

APPLE INC. v. SMITH INTERFACE TECHNOLOGIES, LLC

Case IPR2024-01115, -01116, -01119

Patent Owner's Hearing Demonstratives

November 14, 2025

U.S. Patent No. 10,656,754

U.S. Patent No. 10,656,754

(12) **United States Patent**
Smith

(10) **Patent No.:** US 10,656,754 B1
(45) **Date of Patent:** *May 19, 2020

(54) **DEVICES AND METHODS FOR NAVIGATING BETWEEN USER INTERFACES**

(56) **References Cited**
U.S. PATENT DOCUMENTS

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

3,358,493 A 12/1967 Erich
3,524,169 A 8/1970 K et al.
(Continued)

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FOREIGN PATENT DOCUMENTS

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JP 2008033739 A 2/2008
JP 2011034216 A 2/2011
(Continued)

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

OTHER PUBLICATIONS
US 7,965,578 B2, 06/2011, Bhakta et al. (withdrawn)
(Continued)

(21) Appl. No.: 16/438,455

Primary Examiner — Antonio Xavier
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(22) Filed: Jun. 11, 2019

Related U.S. Application Data

(63) Continuation of application No. 16/153,765, filed on Oct. 6, 2018, now Pat. No. 10,345,961, which is a (Continued)

(57) **ABSTRACT**

In one embodiment, an electronic device displays a plurality of user interface representations in a stack on a display. The device detects a first drag gesture by a first contact at a location on a touch-sensitive surface that corresponds to a location of a first user interface representation on the display. While the first contact is at a location on the touch-sensitive surface that corresponds to the location of the first user interface representation on the display and is moving across the touch-sensitive surface in a direction that corresponds to a first direction on the display, the device moves the first user interface representation in the first direction on the display at a first speed in accordance with a speed of the first contact on the touch-sensitive surface and moves a second user interface representation, disposed above the first user interface representation in the stack, in the first direction at a second speed greater than the first speed.

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

(52) U.S. Cl.
CP: G06F 3/016 (2013.01); G06F 3/017 (2013.01); G06F 3/0416 (2013.01);

(58) G06F 3/017; G06F 3/0416;

365 Claims, 24 Drawing Sheets



Petition (“Pet.”)

Paper 2

Patent Owner Response (“POR”)

Paper 21

**Petitioner’s Reply to Patent Owner’s Response
 (“Reply”)**

Paper 25

Patent Owner Sur-Reply (“Sur-reply”)

Paper 33

IPRs 2024-01115, -01116, and -01119

IPR 2024-01119



Ground	Challenged Claims	Basis for Rejection
1A	2	§103–Ahn (US 2008/0207188), Chaudhri-842 (US 2007/0150842)
1B	1, 208-216	§103–Ahn (US 2008/0207188), Chaudhri-842 (US 2007/0150842), Shiplacoff (US 2010/0095240)

IPR 2024-01116



Ground	Challenged Claims	Basis for Rejection
1A	2, 27, 186, 187, 189, 191, 192, 197, 199-204, 225, 230	§103–Ahn (US 2008/0207188), Chaudhri '842 (US 2007/0150842)

IPR 2024-01115



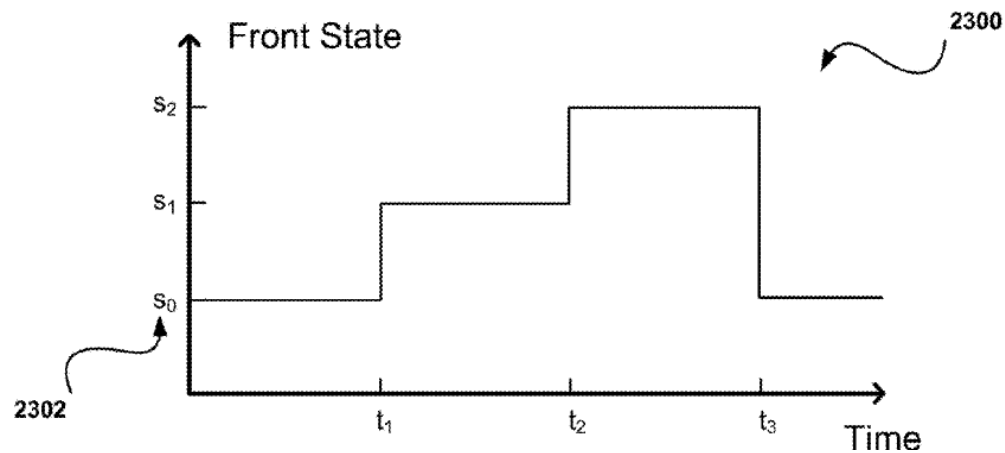
Ground	Challenged Claims	Basis for Rejection
1A	2, 27, 37, 58, 60-64, 67-79, 223	§103–Ahn (US 2008/0207188), Chaudhri '842 (US 2007/0150842)

Overview

- '754 Patent
 - **Multi-Part Pattern Based Gestures**
 - Independent Claims 1, 2, and 225
 - Dependent Claims
- Technical Background
 - Ahn / Chaudhri / Shiplacoff
- Blurring Limitations
 - Sliding Menu Theory (Ahn)
 - Fading Clock Theory (Ahn-Chaudhri)
- Dependent Claims
- Ground 1B
 - Claim 1
 - Claim 208

Multi-Part Pattern Based Gestures

'754 Patent



'754 Patent at Fig 23; POR at 2.

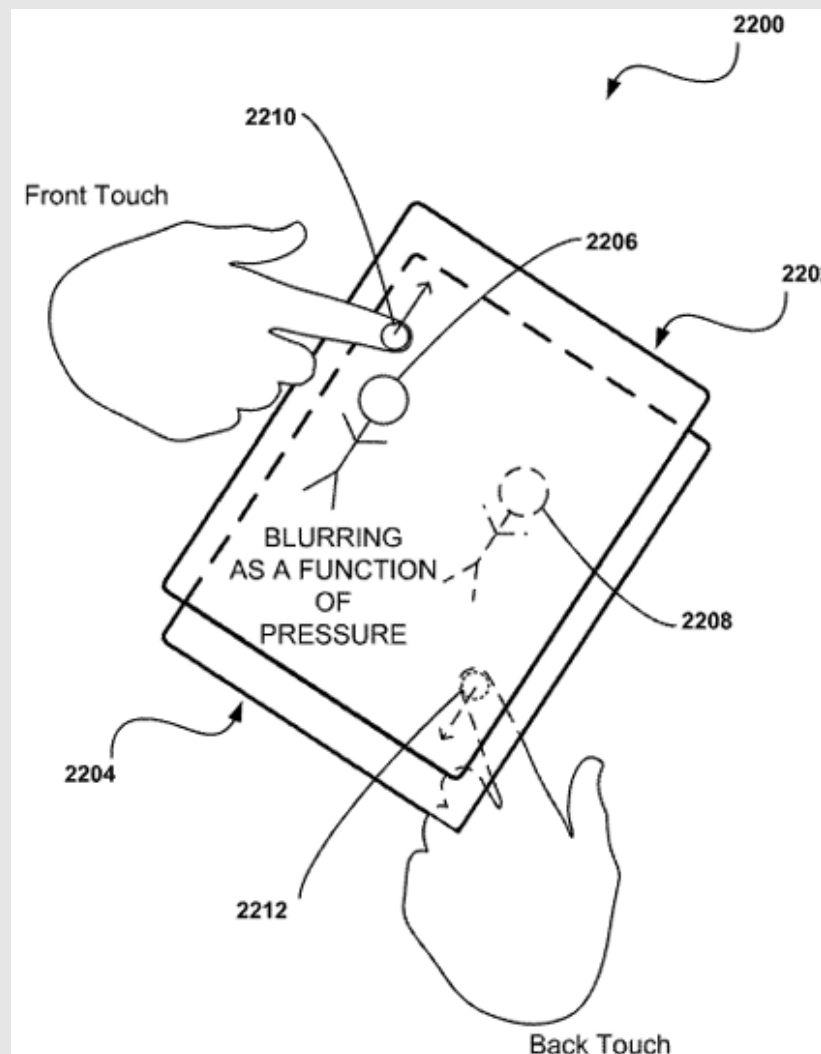
'754 Patent

In some embodiments, pattern-based gestures may be recognized in the form of an ordered sequence of tuples using a decision tree. The use of a decision tree, or similar form of logic, has the advantage of being computationally inexpensive. This method may be more appropriate for

Pattern-based gesture 2302 is based upon three touch state transitions. At time t_1 , the contact point changes from touch state s_0 to s_1 . Similar changes of state occur at t_2 and t_3 . In various embodiments, these touch state transitions may be represented by ordered 2-tuples. For example, the first transition may be represented as (s_1, t_1) . The pattern-based gesture itself may be represented as an ordered sequence of state transitions. For example, pattern-based gesture 2302 may be represented as $\{(s_1, t_1), (s_2, t_2), (s_0, t_3)\}$.

EX1001 at 73:45-54, 71:48-51; POR at 3.

Blur operations providing 3D depth cues



EX2008 at Fig 24; POR at 4

[00795] In various embodiments, virtual display layers may be given the appearance of depth through the use of 3D depth cues. In the context of the present description, a 3D depth cue refers to an effect, manipulation, transformation, animation, or operation which gives a visual indication of simulated depth. For example, in one embodiment, a 3D depth cue may be a blur operation, such that layers located at successively greater depths may appear blurrier than those closer to the user. In various embodiments, one or more 3D depth cues may be used to give the appearance of depth to one or more virtual display layers. In one embodiment, different 3D depth cues may be used for different virtual display layers. In another embodiment, 3D depth cues may be used in conjunction with a 3D layered user interface implemented in a layered display device, to enhance the layered appearance.

EX2005 at [0795]; POR at 8

Overview

- '754 Patent
 - Multi-Part Pattern Based Gestures
 - **Independent Claims 1, 2, and 225**
- Technical Background
 - Ahn / Chaudhri / Shiplacoff
- Blurring Limitations
 - Sliding Menu Theory (Ahn)
 - Fading Clock Theory (Ahn-Chaudhri)
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- Ground 1B
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 - Claim 208

Independent Claim 2 (and Claims 1/225)



Blurring Limitations

2. An apparatus, comprising:

...

[2.b] display an object and at least one other object;

[2.c] detect at least part of a gesture on the touch screen; and

[2.d] during detection of at least a portion of the gesture before a completion thereof is detected, blur, based on a change in a magnitude of the gesture being detected on the touch screen, at least a portion of the at least one other object.

Independent Claim 1



Moving UIE Elements

1. An apparatus, comprising:

...

[1.d] while the first contact is detected moving across the display:

[1.d] moving the first user interface element in a first direction on the display at a first speed; [and]

[1.e] moving the second user interface element on the display at a second speed greater than the first speed

Overview

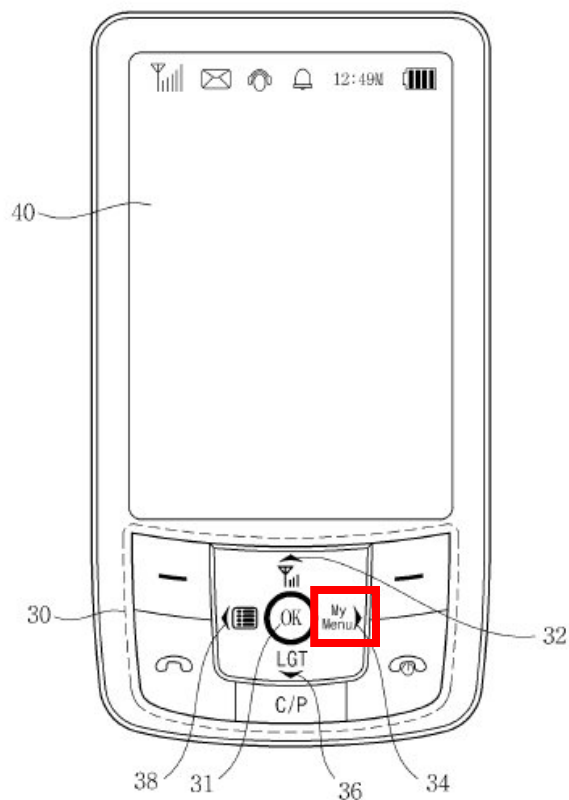
- '754 Patent
 - Multi-Part Pattern Based Gestures
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 - Claim 208

Ahn's menus are binary



Directional Key Embodiment

FIG. 2



EX1004 at FIG. 2 ; POR at 12.



Ahn

FIG. 3A

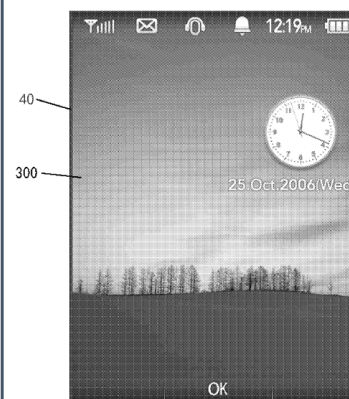


FIG. 4A

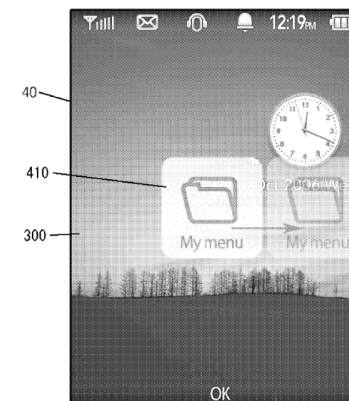
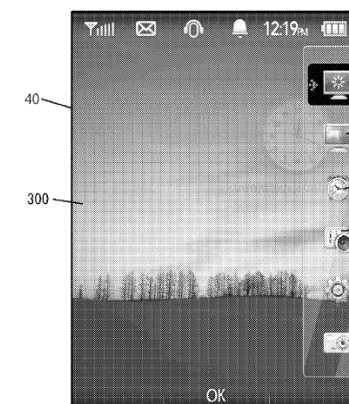


FIG. 4B



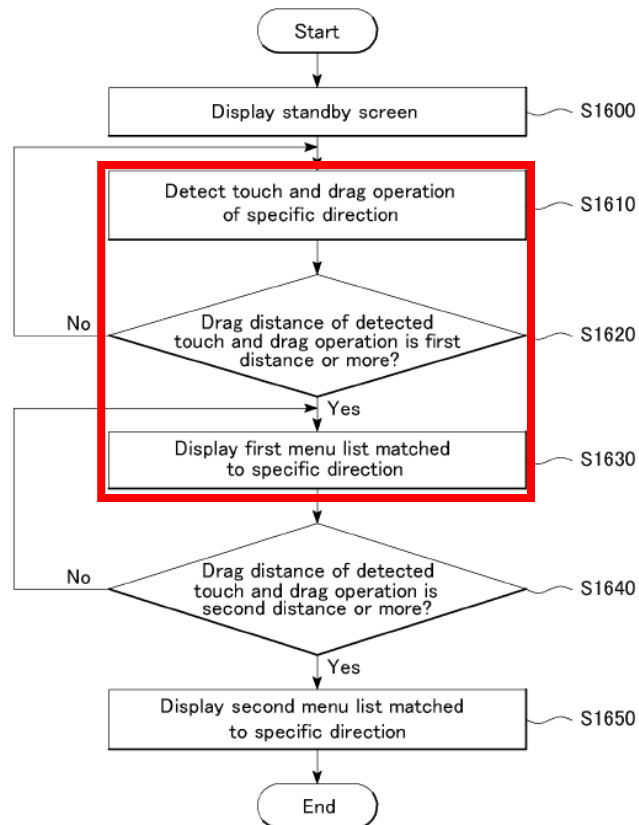
EX1004 at FIGs. 3A, 4A-4B; POR at 14-15.

Ahn's menus are binary



Touch and Drag Embodiment

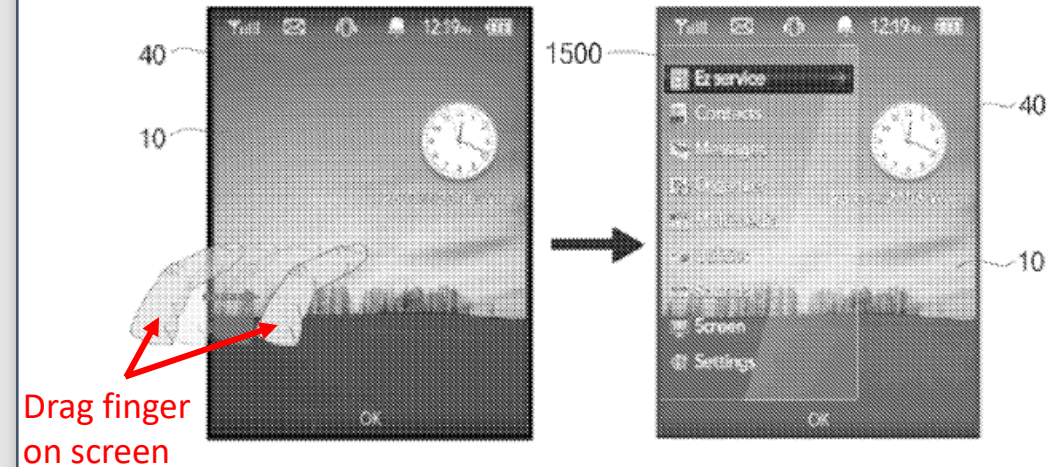
FIG. 16



EX1004 at FIG. 16; POR at 16.



Ahn



if the user drags the touch screen 10 by a distance longer than or equal to the distance d1 and shorter than the distance d2, the first menu list 1700 is displayed, and if the user drags the touch screen 10 by a distance longer than or equal to the distance d2, the second menu list 1710 is displayed.

