Lee	
	45	9003591	B2	2015-04-14	Sakashita et al.	
	46	9013414	B2	2015-04-21	Kung et al.	
	47	9018030	B2	2015-04-28	Li et al.	
	48	9030427	B2	2015-05-12	Yasumatsu	
	49	9035897	B2	2015-05-19	Kinoshita	
	50	9041679	B2	2015-05-26	Reisman et al.	
	51	9045670	B2	2015-06-02	SHITARA et al.	
	52	9046999	B1	2015-06-02	Teller et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	53	9063597	B2	2015-06-23	Liaw et al.	
	54	9069204	B2	2015-06-30	ZHOU et al.	
	55	9069416	B2	2015-06-30	Garrett et al.	
	56	9069460	B2	2015-06-30	Moore	
	57	9092129	B2	2015-07-28	Abdo et al.	
	58	9098193	B2	2015-08-04	Stoneham et al.	
	59	9116609	B2	2015-08-25	Bocirnea	
	60	9125630	B2	2015-09-08	Menzel	
	61	9130651	B2	2015-09-08	Tabe	
	62	9134880	B2	2015-09-15	Johnson et al.	
	63	9152258	B2	2015-10-06	Behdasht et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	64	9152288	B2	2015-10-06	Dietz	
	65	RE41716	E1	2010-09-21	Fernando et al.	

