

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

PETITIONER'S DEMONSTRATIVES

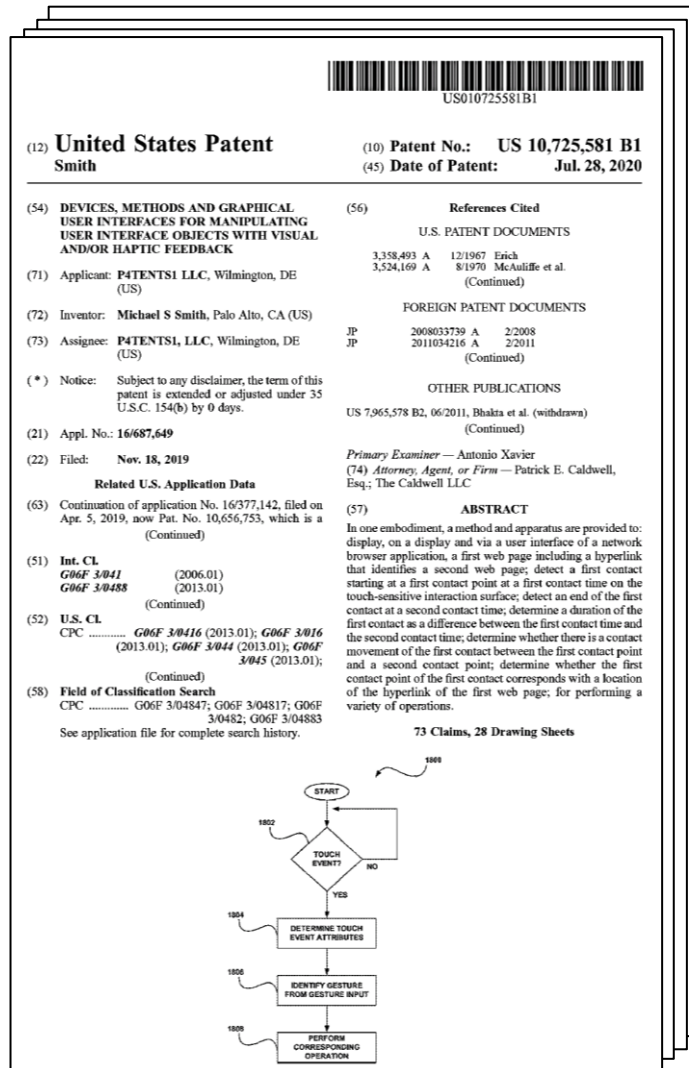
Case No. IPR2024-01090
U.S. Patent No. 10,725,581
Before JAMESON LEE, MIRIAM L. QUINN, and SHARON FENICK
Administrative Patent Judges

APPLE 1100
Apple v. Smith Interface
IPR2024-01090

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Motivation to Combine: Applying Bhumkar's Teachings on Menu Options for Interfacing With a Webpage Preview in the Context of Blumenberg's Web Browser	53

Overview: The '581 Patent – The Challenge



- Challenged Claims: 1-3, 21, 29-31, 42-44, 54, 62-65
- Independent Claims 1/42 rise and fall together
- Dependent Claims 2/43, 21/54, 29/62, 30/63 argued

Ground	Claims	Basis for Rejection
1	1-3, 21, 29-31, 42-44, 54, 62-65	§103–Blumenberg (US 2008/0259041), Bhumkar (US 2008/0235594), and Griffin (US 2011/0248948)

Overview: The '581 Patent – Claim 1

US010725581B1

(12) **United States Patent**
Smith

(10) **Patent No.:** **US 10,725,581 B1**
(45) **Date of Patent:** **Jul. 28, 2020**

(54) **DEVICES, METHODS AND GRAPHICAL USER INTERFACES FOR MANIPULATING USER INTERFACE OBJECTS WITH VISUAL AND/OR HAPTIC FEEDBACK**

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(73) Assignee: **P4TENTS1, 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.: **16/687,649**

(22) Filed: **Nov. 18, 2019**

Related U.S. Application Data

(63) Continuation of application No. 16/377,142, filed on Apr. 5, 2019, now Pat. No. 10,656,753, which is a (Continued)

(51) **Int. Cl.**
G06F 3/041 (2006.01)
G06F 3/0455 (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 **McAuliffe 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US 7,965,578 B2, 06/2011, **Bhaskar et al.** (withdrawn)
(Continued)
Primary Examiner — Antonio Xavier
(74) **Attorney, Agent, or Firm** — Patrick E. Caldwell, Esq.; The Caldwell LLC

(57) **ABSTRACT**
In one embodiment, a method and apparatus are provided to: display, on a display and via a user interface of a network browser application, a first web page including a hyperlink that identifies a second web page; detect a first contact starting at a first contact point at a first contact time on the touch-sensitive interaction surface; detect an end of the first contact at a second contact time; determine a duration of the first contact as a difference between the first contact time and the second contact time; determine whether there is a contact movement of the first contact between the first contact point and a second contact point; determine whether the first contact point of the first contact corresponds with a location of the hyperlink of the first web page; for performing a variety of operations.

73 Claims, 28 Drawing Sheets

1800

1802

1804

1806

1808

```
graph TD
    START([START]) --> TOUCH{TOUCH EVENT?}
    TOUCH -- NO --> START
    TOUCH -- YES --> DETERMINE[DETERMINE TOUCH EVENT ATTRIBUTES]
    DETERMINE --> IDENTIFY[IDENTIFY GESTURE FROM GESTURE INPUT]
    IDENTIFY --> PERFORM[PERFORM CORRESPONDING OPERATION]
```

1. An electronic device, comprising:
a display;
a touch-sensitive interaction surface;
an actuator;
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 to:
display, on the display and via a user interface of a network browser application, a first web page including a hyperlink that identifies a second web page;
detect a first contact starting at a first contact point at a first contact time on the touch-sensitive interaction surface;
detect an end of the first contact at a second contact time;
determine a duration of the first contact as a difference between the first contact time and the second contact time;
determine whether there is a contact movement of the first contact between the first contact point and a second contact point;
determine whether the first contact point of the first contact corresponds with a location of the hyperlink

when: the first web page is displayed via the user interface of the network browser application, the duration of the first contact is determined to be less than a first user-configurable predefined duration, and the end of the first contact is detected: avoid display, on the first web page, a result of any operation based on the first contact;
when: the first web page is displayed via the user interface of the network browser application, the duration of the first contact is determined to be greater than the first user-configurable predefined duration and less than a second user-configurable predefined duration, the first contact point of the first contact is determined to correspond with the location of the hyperlink of the first web page, it is not determined that there is the contact movement of the first contact between the first contact point and the second contact point, and the end of the first contact is detected: replace the display of the first web page with the second web page via the user interface of the network browser application; and
when: the first web page is displayed via the user interface of the network browser application, the duration of the first contact is determined to be greater than the second user-configurable predefined duration, the first contact point of the first contact is determined to correspond with the location of the hyperlink of the first web page, it is not determined that there is the contact movement of the first contact between the first contact point and the second contact point, and the end of the first contact is not detected: output, utilizing the actuator, a first feedback that is perceptible by touch and display a menu including at least one option for, in response to detection of a selection thereof, performing an operation on a web address associated with the hyperlink of the first web page, and further display at least a portion of the second web page, such that at least the at least portion of the second web page is displayed in at least one first virtual display layer which appears above at least one second virtual display layer that includes at least a portion of the user interface of the network browser application that remains at least partially visible.

Three Claimed Scenarios

Overview: The '581 Patent – Claim 1

Pet. 4-5

First Scenario

when: the first web page is displayed via the user interface of the network browser application, the duration of the first contact is determined to be less than a first user-configurable predefined duration, and the end of the first contact is detected: avoid display, on the first web page, a result of any operation based on the first contact;

Second Scenario

when: the first web page is displayed via the user interface of the network browser application, the duration of the first contact is determined to be greater than the first user-configurable predefined duration and less than a second user-configurable predefined duration, the first contact point of the first contact is determined to correspond with the location of the hyperlink of the first web page, it is not determined that there is the contact movement of the first contact between the first contact point and the second contact point, and the end of the first contact is detected: replace the display of the first web page with the second web page via the user interface of the network browser application; and

Third Scenario

when: the first web page is displayed via the user interface of the network browser application, the duration of the first contact is determined to be greater than the second user-configurable predefined duration, the first contact point of the first contact is determined to correspond with the location of the hyperlink of the first web page, it is not determined that there is the contact movement of the first contact between the first contact point and the second contact point, and the end of the first contact is not detected: output, utilizing the actuator, a first feedback that is perceptible by touch and display a menu including at least one option for, in response to detection of a selection thereof, performing an operation on a web address associated with the hyperlink of the first web page, and further display at least a portion of the second web page, such that at least the at least portion of the second web page is displayed in at least one first virtual display layer which appears above at least one second virtual display layer that includes at least a portion of the user interface of the network browser application that remains at least partially visible.

Overview: The '581 Patent – Claim 1

Pet. 4-5

First Scenario

when: the first web page is displayed via the user interface of the network browser application, the duration of the first contact is determined to be less than a first user-configurable predefined duration, and the end of the first contact is detected: avoid display, on the first web page, a result of any operation based on the first contact;

***When Contact < 1st Duration,
Avoid Display (Do Nothing)***

Overview: The '581 Patent – Claim 1

Pet. 4-5

Second Scenario

when: the first web page is displayed via the user interface of the network browser application, the duration of the first contact is determined to be greater than the first user-configurable predefined duration and less than a second user-configurable predefined duration, the first contact point of the first contact is determined to correspond with the location of the hyperlink of the first web page, it is not determined that there is the contact movement of the first contact between the first contact point and the second contact point, and the end of the first contact is detected: replace the display of the first web page with the second web page via the user interface of the network browser application; and

***When Contact > 1st Duration &
< 2nd Duration,
Replace 1st Page with 2nd Page***

Overview: The '581 Patent – Claim 1

Pet. 4-5

Third Scenario

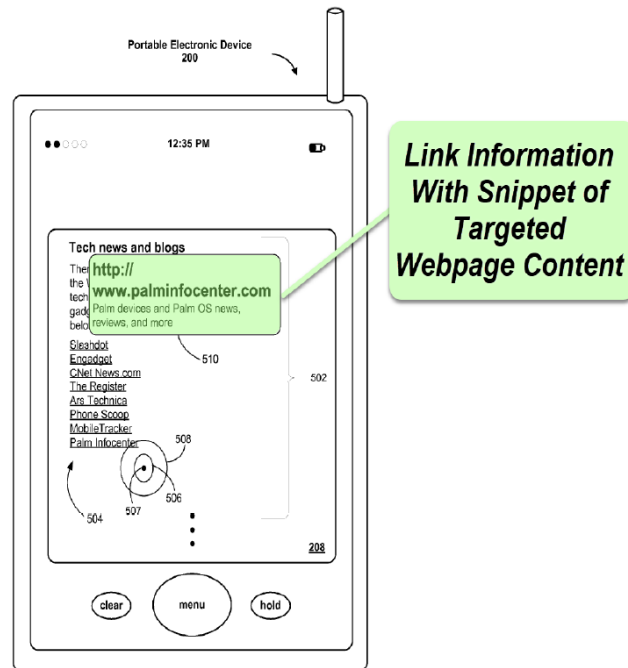
when: the first web page is displayed via the user interface of the network browser application, the duration of the first contact is determined to be greater than the second user-configurable predefined duration, the first contact point of the first contact is determined to correspond with the location of the hyperlink of the first web page, it is not determined that there is the contact movement of the first contact between the first contact point and the second contact point, and the end of the first contact is not detected: output, utilizing the actuator, a first feedback that is perceptible by touch and display a menu including at least one option for, in response to detection of a selection thereof, performing an operation on a web address associated with the hyperlink of the first web page, and further display at least a portion of the second web page, such that at least the at least portion of the second web page is displayed in at least one first virtual display layer which appears above at least one second virtual display layer that includes at least a portion of the user interface of the network browser application that remains at least partially visible.