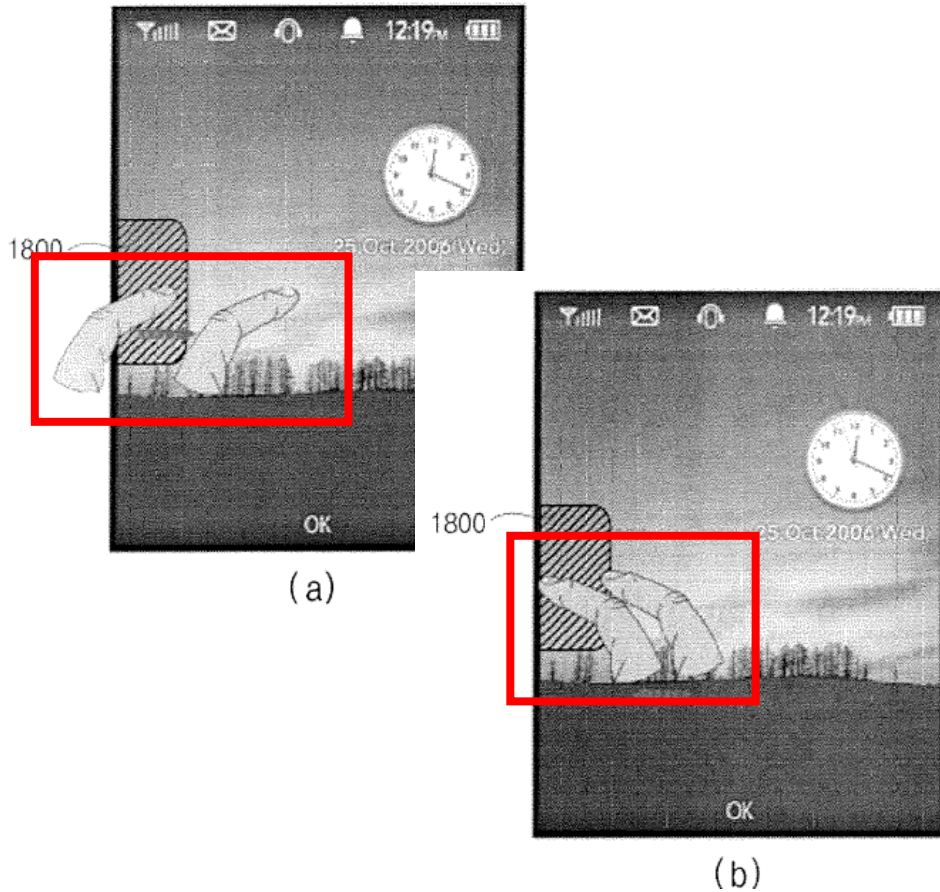
That is, if the touch and drag operation of the user is completed, the controller 50 determines a distance of the touch and drag operation, whereby a specific menu list corresponding to the distance can be displayed in the display 40.

EX1004 at [0116], FIG. 15; POR at 15-16, 32.

Ahn's menus are binary



Graphic Shadow Embodiment

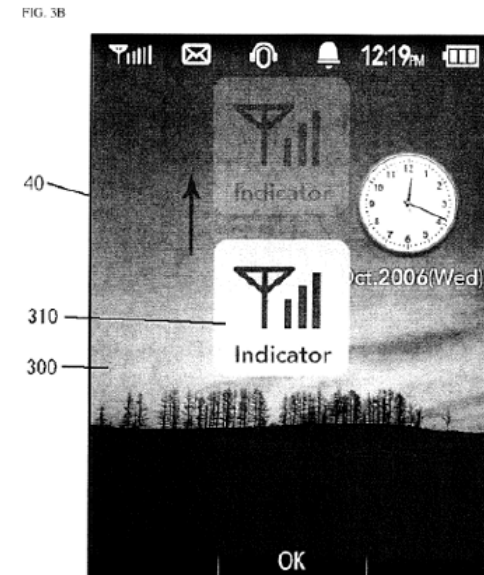


EX1004 at FIG. 18(a)-(b)



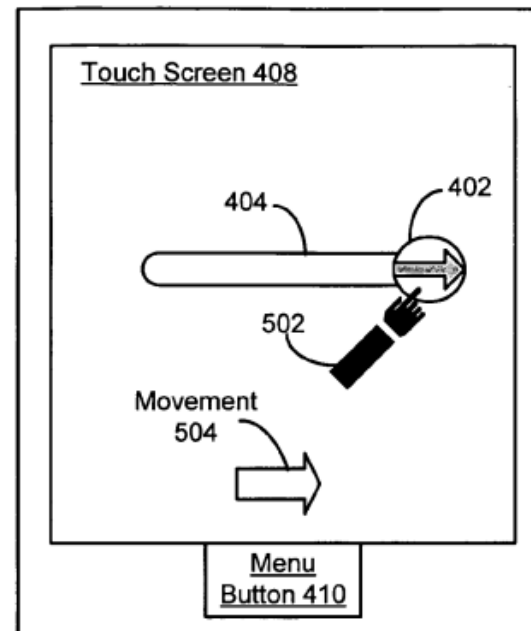
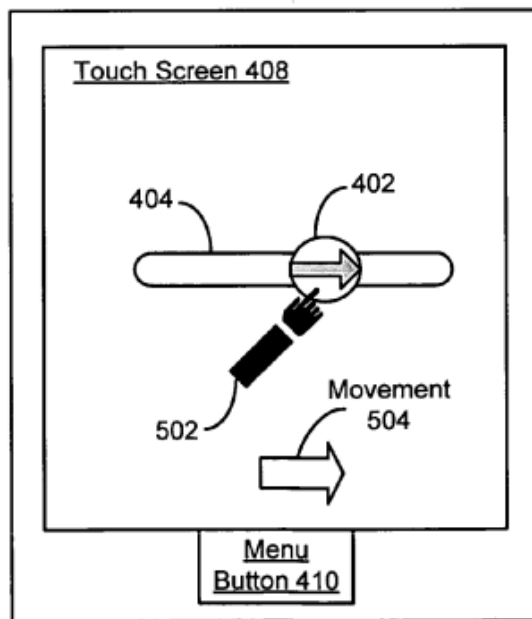
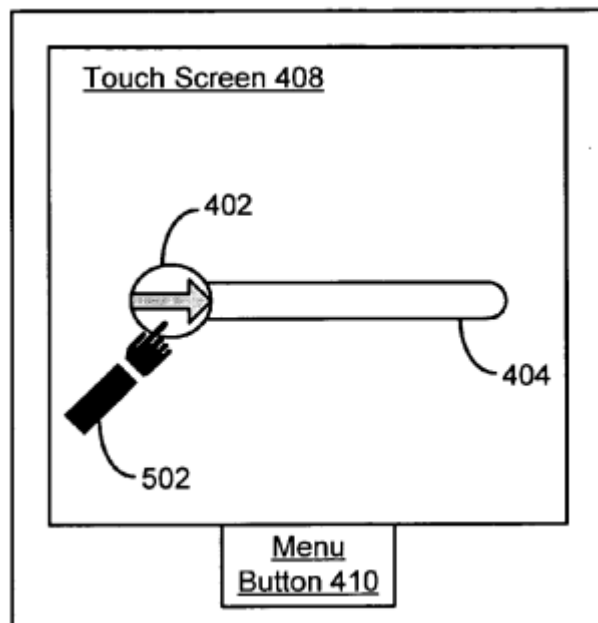
Dr. Rosenberg

92. Additionally, a POSITA would have understood that Ahn's figures show that its menu is not displayed as sliding in with a user's finger. Ahn's figures indicate that it knew how to depict movement of both external and internal objects. Referring to FIGs. 3B, 4A, 6A, 7A, 8B, Ahn depicts other objects as moving in response to an input. *See e.g.*, EX1004, ¶[0037]



EX2006 ¶92, EX1004, FIG. 3B; POR at 34.

Chaudhri discloses an unlocking gesture



EX1005, FIGs. 5A-5C; POR at 19.

Chaudhri's transition effect after the gesture is complete

Chaudhri's Transition Effect

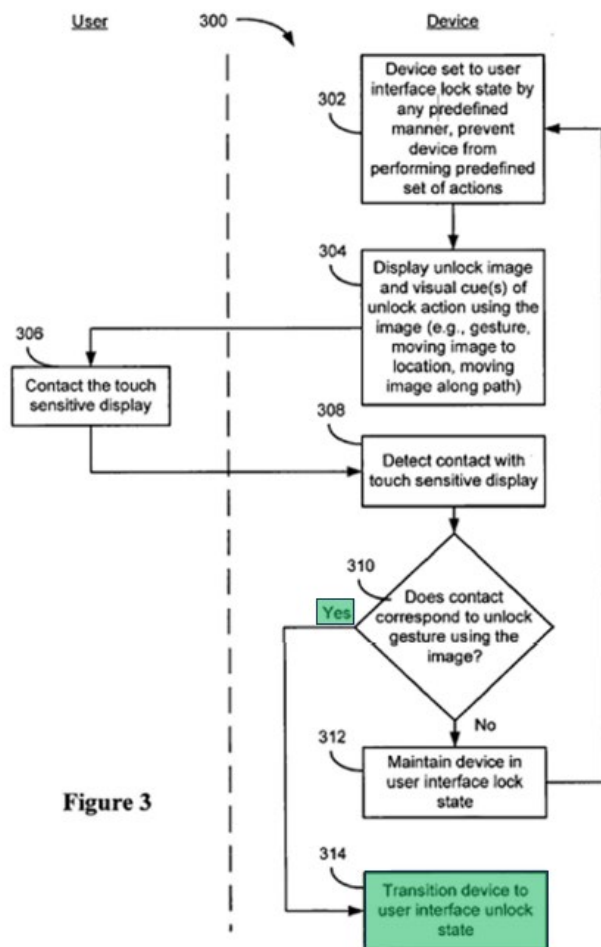


Figure 3

EX1005 at FIG. 3; Sur-Reply at 9.

Chaudhri's fade-in

Unlocking a Device via Gestures

¶¶[0052]-[0079]

...

[0079] In some embodiments, the lock/unlock feature may apply to specific applications that are executing on the device 400 as opposed to the device 400 as a whole. In some embodiments, an unlock gesture transitions from one application to another, for example, from a telephone application to a music player or vice versa. The lock/unlock feature may include a hold or pause feature. In some embodiments, as the user transitions from a first application and to a second application, a user interface for the second application may fade in (i.e., increase in intensity) and a user interface for the first application may fade out (i.e., decrease in intensity). The fade in and fade out may occur smoothly over a pre-determined time interval, such as 0.2 s, 1s or 2s. The

...

Indication of Progress Towards Satisfaction of a User Input Condition

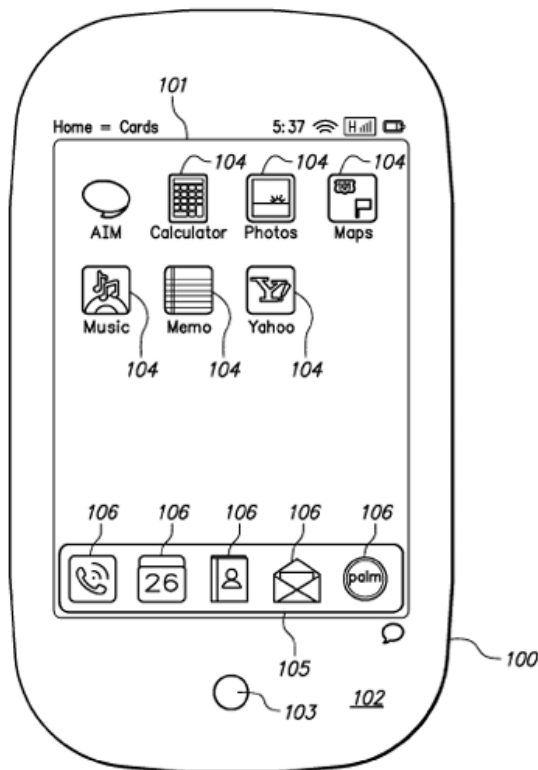
¶¶[0080]-[0096]

EX1005 at [0052], [0079]; Sur-reply at 8.

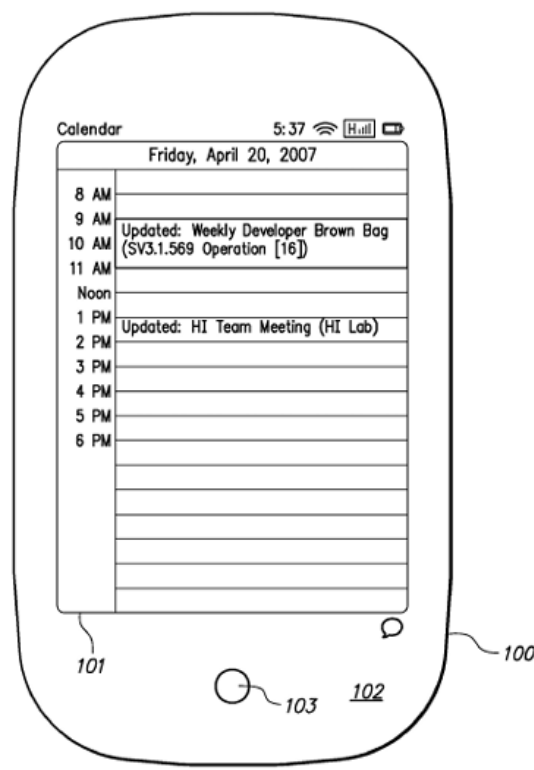
Shiplacoff's display modes



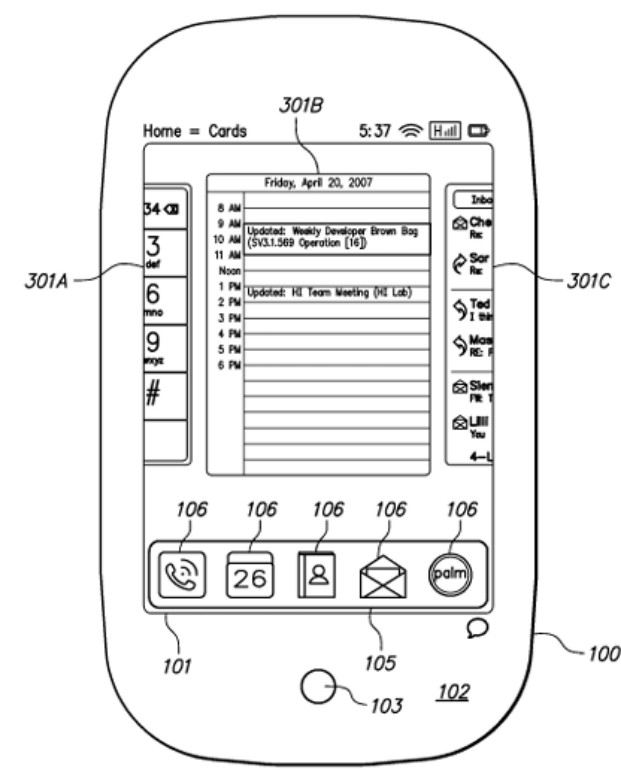
Chaudhri



Launcher Mode



Full-screen Mode



Card Mode

EX1013, FIGs. 1-3; POR at 21-24.

Overview

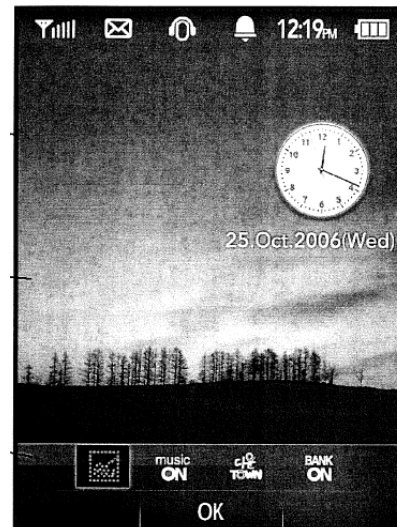
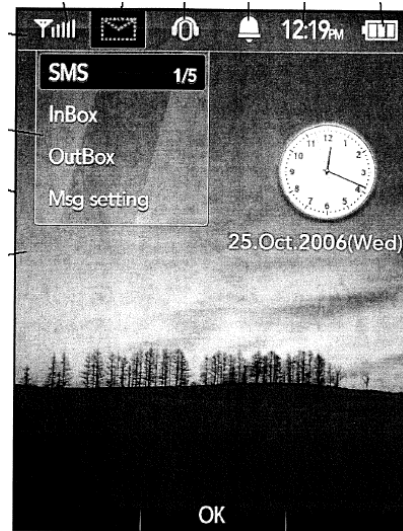
- '754 Patent
 - Multi-Part Pattern Based Gestures
 - Independent Claims 1, 2, and 225
- Technical Background
 - Ahn / Chaudhri / Shiplacoff
- **Blurring Limitations**
 - **Sliding Menu Theory (Ahn)**
 - **PETITION**
 - Fading Clock Theory (Ahn-Chaudhri)
- Dependent Claims
- Ground 1B
 - Claim 1
 - Claim 208

Only Ahn's right menu alters the clock



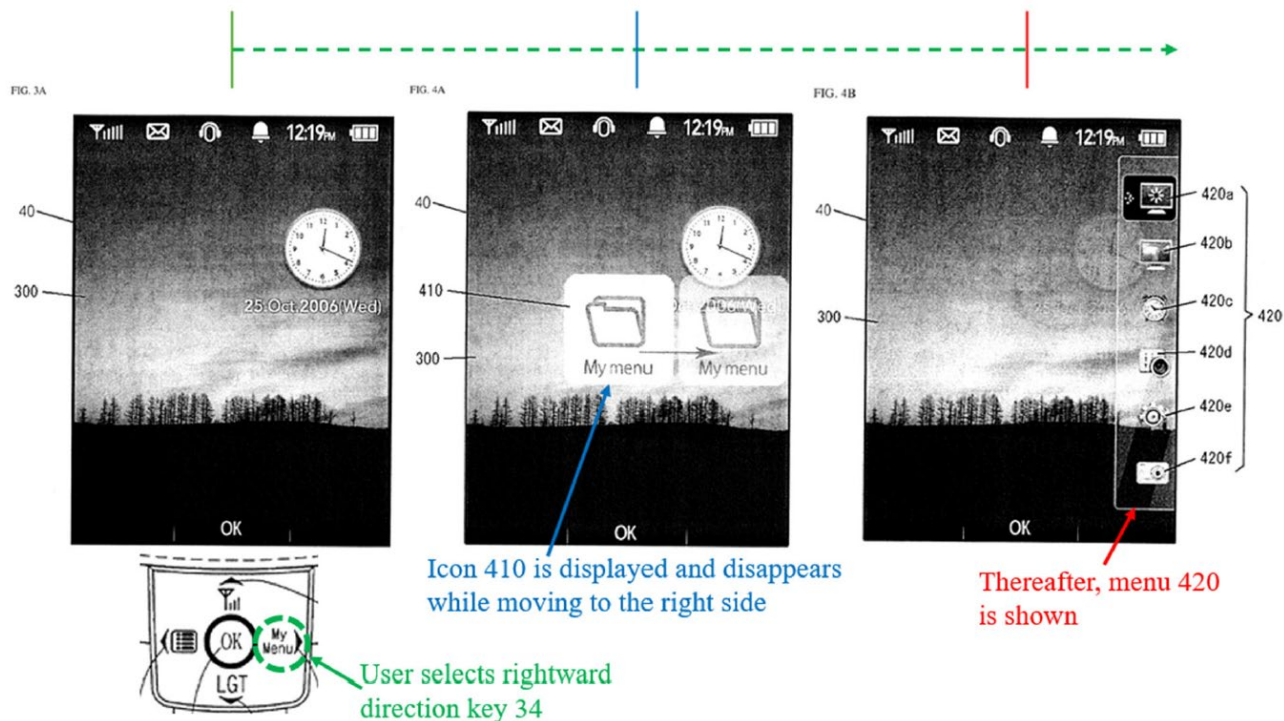
Ahn

There is no discussion of blurring any object in Ahn. Instead, Petitioner relies on the change in appearance of clock widget shown in Ahn's FIG. 4B/13b when the right hand menu 420/1300 is displayed. Pet., 26-28. None of Ahn's other menus result in any change in appearance of the clock widget.