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2]	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1	LYNCH, JAMES P., "Nokia 6100 LCD Display Driver," 2010, pp. 1-55	
	2	MACKENZIE, I. SCOTI, et al., "The Tactile Touchpad," Conference on Human Factors in Computing Systems, 1997, pp. 1-5	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	3	MARKATOS, E., "On Using Network RAM as a non-volatile Buffer," August 1998, pp. 1-15	
	4	MARMOR, MICHAEL F., et al., "Visual Insignificance of the Foveal Pit," 2008, pp.1-7	
	5	MAXIM, "Designing a Simple, Small, Wide-band and Low-Power Equalizer for FR4 Copper Links (Featuring the MAX3785, IGbps to 6.4Gbps Equalizer)," DesignCon 2003, HFTA-06.0, 2003, pp. 1-14	
	6	Maxim, "IGbps to 12.5Gbps; Passive Equalizer for Backplanes and Cables," MAX3787, 19-0406, Rev. 1, December 2005, pp. 1-15	
	7	MCCALLUM, DAVID C. et al., "ARC-Pad: Absolute+Relative Cursor Positioning for Large Displays with a Mobile Touchscreen," University of Manitoba, Oct. 7, 2009, 1-4	
	8	MCCAMMON, ROB, "Android Solutions," Open Kernel Labs, 2009, slides 1-11	
	9	MCCAMMON, ROB, "Streamlining Android Migration with Virtualization," ARM and Android, July 19, 2012, pp. 1-4	
	10	MCCAMMON, ROB, "Using Virtualization to Create Mass-Market Smartphones," Technology in Depth, 2011, pp. 1-4	
	11	MCGILL, KATHLEEN et al., "Process Migration for Resilient Applications," Dartmouth College, 2011, pp. 1-14	
	12	Memory Management 55 slides	
	13	Memory Management 55 slides, CSE 451: Operating Systems Winter 2007, University of Washington, 1/28/2007	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	14	Methodology For a DDR333/400 Data Interface," pp. 1-6, Jun. 27, 2002	
	15	Micron Technology Announces SyncflashTM Memory, A New Flash Technology, 1999, pp. 1	
	16	MICRON, "NANO Flash Memory," 16Gb, 32Gb, 64Gb, 128Gb Asynchronous/Synchronous NANO Features, 2009, pp. 1-158	
	17	MIJAT, ROBERTO et al., "Virtualization is Coming to a Platform Near You," ARM, 2011, pp. 1-12	
	18	MOLNOS, ANCA et al., "Composable Processor Virtualization for Embedded Systems," 2010, pp. 1-10	
	19	MORRE, RYAN W. et al., "Addressing the Challenges of DBT for the ARM Architecture," University of Pittsburgh. 2009, pp. 1-10	
	20	MUTHITACHAROEN, ATHICHA et al., "A Low-bandwidth Network File System," Laboratory for Computer Science, MIT, Department of Computer Science, NYU, Oct. 21, 2001, pp. 1-14	
	21	NATIONAL Semiconductor, "EQ50F100- 2.5 to 6.125 Gbps fixed equalizer; For 10 Gigabit Ethernet, storage and telecom backplanes," 2004, pp. 1-2	
	22	ON, CALVIN, "ANA: A Method for ARM-on-ARM Execution," September 2007, MIT, pp.1-62	
	23	ONOUE, KOICHI et al., "A Virtual Machine Migration System Based on a SPU Emulator," Virtualization Technology in Distributed Computing, Nov. 17, 2006, pp. 1-8	
	24	OPDENACKER, M., "Linux USB drivers," September 15, 2009, pages 1-95	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	25	OSMAN, STEVEN et al., "The Design and Implementation of Zap: A System for Migrating Computing Environments," OSOi, December 2002, pp. 1-16	
	26	OUSTERHOUT, J. et al., "The Case for RAMClouds: Scalable High-Performance Storage Entirely in DRAM," SIGOPS Operating Systems Review, Vol. 43, No. 4, December 2009, pp. 92-105	
	27	PAI, ANKUR et al., "Customizable Multimedia Devices in Virtual Environments," Georgia Institute ofTechnology, 2008, pp. 1-18	
	28	PARK, H.-J., "Signal Integrity for High Speed Circuit Design," Tutorial 9 (ISSCC 2006), pp. 1-91	
	29	PARK, MIRI et al., "Real-time Operating System Virtualization for Xen-Arm," 2009, pp. 1-2	
	30	PASRICHA, SUDEEP et al., "Reducing Backlight Power Consumption for Streaming Video Application on Mobile Hand held Devices," University of California, November 2, 2003, pp. 1-7	
	31	PATTERSON, ROBERT, "Human Factors of Stereoscopic Displays," Washington State University, July 5, 2009, pp. 1-14	
	32	PCI-SIG et al., "Single Root 1/0 Virtualization and Sharing Specification Revision 1.0," September 11, 2007, pp. 1-84	
	33	PELZL, JAN et al., "Virtualization Technologies for Cars, Solutions to increase satety and security of vehicular ECUs," 2008, pp. 1-10	
	34	PERI NG, T., "Intel and Personal Wellness," 22 pages, August 2009	
	35	PERING, T. et al., "The PSI Board: Realizing a Phone-Centric Body Sensor Network," 4th International Workshop on Wearable and Implantable Body Sensor Networks, March 2007, pages 1-6	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	36	PERING, T., "Intel and Personal Wellness," 22 pages	
	37	PETTY, CHRIS, "Multi-Root Overview," PCI-SIG, PCI Express, slides 1-31	
	38	PHADKE, S. et al., "MLP Aware Heterogeneous Memory System," 2011 EDAA, pp. 1-6	
	39	POTTER, SHAYA, "Virtualization Mechanisms for Mobility, Security and system Administration," Columbia University, 2010, pp. 1-241	
	40	PROBST, MARK et al., "Register Liveness Analysis for Optimizing Dynamic Binary Translation," 2002, pp. 1-10	
	41	RAMESH, G., "Design of De-Emphasis and Equalization Circuits for Gigabit Serial Interconnects," An Applications Workshop for High-Performance Design, September 2005, pp. 1-28	
	42	RED HAT, "Virtualization Guide: Red Hat Virtualization," Red Hat Inc., 2007, pp. 1-104	
	43	REFAI, WAIL MOHSEN, "Office Communication," US App No 12/233,386, May 27, 2011	
	44	RIECKE, BERNHARD E. et al., "Selected Technical and Perceptual Aspects of Virtual reality Displays," Technical Report no. 154, October 2006, pp. 1-17	
	45	ROSS, ARUN et al., "A Calibration Model for Fingerprint Sensor Interoperability," SPIE Conference on Biometric Technology for Human Identification, April 2006, pp. 1-12	
	46	RUDOLPH, LARRY, "A Virtualization Infrastructure that Supports Pervasive Computing," VMwar, IEEE CS, 2009, pp.1-6	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	47	RYU, W. H. et al., "High-Frequency Simultaneous Switching Output Noise (SSO) Simulation	
	48	RYU, W. H. et al., "High-Frequency Simultaneous Switching Output Noise (SSO) Simulation Methodology For a DDR333/400 Data Interface," pp. 1-6	
	49	SAHAMI, ALI REZA et al., "Rich Tactile Output on Mobile Devices," November 2008, pp. 1-12	
	50	SANGORRIN, DANIEL et al., "Dual operation System Architecture for Real-Time Embedded Systems," July 6, 2010, slides 1-24	