***When Contact > 2nd Duration,
Feedback + Menu + Preview***

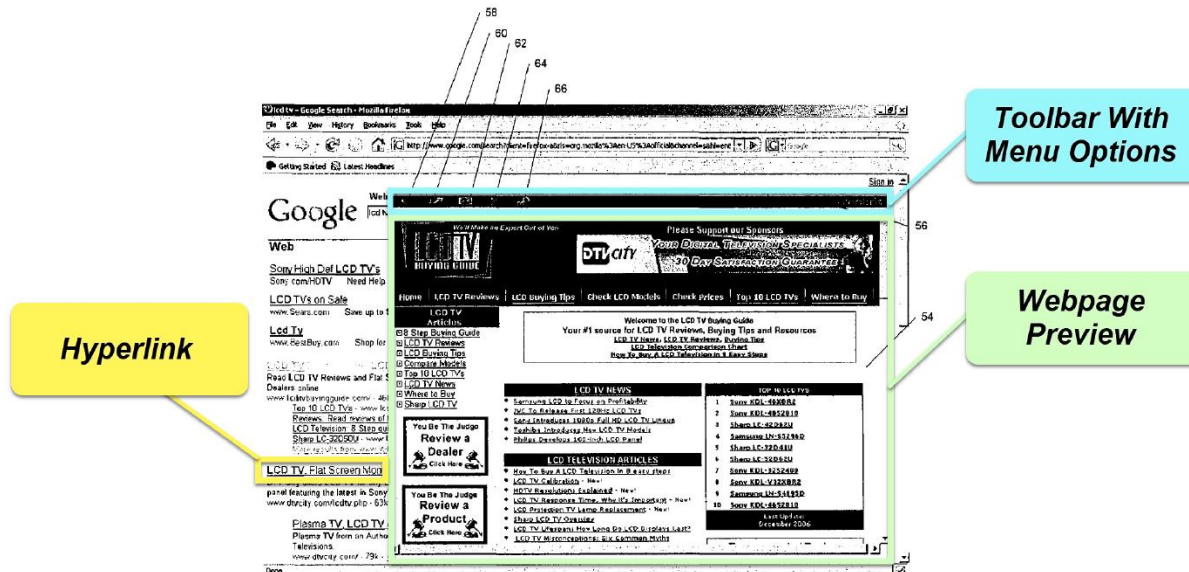
Overview: The Prior Art References

Pet. 8-12

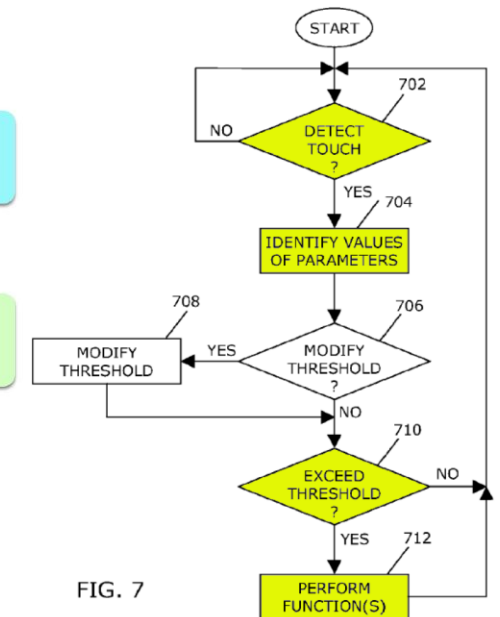
Blumenberg



Bhumkar



Griffin



Overview: Blumenberg

Pet. 8-12

Contact at a hyperlink

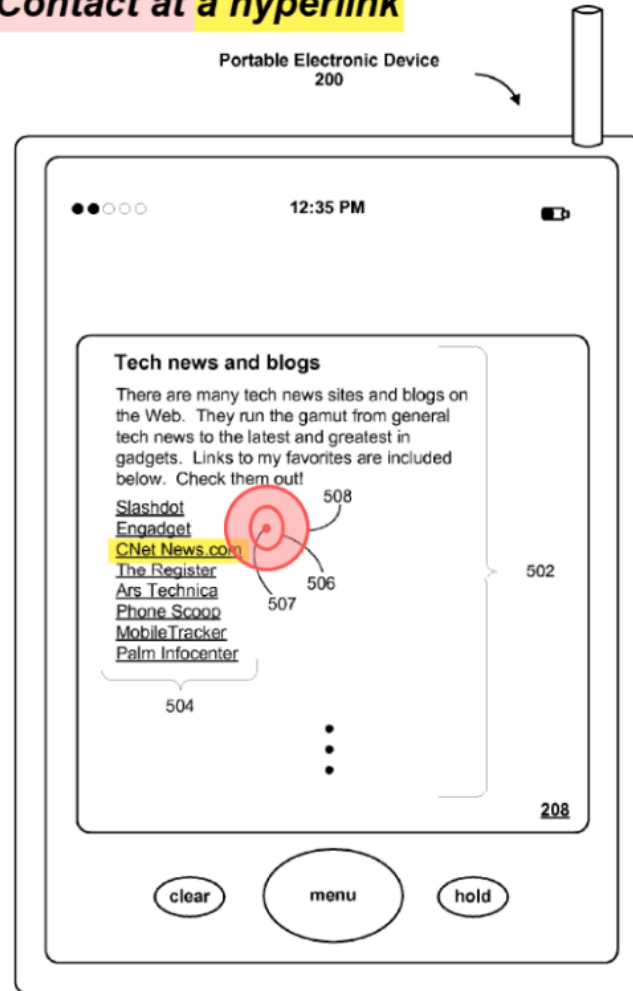


FIG. 5B

Hyperlink selection yields link information

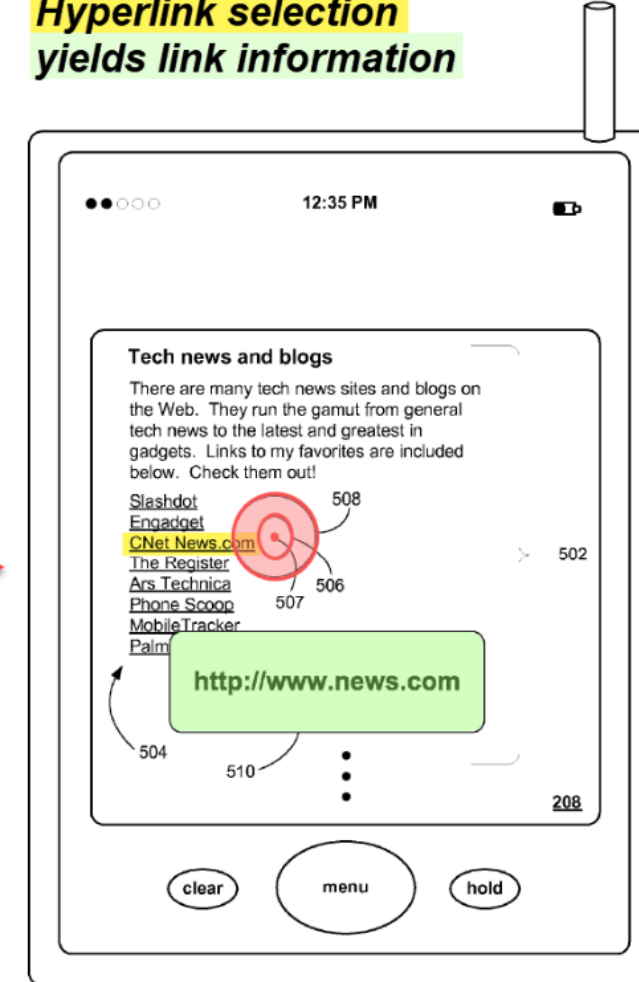
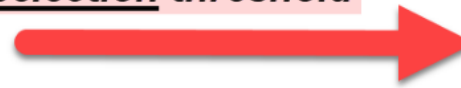


FIG. 5C

Contact maintained for a duration greater than selection threshold



EX1003 (Cockburn Dec.) Paras 58-64

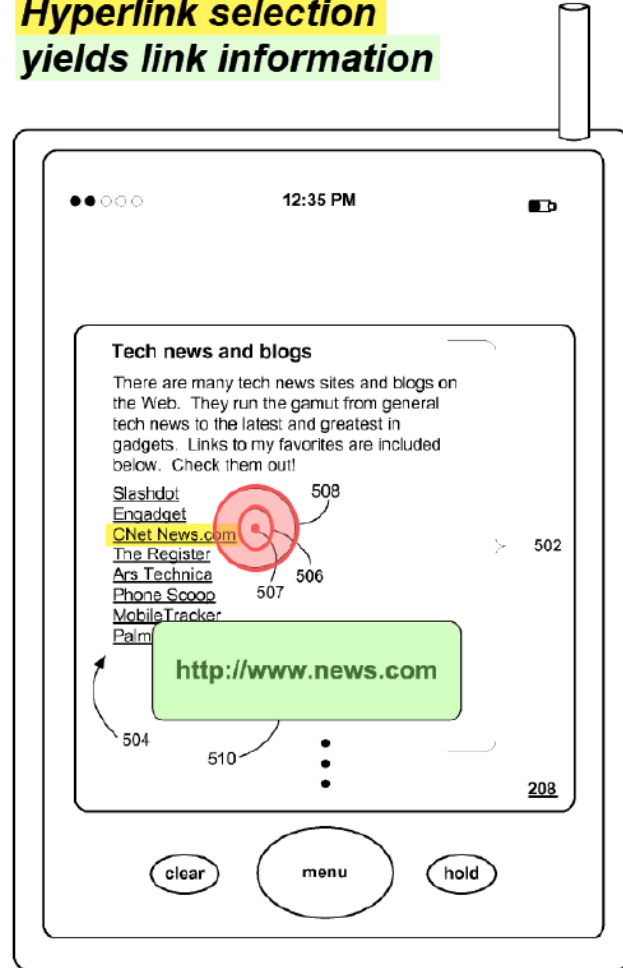
EX1004 (Blumenberg), Figure 5B-5C (annotated)

10

Overview: Blumenberg

Pet. 8-12

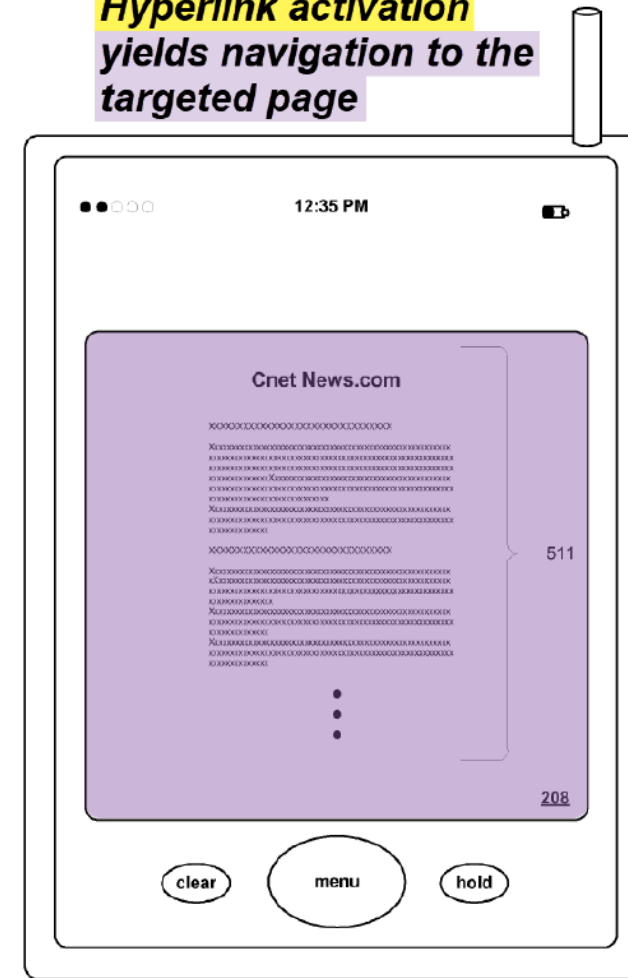
**Hyperlink selection
yields link information**



**Contact terminated with a
duration greater than
selection threshold and
less than activation
threshold**



**Hyperlink activation
yields navigation to the
targeted page**



EX1003 (Cockburn Dec.) Paras 58-64

EX1004 (Blumenberg), Figures 5C-5D (annotated)

Overview: Blumenberg

Pet. 8-12

**Hyperlink selection
yields link information**

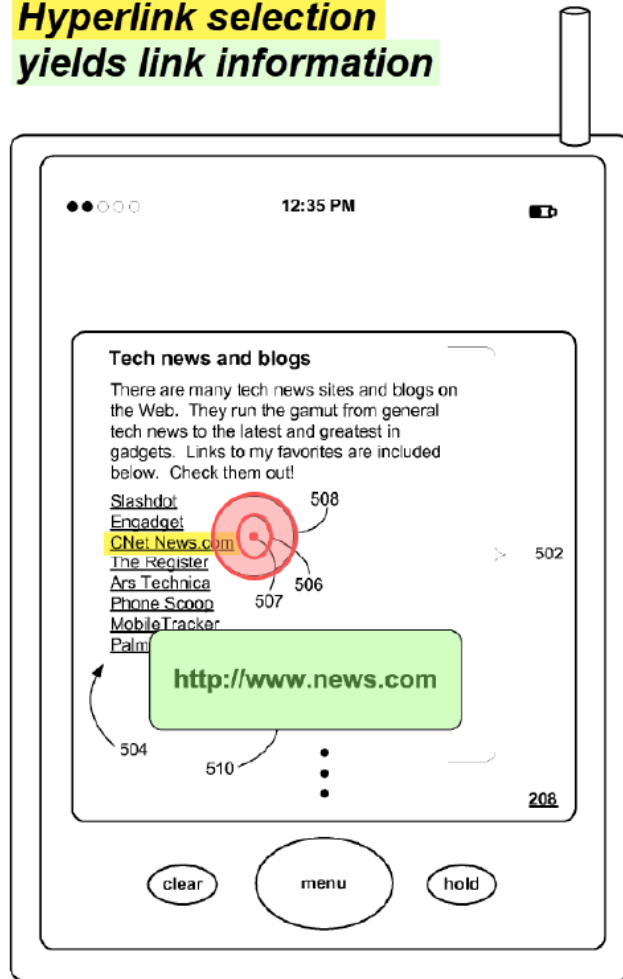


FIG. 5C

**Contact maintained or
terminated with a duration
greater than activation
threshold**



**Maintained hyperlink contact
yields persistent link information**

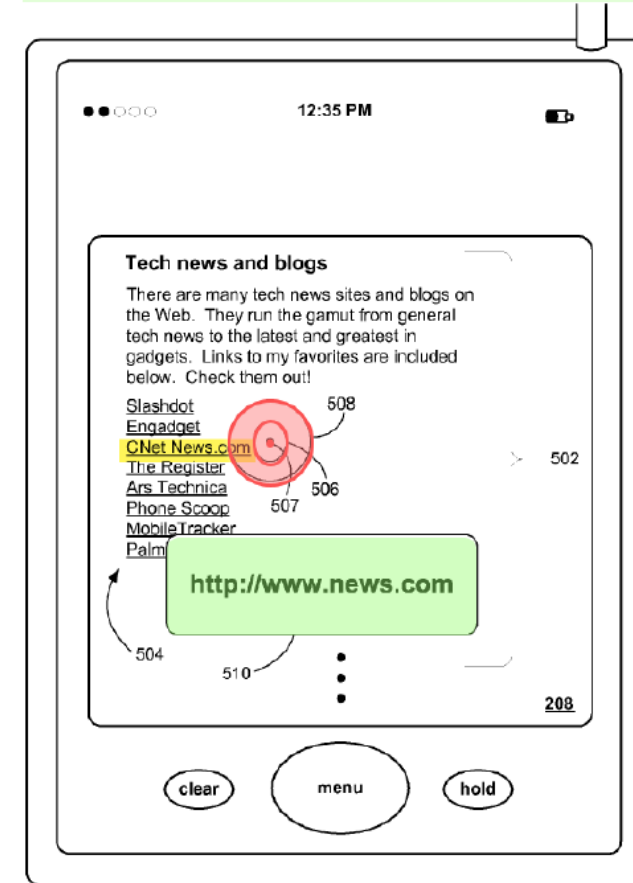


FIG. 5C

EX1003 (Cockburn Dec.) Paras 58-64

EX1004 (Blumenberg), Figure 5C (duplicated and annotated)

