

APPLE INC. (Petitioner)  
v.  
SMITH INTERFACE TECHNOLOGIES, LLC (Patent Owner)

PETITIONER'S DEMONSTRATIVES

Case No. IPR2024-01088  
U.S. Patent No. 10,656,758  
Before JAMESON LEE, MIRIAM L. QUINN, and SHARON FENICK  
*Administrative Patent Judges*

APPLE 1100  
Apple v. Smith Interface  
IPR2024-01088

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# Overview: The '758 Patent – The Challenge

US010656758B1

(12) **United States Patent**  
**Smith**

(10) **Patent No.:** US 10,656,758 B1  
(45) **Date of Patent:** May 19, 2020

(54) **GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT**

(71) Applicant: **PATENTSI, LLC**, Wilmington, DE (US)

(72) Inventor: **Michael S Smith**, Palo Alto, CA (US)

(73) Assignee: **PATENTSI, LLC**, Wilmington, DE (US)

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **16/664,780**

(22) Filed: **Oct. 25, 2019**

**Related U.S. Application Data**

(63) Continuation of application No. 16/558,026, filed on Aug. 30, 2019, which is a continuation of application (Continued)

(51) **Int. Cl.**  
**G06F 3/041** (2006.01)  
**G06F 3/0488** (2013.01)  
(Continued)

(52) **U.S. Cl.**  
CPC ..... **G06F 3/0416** (2013.01); **G06F 3/016** (2013.01); **G06F 3/044** (2013.01); **G06F 3/045** (2013.01);  
(Continued)

(58) **Field of Classification Search**  
CPC ..... **G06F 3/04847**; **G06F 3/04817**; **G06F 3/0482**; **G06F 3/04883**  
See application file for complete search history.

(56) **References Cited**  
**U.S. PATENT DOCUMENTS**  
3,358,493 A 12/1967 Erich  
3,524,169 A 8/1970 McAliff et al.  
(Continued)  
**FOREIGN PATENT DOCUMENTS**  
JP 2008033739 A 2/2008  
JP 2011034216 A 2/2011  
(Continued)  
**OTHER PUBLICATIONS**  
US 7,965,578 B2, 06/2011, Bhakta et al. (withdrawn)  
(Continued)  
**Primary Examiner — Antonio Xavier**  
(74) **Attorney, Agent, or Firm —** Patrick E. Caldwell, Esq.; The Caldwell Firm, LLC

(57) **ABSTRACT**  
In one embodiment, an electronic device is provided, comprising: a display; a touch-sensitive surface; 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, on the display, an application launching user interface that includes a plurality of application icons for launching corresponding applications; while displaying the application launching user interface, detecting a first single-finger touch input that includes detecting the first single-finger touch input at a location on the touch-sensitive surface that corresponds to a first application icon of the plurality of application icons, wherein the first application icon is for launching a first application that is associated with one or more corresponding quick actions; and in response to detecting the first single-finger touch input, determining a response to the first single-finger touch input based on evaluating the first single-finger touch input against at least one of a plurality of criteria, including evaluating a duration (Continued)

1000 START

1002 TOUCH EVENT?

1004 DETERMINE TOUCH EVENT ATTRIBUTES

1006 IDENTIFY GESTURE FROM TOUCH EVENT

1008 PERFORM CORRESPONDING OPERATION

- Challenged Claims: **1**, 9, 12, 19-22, 24-32, 35-43, 47, 57-59, **63**, 71, 74, 81-84, 86-94, 97-105, 109, 119-121, and **124**
- Independent Claims 1/63/124 rise and fall together
- Dependent Claims 21-22, 35, 47, 57 argued

| Ground   | Challenged Claims                                                                                                    | Basis for Rejection                                                                      |
|----------|----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| <b>1</b> | <b>1</b> , 9, 12, 19-22, 24-32, 35-43, 47, 57-59, <b>63</b> , 71, 74, 81-84, 86-94, 97-105, 109, 119-121, <b>124</b> | §103—Chaudhri (US 2011/0252372), Martyn (US 2004/0051726), and Griffin (US 2011/0248948) |
| <b>2</b> | <b>1</b> , 9, 12, 19-22, 24-32, 35-43, 47, 57-59 <b>63</b> , 71, 74, 81-84, 86-94, 97-105, 109, 119-121, <b>124</b>  | §103—Chaudhri, Martyn, Griffin, and Os (US 2011/0167382)                                 |

# Overview: The '758 Patent – Claim 1

Pet. 5-6

US010656758B1

(12) **United States Patent**  
**Smith**

(10) **Patent No.:** **US 10,656,758 B1**  
(45) **Date of Patent:** **May 19, 2020**

(54) **GESTURE-EQUIPPED TOUCH SCREEN SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT**

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**G06F 3/0488** (2013.01)  
(Continued)

(52) **U.S. Cl.**  
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(Continued)

(58) **Field of Classification Search**  
CPC ..... **G06F 3/04847**; **G06F 3/04817**; **G06F 3/0482**; **G06F 3/04883**  
See application file for complete search history.

(56) **References Cited**  
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3,358,493 A 12/1967 Enich  
3,534,169 A 8/1970 McAuliffe et al.  
(Continued)  
**FOREIGN PATENT DOCUMENTS**  
JP 2008033739 A 2/2008  
JP 2011094216 A 2/2011  
(Continued)  
**OTHER PUBLICATIONS**  
US 7,965,578 B2, 06/2011, Bhakta et al. (withdrawn)  
(Continued)  
**Primary Examiner** — Antonio Xavier  
(74) **Attorney, Agent, or Firm** — Patrick E. Caldwell, Esq.; The Caldwell Firm, LLC

(57) **ABSTRACT**  
In one embodiment, an electronic device is provided, comprising: a display; a touch-sensitive surface; 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, on the display, an application launching user interface that includes a plurality of application icons for launching corresponding applications; while displaying the application launching user interface, detecting a first single-finger touch input that includes detecting the first single-finger touch input at a location on the touch-sensitive surface that corresponds to a first application icon of the plurality of application icons, wherein the first application icon is for launching a first application that is associated with one or more corresponding quick actions; and in response to detecting the first single-finger touch input, determining a response to the first single-finger touch input based on evaluating the first single-finger touch input against at least one of a plurality of criteria, including evaluating a duration of the first single-finger touch input against at least one of: one or more application-launch criteria, one or more action-option-display criteria, or one or more operation criteria, and further including evaluating a movement of the first single-finger touch input against one or more movement criteria for:

in accordance with a determination that the first single-finger touch input meets the one or more application-launch criteria that is met when the duration of the first single-finger touch input is evaluated to be less than a first time threshold, launching the first application,

in accordance with a determination that the first single-finger touch input meets the one or more action-option-display criteria that is met when the duration of the first single-finger touch input is evaluated to be greater than the first time threshold, displaying one or more action option objects associated with the first application without launching the first application,

in accordance with a determination that the first single-finger touch input meets the one or more operation criteria that is met when the duration of the first single-finger touch input is evaluated to be greater than a second time threshold that is greater than the first time threshold, performing an operation in connection with the first application icon, and

in accordance with a determination that the first single-finger touch input meets the one or more movement criteria, moving the first application icon in a foreground virtual display layer so that the first application icon appears to float above a background virtual display layer.

START

TOUCH EVENT?

NO

YES

DETERMINE TOUCH EVENT ATTRIBUTES

IDENTIFY GESTURE FROM TOUCH EVENT

PERFORM CORRESPONDING OPERATION

What is claimed is:

1. An electronic device, comprising:

a display;

a touch-sensitive surface;

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, on the display, an application launching user interface that includes a plurality of application icons for launching corresponding applications;

while displaying the application launching user interface, detecting a first single-finger touch input that includes detecting the first single-finger touch input at a location on the touch-sensitive surface that corresponds to a first application icon of the plurality of application icons, wherein the first application icon is for launching a first application that is associated with one or more corresponding action options; and

in response to detecting the first single-finger touch input, determining a response to the first single-finger touch input based on evaluating the first single-finger touch input against at least one of a plurality of criteria, including evaluating a duration of the first single-finger touch input against at least one of: one or more application-launch criteria, one or more action-option-display criteria, or one or more operation criteria, and further including evaluating a movement of the first single-finger touch input against one or more movement criteria for:

in accordance with a determination that the first single-finger touch input meets the one or more application-launch criteria that is met when the duration of the first single-finger touch input is evaluated to be less than a first time threshold, launching the first application,

in accordance with a determination that the first single-finger touch input meets the one or more action-option-display criteria that is met when the duration of the first single-finger touch input is evaluated to be greater than the first time threshold, displaying one or more action option objects associated with the first application without launching the first application,

in accordance with a determination that the first single-finger touch input meets the one or more operation criteria that is met when the duration of the first single-finger touch input is evaluated to be greater than a second time threshold that is greater than the first time threshold, performing an operation in connection with the first application icon, and

in accordance with a determination that the first single-finger touch input meets the one or more movement criteria, moving the first application icon in a foreground virtual display layer so that the first application icon appears to float above a background virtual display layer.

**Four Claimed Scenarios**

# Overview: The '758 Patent – Claim 1

Pet. 5-6

## *First Scenario*

in accordance with a determination that the first single-finger touch input meets the one or more application-launch criteria that is met when the duration of the first single-finger touch input is evaluated to be less than a first time threshold, launching the first application,

## *Third Scenario*

in accordance with a determination that the first single-finger touch input meets the one or more operation criteria that is met when the duration of the first single-finger touch input is evaluated to be greater than a second time threshold that is greater than the first time threshold, performing an operation in connection with the first application icon, and

## *Second Scenario*

in accordance with a determination that the first single-finger touch input meets the one or more action-option-display criteria that is met when the duration of the first single-finger touch input is evaluated to be greater than the first time threshold, displaying one or more action option objects associated with the first application without launching the first application,

## *Fourth Scenario*

in accordance with a determination that the first single-finger touch input meets the one or more movement criteria, moving the first application icon in a foreground virtual display layer so that the first application icon appears to float above a background virtual display layer.

# Overview: The '758 Patent – Claim 1

Pet. 5-6

## *First Scenario*

in accordance with a determination that the first single-finger touch input meets the one or more application-launch criteria that is met when the duration of the first single-finger touch input is evaluated to be less than a first time threshold, launching the first application,

***Touch Input < 1<sup>st</sup> Time Threshold,  
Launch Application***

# Overview: The '758 Patent – Claim 1

Pet. 5-6

## *Second Scenario*

in accordance with a determination that the first single-finger touch input meets the one or more action-option-display criteria that is met when the duration of the first single-finger touch input is evaluated to be greater than the first time threshold, displaying one or more action option objects associated with the first application without launching the first application,

***Touch Input > 1<sup>st</sup> Time Threshold,  
Display Action Option Objects Without  
Launching Application***

# Overview: The '758 Patent – Claim 1

Pet. 5-6

## *Third Scenario*

in accordance with a determination that the first single-finger touch input meets the one or more operation criteria that is met when the duration of the first single-finger touch input is evaluated to be greater than a second time threshold that is greater than the first time threshold, performing an operation in connection with the first application icon, and

***Touch Input > 2<sup>nd</sup> Time Threshold,  
Perform Operation in Connection with  
Application Icon***

# Overview: The '758 Patent – Claim 1

Pet. 5-6

## *Fourth Scenario*

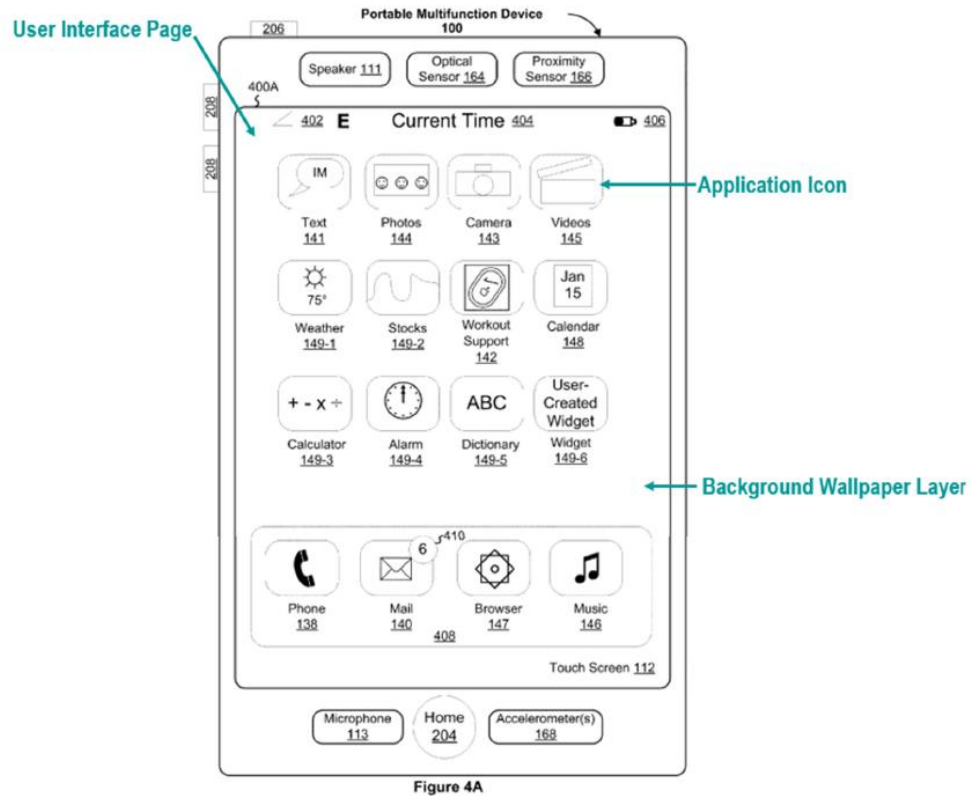
in accordance with a determination that the first single-finger touch input meets the one or more movement criteria, moving the first application icon in a foreground virtual display layer so that the first application icon appears to float above a background virtual display layer.