EX1004 at FIGs. 3C, 6B, 7B; POR at 27.

Ahn's menu is displayed after gesture is complete



EX1004 at FIGs. 3A, 4A-4B; sur-reply at 3.



[0050] First, when the standby screen 300 is displayed, as in FIG. 3A, if the user selects the rightward direction key 34 provided in the key input device 30, an icon 410 corresponding to an icon displayed in the rightward direction key 34 disappears on the standby screen 300 while moving to the right side after being displayed around the center of the standby screen 300, as shown in FIG. 4A.

[0051] Thereafter, a user menu 420 as shown in FIG. 4B is displayed at the right side of the standby screen 300. The user menu 420 comprises sub-menus set by the user in order for the user to easily enter a menu in which the user frequently uses. In FIG. 4B, the user menu 420 may comprise sub-menus such as a brightness setting menu 420a, a standby screen setting menu 420b, an alarm setting menu 420c, a bell sound setting menu 420d, an initial value setting menu 420e, and a camera menu 420f.

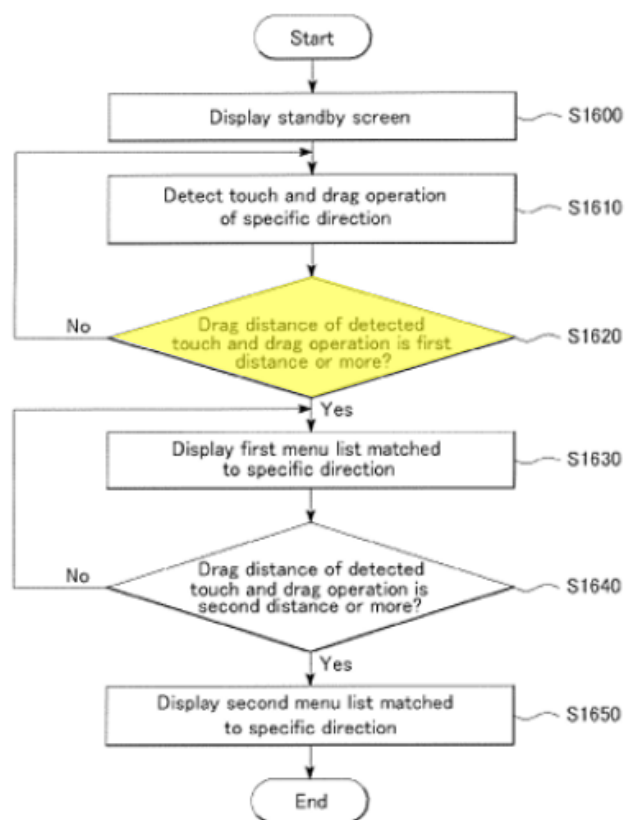
EX1004, [0051]; sur-reply, 2

Ahn's menu is displayed after gesture is complete



Ahn

FIG. 16



EX1004 at FIG. 16; sur-reply at 43.



Dr. Terveen

Q Okay. So at S1630, the first menu is not displayed unless the touch and drag operation distance has met or exceeded the first distance at S1620, correct?

A Yes. The way I put it is the process of displaying the first menu list doesn't happen until the distance traveled has exceeded the first distance, or map or exceeded the first distance.

Q Okay. And similar to S1650, the second menu list is not displayed until the drag distance has met or exceeded the second distance, correct?

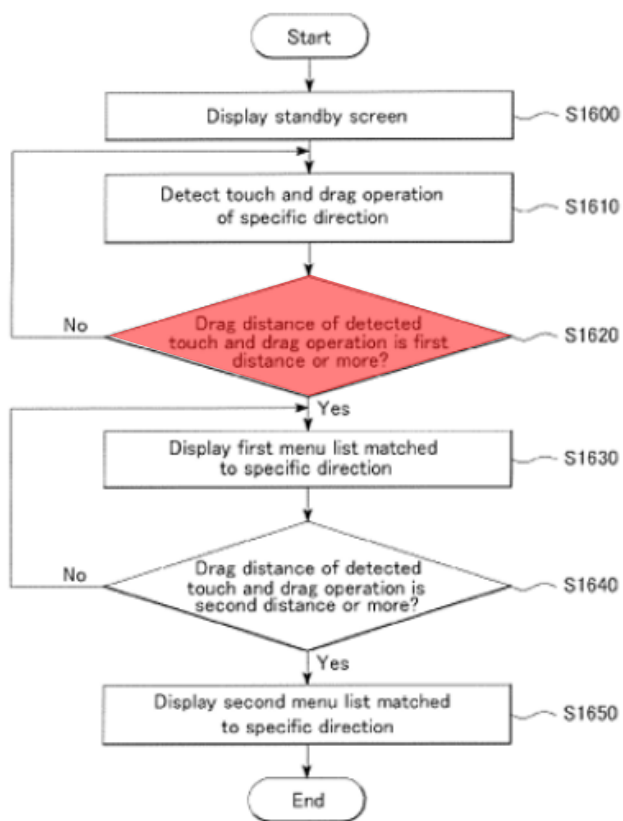
A That's correct. The process of displaying the second menu also doesn't start until you've exceeded, matter exceeded the second distance.

EX2009, 32:17-33:7; POR, 48-49

Ahn's menu is displayed after gesture is complete



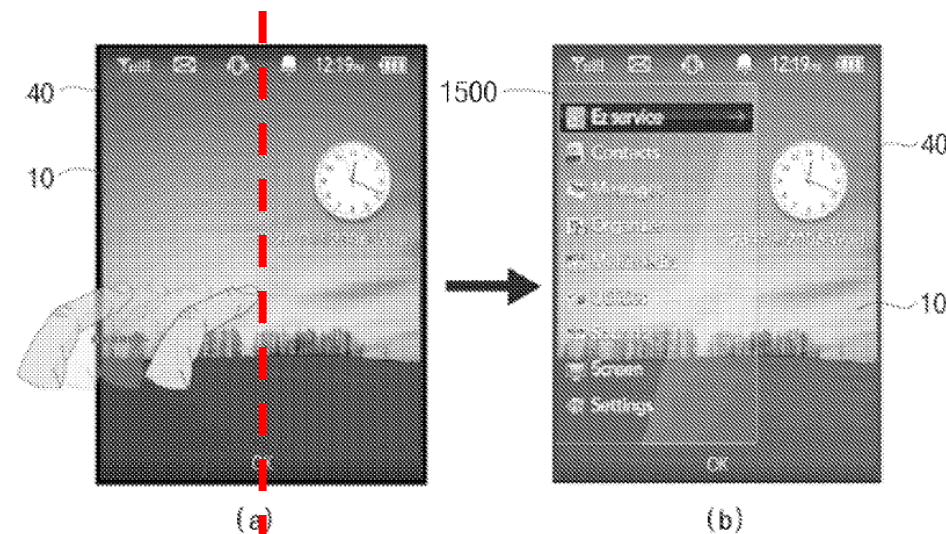
FIG. 16



EX1006 at ¶¶ 118-19; sur-reply at 43.



FIG. 15



That is, if the touch and drag operation of the user is completed, the controller 50 determines a distance of the touch and drag operation, whereby a specific menu list corresponding to the distance can be displayed in the display 40.

EX1004, FIG. 15, [0116]; POR, 16, 29

Ahn's [0118] relies on the same touch and drag operation

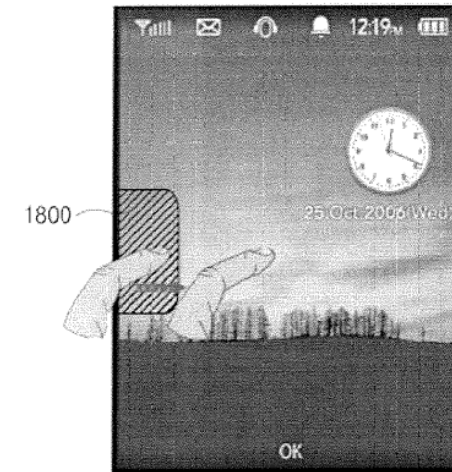
 Ahn

[0118] FIG. 18 illustrates an example of a screen for displaying a graphical display for notifying a start position of a touch and drag operation to a user. For example, referring to FIG. 18(a), if the user drags in a right direction after touching the screen, a graphical shadow 1800 is displayed in the display 40, and the menu list 1500 shown in FIG. 15(b) can be displayed in the display 40. In this case, as the user drags the graphic shadow 1800, the menu list 1500 can be displayed along the dragged graphic 1800.

[0119] Further, for example, referring to FIG. 18(b), if the user touch drags to the left, the menu list 1500 shown in FIG. 15(b) can be displayed in the display 40. In this case, as the user may press the graphic 1800 with a finger, the graphic 1800 gradually disappears in the display 40, and the menu list 1500 can be displayed as emerging from the left side of the display 40 while the graphic 1800 disappears in the display 40.

EX1004 at ¶¶ 118-19

 Ahn



(a)

Menu not displayed “while” the user drags in a right direction

EX1004 at FIG. 18(a)

“Drag” exclusively refers to an external object



[0098] The controller **50** detects a touch and drag operation of a specific direction on the touch screen **10** (S1110). The touch and drag operation indicates movement of an external object on the touch screen **10**.

[0103] Further, for example, referring to FIGS. **14a** and **b**, if the user touches screen **10** and drags the touch in an upward direction, a menu list **1400** matched to the upward direction is displayed in the display **40**. Further, for example, referring to FIGS. **15a** and **b**, if the user touches screen **10** and drags the touch in a rightward direction, a menu list **1500** matched to a right direction is displayed in the display **40**.

[0116]

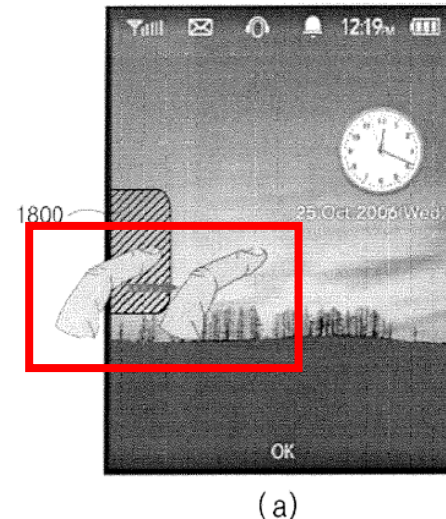
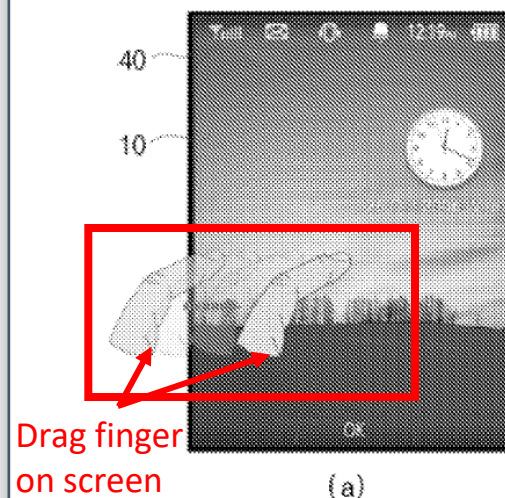
Referring to FIG.

17, if the user drags the touch screen **10** by a distance longer than or equal to the distance **d1** and shorter than the distance **d2**, the first menu list **1700** is displayed,

EX1004 at [0098], [0103], [0116]; POR at 31-32.



FIG. 15



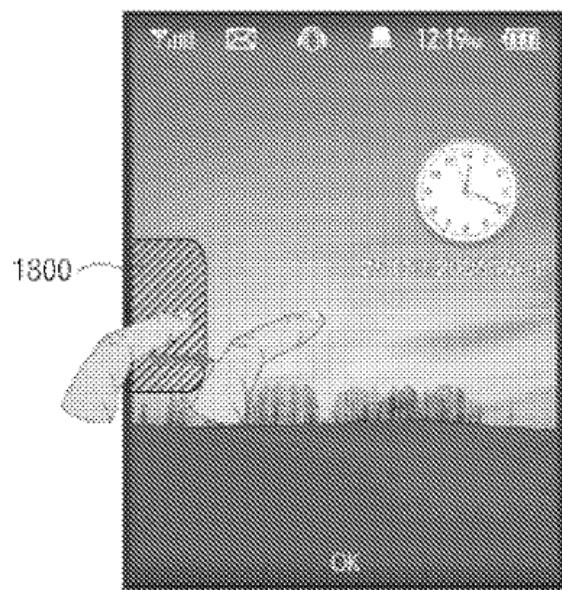
EX1004, FIGs. 15(a), 18(a)

Ahn's menu is displayed after gesture is complete



Ahn's Shadow 1800 Is NOT Illustrated as Moving

FIG. 18



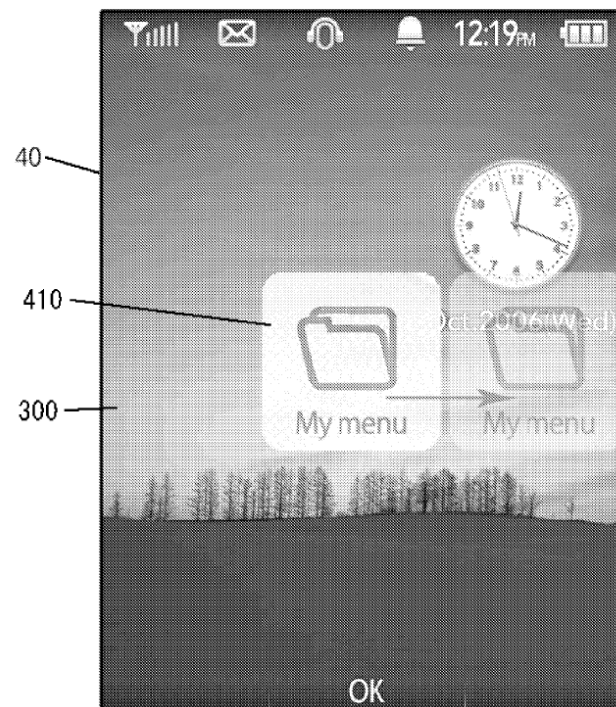
(a)

EX1004, FIG. 18(a); POR, 59.