Overview: Blumenberg

Pet. 8-12

**Hyperlink selection
yields link information**

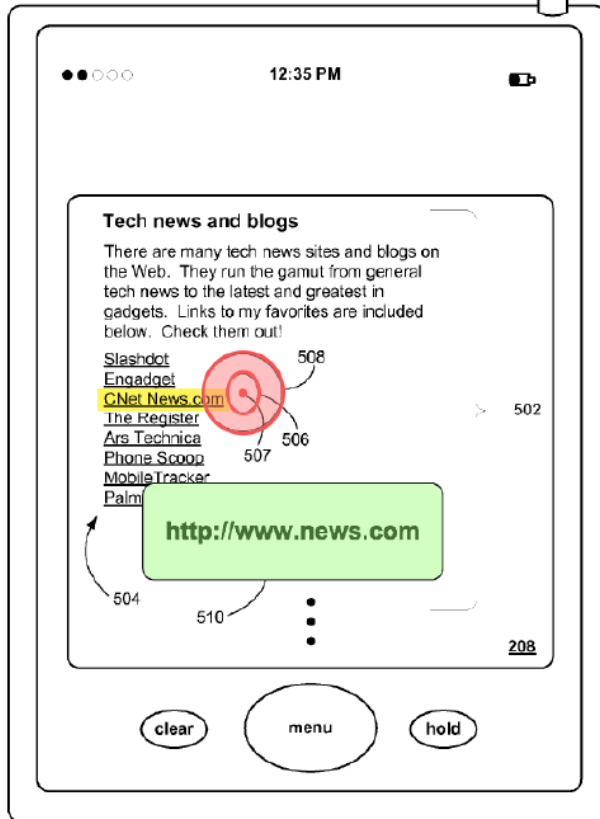


FIG. 5C

**Maintained hyperlink contact
removes link information**

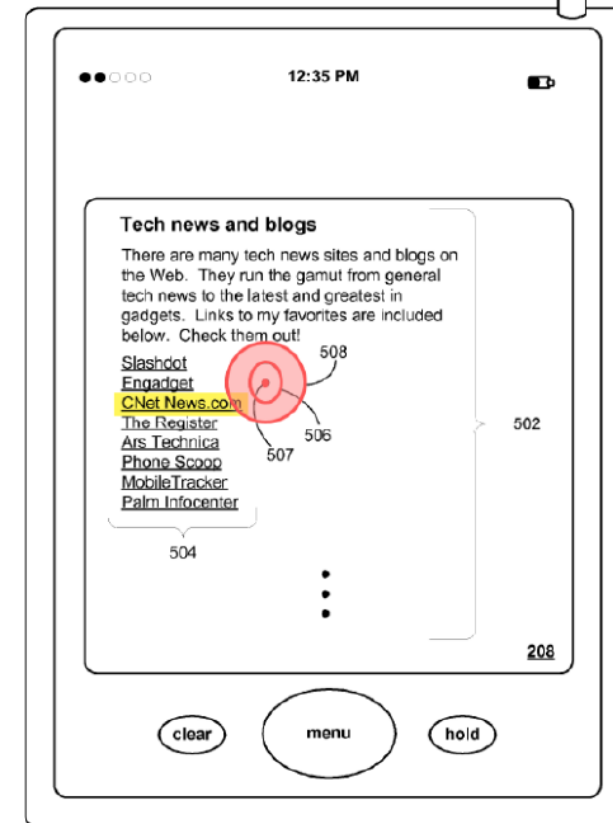


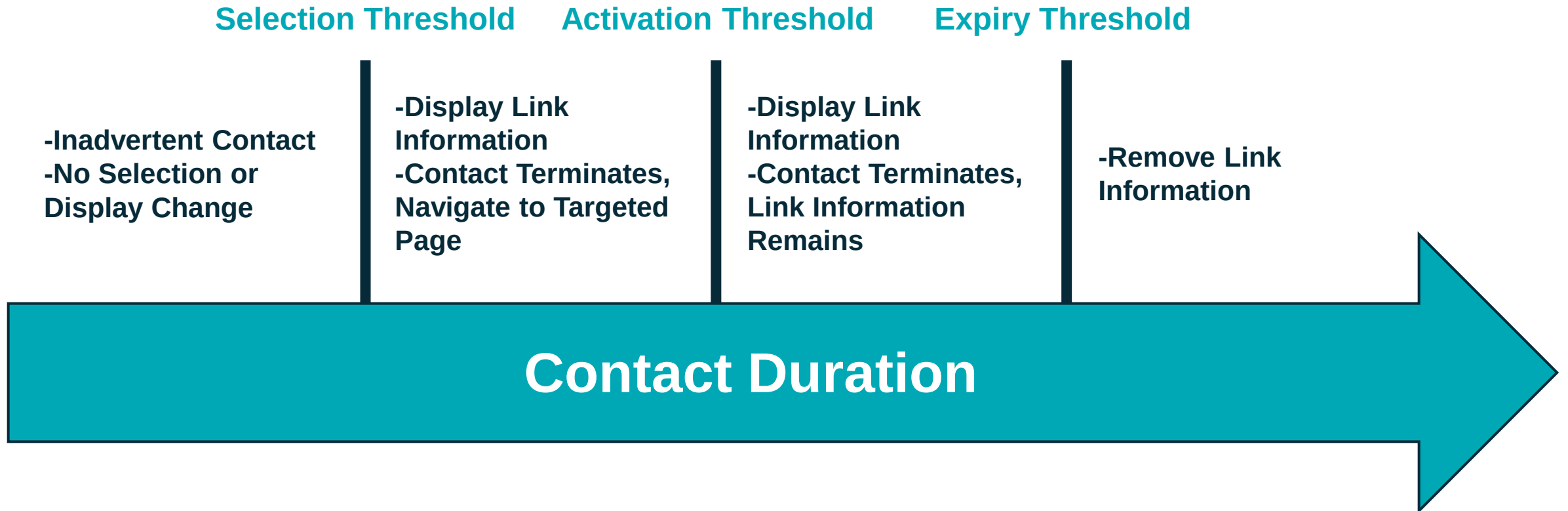
FIG. 5B

**Contact maintained for a
duration greater than
expiry threshold**



Overview: Blumenberg

Pet. 8-12



EX1003 (Cockburn Dec.) Paras 58-64

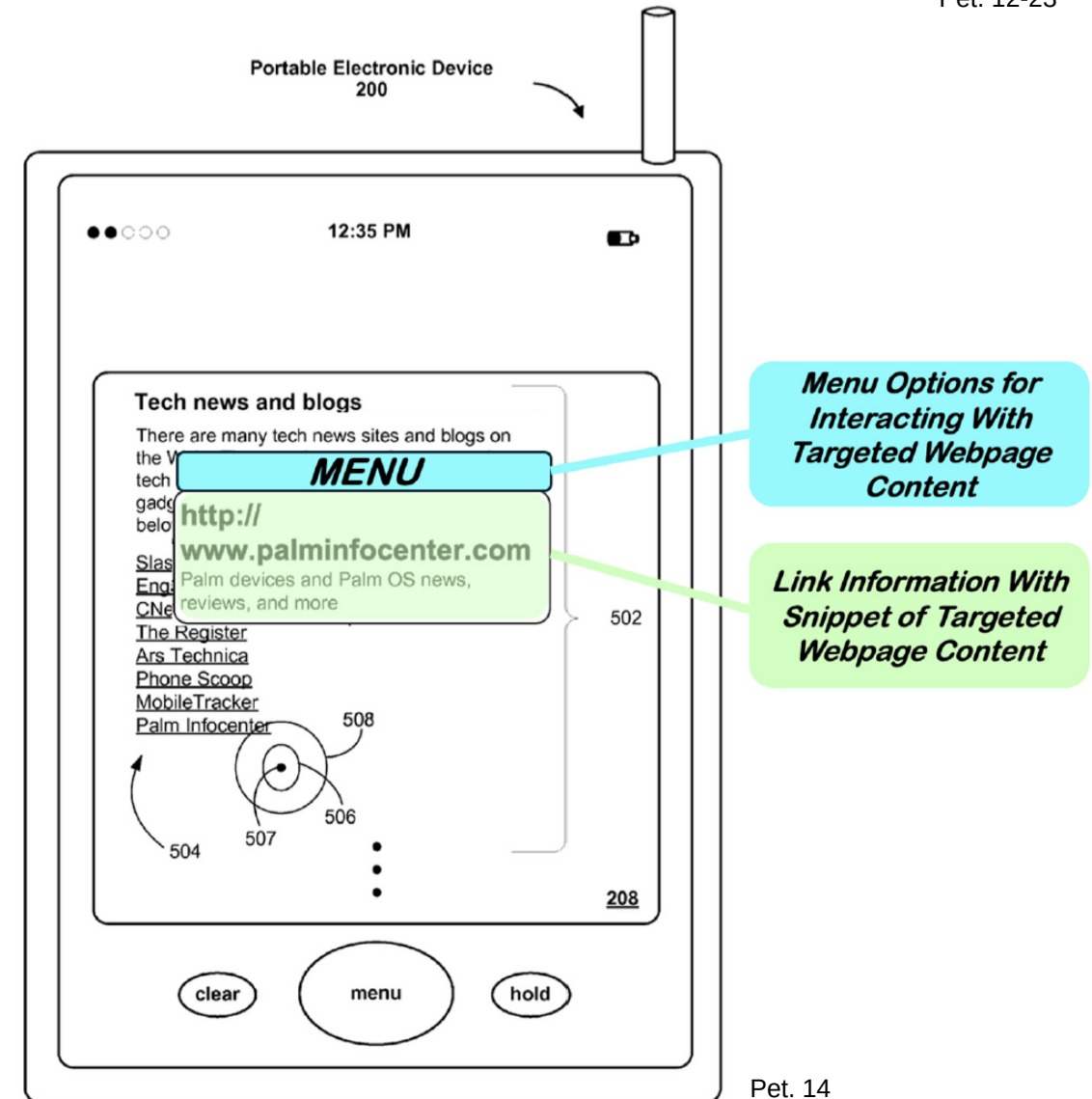
Overview: The Prior Art Combination

Pet. 12-23

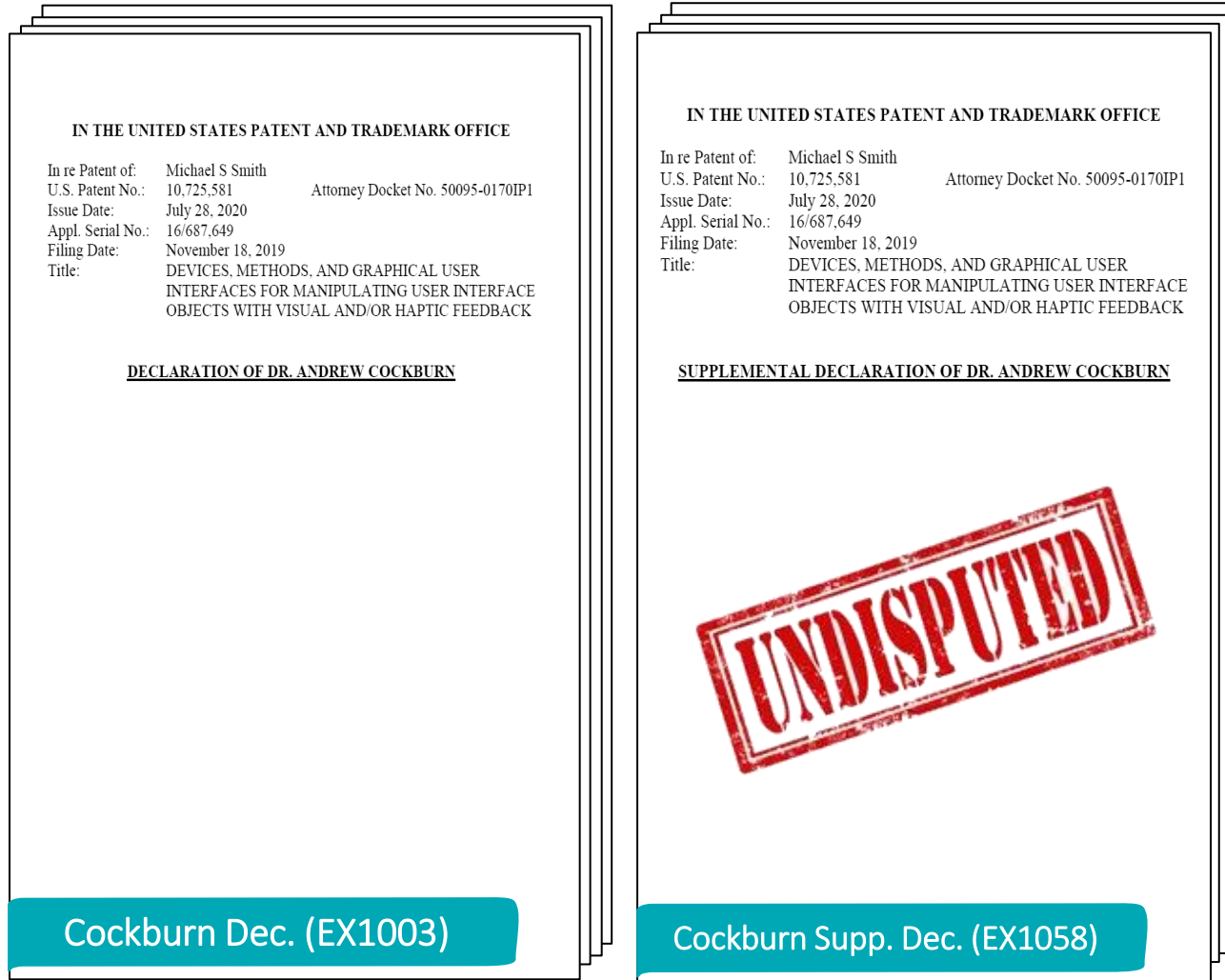
PETITION FOR *INTER PARTES* REVIEW OF UNITED STATES PATENT NO. 10,725,581 PURSUANT TO 35 U.S.C. §§ 311–319, 37 C.F.R. § 42

The Blumenberg-Bhumkar-Griffin Combination represents the predictable and expected result of applying in the context of Blumenberg's web browser: [a] Bhumkar's teachings on menu options for interacting with a webpage preview window corresponding to a hyperlink; [b] Griffin's teachings on multiple user-configurable touch duration thresholds; and [c] Griffin's further teachings on triggering selective tactile feedback. EX1003, ¶67. From a POSITA's perspective

Pet. 12



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, ¶¶38-56)
- Buttressed by more than 30 corroborating exhibits

The First Claimed Scenario

Avoiding Display of Any Operation When the
Contact Is Less Than a First Duration
(Elements [1.m] and [42.h])

1st Scenario [1.m] – Blumenberg Renders Obvious

Pet. 34-35
Reply 2-4

PETITION FOR *INTER PARTES* REVIEW OF UNITED STATES PATENT NO. 10,725,581 PURSUANT TO 35 U.S.C. §§ 311–319, 37 C.F.R. § 42

¶117. Moreover, Blumenberg teaches that information associated with the link will not be displayed until and unless “the contact is maintained for at least a predetermined time (e.g., 0.2 seconds, or another value between 0.1 and 0.25 seconds).” EX1004, [0049]. In effect, Blumenberg’s technique disregards inadvertent contact, such as contact maintained for—i.e., initiated and ended within—an exceedingly short duration. EX1004, [0034] (“inadvertent contact with an icon may not select a corresponding symbol”); EX1003, ¶¶118-119. As mentioned, this *first* and shortest *predefined duration* in Blumenberg is referenced throughout the Petition as the selection threshold. *Supra*, §VI.A.1.

1st Scenario [1.m] – Blumenberg Renders Obvious

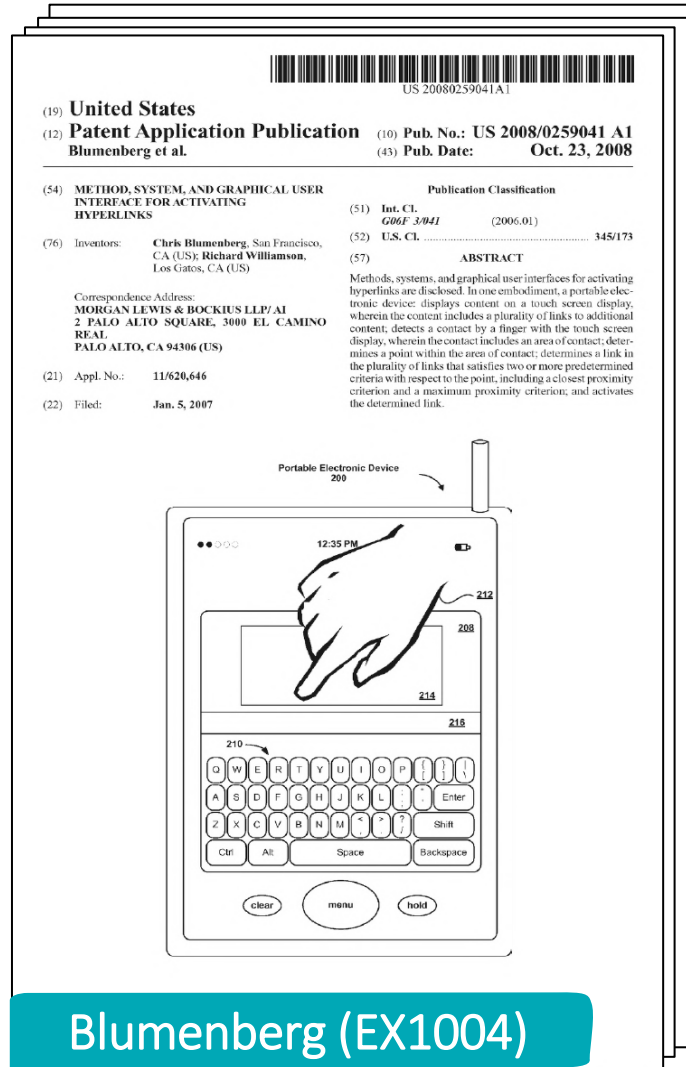
Blumenberg Teaches Disregarding Inadvertent Contact

with the device 200. In some embodiments, inadvertent contact with an icon may not select a corresponding symbol. For example, a swipe gesture that sweeps over an icon may not select a corresponding symbol if the gesture corresponding to selection is a tap gesture.