***Touch Input Meets Movement Criteria,  
Move Application Icon***

# Overview: The Prior Art References

Pet. 8-14

## Chaudhri

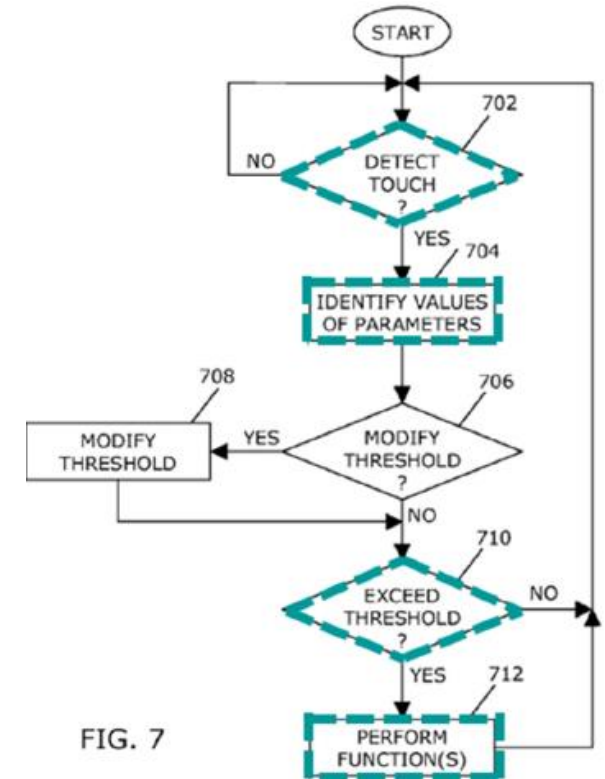


## Martyn



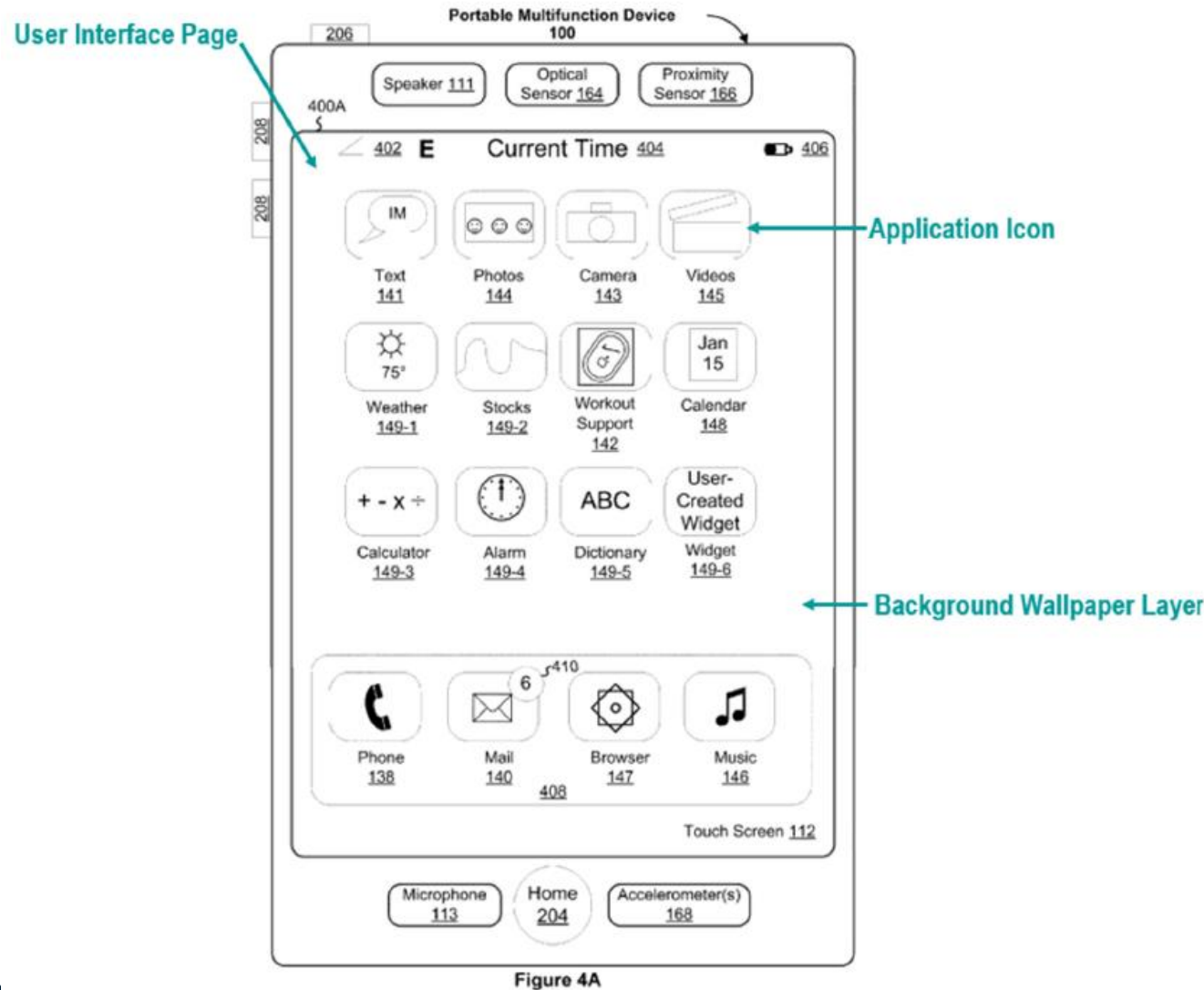
Figure 2

## Griffin



# Overview: Chaudhri

Pet. 8-12



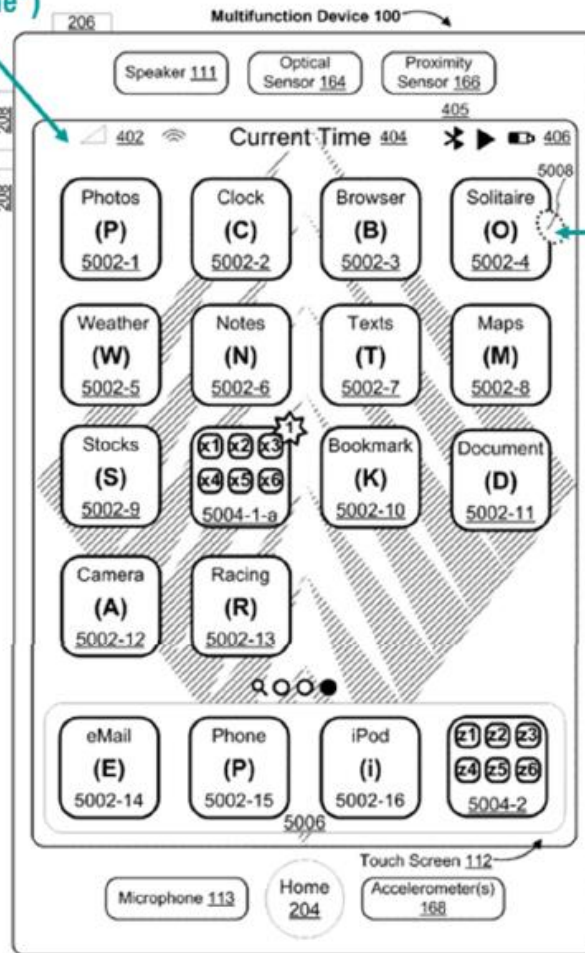
“When the device detects a touch input associated with one of the application icons, it determines a responsive action based on certain gesture characteristics of the touch. EX1004, [0102], [0174], [0216-0217], [0276], [0280], [0302], [0310-0311], Figures 4A, 5A-B, 7A-B; EX1003, ¶55.”

Pet. 8-9

# Overview: Chaudhri

Pet. 8-12

User Interface Page  
(in “normal mode”)



“Tap” to launch application  
or “touch-and-hold” to  
enter reconfiguration mode

“In the ‘normal’ mode of operation for the application menu interface, Chaudhri’s device launches an application when the matching icon is selected with a ‘tap’ gesture (also colloquially called a “short touch”). EX1004, [0101-0102], [0174], [0217], [0276], [0280], [0289], [0302], Figure 5A.”

Pet. 9-10



**DEMONSTRATIVE EXHIBIT – NOT EVIDENCE**

13

# Overview: Chaudhri

Pet. 8-12

“While the interface for the application menu is in the ‘reconfiguration mode,’ Chaudhri’s device recognizes yet another gesture—a drag—as a command to move an application icon. EX1004, [0087], [0101], [0218], [0220], [0328-0331], Figures, 5B-C, 9A-9B, 5KK-5MM.”

Pet. 11-12

User Interface Page  
(in “reconfiguration mode”)

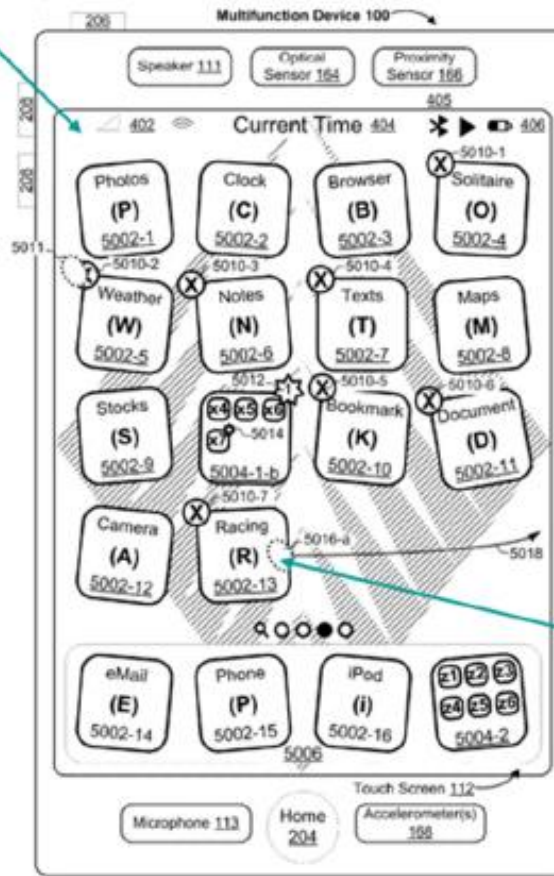


Figure 5B

User Interface Page  
(in “reconfiguration mode”)



Drag to move Application  
Icon

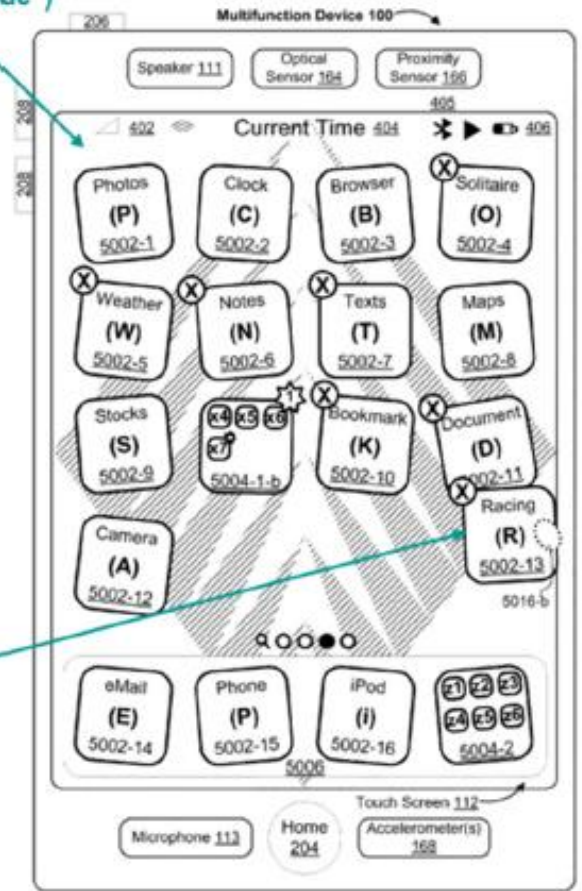
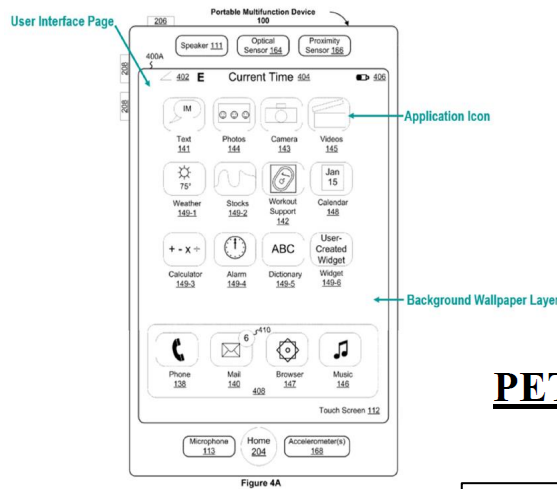


Figure 5C

# Overview: The Prior Art Combination

Pet. 15-22

## Chaudhri



*“launching an application in response to a ‘tap gesture’ at an application icon”*

Pet. 20

Pet. 21

*“transitions from the ‘normal operation mode’ to a ‘reconfiguration mode’ when the user executes a touch-and-hold gesture at the application icon”*

## Martyn



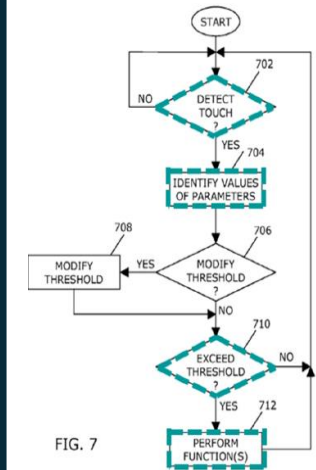
Pet. 21

*“integrating Martyn’s teachings, the device provides the functionality of responding to a touch-and-hold gesture at the application icon by displaying a contextual sub-menu”*

## PETITION FOR INTER PARTES REVIEW OF UNITED STATES PATENT NO. 10,656,758 PURSUANT TO 35 U.S.C. §§ 311–319, 37 C.F.R. § 42

The Chaudhri-Martyn-Griffin Combination represents the predictable result of applying in the context of Chaudhri’s user interface for a touch screen device: [a] Martyn’s teachings about providing a contextual shortcut sub-menu of common application functions in response to a press-and-hold user input; and [b] Griffin’s teachings about evaluating a user’s touch input against predetermined threshold criteria. EX1003, ¶61. From a POSITA’s perspective, integrating the supplemental

## Griffin



*“the POSITA would have looked to incorporate Griffin’s teachings to evaluate a duration parameter of the user’s touch against certain predetermined criteria”*

Pet. 21

Pet. 15

15

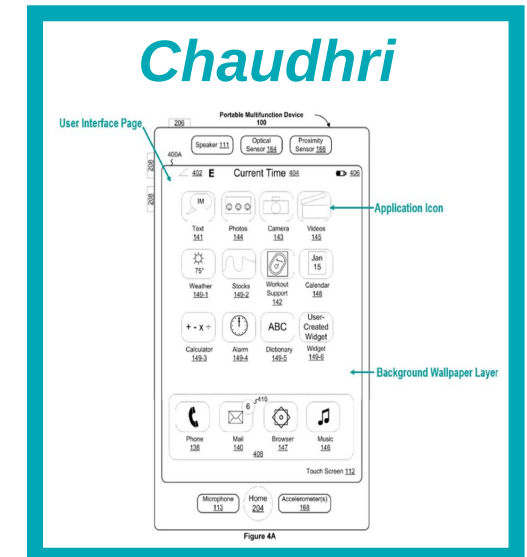
# Overview: The Prior Art Combination

Pet. 15-22

## PETITION FOR *INTER PARTES* REVIEW OF UNITED STATES PATENT NO. 10,656,758 PURSUANT TO 35 U.S.C. §§ 311–319, 37 C.F.R. § 42

¶¶49-53. Next, understanding that Martyn's contextual sub-menu "summary window" is related to selecting and launching the application (i.e., assisting the user with selecting a desired application functionality), the POSITA would have appreciated that this operation should likewise be part of the "normal" mode. EX1003, ¶77 (providing additional technical discussion and reasoning). Accordingly, the POSITA would have known to implement the duration criterion for the corresponding touch-and-hold gesture as being greater than the first time threshold of the tap, while also less than a second time threshold beyond which the interface transitions out of the "normal" mode and into the "reconfiguration" mode.