Ahn Depicts Moving Objects

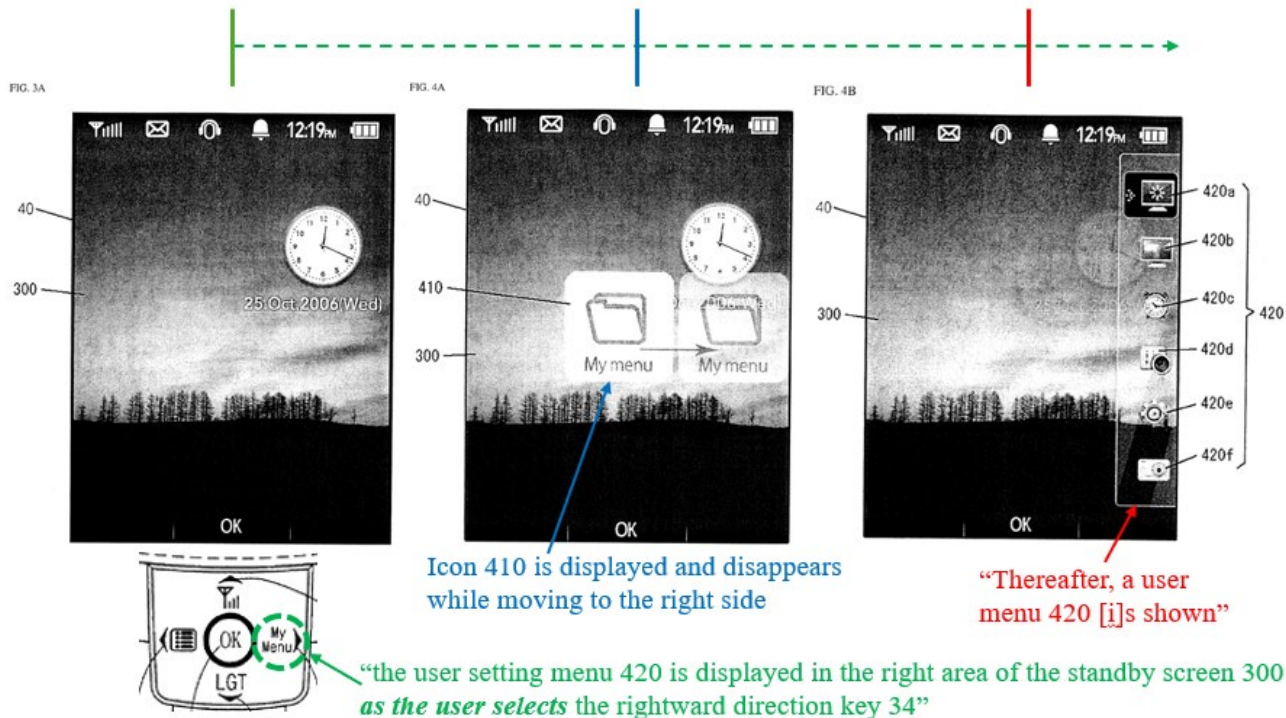
FIG. 4A



EX1004, FIG. 4A; POR, 59

“As” ≠ “during”

 Ahn



EX1004 at [0051], [0094]; FIGs. 3A, 4A-4B; sur-reply at 3.

 Dr. Rosenberg

a POSITA would not understand the phrase “[a]s the touch and drag operation is detected” to mean the menu is displayed before the operation is complete. Ahn uses this phrase several other times to mean that the menu is displayed after the operation is completed. See e.g., EX1004, ¶¶[0016], [0071], [0092], [0094]. For example, paragraphs [0094] of Ahn describes the Directional Key embodiment where “the user setting menu 420 is displayed in the right area of the standby screen 300 **as the user selects** the rightward direction key 34.”

EX2018 at ¶57, sur-reply at 2.

Overview

- '754 Patent
 - Multi-Part Pattern Based Gestures
 - Independent Claims 1, 2, and 225
- Technical Background
 - Ahn / Chaudhri / Shiplacoff
- **Blurring Limitations**
 - **Sliding Menu Theory (Ahn)**
 - **REPLY**
 - Fading Clock Theory (Ahn-Chaudhri)
- Dependent Claims
- Ground 1B
 - Claim 1
 - Claim 208

Petition does NOT modify Ahn's menu

Apple's Petition

A POSITA would have found obvious from these teachings that, in at least **implementations like those described referencing FIG. 18**, Ahn's menu list would have been graphically displayed as sliding onto the display based on a change in a magnitude of the "touch and drag" gesture being detected on the touch screen.

Pet. at 28.



Apple's Motivations are Limited to Changes in Optical Intensity

3. The Combination, Reasons to Combine, & Expectation of Success

First ... Chaudhri-842 provides details for **utilizing transitions in optical intensity** during transitions in user interface state ... Chaudhri-842 provides additional details about the use of varying optical intensity for user interface objects that a POSITA would have found helpful to implement the optical effects shown but not otherwise described in Ahn

Second Chaudhri-842 teaches that the "**change in optical intensity of the user interface objects**" provides a user with sensory feedback of the progress in transitioning between user interface states."

Third, a POSITA would have known that **transparency, translucency/blurring**, and other "focus and context" techniques may be utilized ...

Fourth, a POSITA would have known that **varying optical intensity** for a user interface object ... would have been one of a limited number of ways

Pet., at 14-19.

Petition does NOT modify Ahn's menu

Apple's Sliding Menu Theory

A POSITA would have found obvious from these teachings that, in at least implementations like those described referencing FIG. 18, Ahn's menu list would have been graphically displayed as sliding onto the display based on a change in a magnitude of the "touch and drag" gesture being detected on the touch screen.

Pet. at 28.

Modification in Fading Clock Theory

For the reasons described in Section VI.A.3, *supra*, a POSITA would have found it obvious to apply Chaudhri-842's user interface state transition techniques—particularly the use of transitioning optical intensity to provide visual feedback regarding the progress of a transition between user interface states as a result of detecting a user's input of a predefined gesture—in the context of Ahn's mobile communication terminal 100.

Pet. at 30.

Chaudhri's menu is displayed after gesture is complete

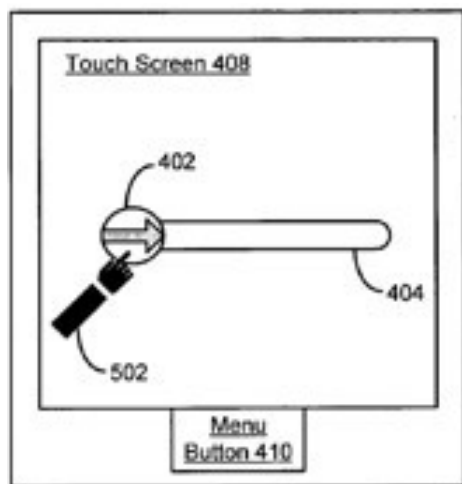


Fig. 5A

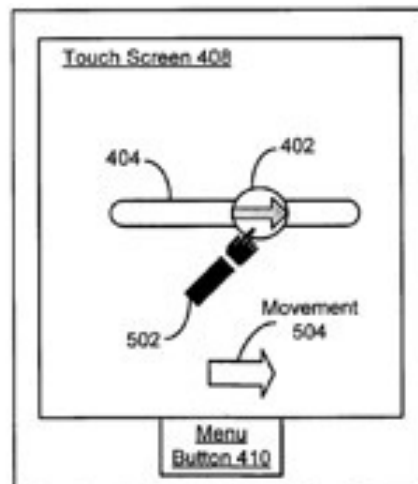


Fig. 5B

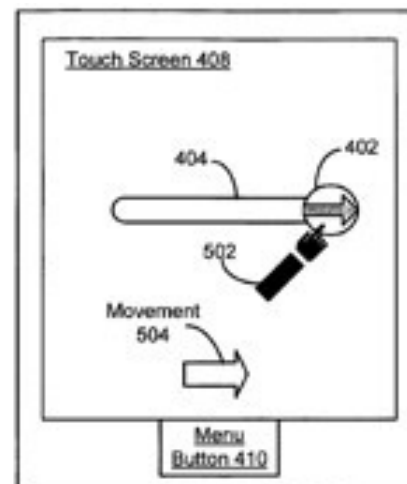


Fig. 5C

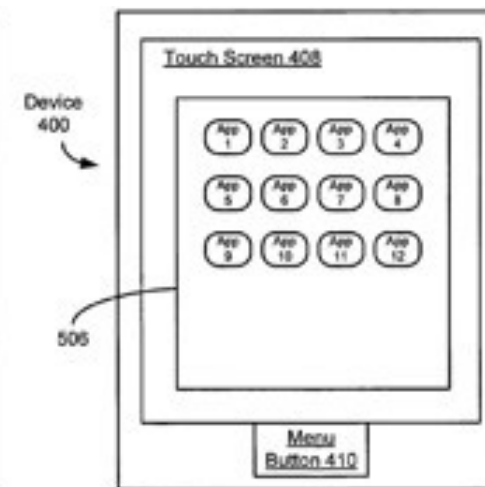


Fig. 5D

[0076] In FIG. 5C, the user has dragged the unlock image 402 to the right end of the channel 404. Once the user releases the unlock image 402 at the right end of the channel 404, the unlock action is complete. Upon completion of the unlock gesture, the device unlocks and displays on the touch screen 408 user-interface objects associated with normal operation of the device 400. FIG. 5D illustrates an example of user-interface objects that may be displayed when the device 400 is unlocked. In FIG. 5D, the device 400 displays a menu 506. The menu 506 includes interactive user-interface objects corresponding to various applications or operations.

EX1005, FIGs. 5A-5D, [0076]; POR at 19.

Chaudhri's transition is after the gesture is complete



Chaudhri's Transition Effect

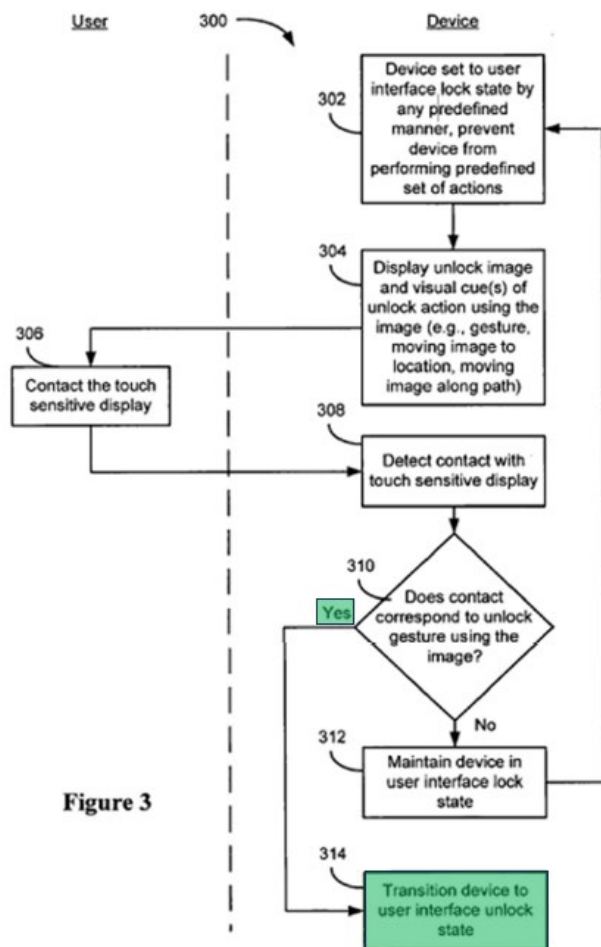


Figure 3

EX1005 at FIG. 3; Sur-Reply at 9.



Chaudhri's Fade-in

Unlocking a Device via Gestures

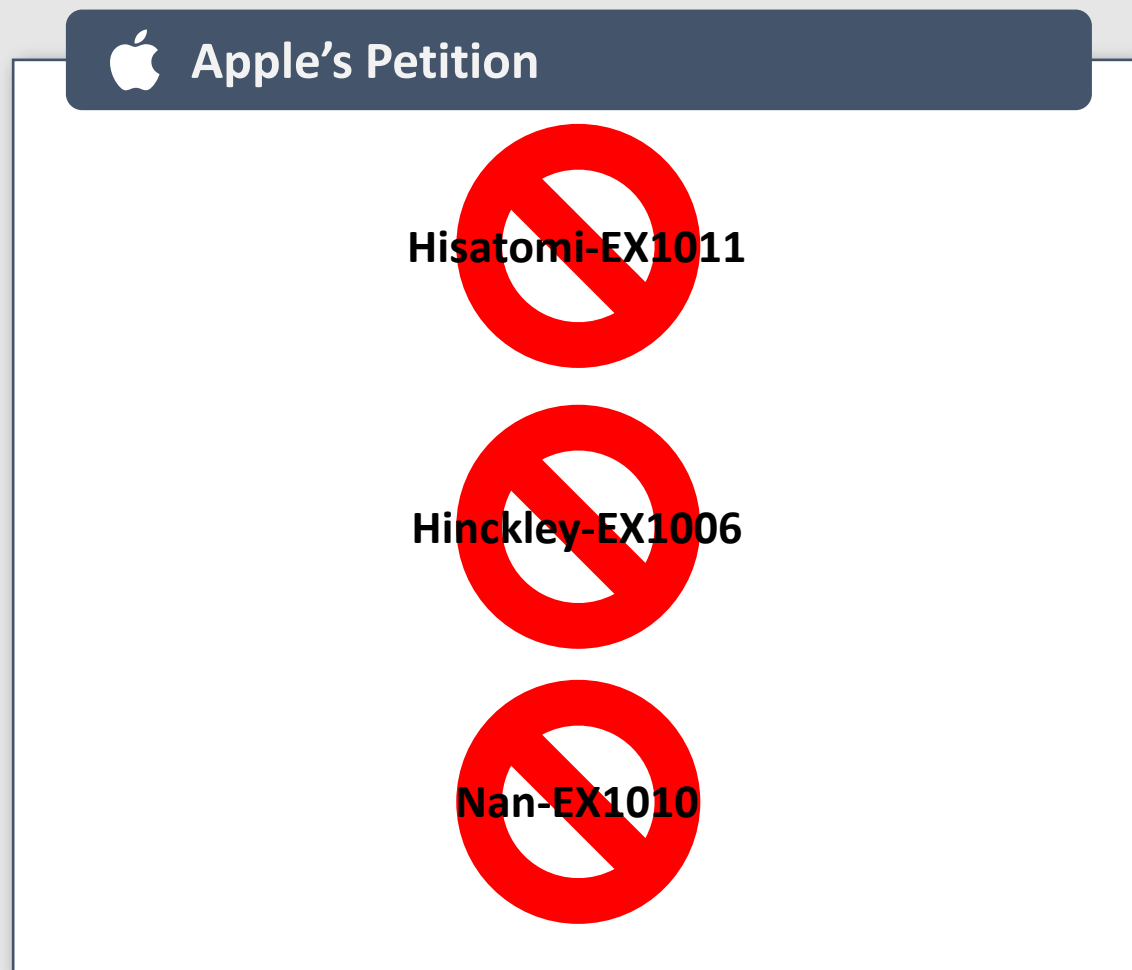
...

[0079] In some embodiments, the lock/unlock feature may apply to specific applications that are executing on the device 400 as opposed to the device 400 as a whole. In some embodiments, **an unlock gesture transitions from one application to another**, for example, from a telephone application to a music player or vice versa. The lock/unlock feature may include a hold or pause feature. In some embodiments, as the user transitions from a first application and to a second application, a user interface for the second application may fade in (i.e., increase in intensity) and a user interface for the first application may fade out (i.e., decrease in intensity). The fade in and fade out may occur smoothly over a pre-determined time interval, such as 0.2 s, 1s or 2s. The

...

EX1005 at [0052], [0079]; Sur-reply at 8.

Petition does NOT modify Ahn's menu



Overview

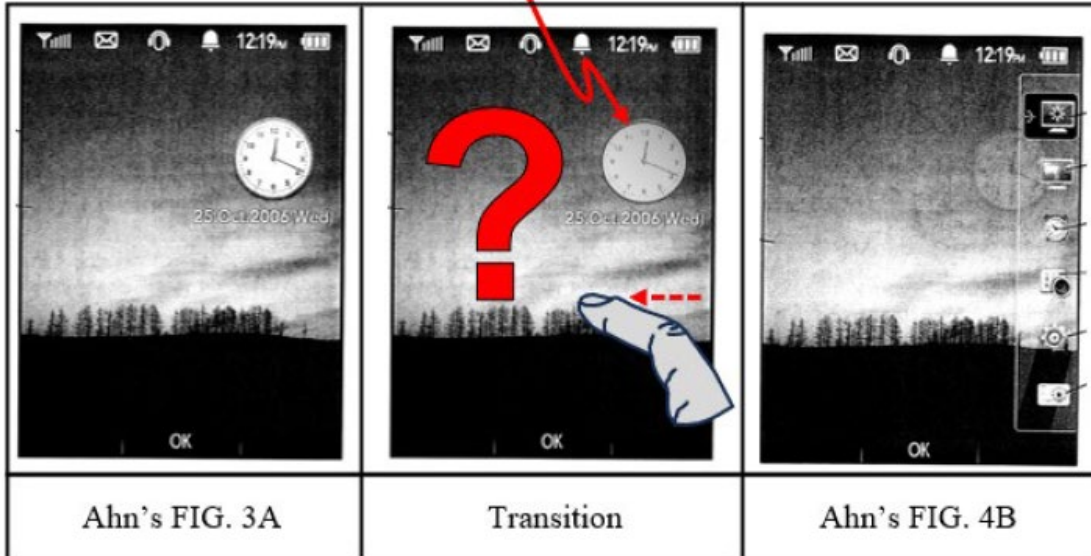
- '754 Patent
 - Multi-Part Pattern Based Gestures
 - Independent Claims 1, 2, and 225
- Technical Background
 - Ahn / Chaudhri / Shiplacoff
- **Blurring Limitations**
 - Sliding Menu Theory (Ahn)
 - **Fading Clock Theory (Ahn-Chaudhri)**
- Dependent Claims
- Ground 1B
 - Claim 1
 - Claim 208

Modification does not show progress



Petitioner's Modification

Clock cannot provide indication of "progress" or associated operation of gesture

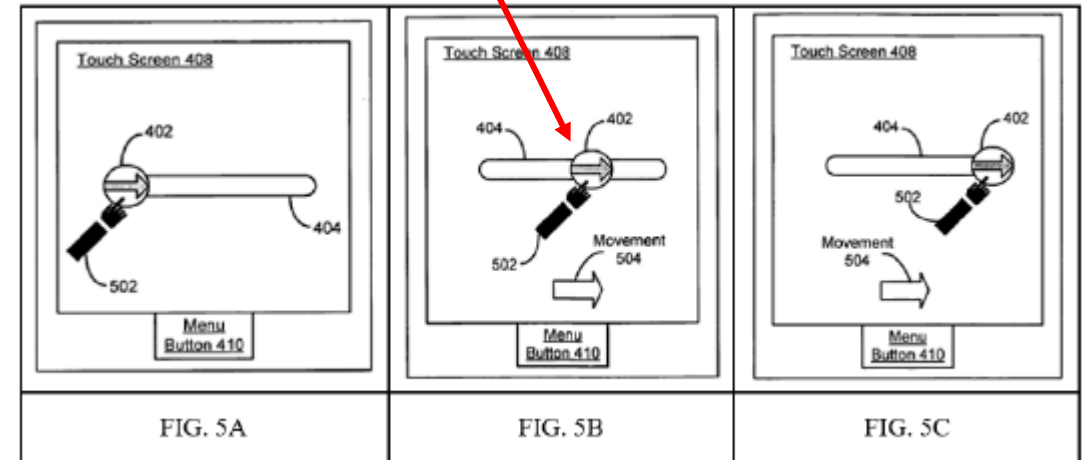


EX1004 FIGs. 3A, 4B; POR at 37, 46.