EX1004 (Blumenberg) [0034]

[0049] In some embodiments, the information is displayed after the contact is maintained for at least a predetermined time (e.g., 0.2 seconds, or another value between 0.1 and 0.25 seconds) for displaying the link information. In some

EX1004 (Blumenberg) [0049]



1st Scenario [1.m] – Blumenberg Renders Obvious

Blumenberg Teaches Disregarding Inadvertent Contact

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of: Michael S Smith
U.S. Patent No.: 10,725,581 Attorney Docket No. 50095-0170IP1
Issue Date: July 28, 2020
Appl. Serial No.: 16/687,649
Filing Date: November 18, 2019
Title: DEVICES, METHODS, AND GRAPHICAL USER
INTERFACES FOR MANIPULATING USER INTERFACE
OBJECTS WITH VISUAL AND/OR HAPTIC FEEDBACK

DECLARATION OF DR. ANDREW COCKBURN

Cockburn Dec. (EX1003)

reasoning. Blumenberg's statement about disregarding inadvertent contact with icons as a general matter would certainly apply to Blumenberg's preferred embodiments about hyperlinks. It would not make sense for Blumenberg to make a general statement about selecting GUI elements that is inapplicable to the main GUI element of concern—hyperlinks. Moreover, the purpose of disregarding inadvertent contact logically applies generally to all different types of selectable GUI elements, including hyperlinks. Whether a hyperlink, button, or slider, the POSITA would have appreciated the general aim of Blumenberg's design is to prevent any/all of those types of GUI elements from being mistakenly selected by inadvertent contact.

1st Scenario [1.m] – Blumenberg Renders Obvious

Blumenberg Teaches Disregarding Inadvertent Contact

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of: Michael S Smith
U.S. Patent No.: 10,725,581 Attorney Docket No. 50095-0170IP1
Issue Date: July 28, 2020
Appl. Serial No.: 16/687,649
Filing Date: November 18, 2019
Title: DEVICES, METHODS, AND GRAPHICAL USER
INTERFACES FOR MANIPULATING USER INTERFACE
OBJECTS WITH VISUAL AND/OR HAPTIC FEEDBACK

SUPPLEMENTAL DECLARATION OF DR. ANDREW COCKBURN

UNDISPUTED

Cockburn Supp. Dec. (EX1058)

did not intend. In fact, in the case of hyperlinks, the POSITA would have

appreciated that it is even more important to disregard inadvertent contact because

the consequence of a mistakenly initiated action is more frustrating to the user.

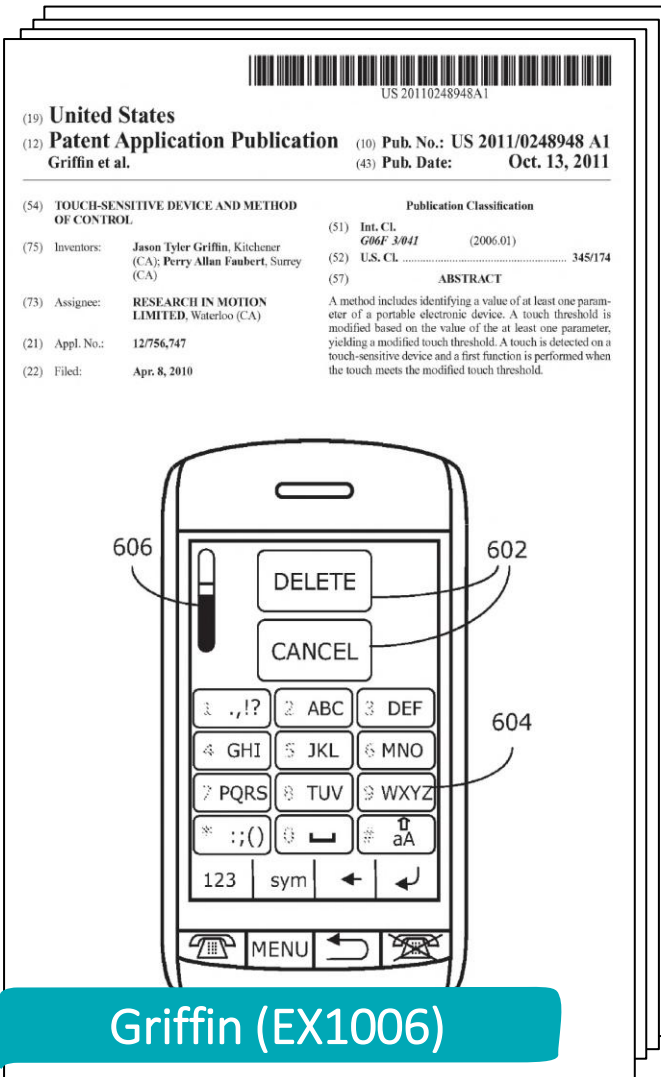
Entering a mistaken alphanumeric key input is an error that can be fixed almost immediately. Navigating to an unintended webpage, by contrast, is likely to force the user to sit in frustration through the loading time, which can extend for several seconds. Blumenberg recognized and sought to remedy this “hit-or-miss character”

of web browsing on mobile devices “which can frustrate users.” EX1004, [0004].

Accordingly, the common-sense notion of disregarding inadvertent contact on hyperlink icons is an integral and obvious part of Blumenberg’s design goal.

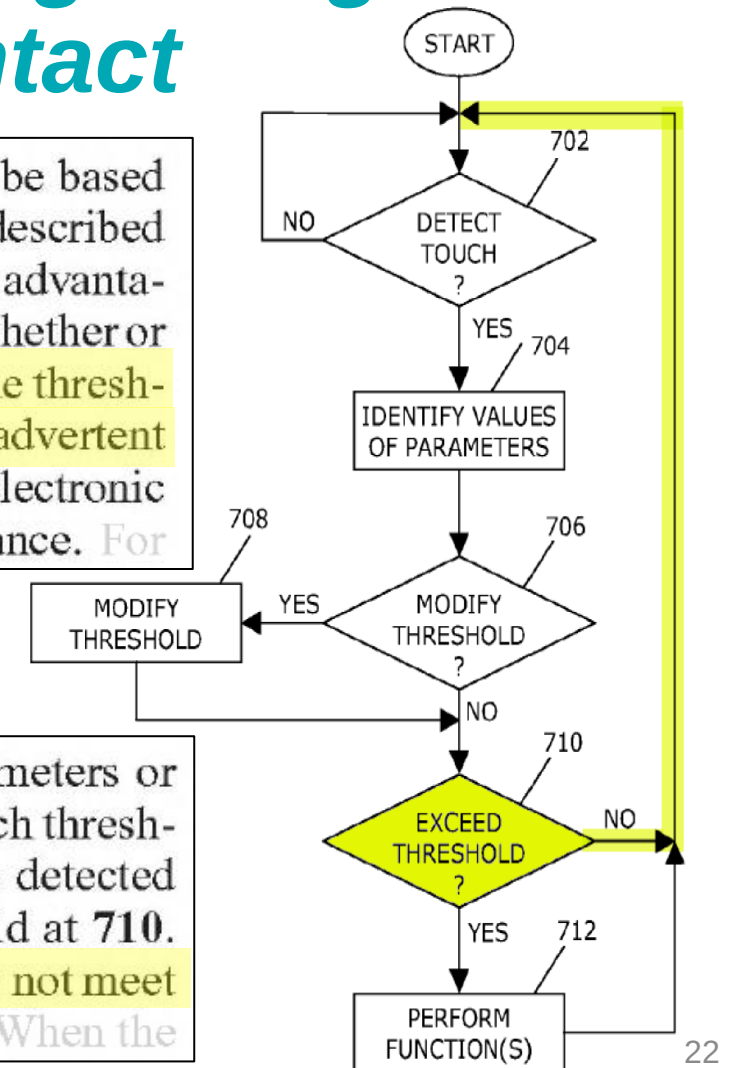
1st Scenario [1.m] – Blumenberg-Griffin Render Obvious

Griffin Teaches Disregarding Inadvertent Contact



[0033] Touch thresholds are modifiable and may be based on the values of any number of parameters, as described below. Baseline or default touch thresholds are advantageously established, e.g., based on the application, whether or not a keyboard 604 is utilized, and so forth. Baseline thresholds may be established, for example, to reduce inadvertent input, e.g., selections resulting when the portable electronic device 100 is carried in a pocket or bag, for instance. For

[0053] One or more values of one or more parameters or characteristics of the touch are compared to the touch threshold at 710, e.g., a force value or contact area. The detected touch may be compared to more than one threshold at 710. When the one or more values related to the touch do not meet any touch threshold, the process continues at 702. When the



1st Scenario [1.m] – Blumenberg-Griffin Render Obvious

Pet. 34-35
Reply 2-4

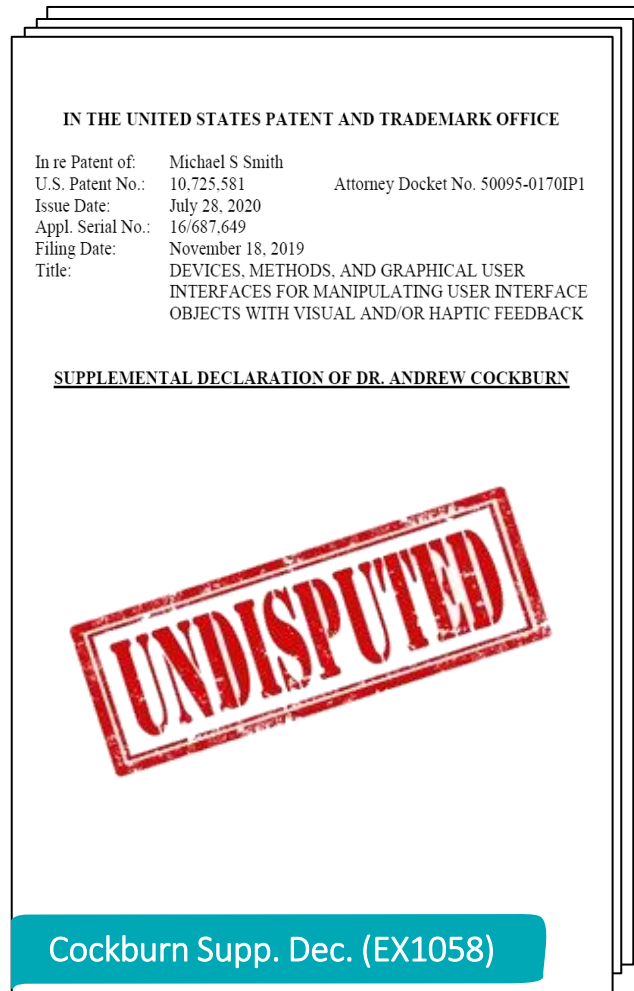
PETITION FOR *INTER PARTES* REVIEW OF UNITED STATES PATENT NO. 10,725,581 PURSUANT TO 35 U.S.C. §§ 311–319, 37 C.F.R. § 42

Consistent with and complementing Blumenberg’s disclosure, Griffin similarly discloses the use of “[b]aseline thresholds...to reduce inadvertent input.” EX1006, [0033]; *see also* [0061]; *supra*, §VI.A.4.c (motivation). Like Blumenberg, Griffin explains that “[a] touch may be considered inadvertent...based on...duration of touch.” *Id.*, [0043]. And touches deemed “inadvertent” may be “disregarded.” *Id.*, [0033]. As such, in Griffin’s process flow, “[w]hen the one or more values related to the touch [e.g., the touch duration] do not meet any touch threshold, the process continues” without performing any functions. *Id.*, [0053], Figure 7.

1st Scenario [1.m] – Blumenberg-Griffin Render Obvious

Rebuttal to: “Blumenberg already solves that problem by permitting a user to lock the screen.” POR at 37.

Pet. 34-35; Reply 2-4



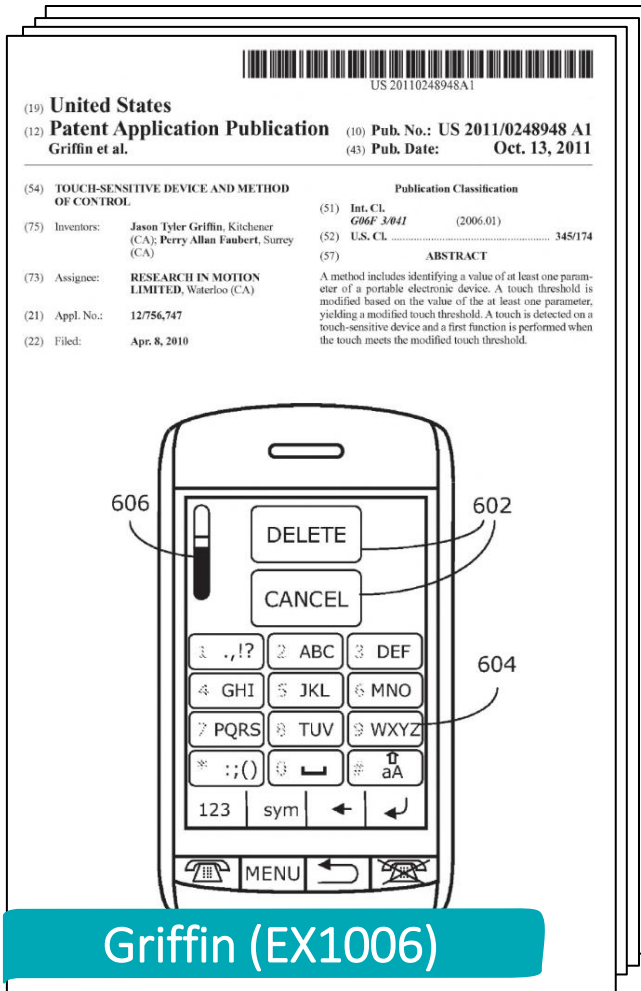
(quoting EX1004, [0025]). But a POSITA would have understood that a locking mechanism does not prevent any and all inadvertent inputs. After all, if locking the device were really a complete solution, Blumenberg would not have subsequently disclosed the concept of disregarding inadvertent contact in a later paragraph. See EX1004, [0034]. In addition, any POSITA would have known that locking the device is not a failsafe because users can make inadvertent short contacts (or near contacts) with the touch screen while the device is unlocked and actively being used. For example, users may accidentally activate a hyperlink while holding a finger near to the display to conveniently scroll a webpage. Even if such contacts are not likely to occur, there is often no meaningful cost or downside to incorporating a minimum duration threshold to reduce the incidence of accidental activation, especially when this general concept is already part of Blumenberg’s disclosure (as discussed).