EX1003, ¶77.

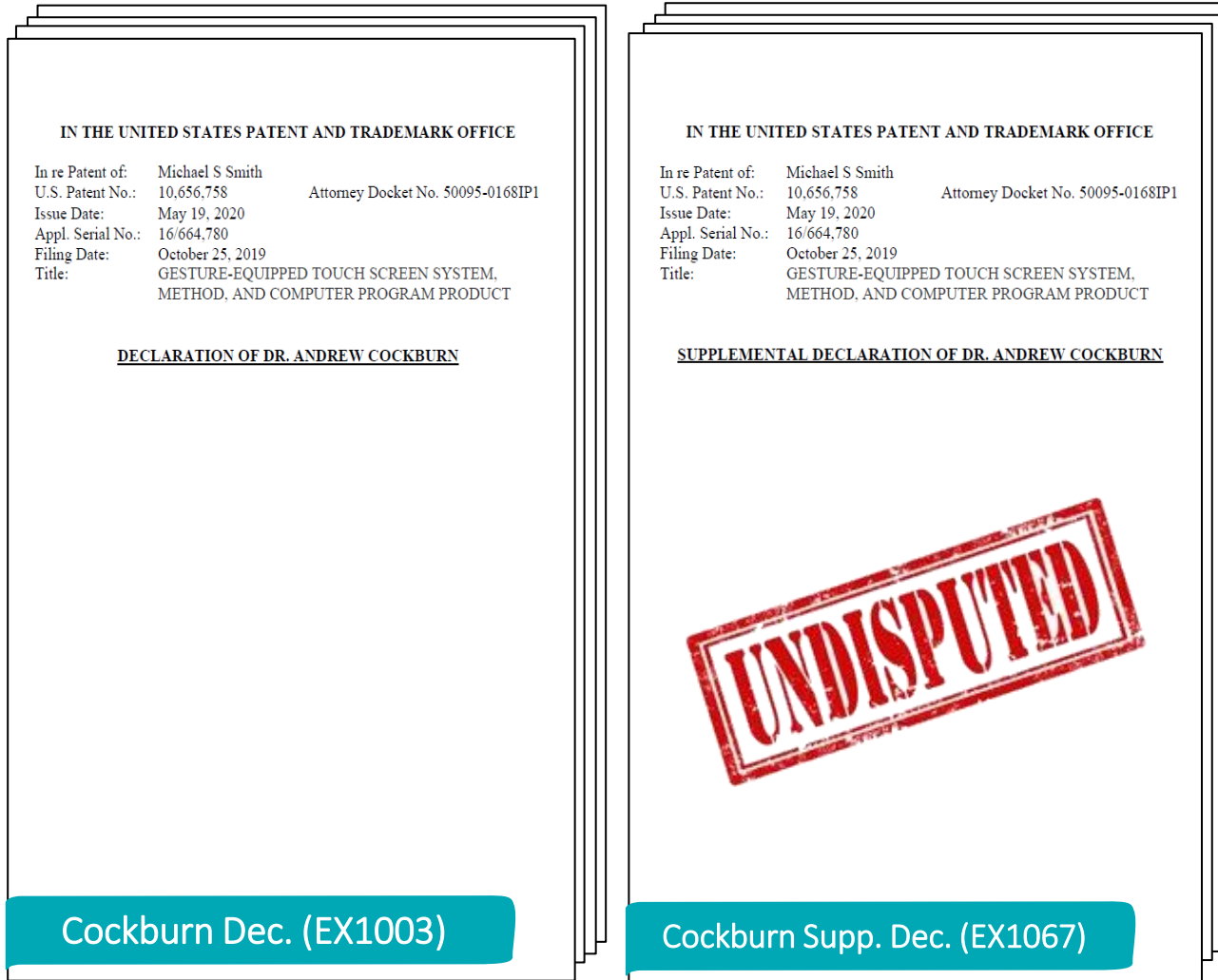


Pet. 22

Pet. 15

16

# Overview: Petitioner's Expert—Dr. Cockburn



- Reflects over 30 years of experience, including gesture-based techniques for mobile device GUIs
- Provides detailed descriptions of a POSITA's background knowledge and the state of the art (EX1003, ¶¶41-53)
- Buttressed by 30 corroborating exhibits

## The Fourth Claimed Scenario

The Petition's Grounds Render Obvious Detecting a Touch Input on an Icon and Moving the Icon (Elements [1.g]/[1.l], [63.c]/[63.h], [124.b]/[124.g])

# 4<sup>th</sup> Scenario [1.g]/[1.I] – The First Application Icon

## Element [1.g]

while displaying the application launching user interface, detecting a first single-finger touch input that includes detecting the first single-finger touch input at a location on the touch-sensitive surface that corresponds to a first application icon of the plurality of application icons,

## Element [1.I]

in accordance with a determination that the first single-finger touch input meets the one or more movement criteria, moving the first application icon in a foreground virtual display layer so that the first application icon appears to float above a background virtual display layer.

# 4<sup>th</sup> Scenario [1.g]/[1.I] – Chaudhri Renders Obvious

Pet. 25-27, 35-38; see *also* 8-12  
Repl 6-11

## *The Petition on [1.g]*

### PETITION FOR *INTER PARTES* REVIEW OF UNITED STATES PATENT NO. 10,656,758 PURSUANT TO 35 U.S.C. §§ 311–319, 37 C.F.R. § 42

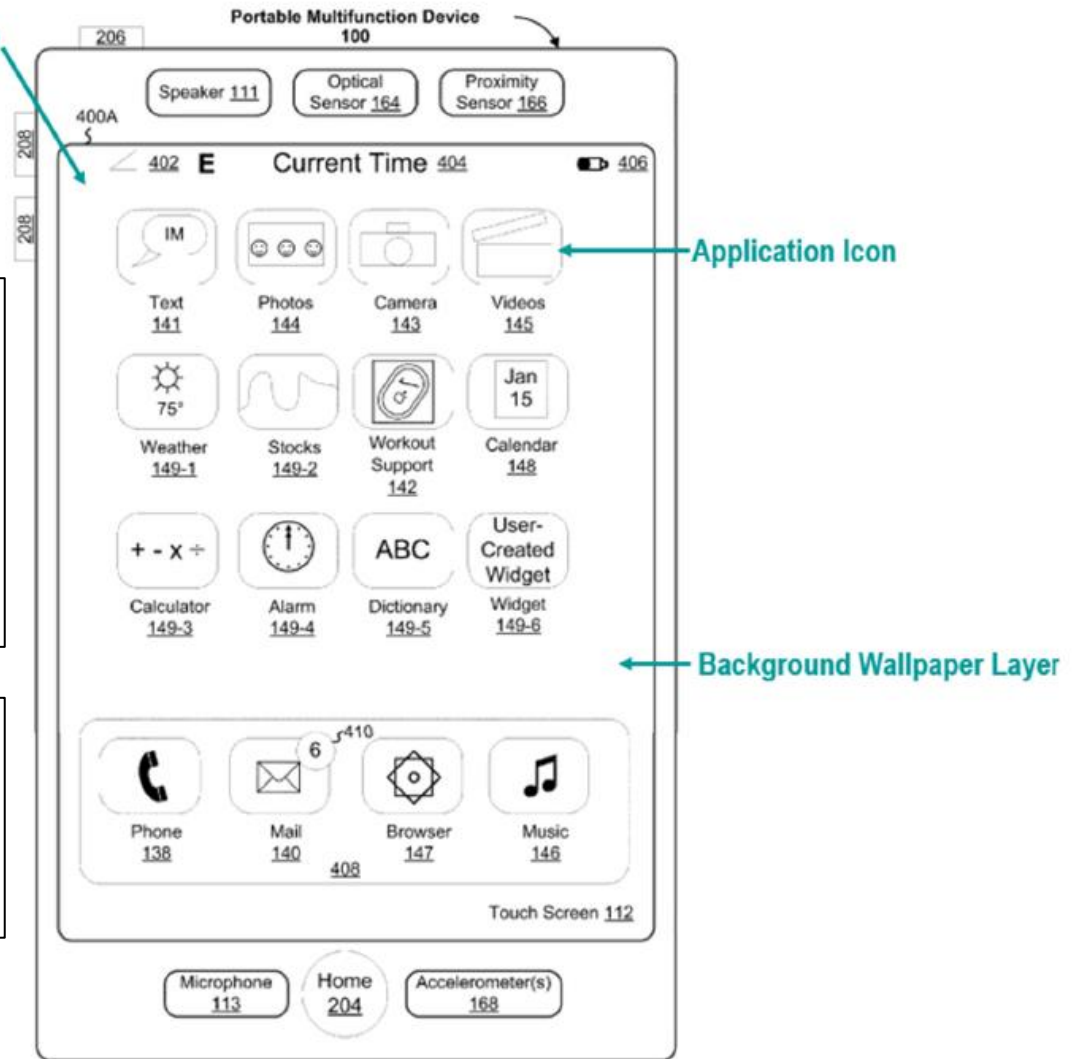
EX1004, [0180], [0215], [0366], [0368]. When the device detects a touch input associated with one of the application icons, it determines a responsive action based on certain gesture characteristics of the touch. EX1004, [0102], [0174], [0216-0217], [0276], [0280], [0302], [0310-0311], Figures 4A, 5A-B, 7A-B; EX1003, ¶55.

Pet. 8-9

<sup>1</sup> General descriptions provided for this and other references and combinations thereof are incorporated into each subsection and mapping of the claims that includes citations to these references.

Pet. 12 (FN1)

User Interface Page



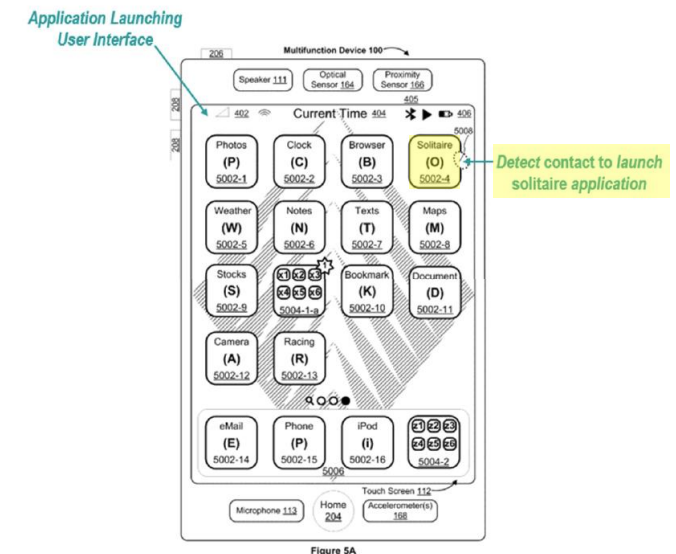
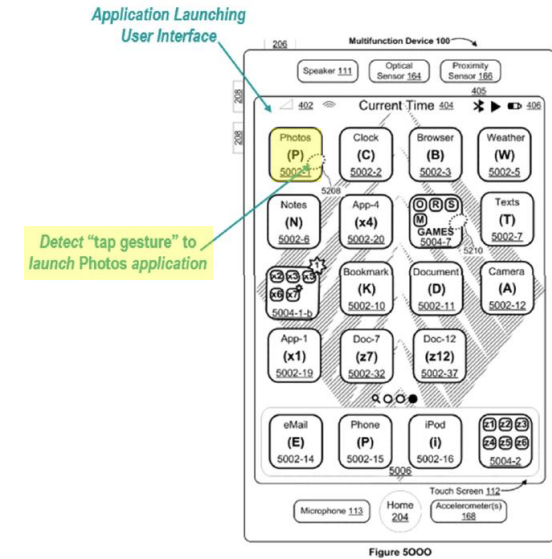
# 4<sup>th</sup> Scenario [1.g]/[1.I] – Chaudhri Renders Obvious

## The Petition on [1.g]

### PETITION FOR *INTER PARTES* REVIEW OF UNITED STATES PATENT NO. 10,656,758 PURSUANT TO 35 U.S.C. §§ 311–319, 37 C.F.R. § 42

Element [1.f]; EX1003, ¶84. Additionally, as illustrated in Figure 5A's depiction of a *displayed application launching user interface*, Chaudhri explains that “the device *detects* a contact 5008 with the *solitaire application icon*” and performs a responsive action (e.g., *launching the application* or entering the reconfiguration mode) based on the characteristics of the touch. EX1004, [0216-0217]; *supra*, §VI.A.1. Similarly, as shown in Figure 5000, “*detecting* a tap gesture 5208 at a location on the touch-sensitive surface that corresponds to the *photos action icon* 5002-1” causes the device to “*launch[]* the photos *application*.” EX1004, [0276].