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Patrick Caldwell/	Date (YYYY-MM-DD)	2018-10-24
Name/Print	Patrick Caldwell	Registration Number	44580

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (03-15)
Approved for use through 07/31/2016. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	
Filing Date	
First Named Inventor	Michael S. Smith
Art Unit	
Examiner Name	
Attorney Docket Number	SMITH070AG

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	1	SATYANARAYANAN, M. et al., "Towards seamless mobility on pervasive hardward," March 1, 2005, pp. 1-33	
	2	SATYANARAYANAN, MAHADEV et al., "Bringing the Cloud Down to Earth: Transient PCs Everywhere," Carnegie Mellon University, September 2010, pp. 1-11	
	3	SATYANARAYANAN, MAHADEV et al.," Pervasive Personal Computing in an Internet Suspend/Resume System," IEEE Computer Society, March 2007, pp. 1-10	
	4	SCHRADER, BERNHARD, "Multi Root 1/0 Virtualization," FCS TEC-Team, Fujitsu Siemens, November 2, 2008, slides 1-9	
	5	SCHRADER, J. H. R., "Wireline Equalization using Pulse-Width Modulation," 2007, pp. 1-152	
	6	SCHRADER, J. H. R., "Wireline Equalization using Pulse-Width Modulation," IEEE 2006 Custom Intergrated Circuits Conference (CICC), 2006, pp. 591-598	
	7	SCHRADER, J.H.R et al., "CMOS Transmitter using Pulse-Width Modulation Pre-Emphasis achieving 33dB Loss Compensation at 5-Gb/s," 2005 Symposium on VLSI Circuits Digest of Technical Papers, pp. 388-391	
	8	SCHRADER, J.H.R et al., "Pulse-Width Modulation Pre-Emphasis Applied in a Wireline Transmitter, Achieving 33 dB Loss Compensation at 5-Gb/s in 0.13- ?m CMOS, IEEE Journal Of Solid-State Circuits, Vol. 41, No. 4, April 2006, pp. 990-999	
	9	SEMTECH, "Advanced Communications and Sensing," 25 July, 2011, pp. 1-61	
	10	SEO, SANGWON, "Research on System Virtualization using Xen Hypervisor for ARM based secure mobile phones," Seminar Security in Telecommunications, January 14, 2010, pp. 1-11	
	11	SHAFER, M. et al., "Connector and Chip Vendors Unite to Produce a High-Performance 10 Gb/s NRZ-Capable Serial Backplane," DesignCon 2003; High-Performance System Design Conference, 2003, pp. 1-19	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	12	SHAO, J. et al., "The Bit-reversal SDRAM Address Mapping," 2005, pp. 1-8	
	13	SIDIROPOULOS, S., "HIGH PERFORMANCE INTER-CHIP SIGNALLING," Technical Report No. CSL-TR-98-760, April 1998, pp. 1-139	
	14	SILVIA, "Adaptive HTTP Streaming for open Codecs," Oct. 9, 2010, pp 1-6	
	15	SMALDONE, STEPHEN, "Leveraging Smart Phones to Reduce Mobility Footprints," 2009	
	16	SMITH, J. E. et al., "Achieving High Performance via Co-Designed Virtual Machines," Oct. 1998, pp.1-6	
	17	SOUSA, JOAO PEDRO et al., "Aura: An Architectural Framework for User Mobility in Ubiquitous Computing Environments," Carnegie Mellon University Research Showcase, August 1, 2002, pp. 1-15	
	18	SOUSA, JOAO PEDRO et al., "The Aura Software Architecture: an Infrastructure for Ubiquitous Computing," Carnegie Mellon University Research Showcase	
	19	SOUSA, JOAO PEDRO, et al., "The Aura software Architecture: an Infrastructure for Ubiquitous Computing," Carnegie Mellon University Research Showcase, August 1, 2003, pp. 1-48	
	20	STACHHOUSE, B. et al., "A 65 nm 2-Billion Transistor Quad-Core Itanium Processor," IEEE Journal Of Solid-State Circuits, Vol. 44, No. 1, January 2009, pp. 18-31	
	21	STOCKHAMMER, THOMAS, "dynamic Adaptive Streaming over HTTP-Design Principles and Standards," Qualcomm Incorporated, February 23, 2011, pp. 1-3	