EX1058 (Cockburn Supp. Dec.) Para. 44

1st Scenario [1.m] – Blumenberg-Griffin Render Obvious

Rebuttal to: “Griffin Confirms That Other Display Operations Occur Before a First Threshold.” Sur-Reply at 11-12.

Griffin’s Alternative “Example” Does Not Override the Petition’s Analysis



120, and so forth. Selection options may include, for example, displayed or virtual keys of a keyboard 602 for entry of characters; selection boxes or windows 602, e.g., “cancel,” “delete,” or “unlock”; function buttons, such as play or stop on a music player; and so forth. For example, a touch that does not meet a touch threshold may cause a selection option to be highlighted, such as a displayed button 602 or key 604, whereas a touch that meets the touch threshold may result in selection or input of that selection option.

EX1006 (Griffin) [0034]

The Second Claimed Scenario

Replacing the Current Webpage With the Hyperlink Identified Webpage When the Contact Is Greater Than the First Duration and Less Than a Second Duration
(Elements [1.n] and [42.i])

2nd Scenario [1.n] – Blumenberg Renders Obvious

PETITION FOR *INTER PARTES* REVIEW OF UNITED STATES PATENT NO. 10,725,581 PURSUANT TO 35 U.S.C. §§ 311–319, 37 C.F.R. § 42

Pet. 36-39
Reply 7-9

Beyond the selection threshold, Blumenberg further provides what this Petition refers to as an activation threshold. *Supra*, §VI.A.1. When the user *ends* the contact attributed to a selected link at a *duration* that is *less than* the activation threshold (*second predefined duration*), the selected link is activated and web browser navigates to the target webpage. EX1004, [0051] (“[T]he selected link is activated by a contact break if the link information was displayed *less* than [a] predetermined amount of time[.]”)⁶ (“the activation of the link may be triggered by a gesture, such as a quick tap”).

To summarize, Blumenberg’s teachings in the Combination provide that a link is activated when the user ends the contact with the link at a *duration* that is *greater than* the selection threshold (*first predefined duration*) and *less than* the activation threshold (*second predefined duration*). EX1003, ¶128.

Hyperlink selection
yields link information

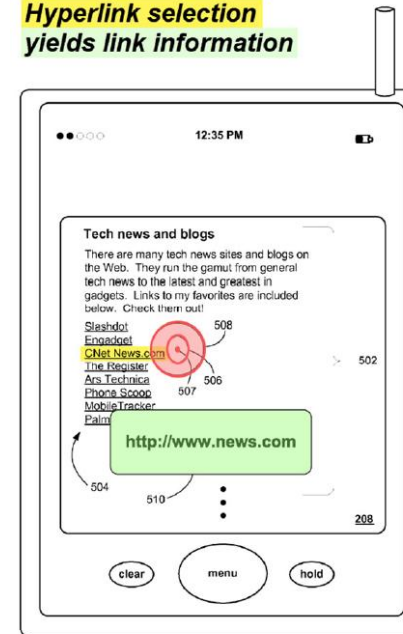


FIG. 5C

Contact terminated with a
duration greater than
selection threshold and
less than activation
threshold



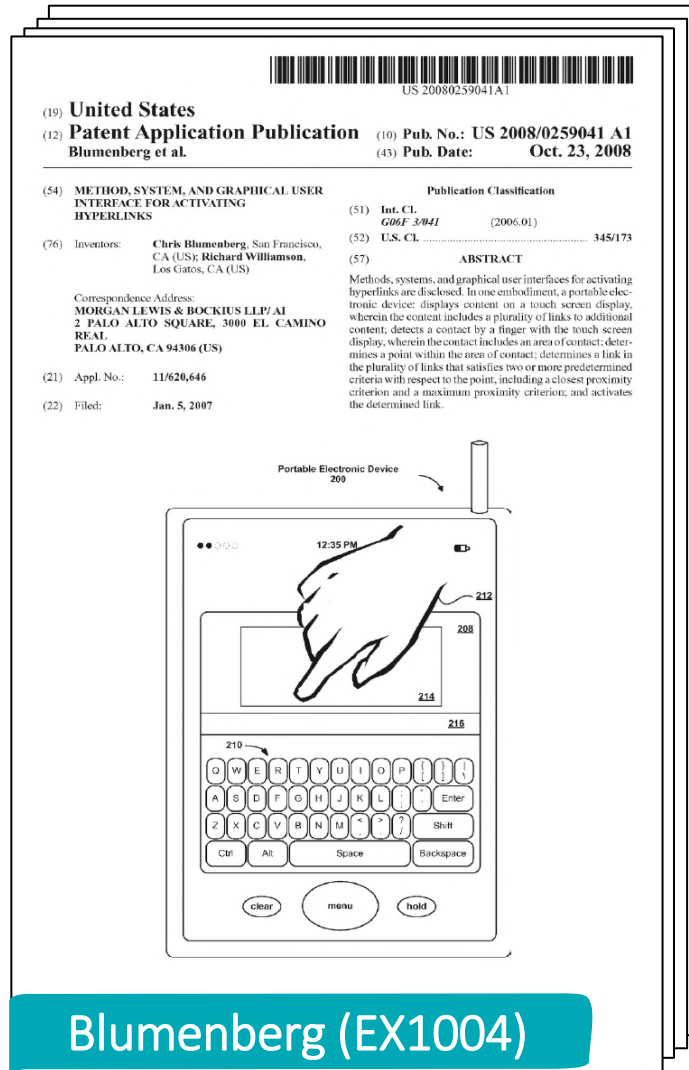
Hyperlink activation
yields navigation to the
targeted page



FIG. 5D

2nd Scenario [1.n] – Blumenberg Renders Obvious

Blumenberg Teaches Contact Durations



[0051] The activation of the link may be triggered in a variety of ways. In some embodiments, the activation is triggered by breaking the contact. For particular embodiments, the activation may be triggered after the breaking of contact before or after a first predetermined amount of time has elapsed. In some other embodiments, the activation of the link may be triggered by a gesture, such as a quick tap on the touch screen 208 after breaking contact. Furthermore, in some embodiments, if the contact is held for longer than a second predetermined amount of time, whatever link information that is displayed is removed from display and the link is not activated. In some embodiments, a combination of such activation criteria are used: the selected link is activated by a contact break if the link information was displayed less than the first predetermined amount of time, and if the link information was displayed for more than that amount of time, then the user must break contact and tap the link information (which is continued to be displayed after the contact break) to activate the selected link.

2nd Scenario [1.n] – Blumenberg Renders Obvious

Pet. 36-39

Reply 7-9

PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE

**Touch
Duration
Discussion**

[0051] The activation of the link may be triggered in a variety of ways. In some embodiments, the activation is triggered by breaking the contact. For particular embodiments, the activation may be triggered after the breaking of contact before or after a first predetermined amount of time has elapsed. In some other embodiments, the activation of the link may be triggered by a gesture, such as a quick tap on the touch screen 208 after breaking contact. Furthermore, in some embodiments, if the contact is held for longer than a second predetermined amount of time, whatever link information that is displayed is removed from display and the link is not activated. In some embodiments, a combination of such activation criteria are used: the selected link is activated by a contact break if the link information was displayed less than the first predetermined amount of time, and if the link information was displayed for more than that amount of time, then the user must break contact and tap the link information (which is continued to be displayed after the contact break) to activate the selected link.

**The Sentence
Patent Owner
Quotes Refers Back
to and Extends the
Touch Duration
Discussion**

EX1004, [0051] (annotated); *see also* [0049]. In short, Blumenberg never describes link activation in a manner divorced from touch duration. EX1058, ¶¶49–50.

Reply, 7-8

29

2nd Scenario [1.n] – Blumenberg Renders Obvious

Rebuttal to:

“The final sentence expressly states that the duration compared to ‘the first predetermined threshold’ is the time period ‘the link information was displayed’ before breaking contact.” Sur-Reply at 12.

Pet. 36-39
Reply 7-9

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of: Michael S Smith
U.S. Patent No.: 10,725,581 Attorney Docket No. 50095-0170IP1
Issue Date: July 28, 2020
Appl. Serial No.: 16/687,649
Filing Date: November 18, 2019
Title: DEVICES, METHODS, AND GRAPHICAL USER
INTERFACES FOR MANIPULATING USER INTERFACE
OBJECTS WITH VISUAL AND/OR HAPTIC FEEDBACK

SUPPLEMENTAL DECLARATION OF DR. ANDREW COCKBURN

UNDISPUTED

Cockburn Supp. Dec. (EX1058)

50. But reading small, isolated pieces of text in a vacuum and drawing broad conclusions from them is not what a POSITA would have done. A POSITA would have instead read all of Blumenberg’s disclosures in context of the document as a whole. For example, the POSITA would have recognized that the sentence in which Dr. Mahon’s isolated clause appears refers to “a combination of such activation criteria” as were described in the preceding sentences about touch durations. EX1004, [0051] (“the contact is held”).

2nd Scenario [1.n] – Blumenberg Renders Obvious

Pet. 36-39; Reply 7-9

Blumenberg Teaches Contact Durations

be removed.” *Id.* Blumenberg also discloses performing certain operations after contact is broken (i.e., when the user removes their finger from the touchscreen), where the operations are based on the amount of time the contact was maintained before the contact break. *See* EX1004, ¶¶[0049]-[0051]. These operations and

EX2001 (Davis Dec.) Para. 41

42. These scenarios are described in paragraphs [0049]-[0051] of Blumenberg. Each scenario starts with a contact being detected on the touchscreen at or near a link within a set of links 504. *See* EX1004, ¶¶[0049]-[0051].

Case IPR2024-01090

Patent No. 10,725,581

DECLARATION OF MARC DAVIS, Ph.D.

Davis Dec. (EX2001)

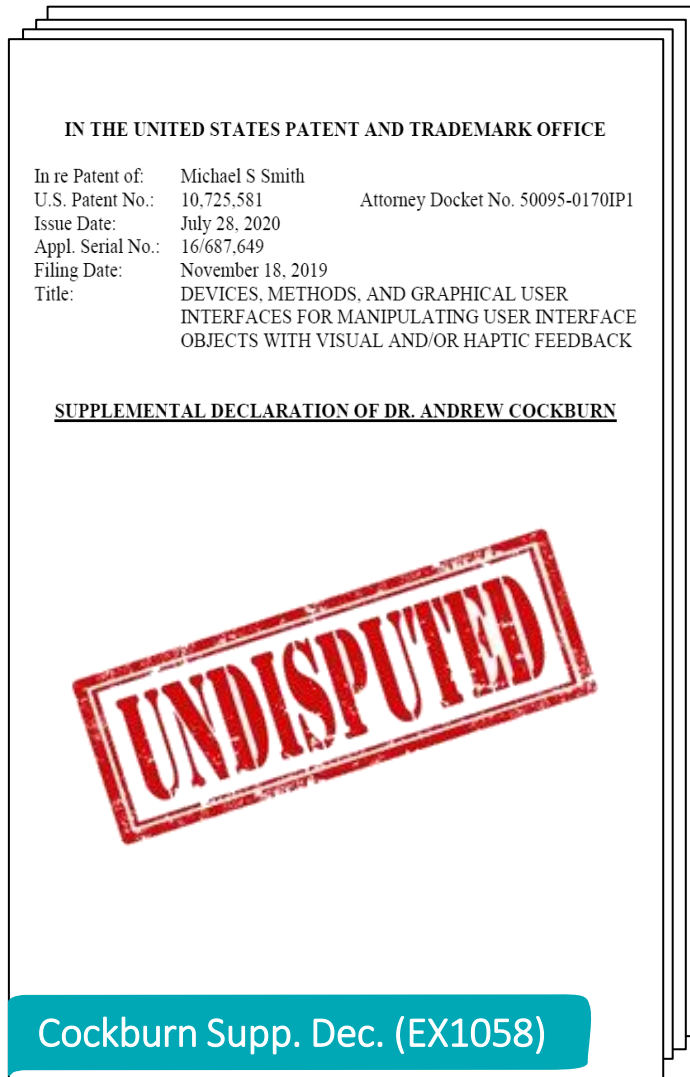
EX2001 (Davis Dec.) Para. 42

46. In the second scenario (purple line in above flowchart), contact is held past the first threshold, which results in link information 510 being displayed, and the contact is broken off shortly after the link information is displayed. *See* EX1004, ¶[0051]. In other words, contact is held past the initial “selection threshold” but is broken off before an “activation threshold.” EX1003, ¶¶61-62. This scenario also results in the activation of the selected link. *Id.* This scenario enables the user to confirm that the contact on the touchscreen corresponds to the desired link the user wishes to visit, which mitigates the hit and miss character of navigating crowded links. *See id*; *see* EX1004, ¶[0004], FIG. 5C. Thus, instead of just taping the link (as in the first scenario), the user can maintain the contact for a bit longer to confirm that the selected link is the link that the user wishes to visit. *see* EX1004, ¶¶[0048]-[0051].

EX2001 (Davis Dec.) Para. 46

2nd Scenario [1.n] – Blumenberg-Griffin Render Obvious

Griffin Teaches Contact Durations



51. Regardless, even if I were to adopt Dr. Mahon’s view that Blumenberg describes a display duration instead of a touch duration (which I do not), that would not change my opinion that the Blumenberg-Bhumkar-Griffin combination satisfies Elements [1.n] and [42.i]. For example, Griffin supplements Blumenberg’s teachings and makes clear that the durations being monitored are touch contact durations. As I explained in my Prior Declaration, “Griffin further provides an exemplary process flow with implementation details associated with tracking touch contact, comparing the contact to predetermined touch duration thresholds,” and “a POSITA would have had multiple reasons to pursue a predictable combination that applies Griffin’s rudimentary implementation details in the context of Blumenberg’s disclosure.” EX1003, ¶89; *see also* ¶¶103–106, ¶¶125–129.