Pet. 25-27, 35-38; see also 8-12  
Reply 6-11



Pet. 26

# 4<sup>th</sup> Scenario [1.g]/[1.I] – Chaudhri Renders Obvious

Pet. 25-27, 35-38; see *also* 8-12  
Reply 6-11

Application Launching  
User Interface

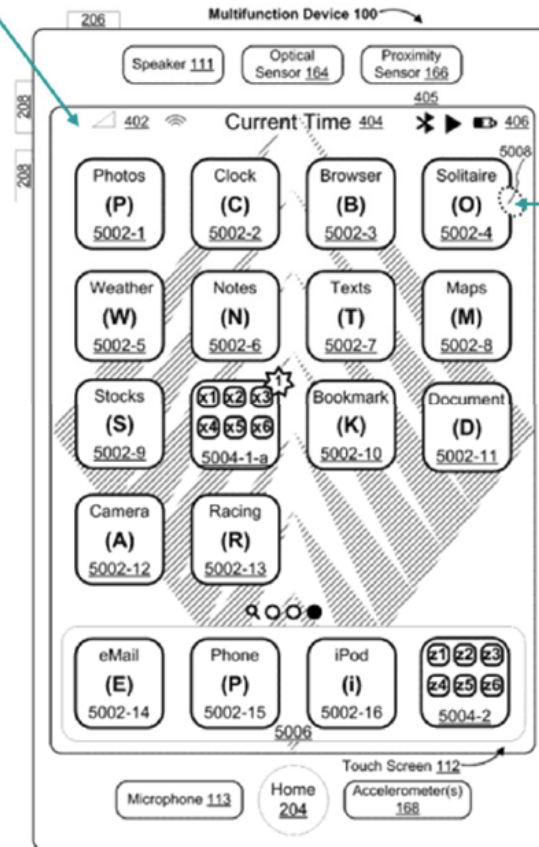


Figure 5A

Application Launching  
User Interface

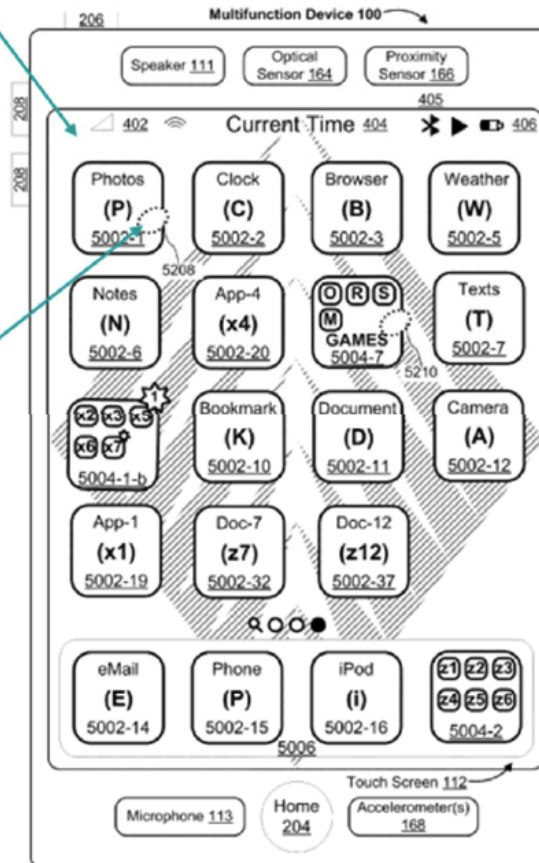


Figure 5000

EX1004, Figures 5A (annotated), 5000 (annotated); EX1003, ¶85.

# 4<sup>th</sup> Scenario [1.g]/[1.I] – Chaudhri Renders Obvious

## Chaudhri's Selectable Application Icons

Pet. 25-27, 35-38; see also 8-12  
Reply 6-11

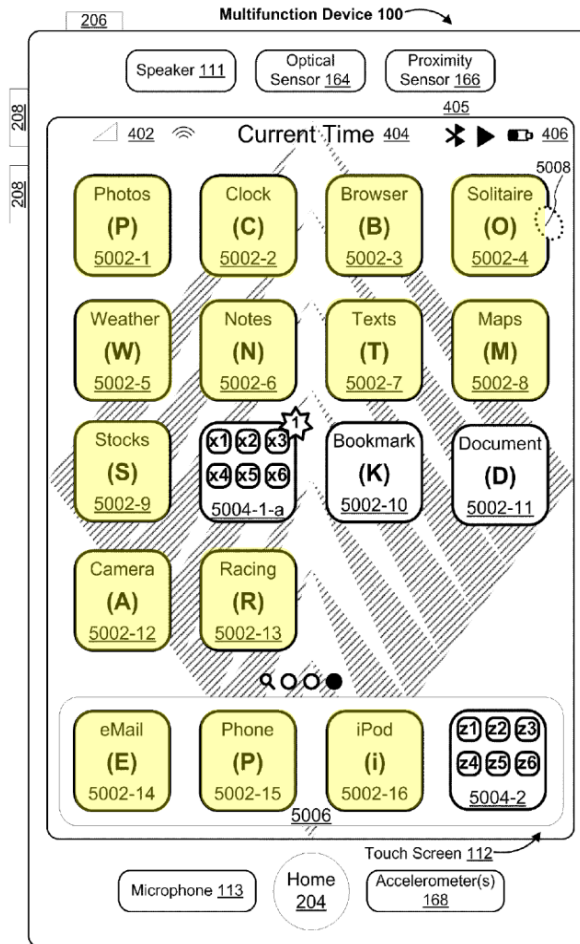
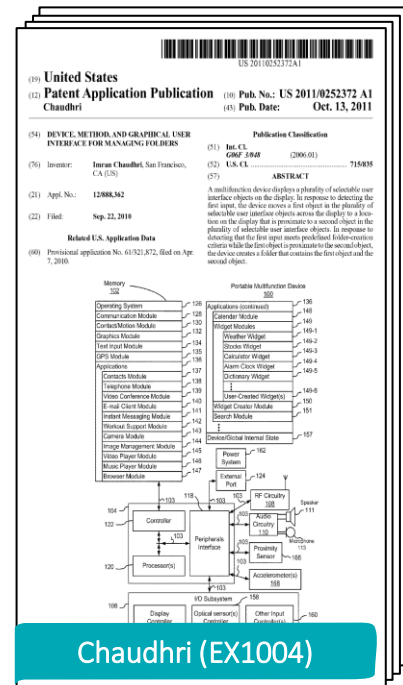


Figure 5A

[0216] Attention is now directed towards FIG. 5A, which includes a plurality of selectable user interface objects, including a plurality of action icons 5002 and a plurality of folder icons 5004. For example, in FIG. 5A the action icons 5002 include a plurality of application icons (e.g., photos application icon 5002-1, clock application icon 5002-2, browser application icon 5002-3, solitaire application icon 5002-4, weather application icon 5002-5, notes application icon 5002-6, texts application icon 5002-7, maps application icon 5002-8, stocks application icon 5002-9, camera application icon 5002-12, racing application icon 5002-13, email application icon 5002-14, phone application icon 5002-15, and iPod application icon 5002-16) for activating respective applications, a bookmark icon 5002-10 for launching a web browser and displaying a bookmarked webpage and a document icon 5002-11 for activating a document viewing/editing application so as to displaying the document associated with the document icon 5002-11.

# 4<sup>th</sup> Scenario [1.g]/[1.I] – Chaudhri Renders Obvious

## Chaudhri's Selectable Application Icons

Pet. 25-27, 35-38; see also 8-12  
Reply 6-11

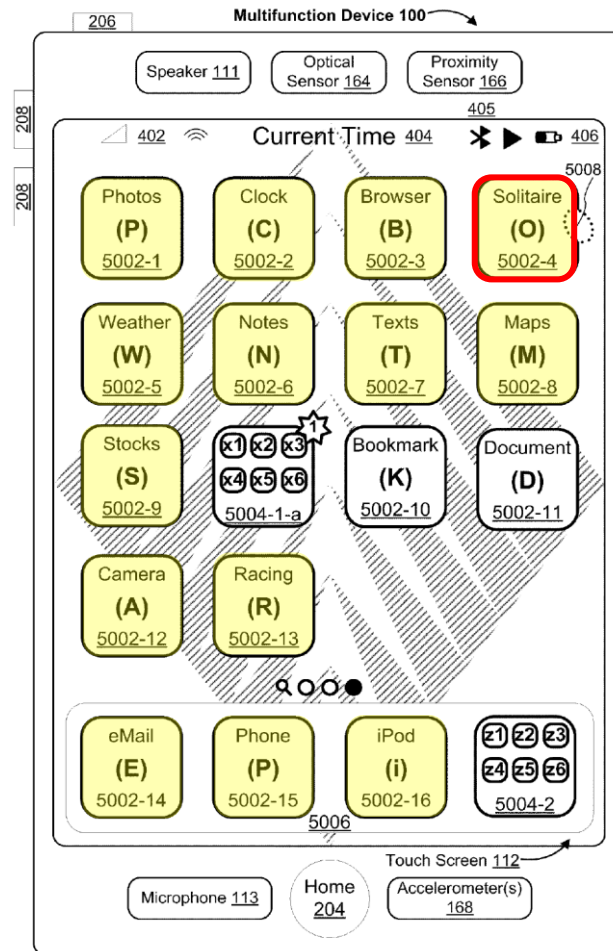
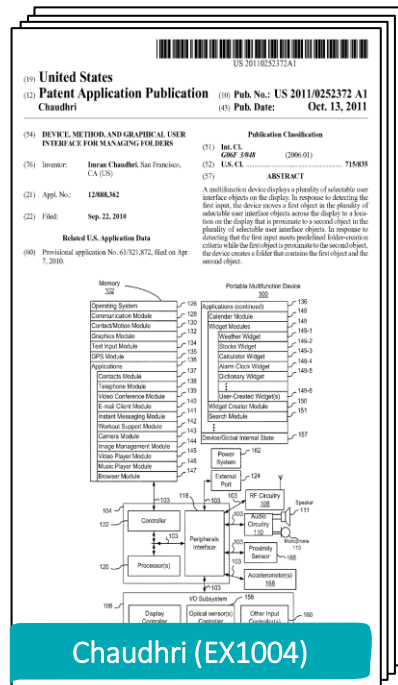


Figure 5A

interface icons (e.g., action icons 5002). In FIG. 5A, the device is in normal operation mode. In other words, selecting one of the action icons will activate an application (e.g., launch an application that is not currently running on the device or display a view of an application that is currently running on the device). In some embodiments, the device detects a request to enter user interface reconfiguration mode. For example, in FIG. 5A, the device detects a contact 5008 with the Solitaire application icon 5002-4 for more than a predetermined period of time (e.g., 2 seconds) and, in response, the device enters a user interface reconfiguration mode, as illustrated in FIG. 5B.

EX1004 (Chaudhri) [0217]

[0280] In response to detecting an input that corresponds to selection of a respective selectable user interface object, the device activates (606) an application that is associated with the respective selectable user interface object. In some embodiments, applications are only activated when the device is in a normal operation mode. For example, selecting a Solitaire application icon 5002-1 in FIG. 5A (e.g., while the device is in a normal operation mode) would launch a Solitaire game application. It should be understood that, when an

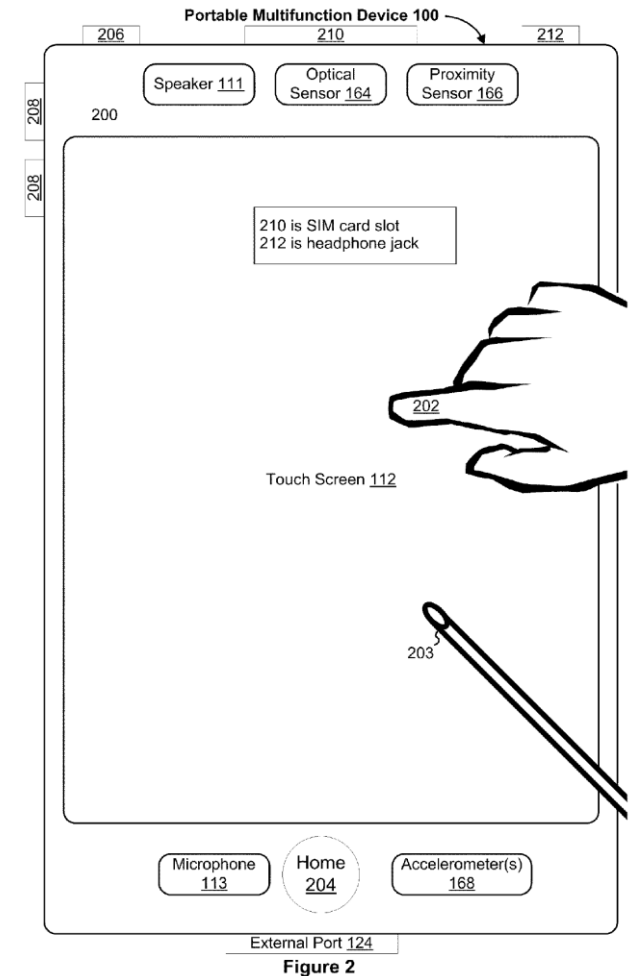
EX1004 (Chaudhri) [0280]

# 4<sup>th</sup> Scenario [1.g]/[1.I] – Chaudhri Renders Obvious

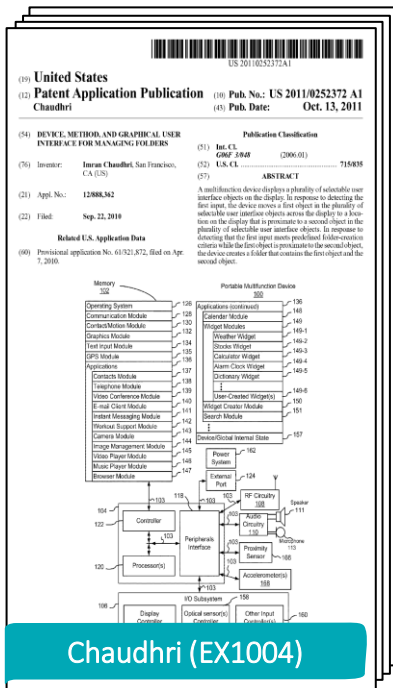
## Chaudhri's Selectable Application Icons

Pet. 25-27, 35-38; see also 8-12  
Reply 6-11

[0174] FIG. 2 illustrates a portable multifunction device 100 having a touch screen 112 in accordance with some embodiments. The touch screen may display one or more graphics within user interface (UI) 200. In this embodiment, as well as others described below, a user may select one or more of the graphics by making contact or touching the graphics, for example, with one or more fingers 202 (not drawn to scale in the figure) or one or more styluses 203 (not drawn to scale in the figure). In some embodiments, selection of one or more graphics occurs when the user breaks contact with the one or more graphics. In some embodiments, the contact may include a gesture, such as one or more taps, one or more swipes (from left to right, right to left, upward and/or downward) and/or a rolling of a finger (from right to left, left to right, upward and/or downward) that has made contact with device 100. In some embodiments, inadvertent contact with a



EX1004 (Chaudhri) [0174]