Chaudhri

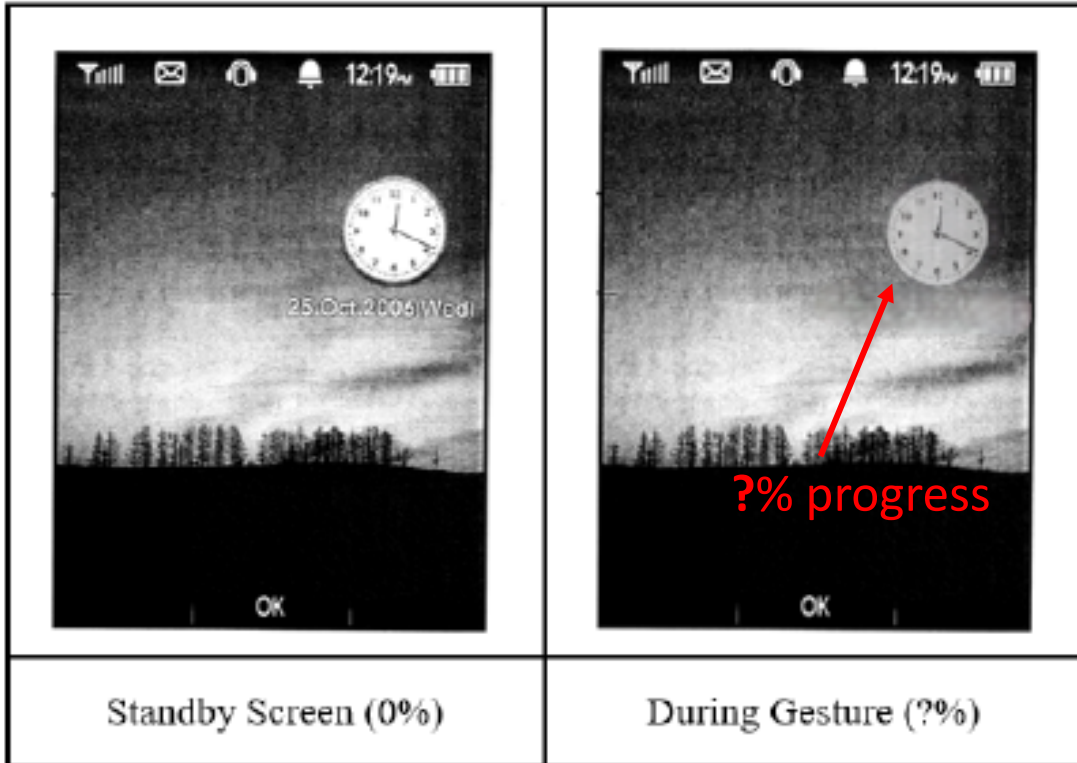
60-70% progress



EX1005 at FIGs. 5A-5C; POR at 19.

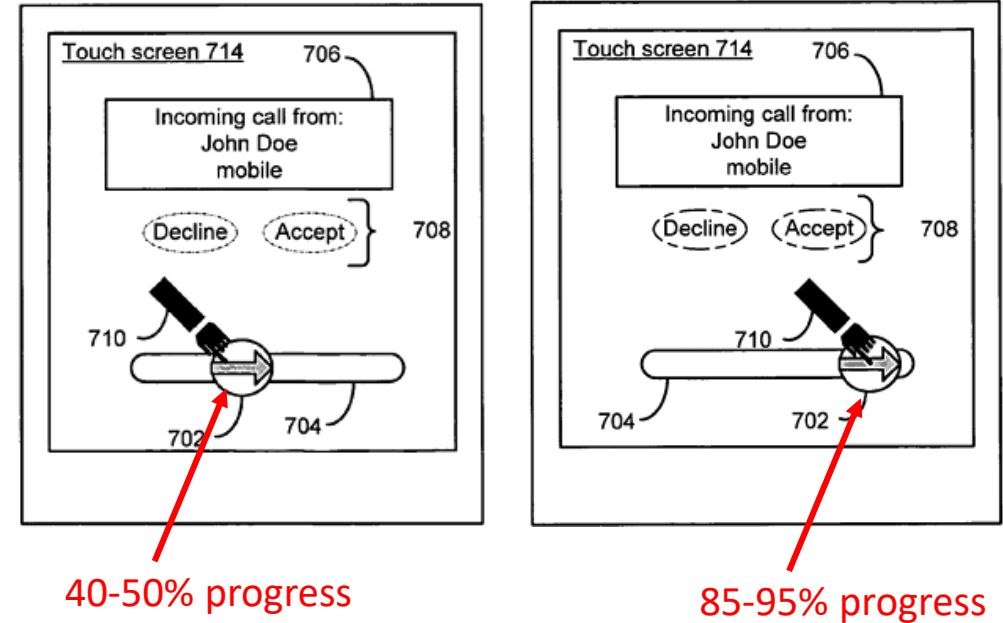
Modification does not show progress

Petitioner's Modification



EX1004 FIGs. 3A, 4B; POR at 39.

Chaudhri



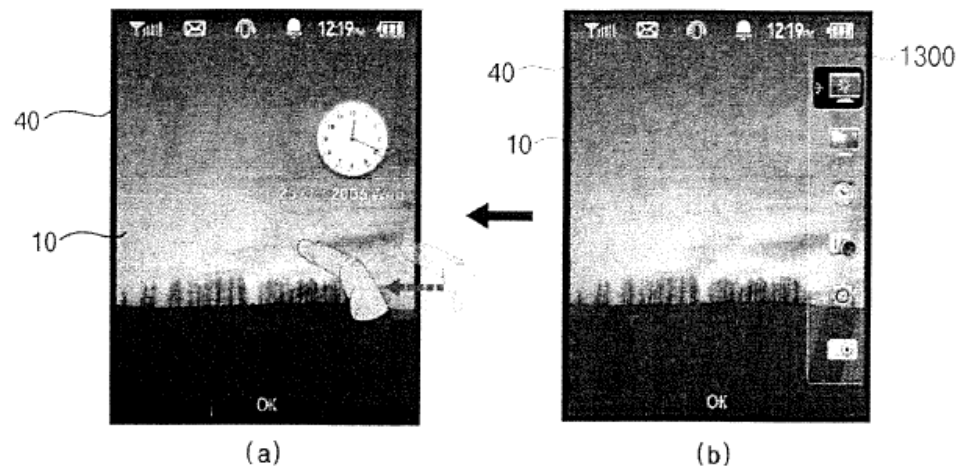
EX1005 at FIGs. 7B-7C; POR at 45.

Petitioner's modification is contrary to Chaudhri



Modification Decreases Visibility of Foreground Objects

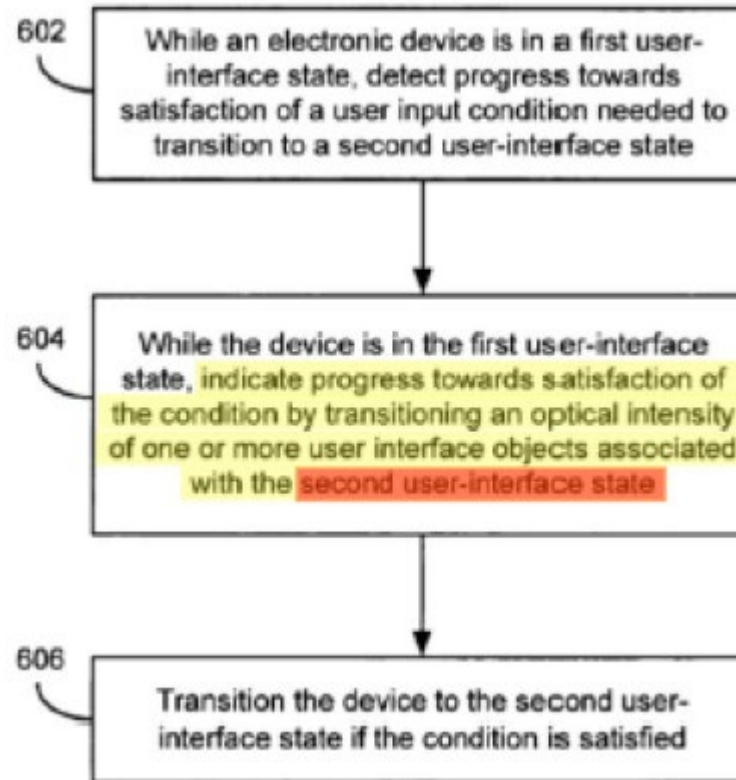
FIG. 13



EX1004 at FIG. 13; POR at 44.



Chaudhri Increases Visibility of Unseen Objects



EX1005 at FIG. 6; POR at 43.

Petitioner's Reply relies on two distinct embodiments



Chaudhri's Indication of Progress

Indication of Progress Towards Satisfaction of a
User Input Condition ¶¶[0080]-[0096]

[0082] While the device is in the first user-interface state, progress is indicated (604) towards satisfaction of the condition by transitioning an optical intensity of one or more user interface objects associated with the second user-interface state. The change in optical intensity of the user-interface objects provides a user with sensory feedback of the progress in transitioning between user interface states.

EX1005 at ¶¶ 76, 79; sur-reply at 27.

Pet., 31



Chaudhri's Fade-in/Fade-out

Unlocking a Device via Gestures ¶¶[0052]-[0079]

...

[0079] In some embodiments, the lock/unlock feature may apply to specific applications that are executing on the device 400 as opposed to the device 400 as a whole. In some embodiments, an unlock gesture transitions from one application to another, for example, from a telephone application to a music player or vice versa. The lock/unlock feature may include a hold or pause feature. In some embodiments, as the user transitions from a first application and to a second application, a user interface for the second application may fade in (i.e., increase in intensity) and a user interface for the first application may fade out (i.e., decrease in intensity). The fade in and fade out may occur smoothly over a pre-determined time interval, such as 0.2 s, 1s or 2s. The

EX1005 at [0052], [0079]; Sur-reply at 27-28.

Not cited in Petition

Chaudhri's fade-in/fade-out is after the gesture



Chaudhri

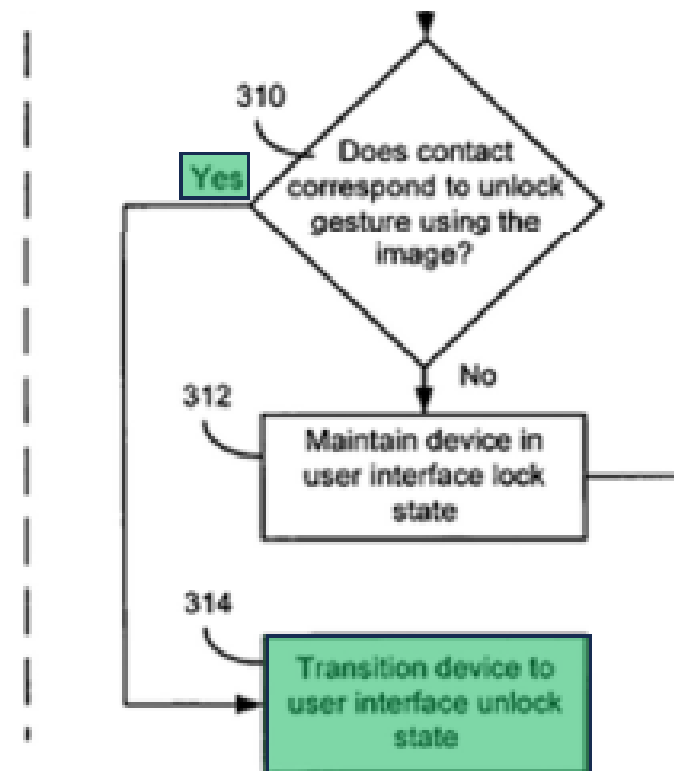
404, the unlock action is complete. Upon completion of the unlock gesture, the device unlocks and displays on the touch screen 408 user-interface objects associated with normal operation of the device 400. FIG. 5D illustrates an example

include a hold or pause feature. In some embodiments, as the user transitions from a first application and to a second application, a user interface for the second application may fade in (i.e., increase in intensity) and a user interface for the first application may fade out (i.e., decrease in intensity). The fade in and fade out may occur smoothly over a pre-determined time interval, such as 0.2 s, 1s or 2s. The pre-determined time interval may be in accordance with the unlock gesture, such as the time it takes the user to perform the gesture. Indication of Progress Towards Satisfaction of a User Input Condition

EX1005 at [0076], [0079]; sur-reply at 8.



Chaudhri (annotated)



EX1005 at FIG. 3; sur-reply at 9.

Petitioner fails to show an “obvious to try” theory



“To prove obviousness under an obvious to try theory, [Petitioner] must show (1) a design or market need to solve a particular problem, and (2) that ‘there are a finite number of identified, predictable solutions’ that would lead to an expectation of success.”

Grunenthal GMBH v. Alkem Labs. Ltd., 919 F.3d 1333, 1345 (Fed. Cir. 2019); sur-reply at 10.



Apple’s Petition

Fourth, a POSITA would have known that varying optical intensity for a user interface object (e.g., the blurring of Ahn’s clock widget) as a function of the magnitude of the user’s touch and drag gesture would have been one of a limited number of ways of implementing the blurring effect shown in FIGS. 4B, 10, and 13B of Ahn. EX1003, ¶[62]; *Uber Technologies, Inc. v. X One, Inc.*, 957 F. 3d 1334, 1339-40 (Fed. Cir. 2020). Either a POSITA could have implemented the blurring effect in a binary fashion (e.g., toggling instantaneously between unblurred and blurred) or progressively varied the blur as a function of the user’s gesture, as taught by Chaudhri-842. EX1003, ¶[62].

NO PROBLEM

Pet. at 19.

Petitioner fails to show an “obvious to try” theory



“To prove obviousness under an obvious to try theory, [Petitioner] must show (1) a design or market need to solve a particular problem, *and* (2) that ‘there are a finite number of identified, predictable solutions’ that would lead to an expectation of success.”

Grunenthal GMBH v. Alkem Labs. Ltd., 919 F.3d 1333, 1345 (Fed. Cir. 2019); sur-reply at 10.

Further, Dr. Terveen’s framing of blurring as being “binary” (EX1003, ¶62) is incorrect and unsupported. There are numerous ways to “blur” an object that are not progressively as a function of the user’s gesture. For example, blurring after a keypad input (EX1004, ¶¶[0049]-[0051]); providing an intermediate animation before the blurring operation (EX1004, FIG. 4A); blurring the object instantaneously at the start of the gesture, during the gesture, or after the gesture is complete; blurring gradually at the start of the gesture or after the gesture, blurring over a predetermined time (EX1005, ¶[0079]) at the start, during, or after the gesture.

Sur-reply at 10.

Dr. Terveen’s

blatant neglect of alternatives does not somehow narrow the choices to two. Moreover, if the problem/solution is viewed without hindsight narrowing (e.g., diminishing an object’s presence when opening a menu), there are countless alternatives to blurring which further undermine Dr. Terveen’s false binary.

Sur-reply at 10-11.

Dr. Terveen’s contrived finiteness.

Overview

- '754 Patent
 - Multi-Part Pattern Based Gestures
 - Independent Claims 1, 2, and 225
- Technical Background
 - Ahn / Chaudhri / Shiplacoff
- Blurring Limitations
 - Sliding Menu Theory (Ahn)
 - Fading Clock Theory (Ahn-Chaudhri)
- **Dependent Claims**
 - **All** (except 223)
 - 37, 64, 75-79, 187, 189, and 223
 - 67-74, 197, 201-204, and 216
 - 199 and 210
- Ground 1B
 - Claim 1
 - Claim 208

All Dependent Claims (except 223)



Menu Opens After Distance Threshold

27. The apparatus of claim 2, wherein the apparatus is configured such that, when the magnitude, including a distance magnitude, of the gesture detected on the touch screen is detected to **increase above a distance threshold**, a menu is displayed with at least one option.

186. The apparatus of claim 2, wherein the apparatus is configured such that: ... when the magnitude of the gesture detected on the touch screen is detected to **increase above a distance threshold**, a menu is displayed with at least one option, such that:

- the at least one other object is displayed via a first virtual display layer,

- the menu is displayed in a second virtual display layer that appears above the first virtual display layer, and

230. The method of claim 225, wherein, in response to the magnitude, including a distance magnitude, of the gesture detected on the touch screen being detected to **increase above a distance threshold**, a menu is displayed with at least one option.