2nd Scenario [1.n] – Blumenberg-Griffin Render Obvious

Pet. 36-39; Reply 7-9

PETITION FOR *INTER PARTES* REVIEW OF UNITED STATES PATENT NO. 10,725,581 PURSUANT TO 35 U.S.C. §§ 311–319, 37 C.F.R. § 42

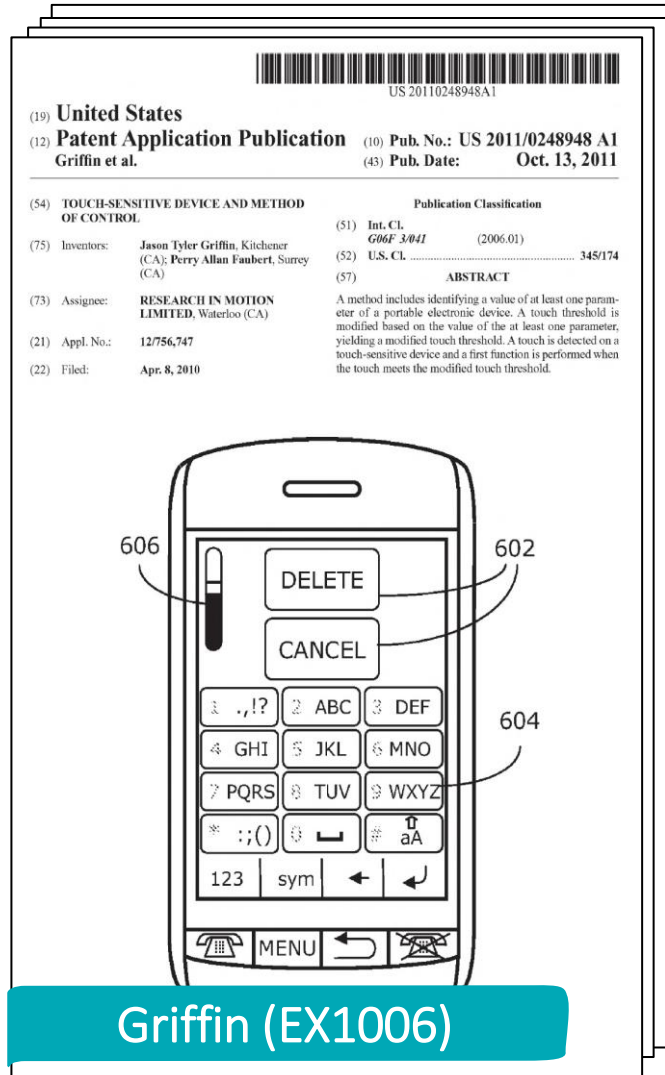
(c) Applying Griffin’s teachings on multiple user-configurable touch duration thresholds in the context of Blumenberg’s web browser

Griffin and Blumenberg both describe touch screen mobile devices where different functionalities are triggered by touch duration thresholds. *Supra*, §VI.A.3, §VI.A.1. Griffin further provides an exemplary process flow with implementation details associated with tracking touch contact, comparing the contact to predetermined touch duration thresholds, and modifying the thresholds automatically and/or based on user input. *Id.* A POSITA would have had multiple independent reasons to pursue a predictable combination that applies Griffin’s rudimentary implementation details in the context of Blumenberg’s disclosure.

Pet. 22-23;
see also 12-13

2nd Scenario [1.n] – Blumenberg-Griffin Render Obvious

Griffin Teaches Contact Durations



Griffin (EX1006)

[0032] A touch threshold is a value associated with a touch, such that when a value of a touch meets the touch threshold, a function is performed. A value meets a threshold when the value is at or beyond the threshold. A touch threshold value may be a value of a characteristic of a touch, for example, a force imparted by a touch on the touch-sensitive display, a displacement distance of at least a part of the touch-sensitive display 118, an area of contact of a touch, a time duration of a touch, and so forth, or any combination thereof. For example, when the touch threshold is a force value, that force threshold may reflect, for example, the force of a touch that actuates the actuator(s) 120 or a force measured or detected by a force sensor 122, which force may be interpreted by the processor 102 to meet the touch threshold. A touch threshold may be a single unit-less value that is a combination of two or more values related to the touch, e.g., duration and force. Multiple touch thresholds may be applicable for a touch, and different values of touch thresholds may be associated with different functions or input. For example, a force below a first

The Third Claimed Scenario

Outputting Tactile Feedback Displaying a Menu, and
Displaying a Portion of the Hyperlink Identified
Webpage When the Contact Is Greater Than the
Second Duration (Elements [1.o] and [42.j])

3rd Scenario [1.o] – Claim Construction

Pet. 49-53
Reply 11-19

Third Scenario

when: the first web page is displayed via the user interface of the network browser application, the duration of the first contact is determined to be greater than the second user-configurable predefined duration, the first contact point of the first contact is determined to correspond with the location of the hyperlink of the first web page, it is not determined that there is the contact movement of the first contact between the first contact point and the second contact point, and the end of the first contact is not detected: output, utilizing the actuator, a first feedback that is perceptible by touch and display a menu including at least one option for, in response to detection of a selection thereof, performing an operation on a web address associated with the hyperlink of the first web page, and further display at least a portion of the second web page, such that at least the at least portion of the second web page is displayed in at least one first virtual display layer which appears above at least one second virtual display layer that includes at least a portion of the user interface of the network browser application that remains at least partially visible.

Disputed Claim Term



“When” Contact > 2nd Duration
Feedback + Menu + Preview

3rd Scenario [1.o] – Claim Construction

Pet. 49-53
Reply 11-19

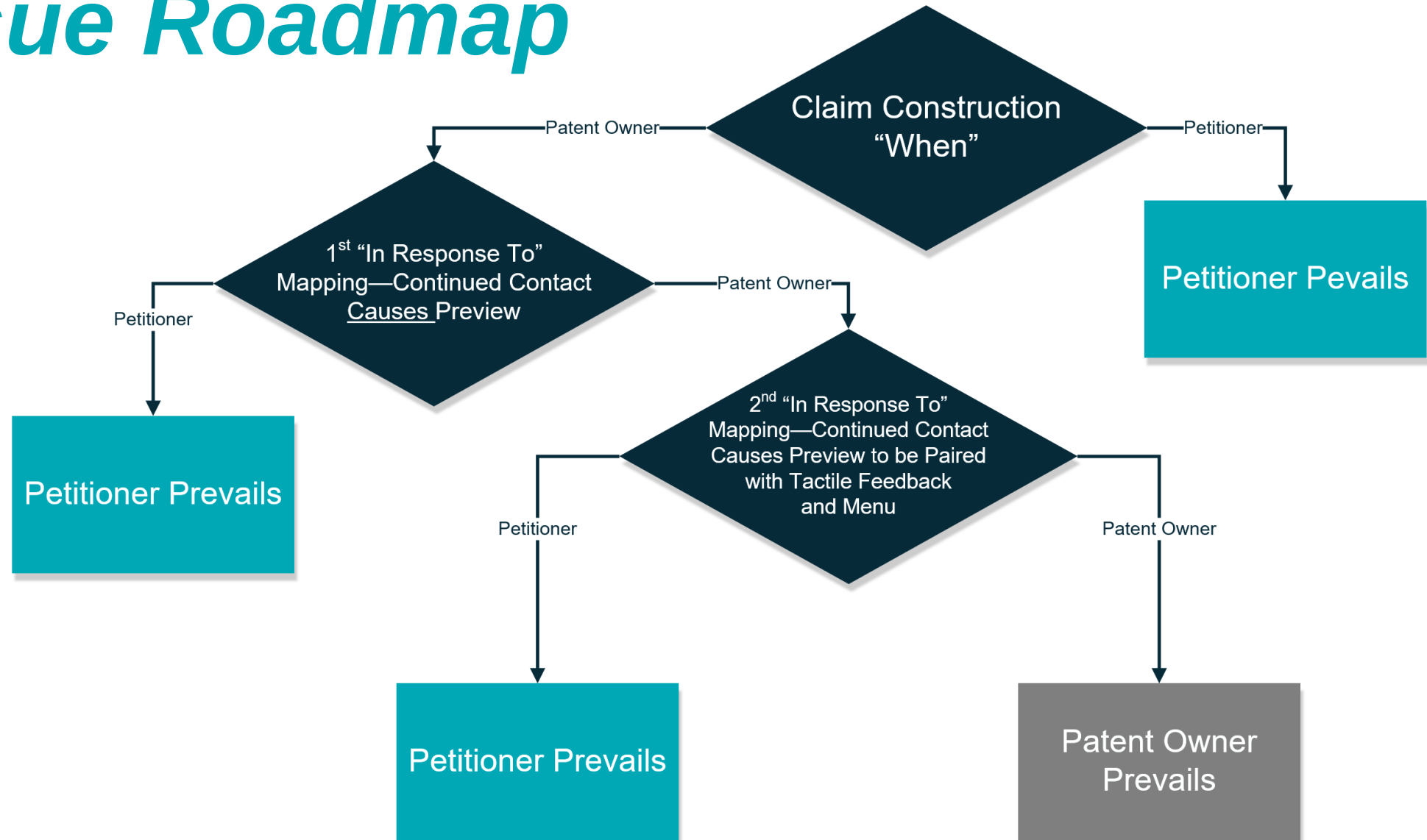
The Parties' Positions on "When"

Petitioner	Patent Owner
Plain meaning— • “[A] basic <u>when-then</u> relationship . . . between the stated touch condition at Elements [1.o.i]-[1.o.v] and the stated functionality at Elements [1.o.vi]-[1.o.viii].” Pet. 52 • “When the claimed touch contact limitations are met, the claimed functions must be performed. Nothing more, nothing less.” Reply 17	“A POSITA would understand that language to require programming logic to determine when all recited preconditions in a limitation are met and, in response to that determination trigger performance of the recited action.” PO Resp. 13

3rd Scenario [1.o] – Claim Construction

Pet. 49-53
Reply 11-19

Issue Roadmap



3rd Scenario [1.o] – Claim Construction

Pet. 49-53
Reply 11-19

Intrinsic

Surrounding
Independent Claim
Language

Dependent Claims

Specification

Prosecution History
of Related Patent

Support for
Plain Meaning
Construction

Extrinsic

Dictionary Definitions

Dr. Cockburn Direct
Testimony

Dr. Mahon Cross-
Examination
Testimony

3rd Scenario [1.o] – Claim Construction

Pet. 49-53
Reply 11-19

Surrounding
Independent Claim
Language

Separate and Distinct Use of
“When” and “In Response To”
Indicates Different Meanings

when: the first web page is displayed via the user interface of the network browser application, the duration of the first contact is determined to be greater than the second user-configurable predefined duration, the first contact point of the first contact is determined to correspond with the location of the hyperlink of the first web page, it is not determined that there is the contact movement of the first contact between the first contact point and the second contact point, and the end of the first contact is not detected: output, utilizing the actuator, a first feedback that is perceptible by touch and display a menu including at least one option for, in response to detection of a selection thereof, performing an operation on a web

EX1001 (581 Pat.) Claim 1 (Element [1.o])

3rd Scenario [1.o] – Claim Construction

Pet. 49-53
Reply 11-19

Dependent Claims

Dependent Claims Add Temporal Limitations

EX1001 (581 Pat.) Claim 3

3. The electronic device of claim 1, wherein the electronic device is configured such that the first feedback that is perceptible by touch is output **prior to** the display of the menu.

EX1001 (581 Pat.) Claim 41

each instance of said when includes only a portion of a duration;
each instance of said when includes an entirety of a duration;
each instance of said **when includes while**;

3rd Scenario [1.o] – Claim Construction

Pet. 49-53
Reply 11-19

Specification

Additional temporal
limitation—"subsequently"

No lexicography for "when"

Definitions

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

EX1001 (581 Pat.) 4:62-67

Terminology

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.

EX1001 (581 Pat.) 11:11-18

network browser application and **when** the duration of the first contact is determined to be greater than the second user-configurable predefined duration, the first contact point of the first contact is determined to correspond with the location of the hyperlink of the first web page, the movement of the first contact is not determined between the first contact point and the second contact point, and the end of the first contact is not detected: output, utilizing the actuator, a first feedback that is perceptible by touch and display a menu including at least one option for, in response to detection of a selection thereof, performing an operation on a web address associated with the at least one selectable hyperlink of the first web page, and **further subsequently display** at least a portion of the second web page, such that at least the at least portion of the second web page is displayed in at least one first virtual display layer which appears above at least one second virtual display layer that includes at least a portion of the user interface of the network browser application that remains at least partially visible, **where the at**

EX1001 (581 Pat.) 2:3-17 42

3rd Scenario [1.o] – Claim Construction

Pet. 49-53
Reply 11-19

Specification

No Specific Logical or Causal Limitations

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.

EX1001 (581 Pat.) 14:21-25

3rd Scenario [1.o] – Claim Construction

Pet. 49-53
Reply 11-19

Prosecution History of Related Patent

Dependent Claim Adds “Only” Limitation

when the magnitude of the pressure of the gesture being detected on the touch screen on the object is greater than the first magnitude threshold, perform a scaling in connection with at least the object, where the scaling includes a reduction in a size such that the size is inversely related to the magnitude of the pressure of the gesture being detected on the touch screen on the object; and

EX1057 (Parent App.) p.9 (independent claim 16)

26. (Previously Presented) The apparatus of Claim 16, wherein the apparatus is configured such that at least a portion of the scaling involves a continuous scaling function that is a continuous function of the magnitude of the pressure of the gesture being detected on the touch screen on the object, only when the magnitude of the pressure of the gesture being detected on the touch screen on the object is greater than the first magnitude threshold and is less than the second magnitude threshold.

EX1057 (Parent App.) p.11 (dependent claim 26)

44

EX1057 (Parent App.)

3rd Scenario [1.o] – Claim Construction

Pet. 49-53
Reply 11-19

Dictionary Definitions

***No Definitional
Causal Limitation***

Merriam-
Webster's
Collegiate[®]
Dictionary

²when *conj* [ME, fr. OE *hwanne*, *hwenne*, fr. *hwanne*, *hwenne*, adv.] (bef. 12c) 1 a : at or during the time that : WHILE <went fishing ~ he was a

ELEVENTH
EDITION

EX1055

The
Chambers
Dictionary

10th Edition

EX1056

when /*wen* or *hwen*/ *adv* (*interrog* and *relative*) and *conj* at what time?; at which time; at or after the time that; upon or after which; while;

3rd Scenario [1.o] – Claim Construction

Pet. 49-53
Reply 11-19

Dr. Cockburn Direct Testimony

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of: Michael S Smith
U.S. Patent No.: 10,725,581 Attorney Docket No. 50095-0170IP1
Issue Date: July 28, 2020
Appl. Serial No.: 16/687,649
Filing Date: November 18, 2019
Title: DEVICES, METHODS, AND GRAPHICAL USER
INTERFACES FOR MANIPULATING USER INTERFACE
OBJECTS WITH VISUAL AND/OR HAPTIC FEEDBACK

SUPPLEMENTAL DECLARATION OF DR. ANDREW COCKBURN

UNDISPUTED

Cockburn Supp. Dec. (EX1058)

57. In addition, the word “when” does not carry a narrow or special meaning of “in response to” to those of ordinary skill in the art, nor is “when” a common keyword in popularized programming languages. “When” is simply a conjunction used in everyday conversation to mean, for example, “at or during the time that.” EX1055, p.3; *see also* EX1056, p.3 (similar). I see no reason why a

58. Dr. Mahon also suggests that his “interpretation is further supported by the specification’s repeated emphasis on the use of decision-tree logic to detect pattern-based user gestures and trigger corresponding system responses.” EX2008, ¶50. Here, although he identifies a series of passages from the ’581 patent, none of them describe the three claimed scenarios outlined in the ’581 patent’s claims.

3rd Scenario [1.o] – Claim Construction

Pet. 49-53
Reply 11-19

Dr. Mahon Cross-
Examination
Testimony

Patent Owner's Dr. Mahon Agrees: No "Particular Way" Is Required

Page 1

UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD

_____)

APPLE INC.,

Petitioner,

v. IPR2024-01090

SMITH INTERFACE US Patent No.
TECHNOLOGIES, LLC, 10,725,581
Patent Owner.

_____)

DEPOSITION OF MARK P. MAHON, PH.D.

June 19, 2025
10:00 a.m. Eastern Time

Reported by: Lori J. Goodin, RPR, CRR, RSA,
California CSR #13959

_____)

DIGITAL EVIDENCE GROUP
1730 M Street, NW, Suite 812

Mahon Depo. (EX1053)

And it is not prescribed as a particular way that it must be done, other than the preconditions must be met and the action must be taken.