# 4<sup>th</sup> Scenario [1.g]/[1.I] – Chaudhri Renders Obvious

Pet. 25-27, 35-38; see also 8-12; Reply 6-11

## Chaudhri's Selectable Application Icons

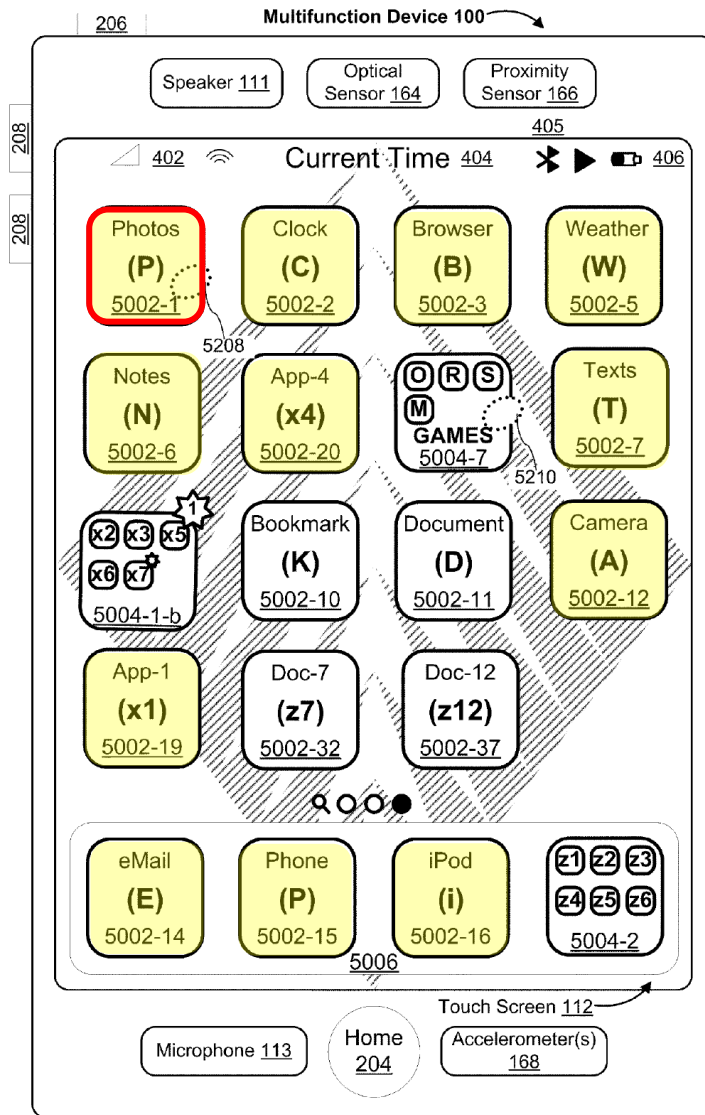
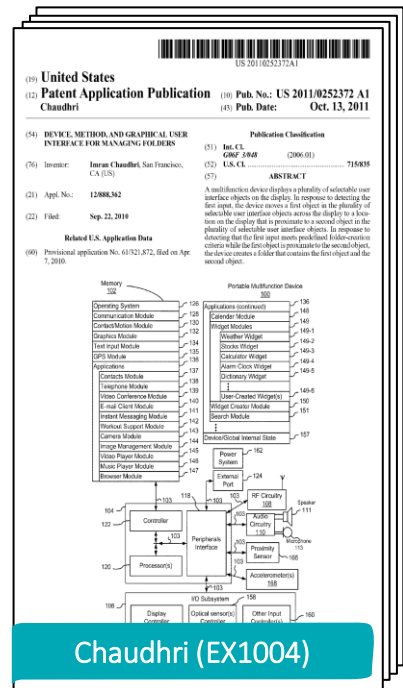


Figure 5000

[0276] In some embodiments, while the device is in a normal operation mode, selection of a respective action icon 5002 results in activating an application associated with the respective action icon. For example in FIG. 5000, in response to detecting selection of the photos action icon (e.g., detecting a tap gesture 5208 at a location on the touch-sensitive surface that corresponds to the photos action icon 5002-1), the device displays a photos application (e.g., launching the photos application if the photos application is not already running, or simply displaying the photos application if the photos application is already running). In contrast, in some

EX1004 (Chaudhri) [0276]

corresponds to folder icon 5004-7 on touch screen 112). In some embodiments, the first input corresponds to a request to select the respective action icon when the first input is (708) a tap gesture at a location on a touch-sensitive surface (e.g., touch screen 112) that corresponds to a location of the respective action icon on the display (e.g., tap gesture 5155 in FIG. 5XX at a location that corresponds to camera application icon 5002-12, or tap gesture 5208 in FIG. 5000, at a location that corresponds to photos application icon 5002-1 on the touch screen 112).

EX1004 (Chaudhri) [0302]

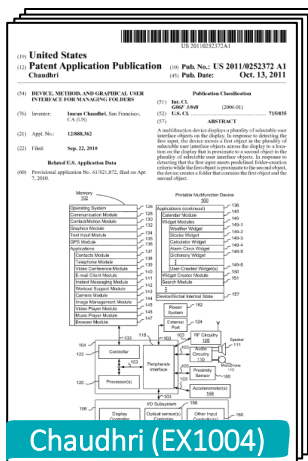
# 4<sup>th</sup> Scenario [1.g]/[1.I] – Chaudhri Renders Obvious

## PETITION FOR *INTER PARTES* REVIEW OF UNITED STATES PATENT NO. 10,656,758 PURSUANT TO 35 U.S.C. §§ 311–319, 37 C.F.R. § 42

Pet. 25-27, 35-38; see *also* 8-12  
Reply 6-11

[0220], [0328-0331], Figures 5B-C, 9A-9B, 5KK-5MM. For example, as illustrated in Figures 5B and 5C (below), when the device is operating in the “reconfiguration mode” and detects a touch “at a location that corresponds to a ‘racing’ [application] icon” coupled with “subsequent movement” of the touch “to the edge of the touch-sensitive surface,” the *application icon* is likewise “*moved* to the edge of the display.” EX1004, [0220].

Pet. 36



Chaudhri (EX1004)

EX1004 (Chaudhri) [0220]

folder in accordance with some embodiments. In FIG. 5B, the device detects a request to move a respective selectable user interface object to an edge of the screen. In this example, the request includes a contact 5016-*a* on the touch-sensitive surface (e.g., touch screen 112) at a location that corresponds to a “racing” action icon 5002-13, and subsequent movement 5018 of the contact to the edge of the touch-sensitive surface (e.g., to contact position 5016-*b* on the touch screen 112, as illustrated in FIG. 5C). In FIG. 5C, the action icon 5002-13 is moved to the edge of the display (e.g., touch screen 112) and

## The Petition on [1.I]

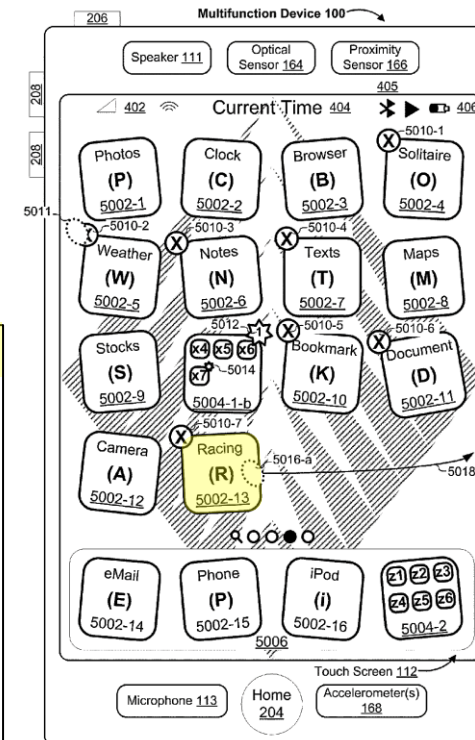


Figure 5B

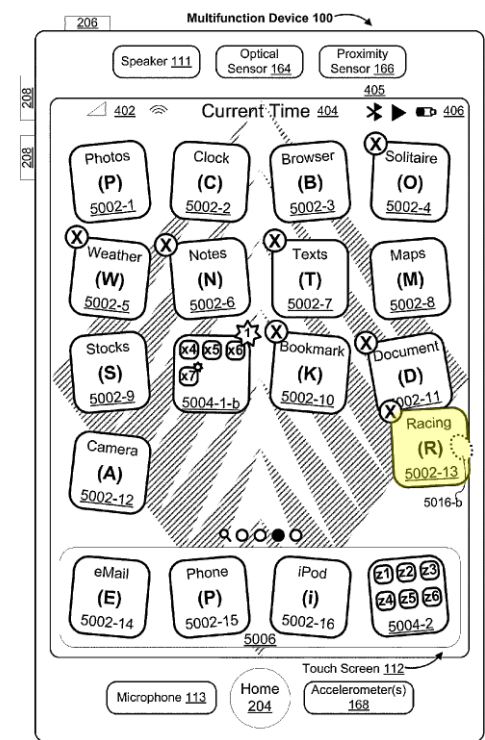
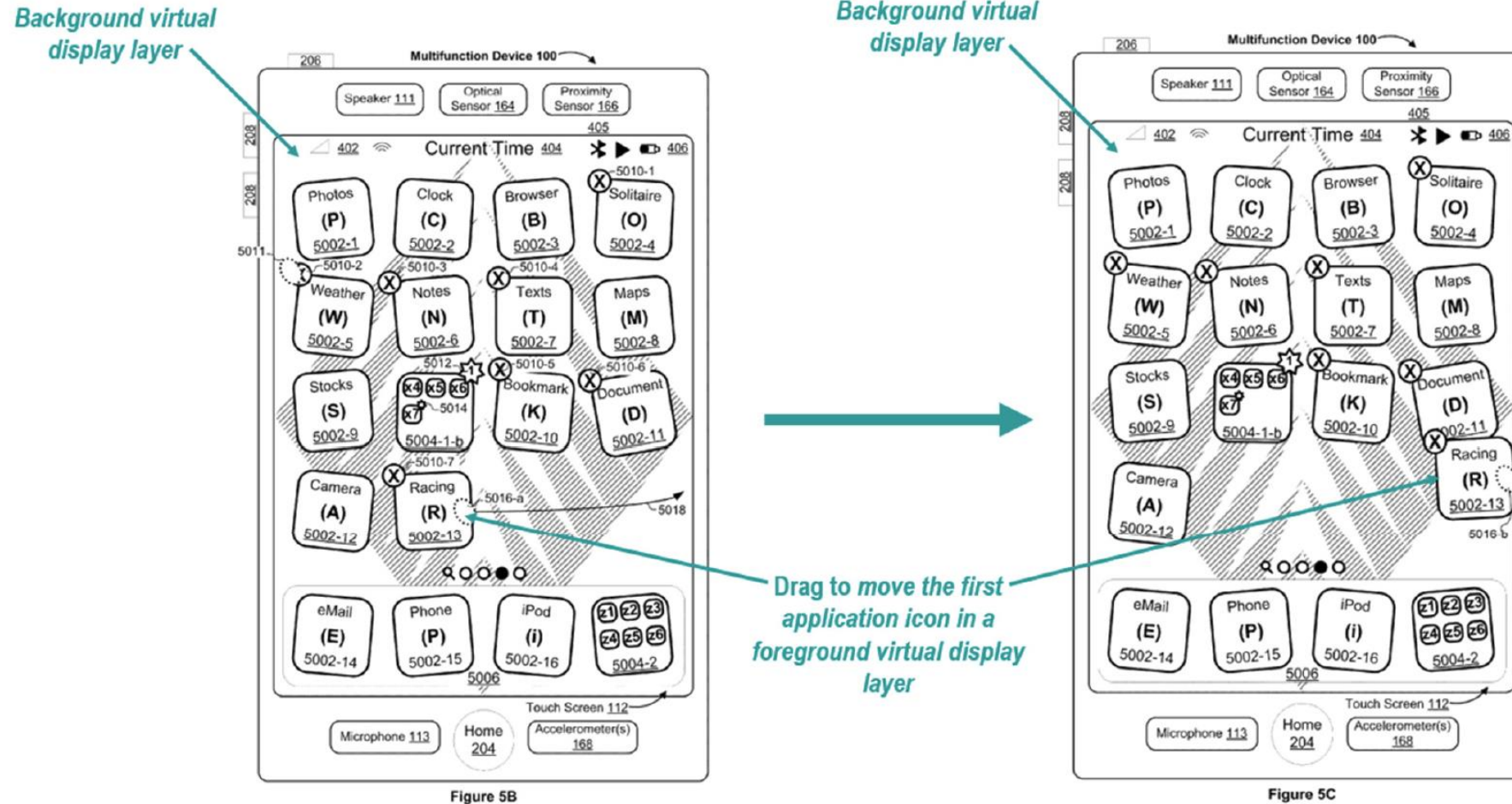


Figure 5C

# 4<sup>th</sup> Scenario [1.g]/[1.I] – Chaudhri Renders Obvious

Pet. 25-27, 35-38; see *a/s/o* 8-12  
Reply 6-11



Pet. 36

EX1004, Figures 5B-C (annotated); EX1003, ¶100.

# 4<sup>th</sup> Scenario [1.g]/[1.I] – Chaudhri Renders Obvious

EX1004 (Chaudhri) [0229]

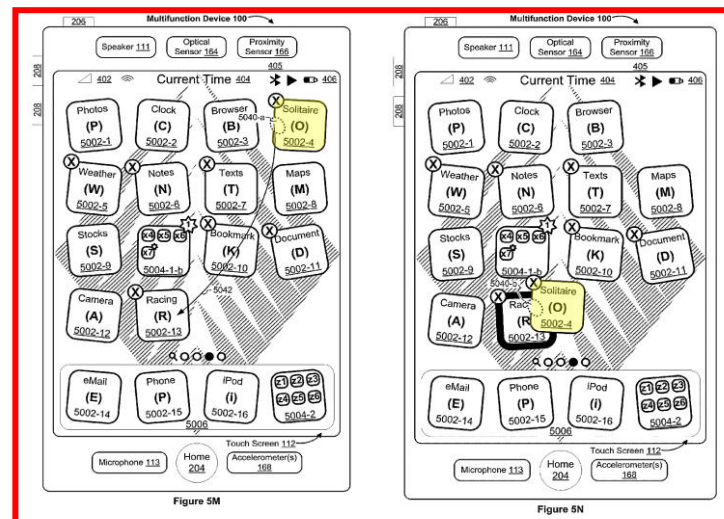
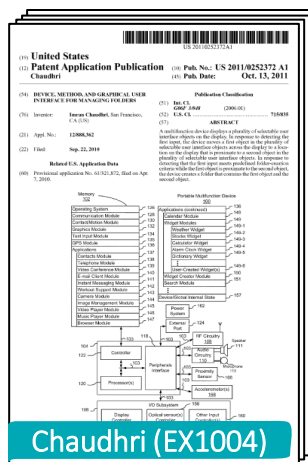
Pet. 25-27, 35-38; see also 8-12; Reply 6-11

another one of the selectable user interface objects. For example in FIG. 5M, the device detects a contact (e.g., 5040-a) at a location on the touch-sensitive surface (e.g., touch screen 112) that corresponds to a location of a first action icon (e.g., the solitaire application icon 5002-4) on the display (e.g., touch screen 112) and detects subsequent movement of the contact (e.g., from a first location 5040-a in FIG. 5M to a second location 5040-b in FIG. 5N on the touch screen 112) that corresponds to movement of the first action icon 5002-4 onto the second action icon 5002-13, as illustrated in FIG. 5N. In some embodiments the device displays an indication that a folder is about to be created (e.g., by highlighting the second action icon 5002-13 as illustrated in FIG. 5N). In some