	22	STOJANOVIC, V. et al., "Adaptive Equalization and Data Recovery in a Dual-Mode (PAM2/4) Serial Link Transceiver," 2004, pp. 1-4	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	23	STOJANOVIC, V. et al., "Modeling and Analysis of High-Speed Links," pp. 1-49	
	24	STOJANOVIC, V. et al., "Modeling and Analysis of High-Speed Links," pp. 1-49, March 2003	
	25	STOJANOVIC, V., "CHANNEL-LIMITED HIGH-SPEED LINKS: MODELING, ANALYSIS AND DESIGN," Dissertation, September 2004, pp. 1-180	
	26	SUCHITHA V, "Simulation methodology using SigXp 15.1 (SPB) for enabling DDR2-533 memory interface based on Intel® 945GMS design," Session Number: 6.10, Intel, pp. 1-36	
	27	SUCHITHA V, "Simulation methodology using SigXp 15.1 (SPB) for enabling DDR2-533 memory interface based on Intel® 945GMS design," Session Number: 6.10, Intel, pp. 1-36, Sept 2006	
	28	SUD, SHIVANI et al., "Dynamic Migration of Computation through Virtualization of the Mobile Platform," Intel Future Technology Research, April 1, 2012, pp. 1-10	
	29	SUD, SHIVANI, et al., "Dynamic Migration of Computation through virtualization of the mobile platform," Intel Labs, Oct. 26, 2009, slides 1-16	
	30	SUDAN, K. et al., "Micro-Pages: Increasing DRAM Efficiency with Locality-Aware Data Placement," ASPLOS'10, March 13-17, 2010, pp. 1-12	
	31	SUN, R. et al., "A Low-Power 20-Gb/s Continuous-Time Adaptive Passive Equalizer," Thesis, 2005, pp. 1-71	
	32	TAKEFMAN, M. L. et al., U.S. Provisional Application No. 61/457,233, filed February 8, 2011	
	33	Texas Instruments, "DC TO 4-GBPS DUAL 1:2 MULTIPLEXER/REPEATER/EQUALIZER," SN65LVCP40, SLLS623D-SEPTEMBER 2004-REVISED FEBRUARY 2006, pp. 1-22	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	34	THE INTERNATIONAL TECHNOLOGY ROADMAP FOR SEMICONDUCTORS, Interconnect, 2009, pp. 1-89	
	35	TIRUVURU, R. et al., "Transmission Line based FIR Structures for High Speed Adaptive Equalization," ISCAS 2006, IEEE, 2006, pp. 1051-1054	
	36	TOMS, T. R., QUALCOMM, CDMA Technologies,"An Assessment of 3D Interconnect, Equipment Readiness and ITRS 3D," July 16, 2008, pp. 1-23	
	37	TURUDIC, A. et al., "Pre-Emphasis and Equalization Parameter Optimization with Fast, Worst- Case/Multibillion-Bit Verification," DesignCon 2007, January 2007, pp. 1-28	
	38	Understanding the Linux Virtual Memory Manager, Chapter 3: Page Table Management, pp. 33-52	
	39	Understanding the Linux Virtual Memory Manager, Chapter 3: Page Table Management, pp. 33-52, Mel Gorman, April 2004	
	40	USER'S GUIDE, "Motorola Backflip with Motoblur," 2010, pp. 1-67	
	41	VAN SCHAIK, CARL et al., "High-Performance Microkernels and Virtualization on ARM and Segmented Architectures," 2007, pp. 1-11	
	42	VARANASI, PRASHANT, "Implementing Hardware-Supported Virtualization in OKL4 on ARM," November 30, 2010, pp. 1-88	
	43	VMware, "Understanding Full virtualization, Paravirutalization, and Hardware Assist," September 11, 2007, pp. 1-17	
	44	VRAZEL, M. G. et al., "Overcoming Signal Integrity Issues with Wideband Crosstalk Cancellation Technology," DesignCon 2006, pp. 1-25	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	45	WANG, B. et al., "6b9b Encoding Scheme for Improving Single-Ended Interface Bandwidth and Reducing Power Consumption without Pin Count Increase," IEEE, 2007, pp. 25-28	
	46	WANG, Z. et al., "Exploiting Smart-Phone USB Connectivity For Fun And Profit," ACSAC '10, December 6-10, 2010, 10 pages	
	47	WELTE, H., "Anatomy of contemporary GSM cellphone hardware," April 16, 2010, pages 1-11	
	48	WIJERING, JEROEN, "What is Video Streaming?," LongTail Community Blog, April 27, 2011, pp. 1-6	
	49	WILTON, S. J. E., "Implementing Logic in FPGA Memory Arrays: Heterogeneous Memory Architectures," 2002, pp. 1-6	
	50	WINTEK, "Specifications for LCD Module," 2010, pp 1-28	