EX1053 40:1-4

There are preconditions that need to be met and actions that need to be taken in this third "when" element.

If those preconditions are met, it is clear to a person of ordinary skill in the art with respect to the third "when" clause that the stated action must be taken when those conditions are met.

EX1053 58:12-19

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3rd Scenario [1.o] – Blumenberg Renders Obvious Under Patent Owner’s Construction

1st “In Response To”
Mapping

Pet. 49-53
Reply 11-19

PETITION FOR *INTER PARTES* REVIEW OF UNITED STATES PATENT NO. 10,725,581 PURSUANT TO 35 U.S.C. §§ 311–319, 37 C.F.R. § 42

As discussed at Element [1.o.ii], per Blumenberg, when the user maintains the contact for a duration greater than the activation threshold, the web browser remains on the current page and **continues displaying the link information**. EX1004, [0049], [0051]. Blumenberg further explains that “the *displayed* [link] information also includes a snippet of the content in [(*at least a portion of*)] the [*second*] webpage or document to which the link links[.]” *Id.*, [0040], [0048], Figures 5C, 5E-5I.

Pet. 49; see also 9-10, 49

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3rd Scenario [1.o] – Blumenberg Renders Obvious Under Patent Owner's Construction

1st "In Response To"
Mapping

Pet. 49-53
Reply 11-19

PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE

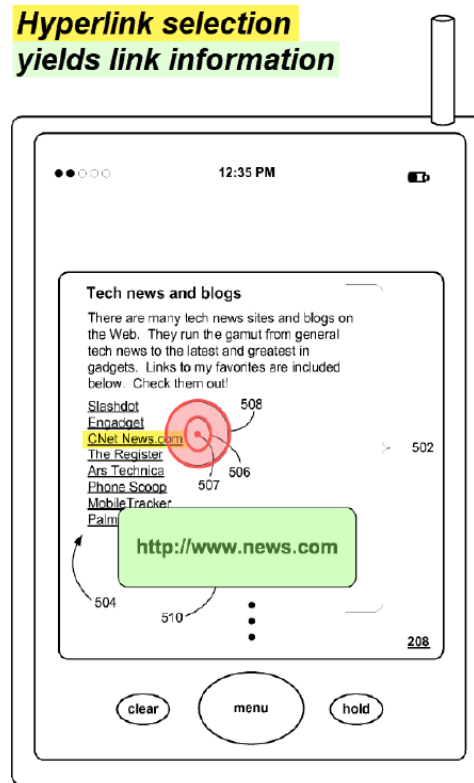
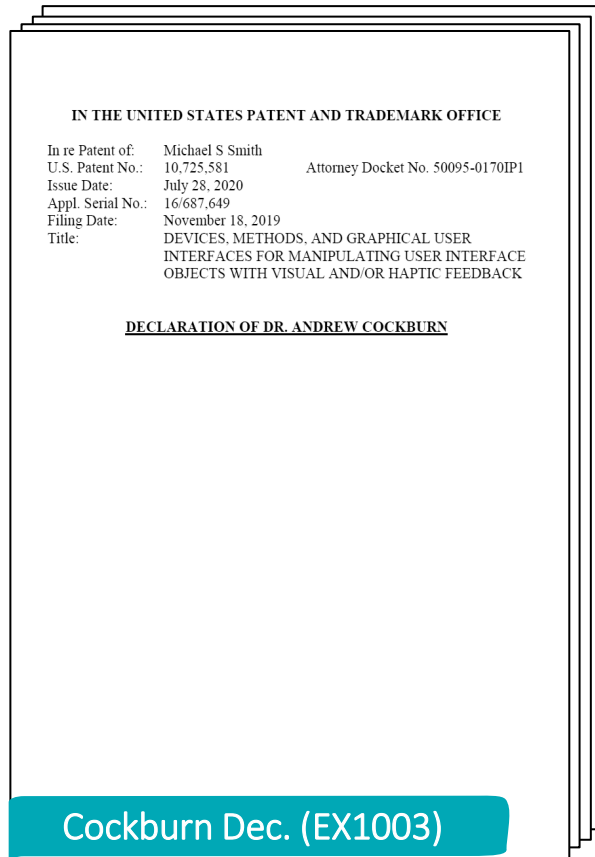
("continues displaying"). This arrangement "plainly satisfies...even a causal conditional relationship"—i.e., the system's continued display of the link information previewing the webpage (*portion of the second web page*) is caused or triggered by a set of conditions that includes the contact being maintained beyond the activation threshold (*second duration*). See EX1003, ¶157; EX1058, ¶65.

Reply 17-18

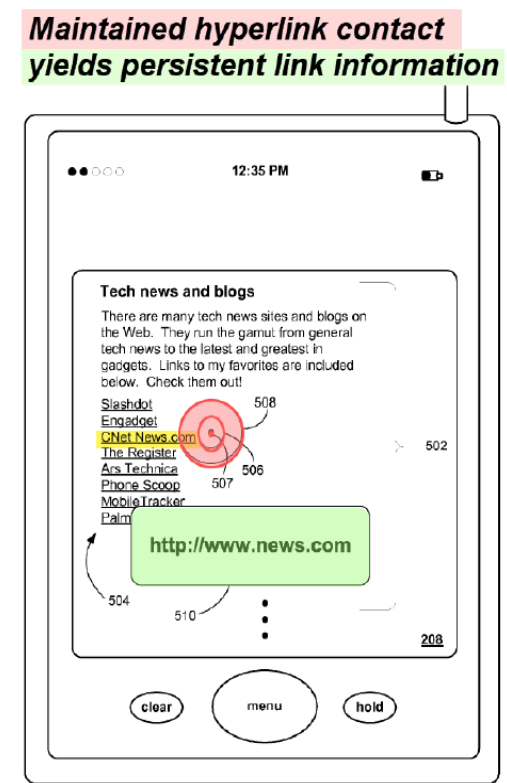
3rd Scenario [1.o] – Blumenberg Renders Obvious Under Patent Owner’s Construction

1st “In Response To” Mapping

Continued Display of “Link Information” Caused by Maintaining Contact



Contact maintained or terminated with a duration greater than activation threshold



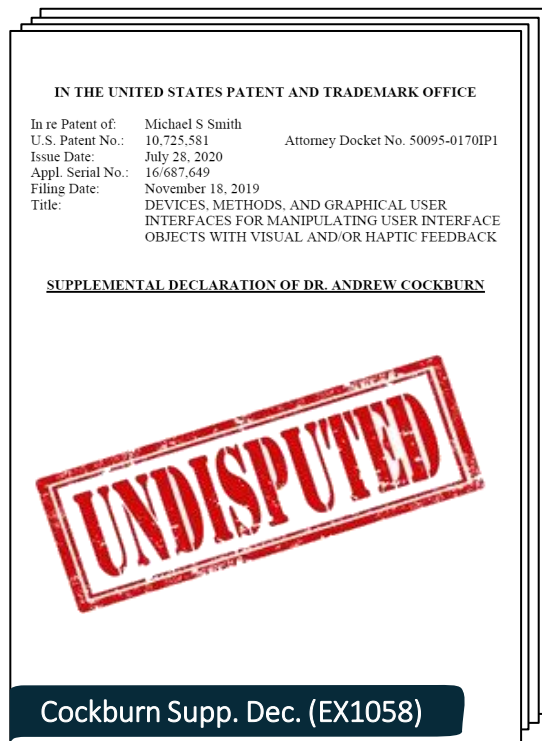
3rd Scenario [1.o] – Blumenberg Renders Obvious Under Patent Owner’s Construction

Rebuttal to:

“The display’s continuation at and beyond the ‘activation threshold is merely an artifact of its earlier action—not a result of meeting the claimed preconditions.” Sur-Reply at 18.

Pet. 49-53; Reply 11-19

Continued Display of “Link Information” Caused by Maintaining Contact



¶150–151. In other words, Blumenberg teaches that the webpage preview is maintained on the display, not merely as a random happenstance but “in response to” / “triggered by” a determination that the user’s touch contact has been held for a time period beyond the activation threshold (*second user-configurable predefined duration*).

EX1058 (Cockburn Supp. Dec.) Para. 65

3rd Scenario [1.o] – Blumenberg Renders Obvious Under Patent Owner’s Construction

2nd “In Response To”
Mapping

Pet. 49-53
Reply 11-19

PETITION FOR *INTER PARTES* REVIEW OF UNITED STATES PATENT NO. 10,725,581 PURSUANT TO 35 U.S.C. §§ 311–319, 37 C.F.R. § 42

[1.o.v] that constitute the claimed condition. EX1003, ¶158. Specifically, the POSITA would have been motivated to incorporate the supplemental teachings of Griffin and Bhumkar such that the output of *feedback perceptible by touch* (as taught by Griffin) and the display of a *menu* (as taught by Bhumkar) occur in response to the user’s contact *duration* exceeding the activation threshold. *Supra* §VI.A.4.a (“Fourth” motivation rationale regarding Bhumkar) and §VI.A.4.b (“Fourth” motivation rationale regarding Griffin). Accordingly, while Blumenberg’s link information (*second webpage portion*) is initially displayed before the activation threshold, it would be paired with tactile *feedback* and a *menu* only after and as a consequence of the activation threshold. EX1003, ¶158.

Motivation to Combine

Applying Bhumkar's Teachings on Menu Options
for Interfacing With a Webpage Preview in the
Context of Blumenberg's Web Browser

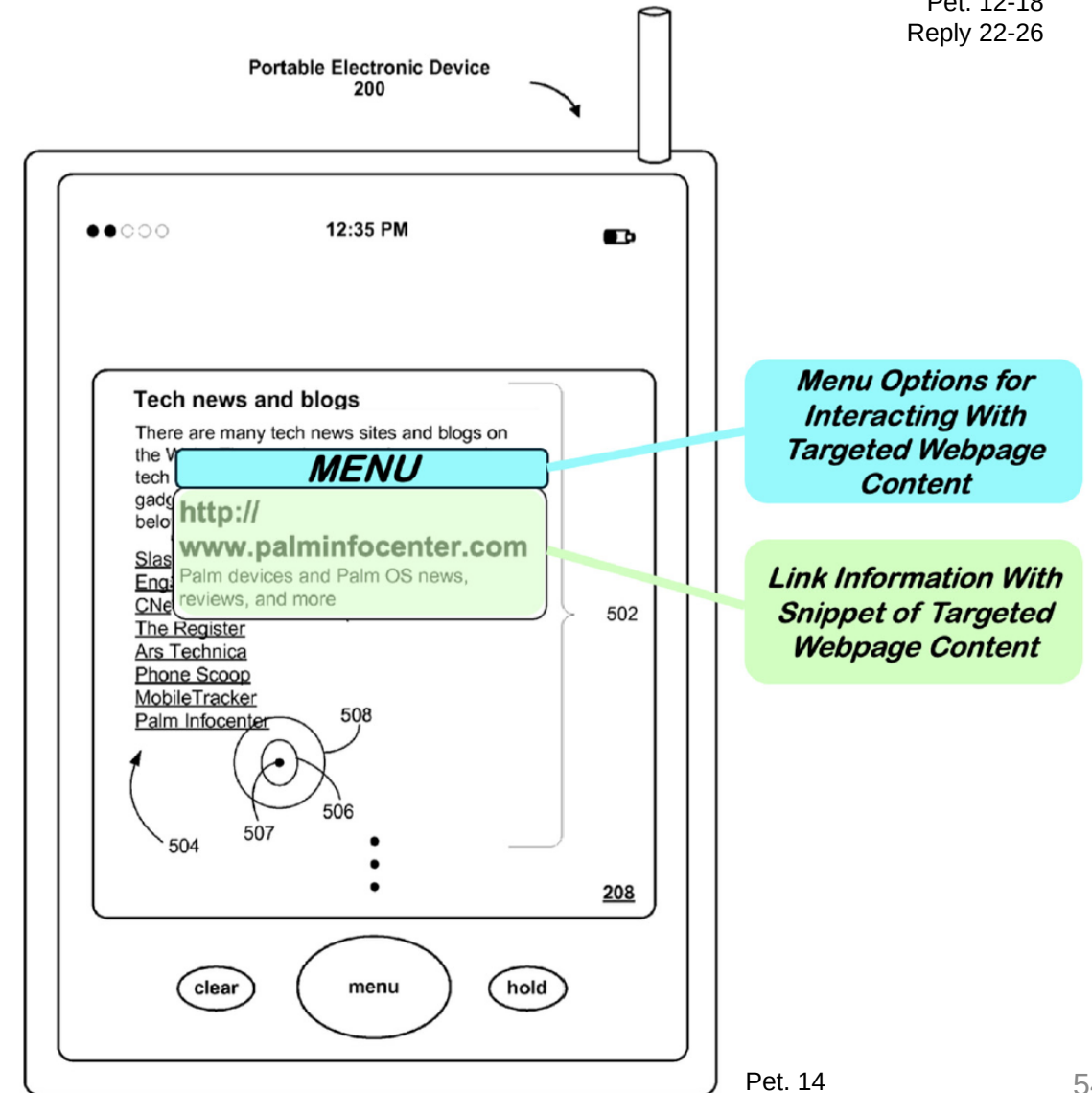
Motivation to Combine Blumenberg and Bhumkar

PETITION FOR *INTER PARTES* REVIEW OF UNITED STATES PATENT NO. 10,725,581 PURSUANT TO 35 U.S.C. §§ 311–319, 37 C.F.R. § 42

The Blumenberg-Bhumkar-Griffin Combination represents the predictable and expected result of applying in the context of Blumenberg's web browser: [a] Bhumkar's teachings on menu options for interacting with a webpage preview window corresponding to a hyperlink; [b] Griffin's teachings on multiple user-configurable touch duration thresholds; and [c] Griffin's further teachings on triggering selective tactile feedback. EX1003, ¶67. From a POSITA's perspective

Pet. 12

Pet. 12-18
Reply 22-26



Pet. 14

54

Motivation to Combine Blumenberg and Bhumkar

Multiple Motivation Rationales Support the Combination

Pet. 12-18
Reply 22-26

1. First Motivation: Menus Like Bhumkar's Were a Well-Known Solution to a Well-Known Problem.....21
2. Second Motivation: A POSITA Would Have Known That Bhumkar's Menu Would Predictably Improve Blumenberg 22
3. Third Motivation: Bhumkar Identifies Specific Advantages That Are Applicable to Blumenberg 24
4. Fourth Motivation: Blumenberg's Disclosure Shows Why a Menu Like Bhumkar's Would Help the User.....25

Motivation to Combine Blumenberg and Bhumkar

2nd Motivation: A POSITA Would Have Known That Bhumkar's Menu Would Predictably Improve Blumenberg

Pet. 12-18
Reply 22-24

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of: Michael S Smith
U.S. Patent No.: 10,725,581 Attorney Docket No. 50095-0170IP1
Issue Date: July 28, 2020
Appl. Serial No.: 16/687,649
Filing Date: November 18, 2019
Title: DEVICES, METHODS, AND GRAPHICAL USER INTERFACES FOR MANIPULATING USER INTERFACE OBJECTS WITH VISUAL AND/OR HAPTIC FEEDBACK

DECLARATION OF DR. ANDREW COCKBURN

Cockburn Dec. (EX1003)

73. Second, a POSITA would have recognized that applying Bhumkar's teaching of a menu for a webpage preview window would **predictably improve Blumenberg's browser from a usability standpoint**. EX1038, p.2 (identifying "Contextual Menus" as one of the "characteristics" relevant to "the usability of mobile devices"). Specifically, it would have been apparent to the POSITA that providing menu options in connection with a webpage preview window, as Bhumkar teaches, would allow the user to accomplish common tasks associated with the target webpage (e.g., sharing the page with an acquaintance) **more quickly and efficiently** (e.g., with fewer user inputs). Reducing the user's cognitive load by displaying **relevant tasks and functionalities in a menu** would make Blumenberg's device and its web browser **easier to use**. EX1039, p.3 (explaining certain "usability heuristics...for touchscreen-based mobile devices" that include "minimiz[ing] the user's memory load by making objects, actions, and options visible" and "provid[ing] shortcuts to the most frequent tasks").