## The Petition on [1.I]

### PETITION FOR INTER PARTES REVIEW OF UNITED STATES PATENT NO. 10,656,758 PURSUANT TO 35 U.S.C. §§ 311–319, 37 C.F.R. § 42

First, Chaudhri shows and describes that icons on the application menu user interface are displayed and *move* in front of a “wallpaper *background*.” EX1004, [0368], Figures 5A-5D. EX1003, ¶102. Second, Chaudhri explains that, in the reconfiguration mode, the application icons “jiggle as though they are *floating* on water.” EX1004, [0218], Figures 5B-E; EX1003, ¶102. Third, Chaudhri depicts the application icon being moved (via a drag gesture) in a *foreground virtual display layer above the virtual display layer of the background wallpaper*. EX1004, Figures 5B-5E, **5M-5N**, 5JJ-5MM; EX1003, ¶102 (explaining that movement of the icon over a static wallpaper teaches the POSITA that the icon and wallpaper are in distinct virtual layers of the GUI); *see also* EX1001, 72:34-48 (the '758 patent describing a



Pet. 37

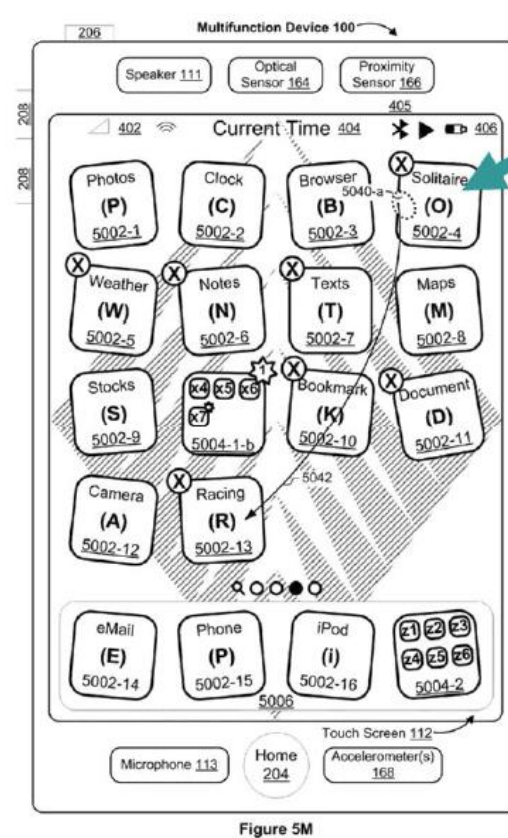
29

# 4<sup>th</sup> Scenario [1.g]/[1.I] – Chaudhri Renders Obvious

Rebuttal  
to:

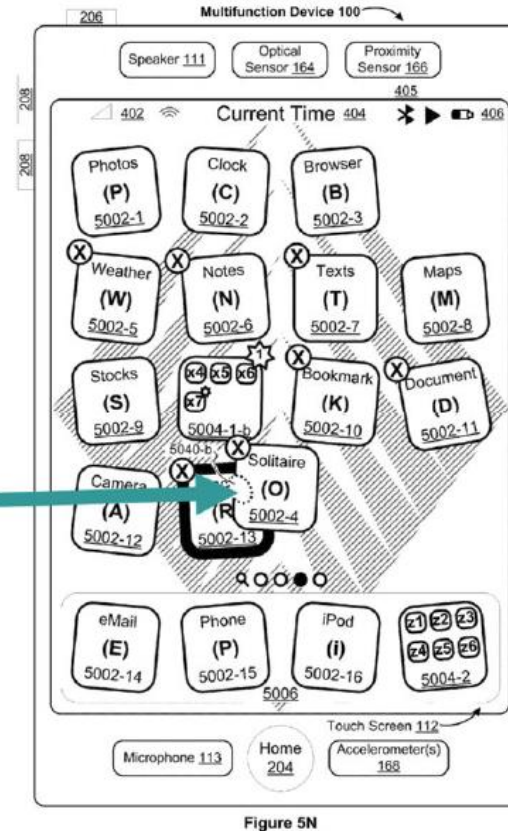
*“Nor does Petitioner identify any place in the Petition pointing to any application icon other than the Racing icon as ‘the first application icon’ in Limitation [1.I].” Sur-Reply at 6.*

Pet. 25-27, 35-38; see also 8-12  
Reply 6-11



Touch Detected on  
(First) Solitaire  
Application Icon

Movement of  
(First) Solitaire  
Application Icon



EX1004, Figures 5M-5N (annotated); see also [0229].

# 4<sup>th</sup> Scenario [1.g]/[1.I] – Chaudhri Renders Obvious

Rebuttal  
to:

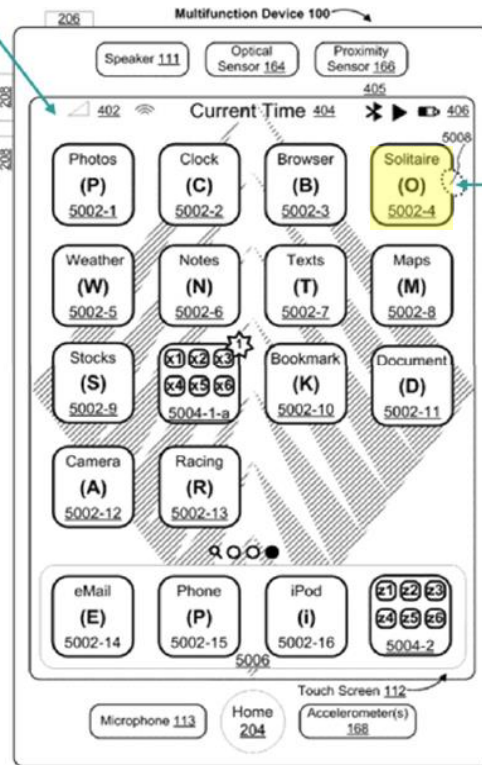
“Nor does Petitioner identify any place in the Petition pointing to any application icon other than the Racing icon as ‘the first application icon’ in Limitation [1.I].” Sur-Reply at 6.

Pet. 25-27, 35-38; see also 8-12  
Reply 6-11

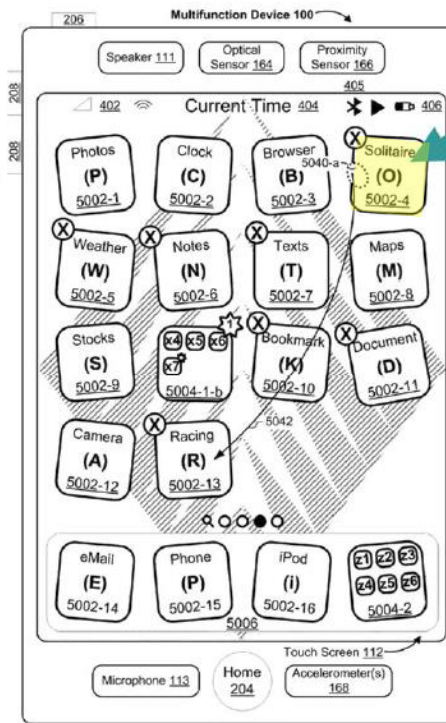
## The Petition on [1.g]

## The Petition on [1.I]

Application Launching  
User Interface

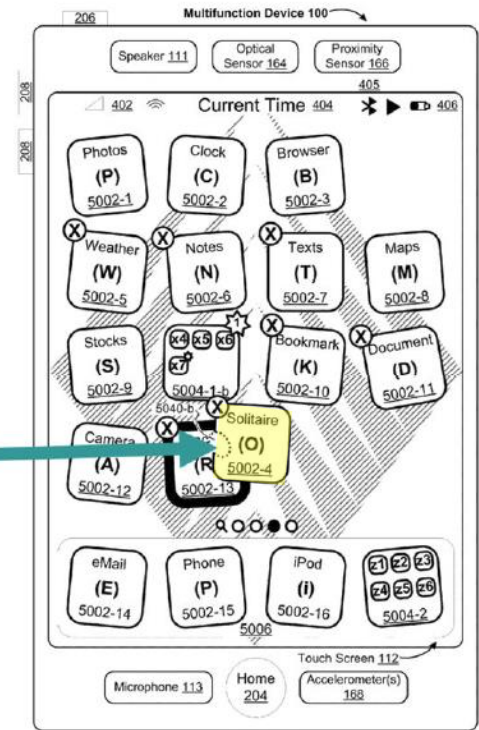


Detect contact to launch  
solitaire application



Touch Detected on  
(First) Solitaire  
Application Icon

Movement of  
(First) Solitaire  
Application Icon



Pet. 26

Reply 8

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# 4<sup>th</sup> Scenario [1.g]/[1.I] – Chaudhri Renders Obvious

**Rebuttal  
to:**

*“Petitioner does not identify any place in the Petition pointing to any application icon other than the Solitaire icon or the Photos icon as the “first application icon” in Limitation [1.g].” Sur-Reply at 6.*

Pet. 25-27, 35-38; see also 8-12  
Reply 6-11

## *All of Chaudhri's Icons Are Selectable and Movable*

41. Moreover, a POSITA would have appreciated that Chaudhri's disclosure focuses on techniques for reorganizing and rearranging the icons presented on a user interface, including selectable application icons. It is apparent from reading Chaudhri that the specific kind of application icons being reorganized/rearranged—e.g., Solitaire, Photos, Racing, etc.—is unimportant. They are parallel examples that are treated equally in the portions of Chaudhri's disclosure about icon selection, icon movement, and entering the reconfiguration mode. Note,

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of: Michael S Smith  
U.S. Patent No.: 10,656,758 Attorney Docket No. 50095-0168IP1  
Issue Date: May 19, 2020  
Appl. Serial No.: 16/664,780  
Filing Date: October 25, 2019  
Title: GESTURE-EQUIPPED TOUCH SCREEN SYSTEM,  
METHOD, AND COMPUTER PROGRAM PRODUCT

SUPPLEMENTAL DECLARATION OF DR. ANDREW COCKBURN

**UNDISPUTED**

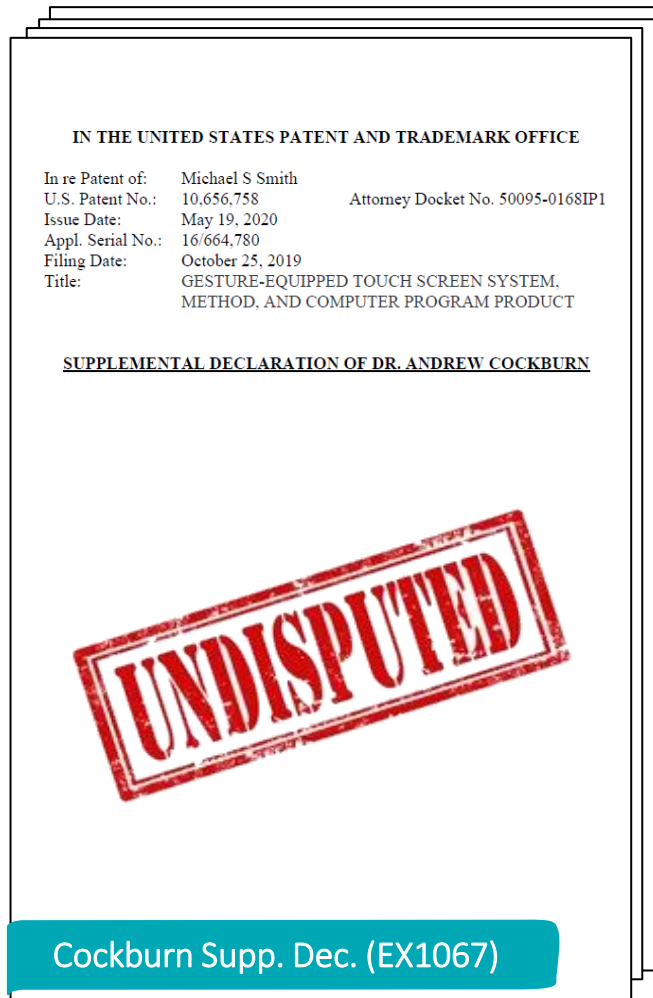
Cockburn Supp. Dec. (EX1067)

# 4<sup>th</sup> Scenario [1.g]/[1.I] – Chaudhri Renders Obvious

**Rebuttal  
to:**

*“Petitioner does not identify any place in the Petition pointing to any application icon other than the Solitaire icon or the Photos icon as the “first application icon” in Limitation [1.g].” Sur-Reply at 6.*

Pet. 25-27, 35-38; see also 8-12  
Reply 6-11



## All of Chaudhri's Icons Are Selectable and Movable

Attention is now directed towards FIGS. 5B-5F, which illustrate exemplary user interfaces for creating a new folder in accordance with some embodiments. In FIG. 5B, the device detects a request to move a respective selectable user interface object to an edge of the screen. In this example, the request includes a contact 5016-a on the touch-sensitive surface (e.g., touch screen 112) at a location that corresponds to a “racing” action icon 5002-13, and subsequent movement 5018 of the contact to the edge of the touch-sensitive surface (e.g., to contact position 5016-b on the touch screen 112, as illustrated in FIG. 5C).

**General  
Description  
Non-Limiting  
Example**

EX1004, [0220]. Here, Chaudhri first generally describes that each “respective”

In some embodiments, the device detects a request to enter user interface reconfiguration mode. For example, in FIG. 5A, the device detects a contact 5008 with the solitaire application icon 5002-4 for more than a predetermined period of time (e.g., 2 seconds) and, in response, the device enters a user interface reconfiguration mode, as illustrated in FIG. 5B.