If you wish to add additional non-patent literature document citation information please click the Add button [Add]

EXAMINER SIGNATURE

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Patrick Caldwell/	Date (YYYY-MM-DD)	2018-10-24
Name/Print	Patrick Caldwell	Registration Number	44580

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (03-15)
Approved for use through 07/31/2016. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99**)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	8952987		2015-02-10	Momeyer et al.	
	2	9092057		2015-07-28	Varela et al.	
	3	9116569		2015-08-25	Stacy et al.	

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20090256807	A1	2009-10-15	Nurmi	
	2	20120105358	A1	2012-05-03	Momeyer et al.	
	3	20150097791	A1	2015-04-09	Lisseman et al.	

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1		

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Patrick Caldwell/	Date (YYYY-MM-DD)	2018-10-24
Name/Print	Patrick Caldwell	Registration Number	44580

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Doc Code: TRACK1.REQ
Document Description: TrackOne Request

PTO/AIA/424 (04-14)

CERTIFICATION AND REQUEST FOR PRIORITIZED EXAMINATION UNDER 37 CFR 1.102(e) (Page 1 of 1)

First Named Inventor:	Michael S. Smith	Nonprovisional Application Number (if known):	
Title of Invention:	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT		

APPLICANT HEREBY CERTIFIES THE FOLLOWING AND REQUESTS PRIORITIZED EXAMINATION FOR THE ABOVE-IDENTIFIED APPLICATION.

1. The processing fee set forth in 37 CFR 1.17(i)(1) and the prioritized examination fee set forth in 37 CFR 1.17(c) have been filed with the request. The publication fee requirement is met because that fee, set forth in 37 CFR 1.18(d), is currently $0. The basic filing fee, search fee, and examination fee are filed with the request or have been already been paid. I understand that any required excess claims fees or application size fee must be paid for the application.

2. I understand that the application may not contain, or be amended to contain, more than four independent claims, more than thirty total claims, or any multiple dependent claims, and that any request for an extension of time will cause an outstanding Track I request to be dismissed.

3. The applicable box is checked below:

I. ☑ **Original Application (Track One) - Prioritized Examination under § 1.102(e)(1)**

i. (a) The application is an original nonprovisional utility application filed under 35 U.S.C. 111(a). This certification and request is being filed with the utility application via EFS-Web.

---OR---

(b) The application is an original nonprovisional plant application filed under 35 U.S.C. 111(a). This certification and request is being filed with the plant application in paper.

ii. An executed inventor's oath or declaration under 37 CFR 1.63 or 37 CFR 1.64 for each inventor, **or** the application data sheet meeting the conditions specified in 37 CFR 1.53(f)(3)(i) is filed with the application.

II. ☐ **Request for Continued Examination - Prioritized Examination under § 1.102(e)(2)**

i. A request for continued examination has been filed with, or prior to, this form.
ii. If the application is a utility application, this certification and request is being filed via EFS-Web.
iii. The application is an original nonprovisional utility application filed under 35 U.S.C. 111(a), or is a national stage entry under 35 U.S.C. 371.
iv. This certification and request is being filed prior to the mailing of a first Office action responsive to the request for continued examination.
v. No prior request for continued examination has been granted prioritized examination status under 37 CFR 1.102(e)(2).