Petitioner's dependent claim theory is inconsistent



Independent Claim Theory

“A POSITA would have found obvious that, as a user utilizes the dragging gesture to open a given translucent menu, the translucent menu would progressively slide onto the display as a function of the magnitude of the user’s dragging gesture.” (Pet., 27)

“Both theories [for the independent claims] rely upon the obviousness of the menus in the Ahn-Chaudhri combination following a user’s finger as the user performs the dragging gesture to open the menu. See Petition, 26-33.” (Reply, 2)

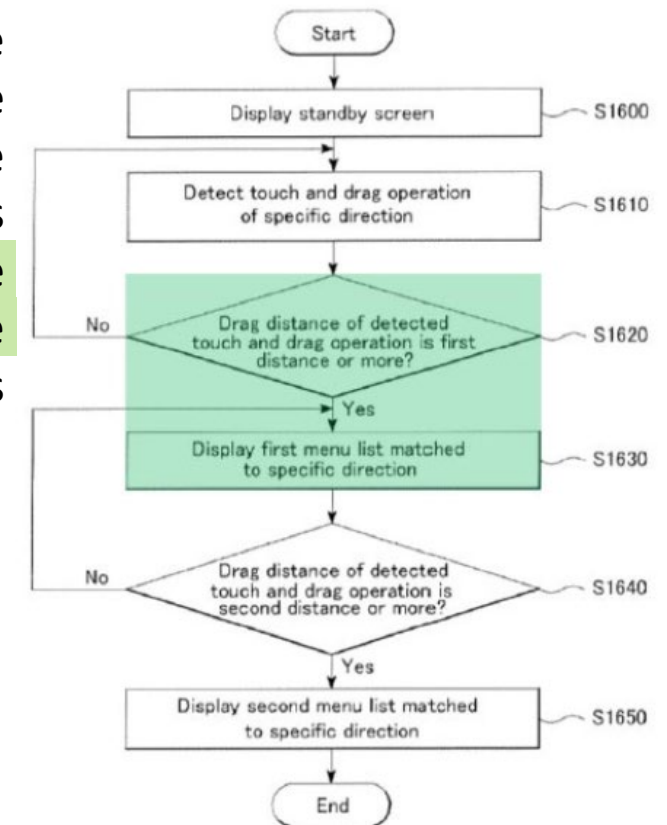
POR at 48-50.



Dependent Claim Theory

when the magnitude ... of the gesture detected on the touch screen is detected to increase above a distance threshold, a menu is displayed

FIG. 16



1116-Pet., 40, 43, 68; 1115-Pet., 40-41; POR, 47-48

Menu cannot follow finger if the menu is not displayed before gesture is complete



Dr. Terveen

Q Okay. So at S1630, the first menu is not displayed unless the touch and drag operation distance has met or exceeded the first distance at S1620, correct?

A Yes. The way I put it is the process of displaying the first menu list doesn't happen until the distance traveled has exceeded the first distance, or map or exceeded the first distance.

Q Okay. And similar to S1650, the second menu list is not displayed until the drag distance has met or exceeded the second distance, correct?

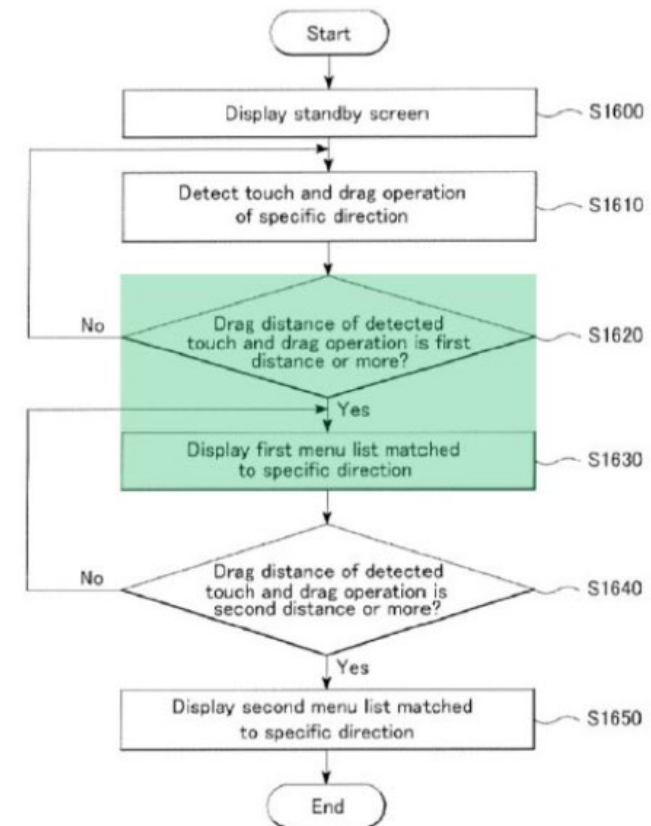
A That's correct. The process of displaying the second menu also doesn't start until you've exceeded, matter exceeded the second distance.

EX2009, 32:17-33:7; POR, 48-49



Ahn's Operation

FIG. 16



1116-Pet., 40, 43, 68; 1115-Pet., 40-41; POR, 47-48

Petitioner's dependent claim theory relies solely on Ahn



Dependent Claims 27, 186, 230

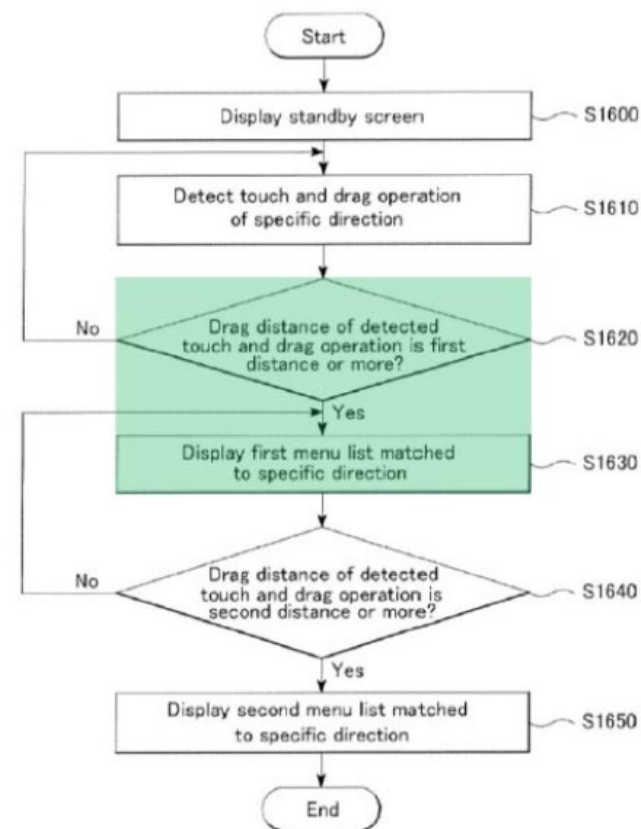
Specifically, Ahn describes that “controller 50 determines whether a drag distance of the detected touch and drag operation is a first distance or more (S1620),” and “[i]f a drag distance of the detected touch and drag operation is a first distance or more, the controller 50 controls to display a first menu list matched to the specific direction (S1630).” EX1004, [0109]. Accordingly, Ahn teaches that *the apparatus is configured such that, when the magnitude, including a distance magnitude, of the gesture detected on the touch screen is detected to increase above a distance threshold, a menu is displayed with at least one option*, as recited in Claim [27]. EX1003, [134].

1116-Pet., 40, 44, 68; 1115-Pet., 40-41



Ahn's Operation

FIG. 16



1116-Pet., 40, 43, 68; 1115-Pet., 40-41; POR, 47-48

Petitioner's modifications are new



De minimus Modification

Even accepting, *arguendo*, Smith's position, Ahn does not specify or limit the "first distance" that the drag operation must meet or exceed in order to display a first menu. EX1004, [0109]; EX1023, [26]. A POSITA would have found **obvious that** the "first distance" would be a *de minimus* distance used to distinguish a drag gesture from other gestures, such as a "tap." EX1023, [26]. The use of such *de minimus* distances to distinguish between gestures was well known to POSITAs as of the Critical Date. For example, Shaffer describes that a "tap" may include some small amount of movement of a user's finger, so long as the movement is "less than a predefined threshold." See EX1025, 28:37-62.

Reply at 17.



Complete Menu Opening Modification

Further, as Dr. Terveen explained in his deposition, a POSITA would have reasonably interpreted reference in Ahn's FIG. 16 to "display[ing] a first menu" at S1630 as the complete opening of the menu. See EX2009, 38:9-44:1; EX1004, [0105]-[0109]. That is, from FIGS. 16 and 17, a POSITA would have additionally or alternatively understood that the menu follows the user's finger, and only after the user's finger has traveled a certain distance would the menu be and remain fully opened when the user's finger lifts from the screen. EX1023, [28].

One obvious way this would work is for Ahn's menu to follow the user's finger, and depending on whether the finger travels a certain distance before it lifts off the screen, the menu would either close or remain open. EX1023, [29]

Reply at 18-19.

Modifications are wrong – *De minimus*

De minimus Modification

A POSITA would have found

obvious that the “first distance” would be a *de minimus* distance used to distinguish a drag gesture from other gestures, such as a “tap.” EX1023, [26]. [Reply at 17.](#)

Ahn already detects/distinguishes the gesture at S1610

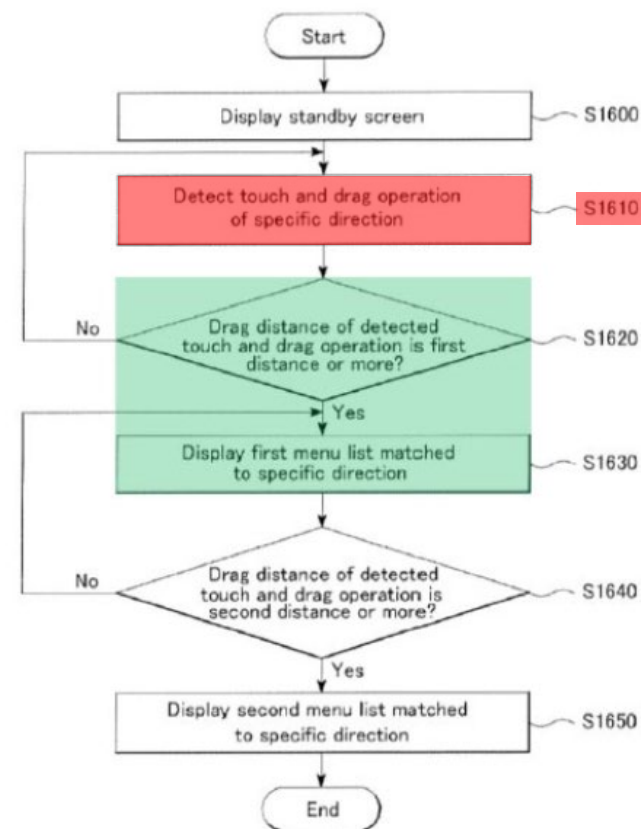
[0107] The controller 50 **detects a touch and drag operation** of a specific direction in the touch screen 10 (**S1610**). Step **S1610** corresponds to step S1110 of FIG. 11.

[0109] The controller 50 determines whether a drag distance of the **detected** touch and drag operation is a **first distance** or more (S1620). If a drag distance of the detected touch and drag operation is a first distance or more, the controller 50 controls to display a first menu list matched to the specific direction (S1630).

[EX1004](#), [0107], [0109], [sur-reply at 14-15.](#)

Ahn's operation

FIG. 16



[sur-reply at 15.](#)

Modifications are wrong – Complete menu opening



Complete Menu Opening Modification

Further, as Dr. Terveen explained in his deposition, a POSITA would have reasonably **interpreted reference in Ahn's FIG. 16** to “display[ing] a first menu” at **S1630** as the complete opening of the menu. See EX2009, 38:9-44:1; EX1004,

Reply at 18



Dr. Terveen contradicts Petitioner's FIG. 16 theory

Q Okay. So at **S1630**, the first menu is not displayed unless the touch and drag operation distance has met or exceeded the first distance at S1620, correct?

A Yes. The way I put it is the process of displaying the first menu list **doesn't happen until the distance traveled has exceeded the first distance**, or map or exceeded the first distance.

EX2009, 32:17-33:7; sur-reply, 18



Petitioner's miscited testimony still fails

[0112] As shown in **FIG. 17**, the second menu list **1710** may be displayed together with the first menu list **1700**. For example, when a drag distance of the touch operation reaches the distance **d1**, the first menu list **1700** is displayed. **If the drag distance of the touch operation reaches the distance d2**, the first menu list **1700** disappears and the second menu list **1710** may be displayed.

EX1004, [0112]

Q Even though that language says if a touch operation dragged by the distance D1 reaches a distance D2 -- sorry. Last sentence of **paragraph 112**, if the drag distance of the touch operation reaches the distance D2. Isn't that an "if then" statement?

A Let me just read it carefully. I do think that the word "if" does make that more plausible, that is with the word **"if"**, it's **more plausible that** if the -- if you have -- if you haven't reached the distance D2, that the second **menu list would not be displayed.**

EX2009, 38:9-44:1

sur-reply, 18

Overview

- '754 Patent
 - Multi-Part Pattern Based Gestures
 - Independent Claims 1, 2, and 225
- Technical Background
 - Ahn / Chaudhri / Shiplacoff
- Blurring Limitations
 - Sliding Menu Theory (Ahn)
 - Fading Clock Theory (Ahn-Chaudhri)
- Dependent Claims
 - All
 - **37, 64, 75-79, 187, 189, and 223**
 - 67-74, 197, 201-204, and 216
 - 199 and 210
- Ground 1B
 - Claim 1
 - Claim 208

Dependent Claim 37

Claim 37

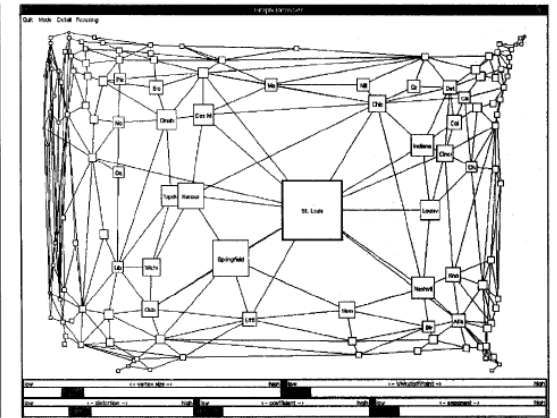
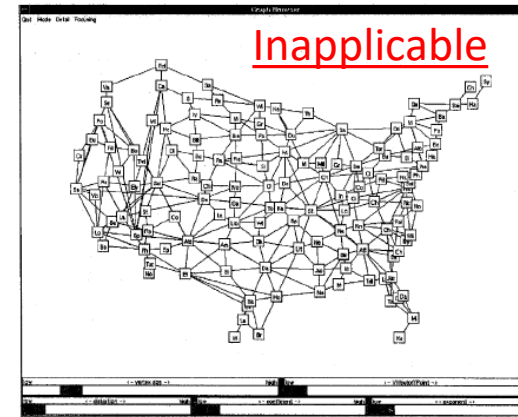
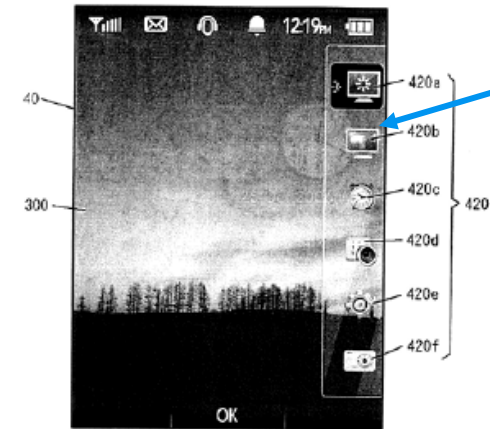
37. The apparatus of claim 27, wherein the apparatus is configured such that the menu is sharpened and magnified when displayed.

Petitioner's Theory

it “was well known to combine blur with other ‘focus and context’ techniques” such as “‘distortion oriented or spatial methods’ in which ‘geometry of the display is distorted to allow a magnification of interesting information without losing the (less magnified) context.’”

1115-Pet., 43-44 (quoting EX1008, 1-2).

Unexplained and Illogical

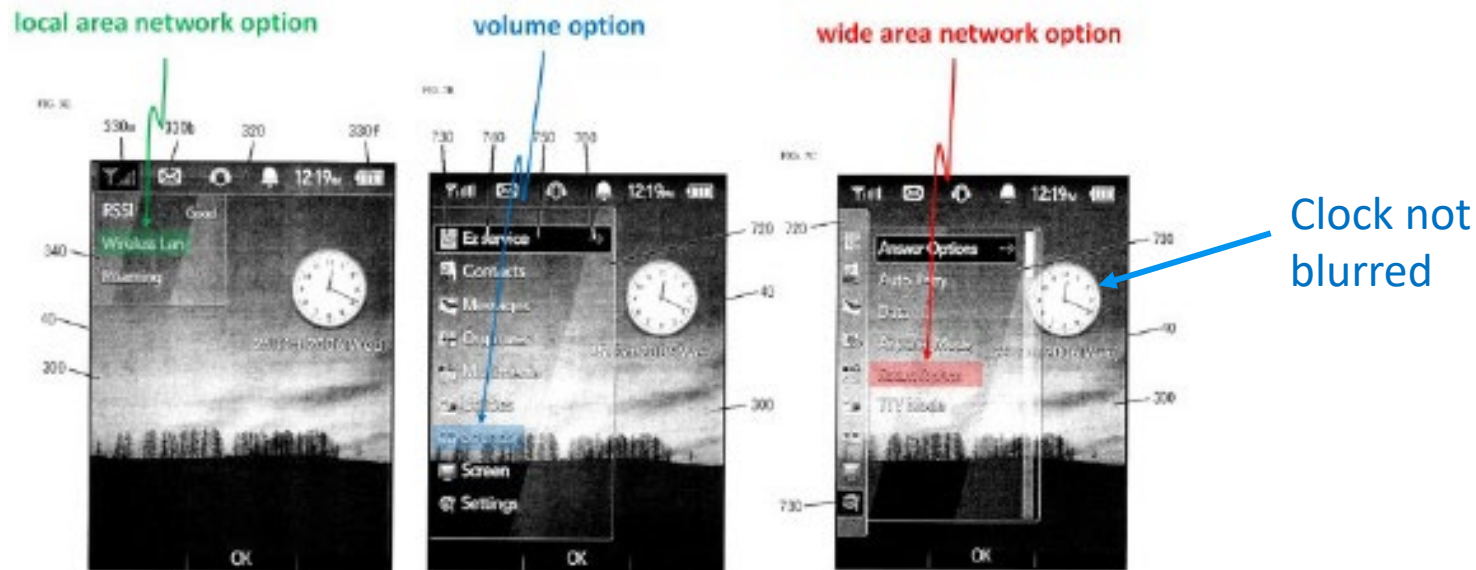


EX2018 ¶¶144-151; POR, 59-61

Dependent Claim 64

Petitioner Mixes and Matches Menus

64. The apparatus of claim 27, wherein the apparatus is configured such that **the menu** fades-in, and includes a wide area network option, a local area network option, and a volume option.