THE STATE OF THE ART OF MOBILE APPLICATION USABILITY EVALUATION

At the same time, **mobile device manufacturers have been enforcing their own usability constraints**. For example, the Apple iOS Human Interface Guidelines [14] states the iOS platform characteristics that should be considered during the application development process, such as: Interaction with Multi-Touch screen, Displays of different resolutions and dimensions, Device orientation changes and Gestures such as tap, flick, and pinch. In addition, Apple reviews applications submitted for the App Store based on these characteristics.

Concurrently, Google has developed Android user interface guidelines [15], which guide developers to take into account the following characteristics: Touch gestures, size and location of Icons and Buttons, **Contextual Menus** and their responsiveness, simplicity, size, and format of Text, and certain aspects of Messages. These guidelines also explain how these characteristics should be considered during the development and testing of Android applications.

Usability Heuristics for Touchscreen-based Mobile Devices

(TMD7) *Customization and shortcuts*: The device should provide basic configuration options and should give expert users access to advanced configuration options. The device should **provide shortcuts to the most frequent tasks** and should allow their customization and/or definition.

Motivation to Combine Blumenberg and Bhumkar

2nd Motivation: A POSITA Would Have Known That Bhumkar's Menu Would Predictably Improve Blumenberg

Pet. 12-18
Reply 22-24

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of: Michael S Smith
U.S. Patent No.: 10,725,581 Attorney Docket No. 50095-0170IP1
Issue Date: July 28, 2020
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INTERFACES FOR MANIPULATING USER INTERFACE
OBJECTS WITH VISUAL AND/OR HAPTIC FEEDBACK

SUPPLEMENTAL DECLARATION OF DR. ANDREW COCKBURN

UNDISPUTED

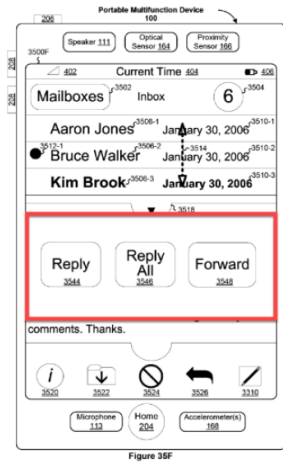
Cockburn Supp. Dec. (EX1058)

27. As I explained in my Prior Declaration, menus had been a core feature in computer GUIs for nearly half a century before the '581 patent. *See* EX1003, ¶¶40–46. By 2001, virtually all consumer personal computing devices, both mobile and desktop, featured GUIs with menus. *See* EX1003, ¶43. Mobile touch screen devices were no different. Well-known devices like Apple's Newton MessagePad (1993) and iPhone (2007) touch screen mobile device products both heavily utilized menus in their respective GUIs. *See* EX1003, ¶43 (citing EX1022, pp. 128-141

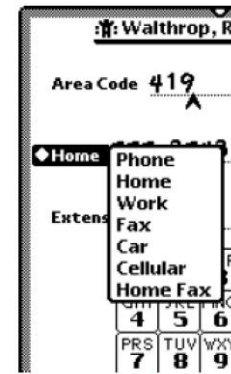
Motivation to Combine Blumenberg and Bhumkar

2nd Motivation: A POSITA Would Have Known That Bhumkar's Menu Would Predictably Improve Blumenberg

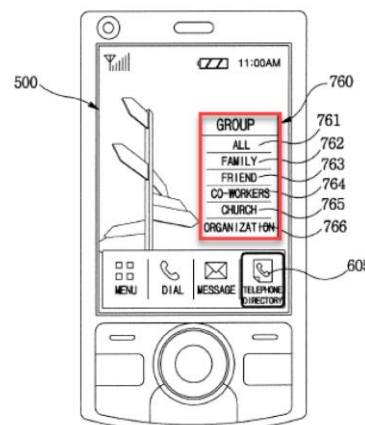
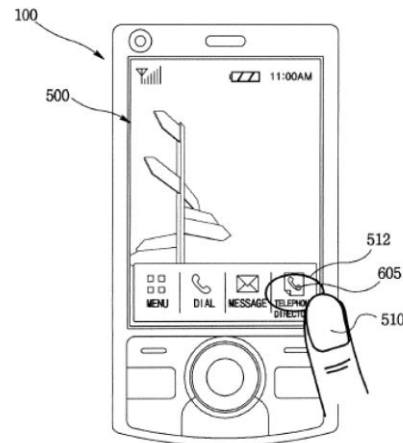
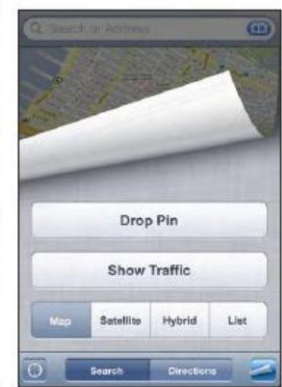
Pet. 12-18
Reply 22-24



Picker from a picture button



Picker from a label

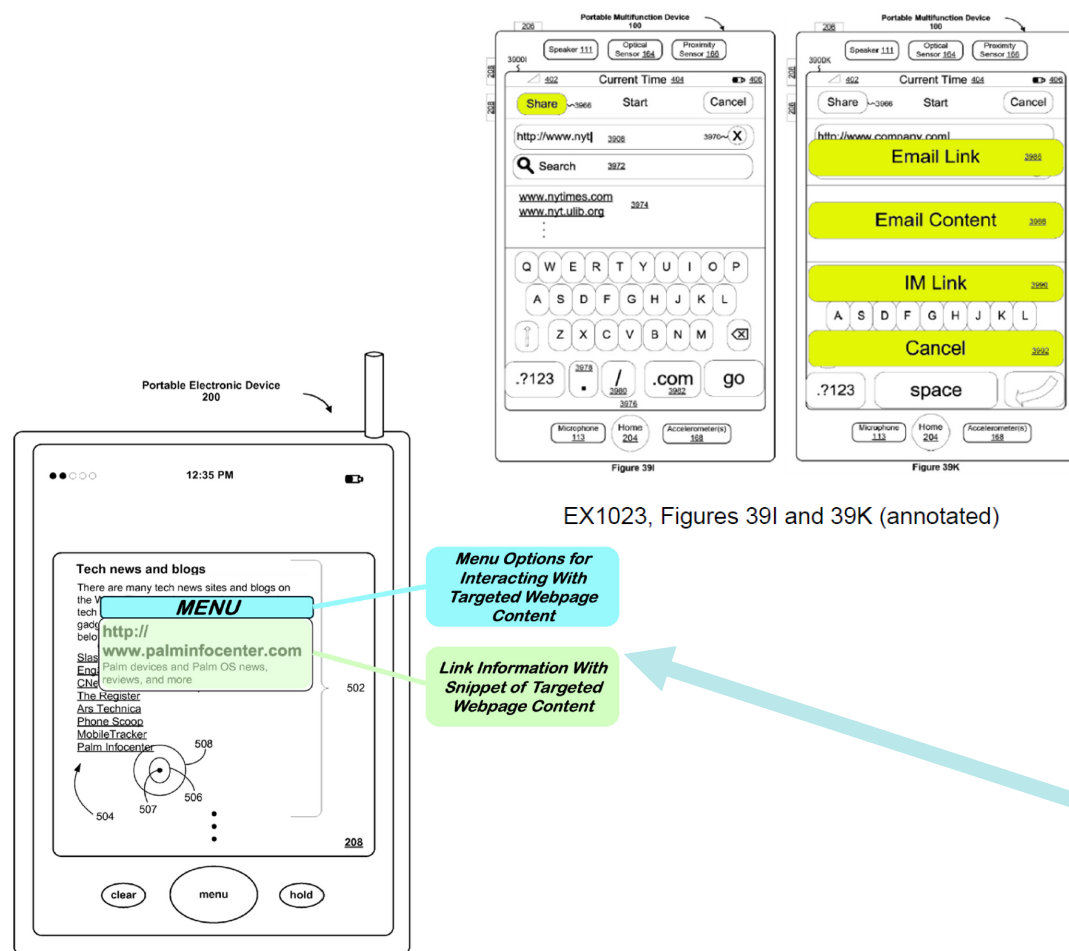


EX1003 (Cockburn Dec.) Paras. 28-46

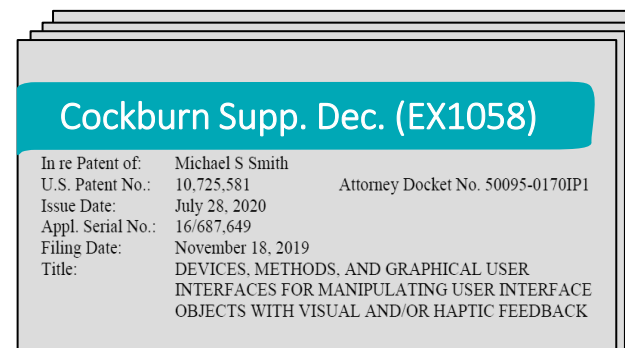
Motivation to Combine Blumenberg and Bhumkar

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2nd Motivation: A POSITA Would Have Known That Bhumkar's Menu Would Predictably Improve Blumenberg



EX1023, Figures 39I and 39K (annotated)



31. While certainly preferable to the unwieldy manual copy-paste sharing functionality that Bhumkar described from the older prior art, the 2009 Apple patent to Blumenberg, et al. still requires the user to select a hyperlink and visit the target webpage before sharing. With Bhumkar's approach, as discussed, the sharing functionality is presented in a toolbar menu displayed with the webpage preview, allowing the user to share even more easily and efficiently without ever leaving the page displaying the hyperlink.

Motivation to Combine Blumenberg and Bhumkar

Rebuttal to:

“The record contains no showing that the proposed combination would yield any meaningful functional benefit without converting Blumenberg’s preview into a functioning browser window.” Sur-Reply at 24.

Pet. 12-18
Reply 22-24

Bhumkar Is Not Limited to Previews That Include a Fully Functioning Webpage

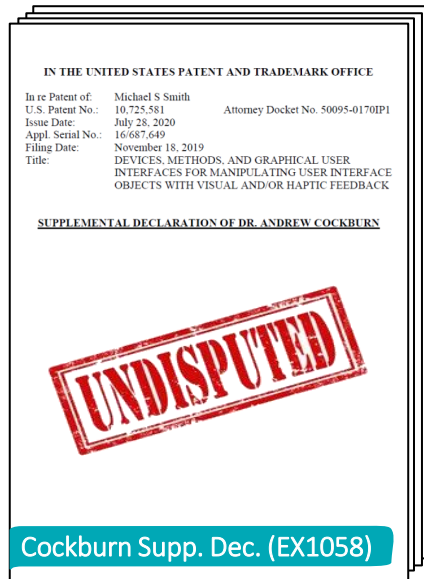
17. According to Dr. Mahon: “Bhumkar’s focus on rendering an entire functional web page within a preview window is directly at odds with Blumenberg’s approach of showing limited textual data to maintain legibility.” EX2008, ¶125. Dr. Mahon is incorrect. Bhumkar is not solely focused on rendering an entire fully functioning webpage as the preview. This is clear from the very first page of Bhumkar, where the Abstract says “[p]reviews of a target web site...are displayed in preview windows, which may have associated toolbars that include functions permitting various manipulations of the content displayed in the preview window.” The very next sentence of the Abstract says, “the target web site is displayed as an image thereof in the preview window.” There is no mention at all in the Abstract of the fully functioning webpage preview that Bhumkar later describes as an alternative embodiment.

(19) **United States**
(12) **Patent Application Publication**
Bhumkar et al.

(57) **ABSTRACT**

Previews of a target web site or other Internet-accessible resource are displayed in response to cursor control events. The previews are displayed in preview windows, which may have associated toolbars that include functions permitting various manipulations of the content displayed in the preview window. In some cases, the target web site is displayed as an image thereof in the preview window.

EX1008 (Bhumkar) Abstract



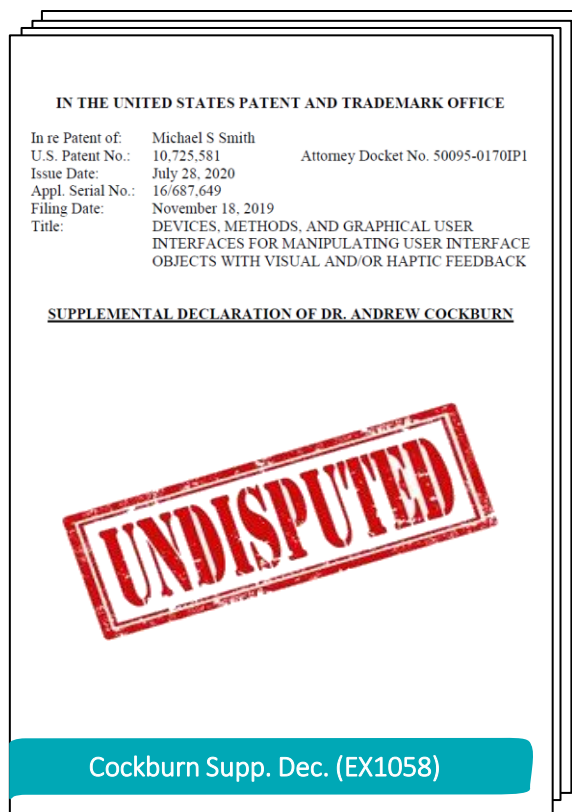
Motivation to Combine Blumenberg and Bhumkar

Rebuttal to:

“The record contains no showing that the proposed combination would yield any meaningful functional benefit without converting Blumenberg’s preview into a functioning browser window.” Sur-Reply at 24.

Pet. 12-18
Reply 22-24

Bhumkar Is Not Limited to Previews That Include a Fully Functioning Webpage



29. Particularly as it relates to sharing webpage content, Bhumkar’s disclosure illustrates how much easier and more efficiently users can access this functionality with the webpage preview toolbar menu. For example, Bhumkar describes the prior state of the art, e.g., where “sharing a link with oneself or others requires a user to copy and paste the link into a new message window in the user’s email client.” EX1005, [0010]. Bhumkar’s goal is “[t]o alleviate [such] problems,” and the solution is to make “sharing information...easier by using options to either selectively, or as a whole, share some or all of the content of the preview window or current page without using the traditional email clients.” EX1005, [0038], [0043]. And Bhumkar makes this sharing functionality easy and efficient to access by displaying it with the webpage preview as a toolbar menu option. EX1005, [0021], [0071], [0072], Figure 5. As a result, “[t]he user can share links without losing context and/or focus.” EX1005, [0043].