Signature /Patrick Caldwell/	Date 24 Oct 2018
Name (Print/Typed) Patrick Caldwell	Practitioner Registration Number 44580

Note: *This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. Submit multiple forms if more than one signature is required.**

☑ *Total of 1 forms are submitted.

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Patent Application Fee Transmittal

Application Number:	
Filing Date:	
Title of Invention:	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT
First Named Inventor/Applicant Name:	Michael S Smith
Filer:	Patrick Edgar Caldwell
Attorney Docket Number:	SMITH070AG

Filed as Small Entity

Filing Fees for Track I Prioritized Examination - Nonprovisional Application under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
UTILITY FILING FEE (ELECTRONIC FILING)	4011	1	75	75
UTILITY SEARCH FEE	2111	1	330	330
UTILITY EXAMINATION FEE	2311	1	380	380
REQUEST FOR PRIORITIZED EXAMINATION	2817	1	2000	2000
Pages:				
UTILITY APPL SIZE FEE PER 50 SHEETS >100	2081	1	200	200
Claims:				
Miscellaneous-Filing:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
PROCESSING FEE, EXCEPT PROV. APPLS.	2830	1	70	70
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
		Total in USD ($)		**3055**

Electronic Acknowledgement Receipt	
EFS ID:	34108153
Application Number:	16169961
International Application Number:	
Confirmation Number:	7650
Title of Invention:	GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT
First Named Inventor/Applicant Name:	Michael S Smith
Customer Number:	92045
Filer:	Patrick Edgar Caldwell
Filer Authorized By:	
Attorney Docket Number:	SMITH070AG
Receipt Date:	24-OCT-2018
Filing Date:	
Time Stamp:	20:47:20
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$3055
RAM confirmation Number	102518INTEFSW20480400
Deposit Account	
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Power of Attorney	SMITH070_POA_vF_24-Oct-2018.pdf	76487 49188a07efaec9a031adc1a14e5bbe6e6329be6c	no	1
Warnings:					
Information:					
2	Application Data Sheet	SMITH070AG_ADS_vF_24-Oct-2018.pdf	1256086 1cf218a0c312a2ecece043b99c08e4fa32ac20a	no	9
Warnings:					
Information:					
3		SMITH070AG_Application_vF_24-Oct-2018.pdf	712080 d4089f0cadc19dd69ea9ec4b0dbcab5986e67289	yes	131

Multipart Description/PDF files in .zip description

Document Description	Start	End
Abstract	131	131
Claims	127	130
Specification	1	126

Warnings:					
Information:					
4	Oath or Declaration filed	SMITH070AG_Declaration_vF_24-Oct-2018.pdf	66462 f292b7c6a12ad450b4a84dac561096f02f697c19	no	1
Warnings:					
Information:					
5	Drawings-only black and white line drawings	SMITH070AG_Drawings_vF_24-Oct-2018.pdf	2579875 2e174338b6c5af25771a8e5c9c52e73fbb2bac29	no	24

Warnings:					
Information:					
6	Information Disclosure Statement (IDS) Form (SB08)	SMITH070AG_IDS_20171124__1_OF_6_vF.pdf	1062355 121c1eb559a3aaefc40ac22c89b800c175a307d6	no	36
Warnings:					
Information:					
7	Information Disclosure Statement (IDS) Form (SB08)	SMITH070AG_IDS_20171124__2_OF_6_vF.pdf	1062533 62c7c3398de7951c9bfb78d5e8f99137bd1eace8	no	35
Warnings:					
Information:					
8	Information Disclosure Statement (IDS) Form (SB08)	SMITH070AG_IDS_20171124__3_OF_6_vF.pdf	1062435 712851dda3a69a0cd6a309680e0da0210bee3e9b	no	36
Warnings:					
Information:					
9	Information Disclosure Statement (IDS) Form (SB08)	SMITH070AG_IDS_20171124__4_OF_6_vF.pdf	1058155 3e02fe1d649d3d0990d1811888ceee09e05d0f66	no	14
Warnings:					
Information:					
10	Information Disclosure Statement (IDS) Form (SB08)	SMITH070AG_IDS_20171124__5_OF_6_vF.pdf	1056960 0a11c6f64ed0fd681b73f621a5e99d2d37adad28	no	8
Warnings:					
Information:					
A U.S. Patent Number Citation or a U.S. Publication Number Citation is required in the Information Disclosure Statement (IDS) form for autoloading of data into USPTO systems. You may remove the form to add the required data in order to correct the Informational Message if you are citing U.S. References. If you chose not to include U.S. References, the image of the form will be processed and be made available within the Image File Wrapper (IFW) system. However, no data will be extracted from this form. Any additional data such as Foreign Patent Documents or Non Patent Literature will be manually reviewed and keyed into USPTO systems.					
11	Information Disclosure Statement (IDS) Form (SB08)	SMITH070AG_IDS_20171124__6_OF_6_vF.pdf	1054419 372929041cee65a1f2f39476eaf22b35f93a607%	no	5
Warnings:					
Information:					
A U.S. Patent Number Citation or a U.S. Publication Number Citation is required in the Information Disclosure Statement (IDS) form for autoloading of data into USPTO systems. You may remove the form to add the required data in order to correct the Informational Message if you are citing U.S. References. If you chose not to include U.S. References, the image of the form will be processed and be made available					