1115-Pet., 53-54.

Dependent Claims 75-79, 187

Claim 75

75. ... when the magnitude, including the distance magnitude, of the gesture detected on the touch screen is detected to not increase above the distance threshold, a home screen for choosing among a plurality of applications is displayed.

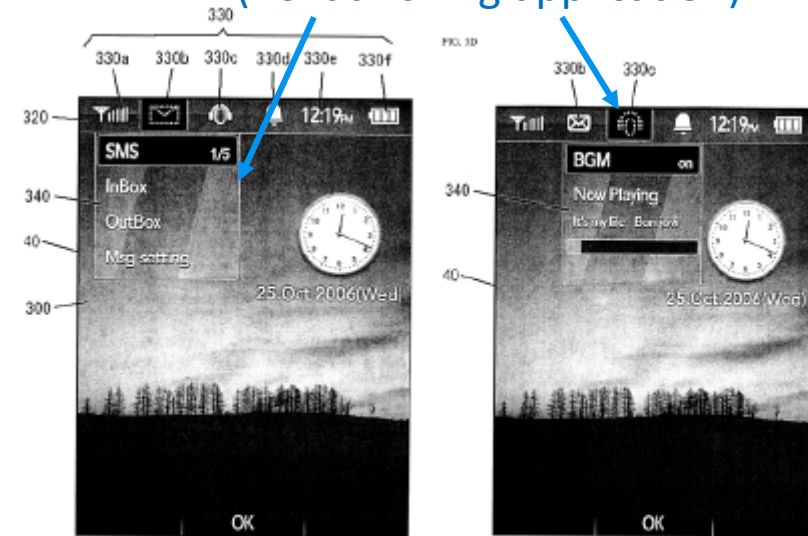
Petitioner's Theory

A POSITA would have understood and found obvious that selecting the “message notification icon 330b” and/or “background music setting icon 330c” displayed in Ahn’s indicator area 320 of the standby screen 300 would have **launched an application** associated with that functionality.

1115-Pet., 68

Contradicted by Ahn

Opens a menu
(no launching application)



EX1004 FIGs. 3C-3D; EX2018 ¶¶118-121; POR, 51-53

Dependent Claim 189



Claim 189

189. The apparatus of claim 186, wherein the apparatus is configured such that the gesture includes a swipe down gesture.



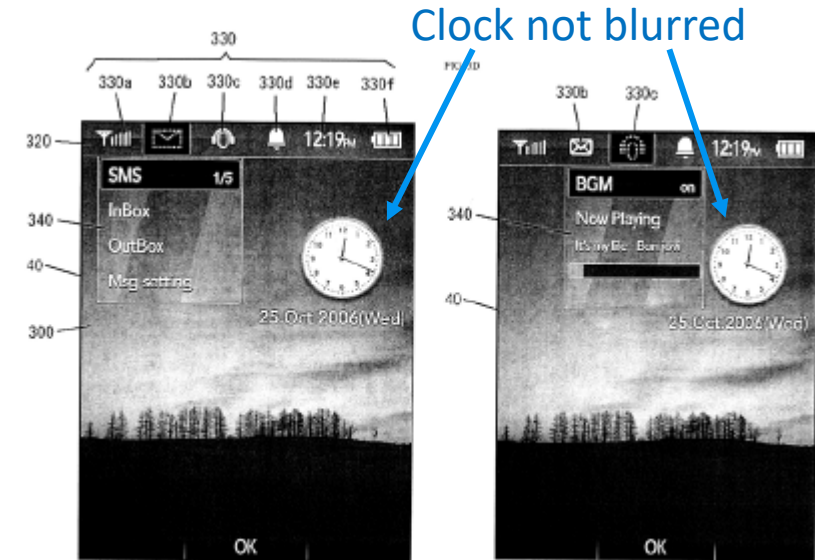
Petitioner's Theory

Ahn describes that the “controller 50 detects a touch and drag operation of a specific direction on the touch screen 10 (S1110)” and “the controller 50 controls to display an item list matched to the specific direction in the display 40 (S1120).”

1116-Pet., 57-58



Contradicted by Ahn



Q The top menu that's displayed doesn't blur the clock at all, does it?

A In this example, the clock widget is not blurred.

EX1004 FIGs. 3C-3D; EX2009, 22: 14-20; POR, 55

Overview

- '754 Patent
 - Multi-Part Pattern Based Gestures
 - Independent Claims 1, 2, and 225
- Technical Background
 - Ahn / Chaudhri / Shiplacoff
- Blurring Limitations
 - Sliding Menu Theory (Ahn)
 - Fading Clock Theory (Ahn-Chaudhri)
- **Dependent Claims**
 - All
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 - **67-74, 197, 201-204, and 216**
 - 199 and 210
- Ground 1B
 - Claim 1
 - Claim 208

Dependent Claims 67-74, 197



Blurring details

68. ... the blur includes decreasing a transparency of a virtual display layer overlaying the at least one other object.
69. ... a magnitude of the blurring is continuously increased as a function of a continuous increase in the change in the magnitude of the gesture being detected on the touch screen, until a predetermined amount of an interface including the at least one other object is completely obscured by an overlaying virtual display layer.
71. ... the at least one other object is blurred by continuously decreasing a magnitude of a translucency of a virtual display layer overlaying the at least one other object as a continuous function of an increase in the change in the magnitude of the gesture being detected on the touch screen.
197. ... the blur includes decreasing a transparency or a translucency of the second display layer that overlays the at least one other object.

Petitioner's dependent claim theory is inconsistent



Petitioner's Continuous Theory

“the Ahn-Chaudhri combination is configured such that a magnitude of the blurring is continuously increased as a function of a continuous increase in the change in the magnitude of the gesture being detected on the touch screen”

1115-Pet., 59-61

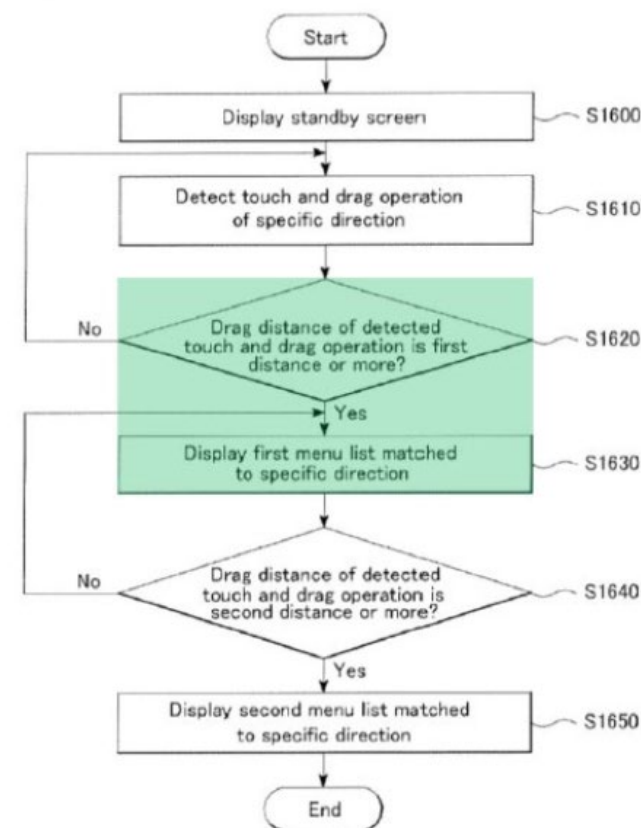


Petitioner's Threshold Theory

“the process of displaying the first menu list doesn't happen until the distance traveled has exceeded the first distance.”

(EX2009, 32:14-33:3)

FIG. 16



1116-Pet., 40, 43, 68; 1115-Pet., 40-41; POR, 47-48

Dependent Claims 201-204



Blurring details

186. ... the at least one other object [*clock widget*] is displayed via a first virtual display layer, the menu is displayed in a second virtual display layer that appears above the first virtual display layer,

201. ... the apparatus is configured such that the at least one other object is blurred by continuously decreasing a magnitude of a translucency of the second display layer that overlays the at least one other object as a continuous function of an increase in the change in the magnitude of the gesture being detected on the touch screen.

Petitioner's dependent claim theory is inconsistent

Petitioner's Fading Clock Theory doesn't alter the second display layer

"the clock widget of standby screen 300[] is displayed via a first virtual display layer" (EX1003, ¶277)

If Petitioner is relying on its variation of the clock widget from its Ahn- Chaudhri theory, as discussed in Limitation [186d], this would not result in any change in "the second display layer." As conceded by Dr. Terveen, the clock widget is in the first layer (EX1003, ¶277), and alteration of its appearance, as taught in Chaudhri, would not change a property of the second display layer (e.g., the menu). (EX2018, ¶136)

1115-Pet., 59-61

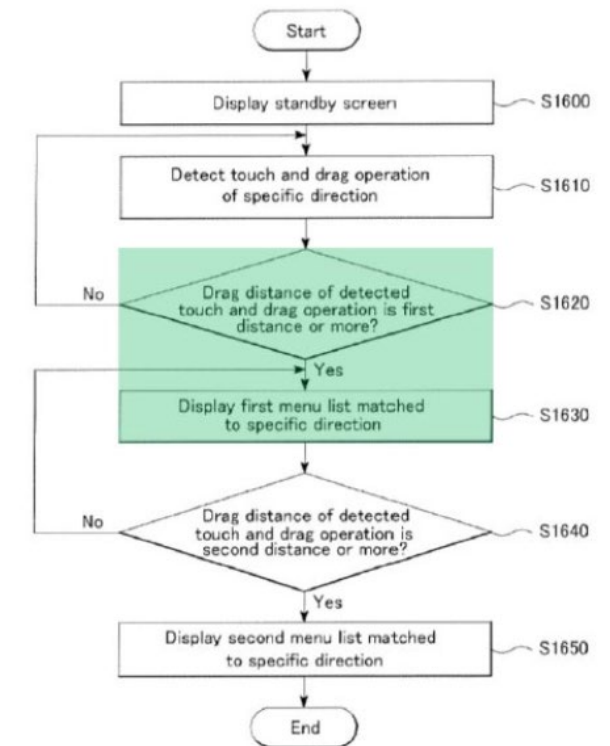


Petitioner's Sliding Menu Theory happens after gesture (not continuous)

"the process of displaying the first menu list doesn't happen until the distance traveled has exceeded the first distance."

(EX2009, 32:14-33:3)

FIG. 16

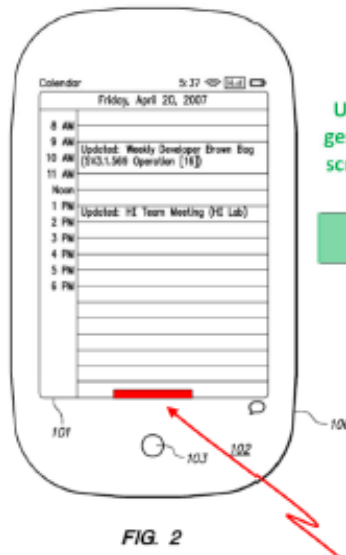


1116-Pet., 40, 43, 68; 1115-Pet., 40-41; POR, 47-48

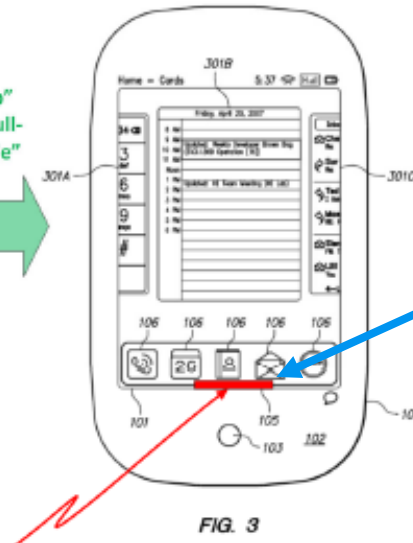
Dependent Claim 216

Petitioner's Theory is Illogical

216. The apparatus of claim 208, wherein the apparatus is configured such that the object is moved during the at least part of the gesture



User performs "swipe-up" gesture to switch "from full-screen mode to card mode"



Petitioner's "object" does not move from full-screen mode to card mode

Pet., 85-86

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- Technical Background
 - Ahn / Chaudhri / Shiplacoff
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 - Fading Clock Theory (Ahn-Chaudhri)
- **Dependent Claims**
 - All
 - 37, 64, 75-79, 187, 189, and 223
 - 67-74, 197, 201-204, and 216
 - **199 and 210**
- Ground 1B
 - Claim 1
 - Claim 208

Dependent Claims 199 and 210



Claims 199 and 210

186. ... the at least one other object *[clock widget]* is displayed via a first virtual display layer, [and] the menu is displayed in a second virtual display layer that appears above the first virtual display layer, and

199. The apparatus of claim 186, wherein the apparatus is configured such that the magnitude of the blurring is continuously increased, until the at least one other object *[clock widget]* is completely obscured by the second display layer that overlays the at least one other object.

208. ... the multitasking interface is displayed in at least one first virtual display layer that appears above a second virtual display layer including the at least portion of the at least one other object that is blurred,

209. ... second virtual display layer includes the home screen for choosing among the plurality of applications.

210. The apparatus of claim 209, wherein the apparatus is configured such that a third virtual display layer is displayed between the first virtual display layer and the second virtual display layer.

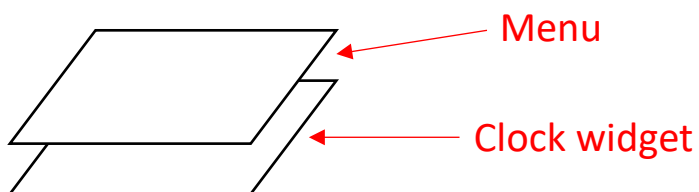
Dependent Claims 199 and 210



Claim 199

186. ... the at least one other object *[clock widget]* is displayed via a first virtual display layer, [and] the menu is displayed in a second virtual display layer that appears above the first virtual display layer, and

199. The apparatus of claim 186, wherein the apparatus is configured such that the magnitude of the blurring is continuously increased, until the at least one other object *[clock widget]* is completely obscured by the second display layer that overlays the at least one other object.

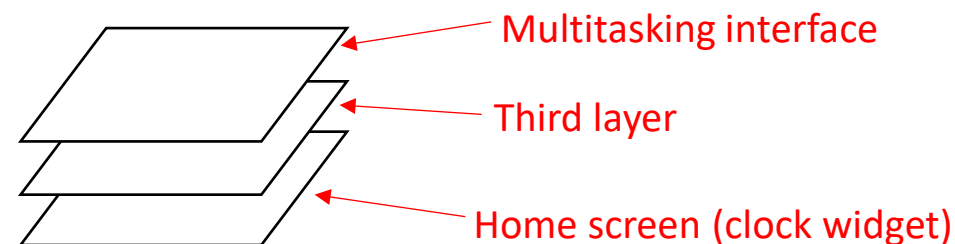


Claim 210

208. ... the multitasking interface is displayed in at least one first virtual display layer that appears above a second virtual display layer including the at least portion of the at least one other object that is blurred,

209. ... second virtual display layer includes the home screen for choosing among the plurality of applications.

210. The apparatus of claim 209, wherein the apparatus is configured such that a third virtual display layer is displayed between the first virtual display layer and the second display layer.



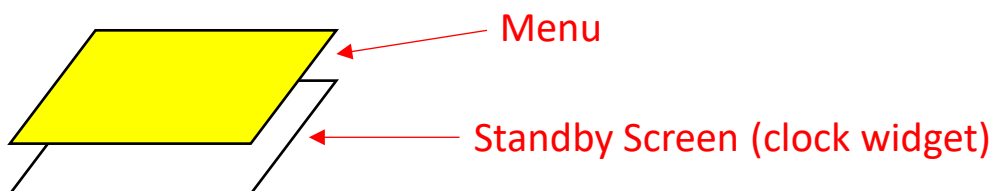
Petitioner's Mapping Is Inconsistent



Claim 199

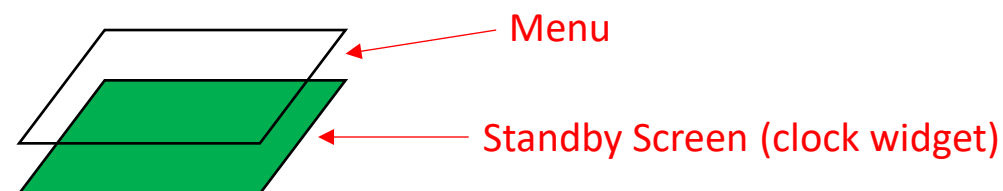
186. ... the at least one other object [*clock widget*] is displayed via a first virtual display layer, [and] the menu is displayed in a second virtual display layer that appears above the first virtual display layer, and

199. The apparatus of claim 186, wherein the apparatus is configured such that the magnitude of the blurring is continuously increased, until the at least one other object [*clock widget*] is completely obscured by the second display layer that overlays the at least one other object.