**General  
Description  
Non-Limiting  
Example**

EX1004, [0220]. Chaudhri starts by generally describing that “the device detects a

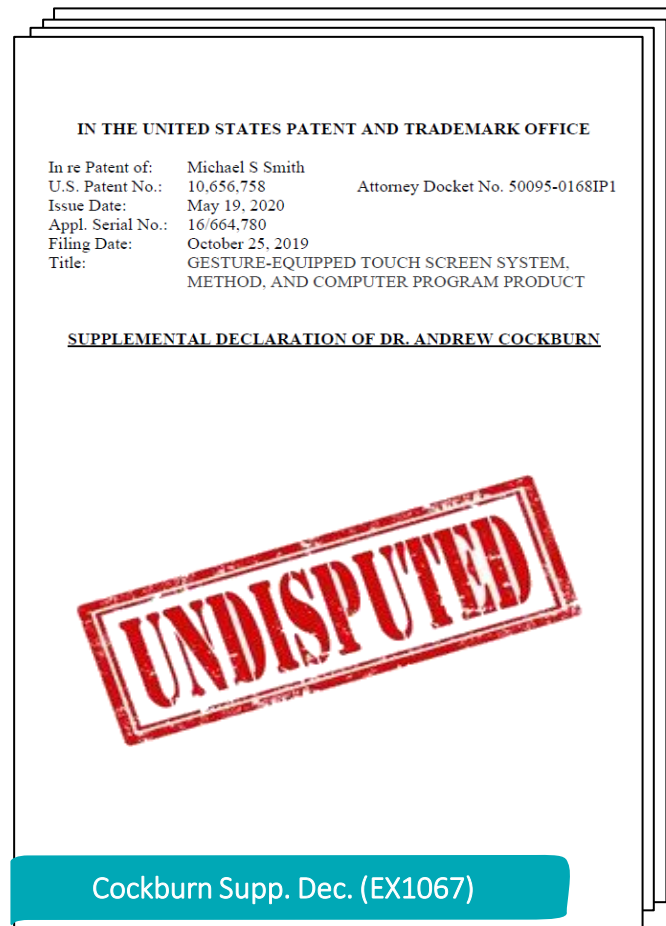
# 4<sup>th</sup> Scenario [1.g]/[1.I] – Chaudhri Renders Obvious

Rebuttal  
to:

*“Petitioner does not identify any place in the Petition pointing to any application icon other than the Solitaire icon or the Photos icon as the “first application icon” in Limitation [1.g].” Sur-Reply at 6.*

Pet. 25-27, 35-38; see also 8-12  
Reply 6-11

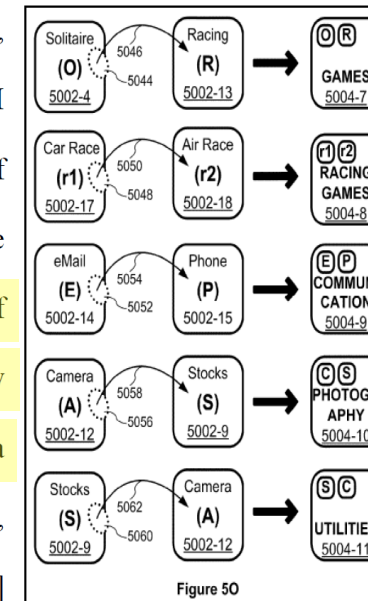
## All of Chaudhri's Icons Are Selectable and Movable



Pet. 34-35  
Reply 2-4

**FISH.**

46. Under Dr. Madisetti's theory, these passages from Chaudhri would teach that a user can only enter the reconfiguration mode with a touch-and-hold on the Solitaire icon or only move the Racing icon, because that is what Figures 5A-C illustrate. I cannot agree with such a narrow interpretation of Chaudhri. It is not reasonable from the perspective of a POSITA, and it contradicts other portions of Chaudhri, such as Figure 5O (at right), that show and describe the use of drag gestures to move a wide variety of different application icons. *E.g.*, EX1004, [0227] (Notes icon, Figure 5J), [0229] (Solitaire icon, Figures 5M-5N), [0230] (multiple icons, Figure 5O), [0248] (Stocks icon, Figures 5KK-5MM), [0252] (Maps, Figures 5OO-5PP).



# 4<sup>th</sup> Scenario [1.g]/[1.I] – Chaudhri Renders Obvious

**Rebuttal  
to:**

*“Petitioner does not identify any place in the Petition pointing to any application icon other than the Solitaire icon or the Photos icon as the “first application icon” in Limitation [1.g].” Sur-Reply at 6.*

Pet. 25-27, 35-38; see also 8-12  
Reply 6-11

## SUPPLEMENTAL DECLARATION OF DR. ANDREW COCKBURN

<sup>2</sup> Note that I refer to the interpretation of Chaudhri that Dr. Madisetti’s theory assumes because Dr. Madisetti does not expressly state that a POSITA would have taken such a narrow view of Chaudhri. For example, when summarizing Chaudhri’s disclosure, Dr. Madisetti does not identify any specific application icons. He generically refers to “applications.” EX2005, ¶63.

EX1067 (Cockburn Supp. Dec.) FN2

***All of Chaudhri’s  
Icons Are  
Selectable and  
Movable***

## DECLARATION OF DR. VIJAY MADISETTI

63. Chaudhri also discloses two modes: a “normal operation mode” and a “user interface reconfiguration mode.” EX1004, [0217-0218] In the “normal mode, tapping on an application will launch the application.” EX1004, [0217]. When in “user interface reconfiguration mode,” a user is able to rearrange applications and can reach a “pop-up dialogue” by touching a separate “object modification target.” EX1004, [0274].

EX2005 (Madisetti Dec.) Para 63

***The  
Experts  
Agree***

# 4<sup>th</sup> Scenario [1.g]/[1.I] – Chaudhri Renders Obvious

**Rebuttal  
to:**

*“Petitioner does not identify any place in the Petition pointing to any application icon other than the Solitaire icon or the Photos icon as the “first application icon” in Limitation [1.g].” Sur-Reply at 6.*

Pet. 25-27, 35-38; see also 8-12  
Reply 6-11

## SUPPLEMENTAL DECLARATION OF DR. ANDREW COCKBURN

47. Going back to the outset of this discussion, Apple’s iPhone back in 2009 provides yet another reason why the POSITA would not adopt the narrow, improper view that Dr. Madisetti’s theory demands. Again, the iPhone (OS 3.1 Software) included a feature that allowed users to “customize the layout of icons on the Home screen” by performing a “touch and hold” on “any Home screen icon until the icons begin to wiggle” and then “arrang[ing] the icons by dragging them.” EX1045, p.25; EX1003, ¶101, ¶41. Chaudhri, a published patent application filed in 2010, repeatedly references to the iPhone, and a POSITA would have understood Chaudhri to be describing the same general technology (and more). See EX1004, [0073], [0088], [0322]. So, just as it was well known that “any” application icon on an iPhone could be (i) selected with a tap to launch an application, (ii) used to trigger the reconfiguration mode with a touch-and-hold, and (iii) moved with a drag, the POSITA would have had the same understanding about Chaudhri’s disclosure.

EX1067 (Cockburn Supp. Dec.) Para 47

## *All of Chaudhri’s Icons Are Selectable and Movable*

### Home Screen

Press the Home button at any time to go to the Home screen, which contains your iPhone applications. Tap any application icon to get started.

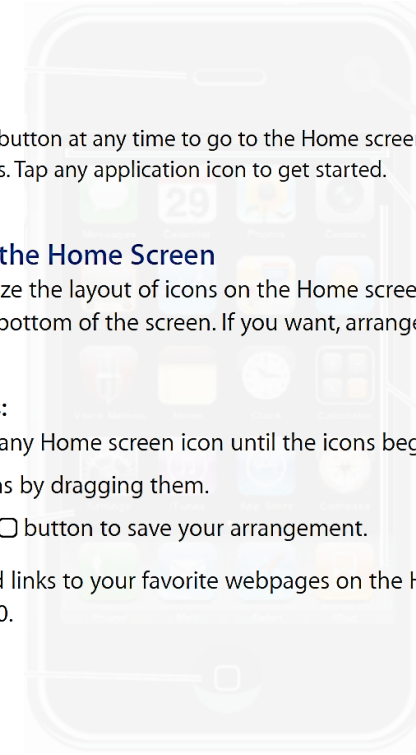
### Customizing the Home Screen

You can customize the layout of icons on the Home screen—including the Dock icons along the bottom of the screen. If you want, arrange them over multiple Home screens.

#### Rearrange icons:

- 1 Touch and hold any Home screen icon until the icons begin to wiggle.
- 2 Arrange the icons by dragging them.
- 3 Press the Home button to save your arrangement.

You can also add links to your favorite webpages on the Home screen. See “Web Clips” on page 70.



EX1045 at 20, 23, 25

# 4<sup>th</sup> Scenario [1.g]/[1.I] – Chaudhri Renders Obvious

Reply 11-14; see also Pet. 38-39, 62-67

## *The Petition's Alternative “Single Continuous Touch” Theory Moots “Inconsistent Mapping” Issue*

### **PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE**

In any event, even if the Board is inclined to adopt Patent Owner's contorted view, the Petition presents alternative obviousness rationales where a touch-and-hold gesture on an application icon for entering Chaudhri's reconfiguration mode and a drag gesture for moving the icon are part of a detected single continuous touch.

See Pet., 38-39, 65-67. These alternative rationales, discussed below at Sections II.B.2-3, moot Patent Owner's misplaced “inconsistent mapping” argument.

Reply 11

# 4<sup>th</sup> Scenario [1.g]/[1.l] – Chaudhri Renders Obvious

Reply 11-14; see also Pet. 38-39, 62-67

## *The Petition's Alternative "Single Continuous Touch" Theory Moots "Inconsistent Mapping" Issue*

### DECLARATION OF DR. ANDREW COCKBURN

107. For example, a POSITA would have recognized that there are only three apparent design options to implement Chaudhri's teachings for using a drag gesture to move an application icon after shifting from the "normal mode" to the "reconfiguration mode" via a touch-and-hold gesture. First, the device and interface could be designed so that the user must keep their finger down on the touch screen between the touch-and-hold gesture and the drag gesture. A POSITA would have appreciated that this option would allow the user to efficiently activate the "reconfiguration mode" at a particular target application icon and drag that target icon to a new location using a single gesture, without need to release the finger and start a second gesture at the same target icon. Second, the device and interface could

EX1003 (Cockburn Dec.) Para. 107

### SUPPLEMENTAL DECLARATION OF DR. ANDREW COCKBURN

52. Before addressing Dr. Madisetti's position in full, I note that my Prior Declaration referred to the notion of a continuous touch between Chaudhri's touch-and-hold gesture on an icon to trigger the reconfiguration mode (Element [1.k] analysis) and Chaudhri' drag gesture for moving an icon (Element [1.l] analysis). Dr. Madisetti instead references Element [1.g], regarding input detection, and Element [1.l], regarding icon movement. This distinction does not alter my analysis or my conclusion. The continuous touch addressed in my Prior Declaration extends from the point of detected contact, through the touch-and-hold, and through the drag.

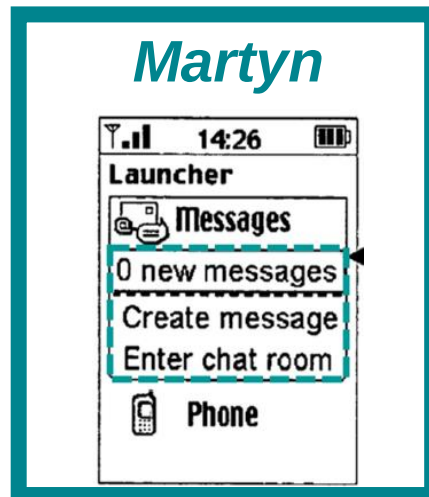
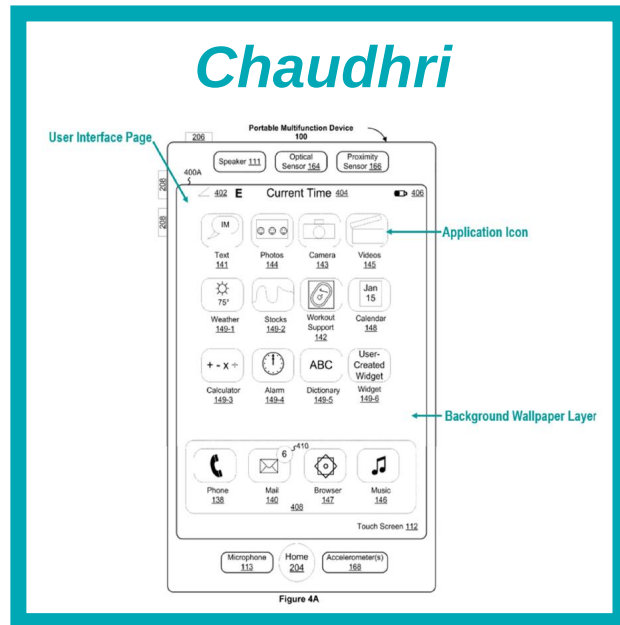
EX1067 (Cockburn Supp. Dec.) Para. 52

## Motivation to Combine

The Petition Provides Ample Motivation for Integrating Martyn's App Snapshot With Chaudhri and Using the Prior Art Touch-and-Hold as a Command Gesture

# Motivation to Combine – Chaudhri-Martyn

Pet. 15-19



## PETITION FOR *INTER PARTES* REVIEW OF UNITED STATES PATENT NO. 10,656,758 PURSUANT TO 35 U.S.C. §§ 311–319, 37 C.F.R. § 42

A POSITA would have been motivated to integrate Martyn's teachings about providing a contextual shortcut sub-menu in the form of a "summary window" of common application functions (an "App Snapshot") in response to a press-and-hold user input with Chaudhri's disclosure of a touch screen mobile device with a user interface for displaying and reorganizing a menu of selectable application icons. EX1003, ¶¶63-69. The POSITA would have understood that the analog to Martyn's press-and-hold input on a touch screen like Chaudhri's is the well-known touch-and-hold gesture. EX1003, ¶63; see also ¶¶49-53. Accordingly, the predictable result of the Chaudhri-Martyn Combination is a mobile device featuring an application menu user interface that displays a contextual sub-menu, such as Martyn discloses, in response to a touch-and-hold gesture applied to Chaudhri's touch screen. EX1003, ¶63. The following reasons, each independently and together collectively,

Pet. 15-16

40

# Motivation to Combine – Chaudhri-Martyn

Pet. 15-19

## Four Motivation Rationales—None Disputed

First, providing a sub-menu of selectable options corresponding to commonly

used application functions was a ubiquitous feature in com

EX1003, ¶¶64-65; *see also*

sub-menus of this type ha

EX1003, ¶¶64-65; *see also*

known solution to the ec

relevant and available acti

the state of the device. E

contextual shortcut sub-1

applications” of a mobil

axiomatic for a POSITA t

for “a menu of application

*also* ¶¶43-48.

Second, a POSITA would ha

of a contextual sub-menu would pre

“a menu of applications” from

Specifically, it would have been app

of options for invoking common ap

allow the user to accomplish recurin

fewer user inputs). EX1003, ¶¶66-67

in this context—e.g., the degree to w

the user’s desired task—was a key di

EX1003, ¶¶66-67. While the same

on two competing devices, differen

those functions easier and more efficient on one of the two. EX1003, ¶¶66-67. A

mobile device with a superior interface from a usability standpoint would be more

attractive to consumers. EX1003, ¶¶66-67.