within the Image File Wrapper (IFW) system. However, no data will be extracted from this form. Any additional data such as Foreign Patent Documents or Non Patent Literature will be manually reviewed and keyed into USPTO systems.

12	Information Disclosure Statement (IDS) Form (SB08)	SMITH070AG_IDSa_112417_vF.pdf	1034618 52cfef0c52d7027ea35a2b628862ad980f57c3f2	no	4
Warnings:					
Information:					
13	TrackOne Request	SMITH070AG_ReqForPrioritizedExam_vF_24-Oct-2018.pdf	134415 adf7c02c79c3c1aec7efe7d662ef90a2bbb938c1	no	2
Warnings:					
Information:					
14	Fee Worksheet (SB06)	fee-info.pdf	39959 e3558a7e515598 1e0b970a4c4d54fac82ee7a671	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	12256839		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (03-15)
Approved for use through 07/31/2016. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	
Filing Date	
First Named Inventor	Michael S. Smith
Art Unit	
Examiner Name	
Attorney Docket Number	SMITH070AG

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	1	WITI, K. et al., "Test & Simulation Results in Support mof SAS-2," Vitesse, 17 slides	
	2	WITT, K. et al., "Test & Simulation Results in Support of SAS-2," Vitesse, 17 slides, January 2006	
	3	WOLBACK, ADAM et al., "Transient customization of Mobile Computing Infrastructure," Carnegie Mellon University, April 20, 2008, pp. 1-5	
	4	WOLF, CHRIS, "Let's Get Virtual: A Look at Today's Server Virtualization Architectures," Burton Group Data center Strategies, May 14, 2007, pp 1-42	
	5	XIAO, FENG et al., "Mobile Imaging: The Big Challenge of the Small Pixel," SPIE-IS& T Vol. 7250, 2009, pp.1-9	
	6	XU, FAN et al., "A Dynamic Binary Translation Framework Based on Page Fault Mechanism in Linux Kernel," IEEE International Conference on Computer and Information Technology, 2010, p. 1-6	
	7	YE, D. et al., "Prototyping a Hybrid Main Memory Using a Virtual Machine Monitor," 2008, pp. 1-8	
	8	YE, D. et al., "Prototyping a Hybrid Main Memory Using a Virtual Machine Monitor," October 2008, 15 slides	
	9	YUEN, R. et al., "A 5Gb/s Transmitter with Reflection Cancellation for Backplane Transceivers," pp. 1-4	
	10	YUEN, R. et al., "A 5Gb/s Transmitter with Reflection Cancellation for Backplane Transceivers," pp. 1-4, Sept. 2006	
	11	ZCTOAK, CODEN, "Special Topic: Mobile Cloud Computing and Applications," ZTE Communications, vol. 9, March 2011, pp. 1-70,	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

	12	ZHOU, HON BO et al., "Receiver Makes Right Data Conversion in PVM," Oak Ridge National Laboratory, 1995 pp. 1-8
	13	ZWICKER, MATIHIAS et al., "Antialiasing for Automultiscopic 3D displays," 2006, pp 1

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Michael S. Smith
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SMITH070AG

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Patrick Caldwell/	Date (YYYY-MM-DD)	2018-10-24
Name/Print	Patrick Caldwell	Registration Number	44580

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.