Third, Martyn identifies specific “advantages” of the “App Snapshot”

contextual sub-menu over other known t

functionality on a mobile device. EX1005,

Where other techniques require the user to na

only show “one option...at any one time,” Ma

in one summary window, a limited list of con

advantages in ease and speed of navigation

EX1003, ¶68. Understanding the similariti

respective multi-functional mobile devices,

predictably improve Chaudhri’s interface for

same way Martyn did—i.e., via a contextual s

Fourth, the POSITA would have been prompted to pursue a combination with

Martyn based on Chaudhri’s suggestions to do so. EX1003, ¶69. For example,

Chaudhri teaches the notion of displaying a contextual “pop-up dialogue” sub-menu

that “provides the user with options for modifying the selectable user interface

object.” EX1004, [0274], [0317] (discussing “a contextual menu”), Figure 5LLL.

This disclosure by Chaudhri would have prompted a POSITA to seek out and apply

the teachings from other references in the same field, like Martyn, that describe

analogous implementations of contextual sub-menus to augment a user interface for

a multi-functional mobile device. EX1003, ¶69; *see also* ¶¶43-48. From the

POSITA’s perspective, the straightforward discussion in Martyn about presenting

commonly used application functions as selectable sub-menu options in an App

Snapshot/summary window is a natural and obvious extension of Chaudhri.

EX1003, ¶69; *see also* ¶¶43-48.

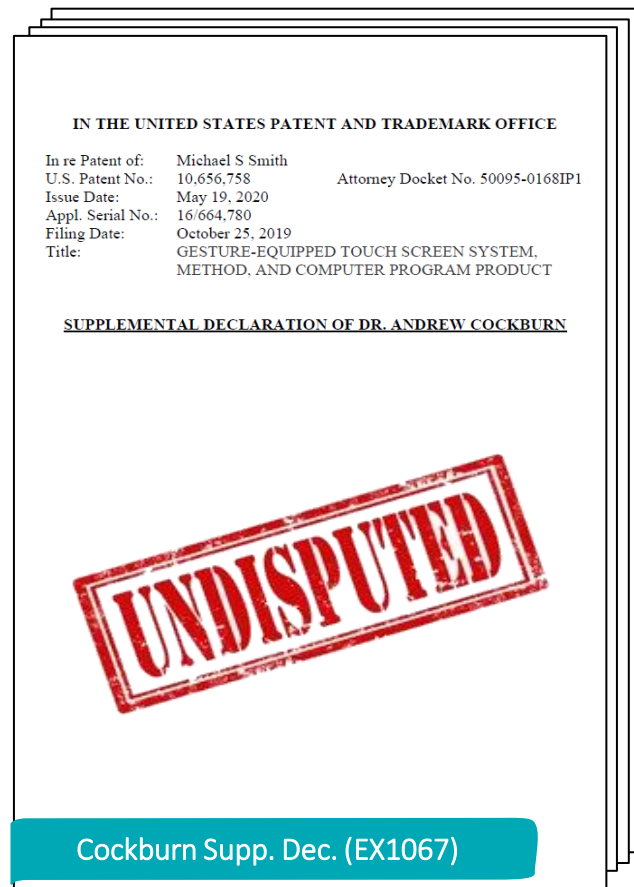
# Motivation to Combine – Chaudhri-Martyn

Rebuttal  
to:

*“[E]ach motivation does **not** motivate using “a press-and-hold user input” for calling Martyn’s Snapshot, but only motivates Martyn’s Snapshot itself[.]” Sur-Reply at 15.*

Pet. 15-19  
Reply 15-17

## A POSITA Would Not “Ignore” Martyn’s Press-and-Hold



20. Another problem with Dr. Madisetti’s approach is that he attempts to isolate Martyn’s App Snapshot teachings from Martyn’s corresponding disclosure of a press-and-hold user input as a technique for calling the App Snapshot. I did not separate these disclosures because a POSITA would not have done so. The POSITA would have instead taken Martyn’s teachings as a whole, including Martyn’s disclosure of calling the App Snapshot with a press-and-hold user input. It would not make sense for someone motivated to incorporate Martyn’s App Snapshot with Chaudhri to completely ignore Martyn’s other related teachings. Given that Martyn and Chaudhri both describe similar mobile devices like smartphones and PDAs, the POSITA would have appreciated that Martyn’s teaching to employ a press-and-hold user input for calling the App Snapshot would be similarly effective in the context of Chaudhri. See EX1004, [0073] (“iPhone” and “PDA”); EX1005, [0002] (“smart phones” and “PDAs”). Accordingly, when I articulated multiple motivation

# Motivation to Combine – Chaudhri-Martyn

## Rebuttal to:

*“Petitioner conflates a ‘touch’ on an application icon and a ‘press’ on a physical button because Petitioner does not dispute that Martyn is not a touch screen device.” Sur-Reply at 16.*

Pet. 15-19  
Reply 15-17

## Touch-and-Hold and Press-and-Hold Were Known Analogs

21. I further explained in my Prior Declaration that a POSITA would have understood that a touch-and-hold gesture performed on a touch screen device is the “analog” of Martyn’s press-and-hold input. EX1003, ¶63. This fact is essentially self-evident given the similarity of the terms “touch-and-hold” and “press-and-hold.” Indeed, these terms are often used interchangeably in the technical and patent literature, and also amongst ordinarily skilled people in the field. As one example, I note that the online Android Developer’s guide in 2011 described an event listener called “onLongClick()” that applied equally to long duration inputs based on touch and physical key presses:

`onLongClick()`

From [View.OnLongClickListener](#). This is called when the user either touches and holds the item (when in touch mode), or focuses upon the item with the navigation-keys or trackball and presses and holds the suitable “enter” key or presses and holds down on the trackball (for one second).

EX1061, p.1.

Applies to these editions of Windows 7:

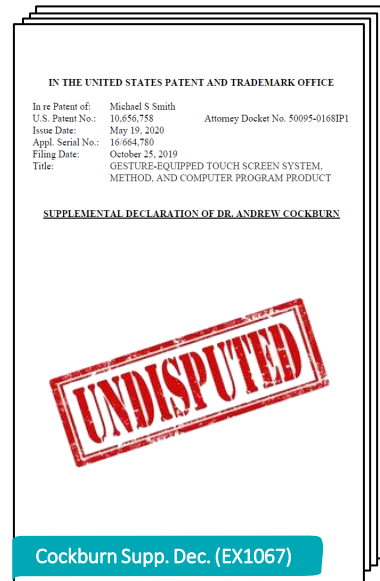
### Using touch gestures

If you have a computer with a touchscreen, you might find that *gestures* (motions that you make with one or two fingers) are easier to use than a mouse, pen, or keyboard.

### Press and hold

*Press and hold* does the same thing as right-clicking an item. To perform the action, touch the screen where you want to right-click, hold until a complete circle appears, and then lift your finger. The shortcut menu appears after you lift your finger.

EX1071 at 1



# Motivation to Combine – Chaudhri-Martyn

## Rebuttal to:

*“It Is Not Obvious To Create A Self-Induced ‘Problem’ That Serves No Purpose Other Than To Create A Conflict Justifying Further Modifications.” Sur-Reply at 12.*

Pet. 15-19  
Reply 15-17

## Touch-and-Hold Was a Well-Known Solution to a Known Problem

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of: Michael S Smith  
U.S. Patent No.: 10,656,758 Attorney Docket No. 50095-0168IP1  
Issue Date: May 19, 2020  
Appl. Serial No.: 16/664,780  
Filing Date: October 25, 2019  
Title: GESTURE-EQUIPPED TOUCH SCREEN SYSTEM,  
METHOD, AND COMPUTER PROGRAM PRODUCT

### SUPPLEMENTAL DECLARATION OF DR. ANDREW COCKBURN

**UNDISPUTED**

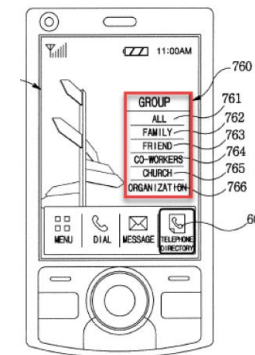
Cockburn Supp. Dec. (EX1067)

18. Dr. Madisetti’s general position is that the motivation rationales provided in my Prior Declaration only account for “providing a sub-menu of selectable options corresponding to commonly used application functions” and “not that a specific method for calling those sub-menus was ubiquitous.” EX2005, ¶¶98; see also ¶¶95-112. This is not true. For example, the analyses outlining the (duration-based touch gestures”), ¶63 n3 (“Section VI.B.3”). In my discussion of the POSITA background knowledge, I highlighted multiple examples of touch screen mobile devices where a “long press selection” reveals “additional functionality” in the form of “a pop up control that a user may then interact with”—e.g., “a pop up contextual menu that relates to an element in the display.” EX1024, 1:35-65; see also, 4:25-5:51, 8:66-9:19, Figure 1; EX1025, [0182]–[0183], Figures 12c-12d; EX1003, ¶¶47-48.



In this example, the functionality involves the generation of a contextual pop up menu 106 associated with the first message in the latest events area 102 that was long-pressed by the user.

EX1024 Figure 1, 5:35-39



The controller 180 determines that the input medium 510 has performed the proximity touch operation for a predetermined period of time and may display on the touch screen 500 a second level menu for providing a function

EX1025 Figures 12c-12d

## Motivation to Combine

Patent Owner Cannot Undermine the Petition by  
Proposing an Alternative Modification

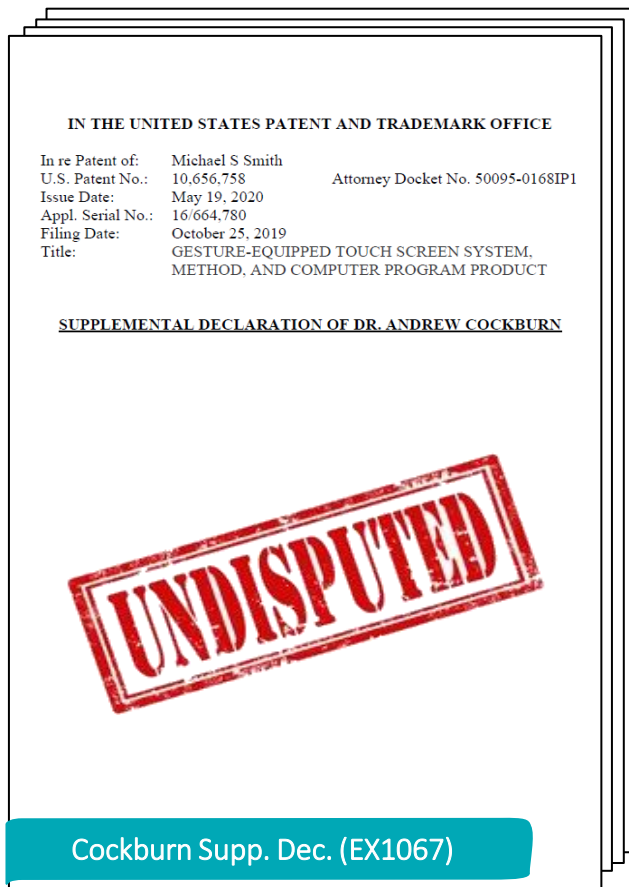
# Motivation to Combine – Chaudhri-Martyn

Rebuttal  
to:

*“Petitioner does not dispute that a POSITA could combine Chaudhri and Martyn in a way that does not result in a conflict.” Sur-Reply at 18.*

Pet. 15-19  
Reply 18-23

## Martyn and Chaudhri’s Teachings Do Not “Conflict”



25. To start, Dr. Madisetti appears to assume that using a touch-and-hold gesture for calling the App Snapshot causes a “conflict” with Chaudhri’s disclosed touch-and-hold gesture for entering the reconfiguration mode. EX2005, ¶92. That assumption is wrong. As I explained in my Prior Declaration, Chaudhri discloses “a touch that exceeds the criterion of a ‘predetermined period of time (e.g., 2 seconds),’” and a “tap” gesture was commonly associated with duration thresholds on the order of “less than 500 milliseconds.” EX1003, ¶¶75-77 (quoting EX1004, [0217]; EX1035, 11:19-24). As such, a “POSITA would have known to implement the duration criterion for the corresponding touch-and-hold gesture [that calls the App Snapshot] as being greater than the first time threshold of the tap [e.g., 500 milliseconds], while also less than a second time threshold beyond which the interface transitions out of the ‘normal’ mode and into the ‘reconfiguration’ mode [e.g., 2 seconds].” EX1003, ¶77; see also ¶¶49-53 (describing the advanced state of

Pet. 34-35  
Reply 2-4

EX1067 (Cockburn Supp. Dec.) Para 25

# Motivation to Combine – Chaudhri-Martyn

**Rebuttal  
to:**

*“[A] tappable object modification target could be added to Chaudhri’s normal mode for calling Martyn’s Snapshot.” Sur-Reply at 18.*

Pet. 15-19  
Reply 18-23

## Patent Owner’s Alternatives Are Worse, Not “Superior”

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of: Michael S Smith  
U.S. Patent No.: 10,656,758 Attorney Docket No. 50095-0168IP1  
Issue Date: May 19, 2020  
Appl. Serial No.: 16/664,780  
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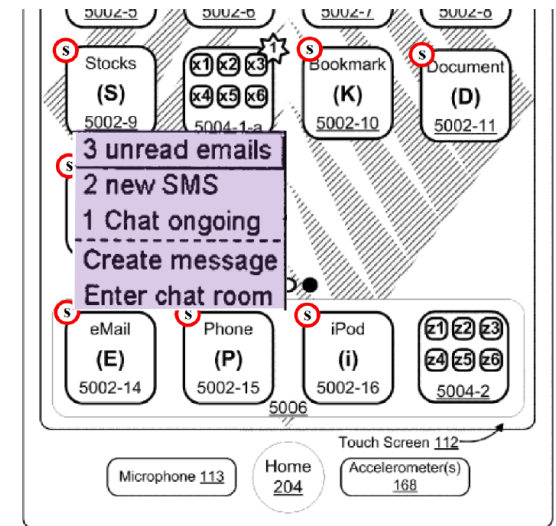
SUPPLEMENTAL DECLARATION OF DR. ANDREW COCKBURN

**UNDISPUTED**

Cockburn Supp. Dec. (EX1067)

27. Dr. Madisetti claims this alternative gesture “is superior to Martyn’s calling methods.” EX2005, ¶119. I disagree. For example, a POSITA would not have preferred Dr. Madisetti’s alternative because it creates a crowded user interface and requires the user to precisely tap a small “object modification target” (red circles below) placed “in the upper lefthand corner on [the respective application] icons”:

EX2005, ¶¶113-117 (Dr. Madisetti’s visual aid). From a POSITA’s perspective, this crowded interface problem is particularly concerning in the context of mobile touch screen devices like those Chaudhri describes. For example, as Chaudhri explains,



EX2005 Paras 113-117 (Dr. Madisetti’s visual aid)

EX1067 (Cockburn Supp. Dec.) Para 27