Petitioner's Mapping Confuses Layers

"a POSITA would have at least found it obvious to vary the optical intensity (e.g., the blur) of the standby screen 300 or at least the clock widget portion thereof" (1116-Pet., 62)



POR, 57

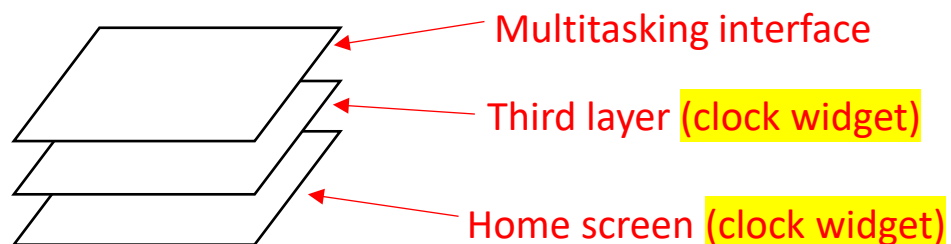
Petitioner's Mapping Is Inconsistent



Petitioner's Mapping Confuses Layers

“at least one other object (e.g., the clock widget of standby screen 300),” (Pet., 24)

“third virtual display layer (e.g., a virtual display layer containing the clock widget)” (Pet., 73)



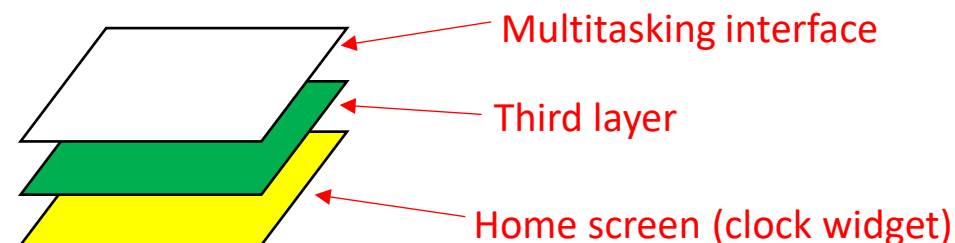
POR, 95-97



Claim 210

208. ... the multitasking interface is displayed in at least one first virtual display layer that appears above a second virtual display layer including the at least portion of the at least one other object that is blurred [clock widget],

210. The apparatus of claim 209, wherein the apparatus is configured such that a third virtual display layer is displayed between the first virtual display layer and the second virtual display layer.



Overview

- '754 Patent
 - Multi-Part Pattern Based Gestures
 - Independent Claims 1, 2, and 225
- Technical Background
 - Ahn / Chaudhri / Shiplacoff
- Blurring Limitations
 - Sliding Menu Theory (Ahn)
 - Fading Clock Theory (Ahn-Chaudhri)
- Dependent Claims
- Ground 1B
 - **Claim 1**
 - Claim 208

Independent Claim 1



Moving UI Elements

1. An apparatus, comprising:

...

[1.d] while the first contact is detected moving across the display:

[1.d] moving the first user interface element in a first direction on the display at a first speed; [and]

[1.e] moving the second user interface element on the display at a second speed greater than the first speed

Petition's Theory



"Snapping" Card Moves faster

"A POSITA would have found obvious that, in filling the gap, cards 301C and 301D move with a particular speed in the direction of the arrow shown in FIG. 9B. Shiplacoff does not specify or otherwise limit the speed at which cards 301C and 301D move when fillings the gap, leaving the speed as a design choice to the POSITA. EX1013, [0104]. Notably, though, Shiplacoff describes that 'a transition effect is performed to enhance the smoothness of the transition as cards 301 move and/or snap into place.' EX1014, [0094]. Based on the use of the word 'snap,' a POSITA would have at least found obvious that the cards 301C and 301D could move quickly on the display."

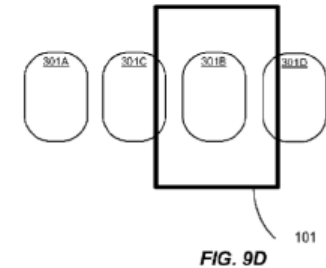
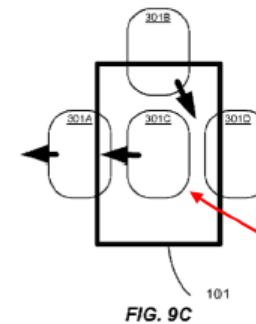
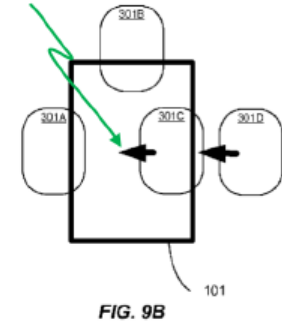
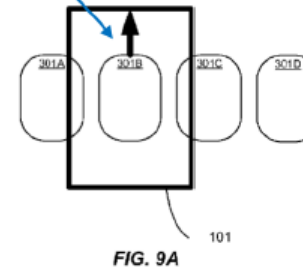
Pet. at 48-49.



Card Shuffling Theory

"[U]ser taps and holds his or her finger on card 301B, then drags card 301B upward"

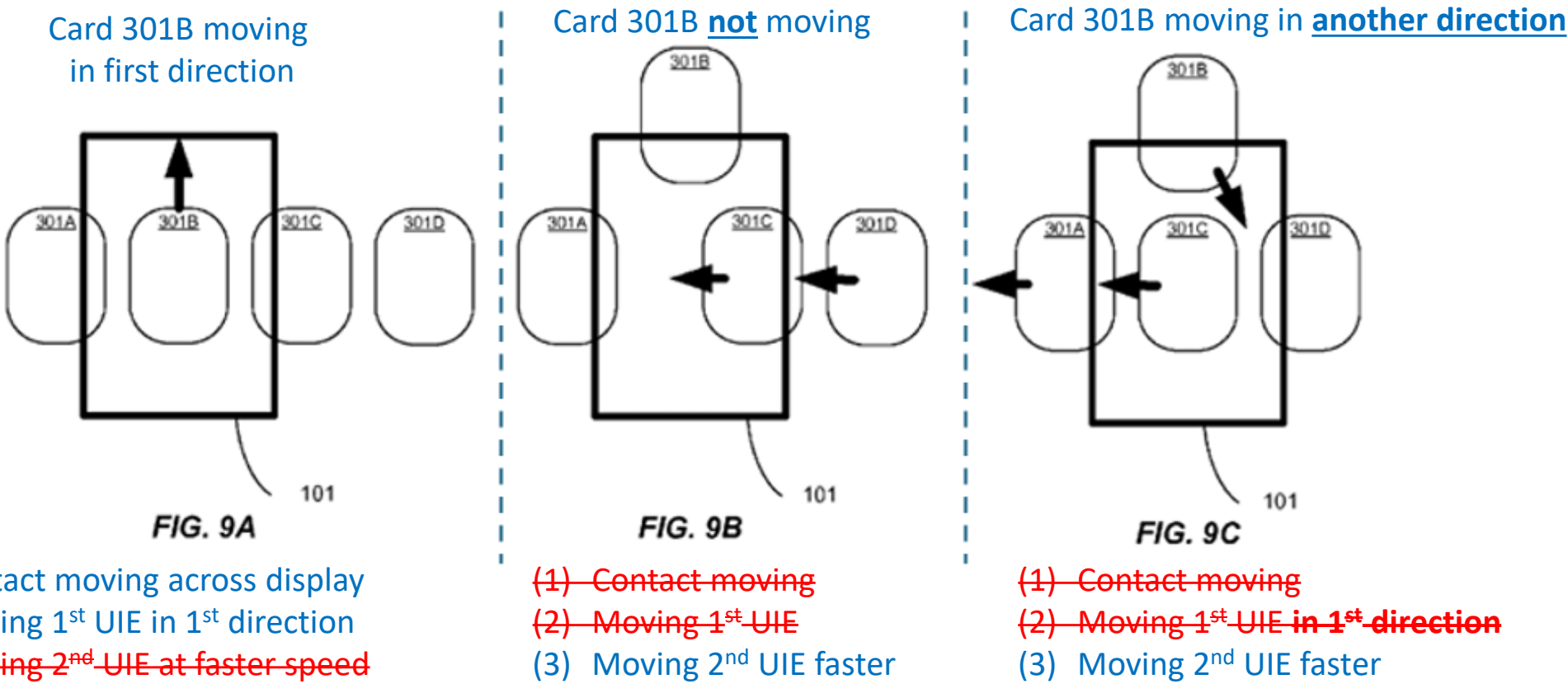
Card 301B being dragged upward
"caus[es] cards 301C and 301D to
move to fill the gap"



While continuing to hold card 301B, "the user moves the dragged card 301B between two other cards 301C and 301D, [and] the two cards 301C and 301D separate to allow placement of the dragged card 301B"

EX1013, FIGs. 9A-9D, Pet., 45

Shiplacoff's card 301C is NOT moving faster “while the first contact is detected moving across the display”



EX1013, FIGs. 9A-9C; POR at 79-80.

Moving Shiplacoff's cards very slowly fails to teach claim 1

Petition

"Shiplacoff does not specify ... the speed at which cards 301C and 301D move when fillings the gap"

Pet., at 48.

Reply

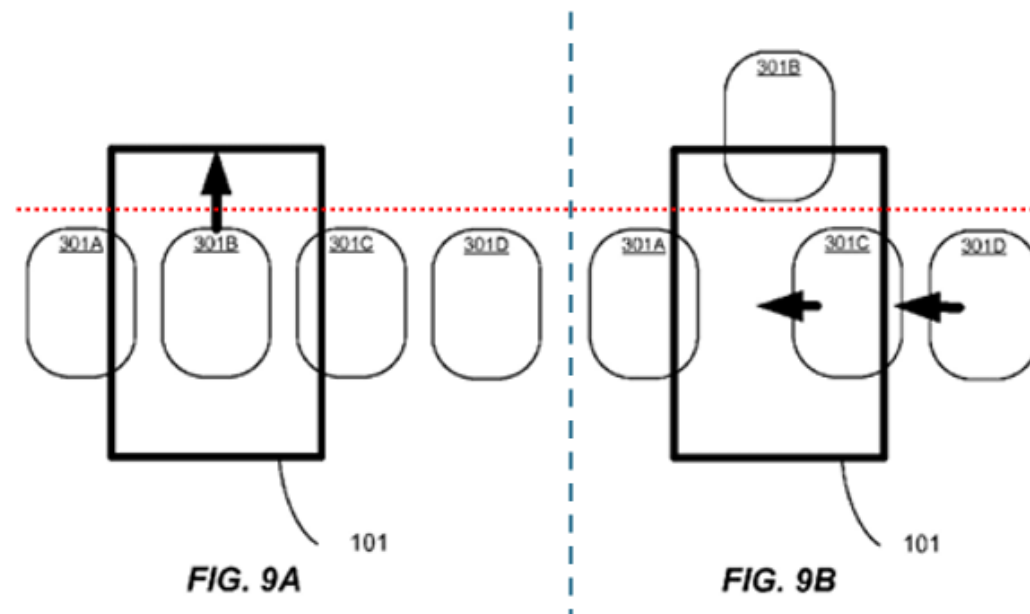
"whatever automatic filling speed a POSITA chose, that speed would obviously be faster than a 'near stop' to which a user would bring card 301B as the movement of cards 301C and 301D was happening."

Reply, at 22.

'754 Patent – Claim 1

1. An electronic **device**, comprising ... 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:**

Shiplacoff's Card Shuffling



EX2018, ¶185; Sur-reply at 31.

Snap does NOT mean quickly



Petition

Based on the use of the word 'snap,' a POSITA would have at least found obvious that the cards 301C and 301D could move quickly on the display."

Pet., at 48.



Dr. Rosenberg

A POSITA would have understood that "snap" is related to an object's alignment or position on the screen and not the speed at which the object moves.

EX2018 at ¶¶ 181-182; *POR* at 76



Use of "Snap" in Record

- "the card 301 **snaps into the central position** upon completion of the drag operation" (*EX1013*, [0086])
- "Snapping the user interface object 6002 to the first guide 6082 ... moves 6088 the user interface object 6002 to the left **so as to align one edge** of the user interface object 6002 with the first guide 6082" (*EX012*, [0227])
- "Usually, a "Snap to grid" option can be activated So that text and/or objects can **automatically align** to a grid line or a grid vertex (an intersection of vertical and horizontal grid lines). Thus, the "Snap to grid" option can be used to **accurately align texts and/or objects** relative to each other." (*EX1013*, [0086])
- "to 'snap' an element of a user interface ... to a border" (*EX1027*, [0007])
- "[w]hen the element reaches the snap threshold (such as a position on screen), it is **snapped to a snap position.**" (*EX1027*, [0011])

POR at 76; *sur-reply* at 26

Snap Does NOT Mean Quickly

 Rapp

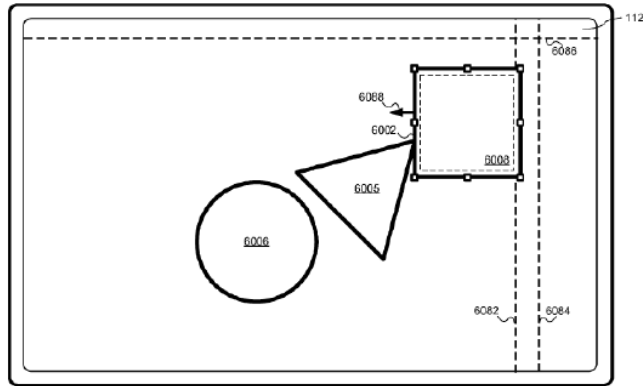


Figure 6G

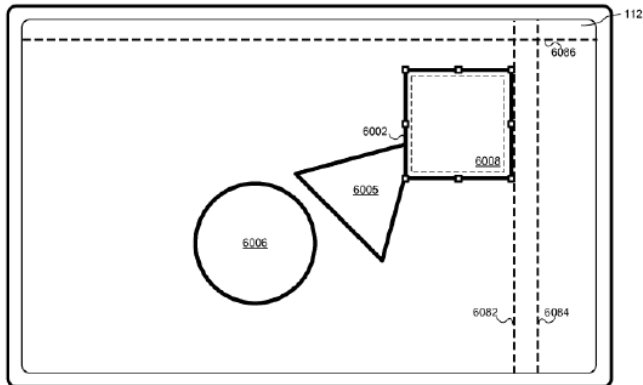


Figure 6H

EX2012 at FIGs. 6G-6H; POR at 77.

 Hoover

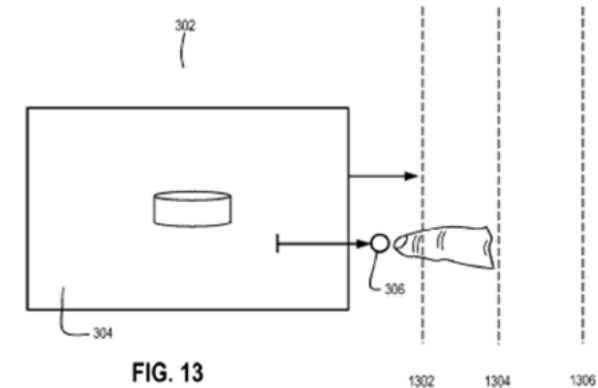
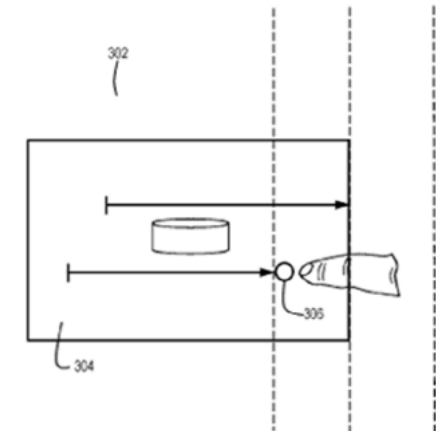


FIG. 13



EX1027 at FIGs. 13-14; sur-reply at 27.

Hoover's snap does NOT move one object faster than another object



Shiplacoff's Movement of Object Relative to an Object

"[U]ser taps and holds his or her finger on card 301B, then drags card 301B upward"

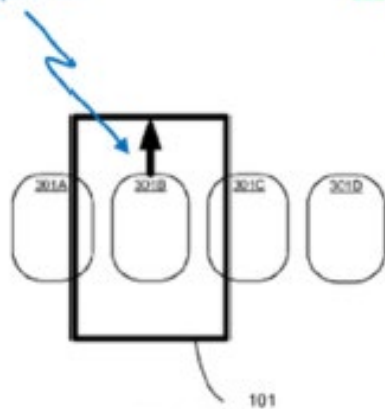


FIG. 9A

Card 301B being dragged upward "caus[es] cards 301C and 301D to move to fill the gap"

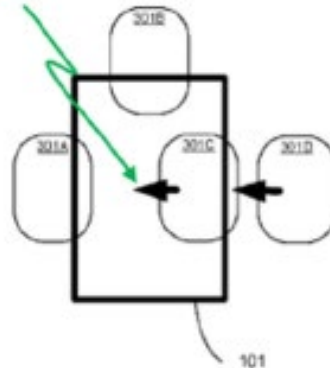


FIG. 9B

EX1013 at FIGs. 9A-9B; Pet., at 54.



Hoover's Movement of Object Relative to a Finger

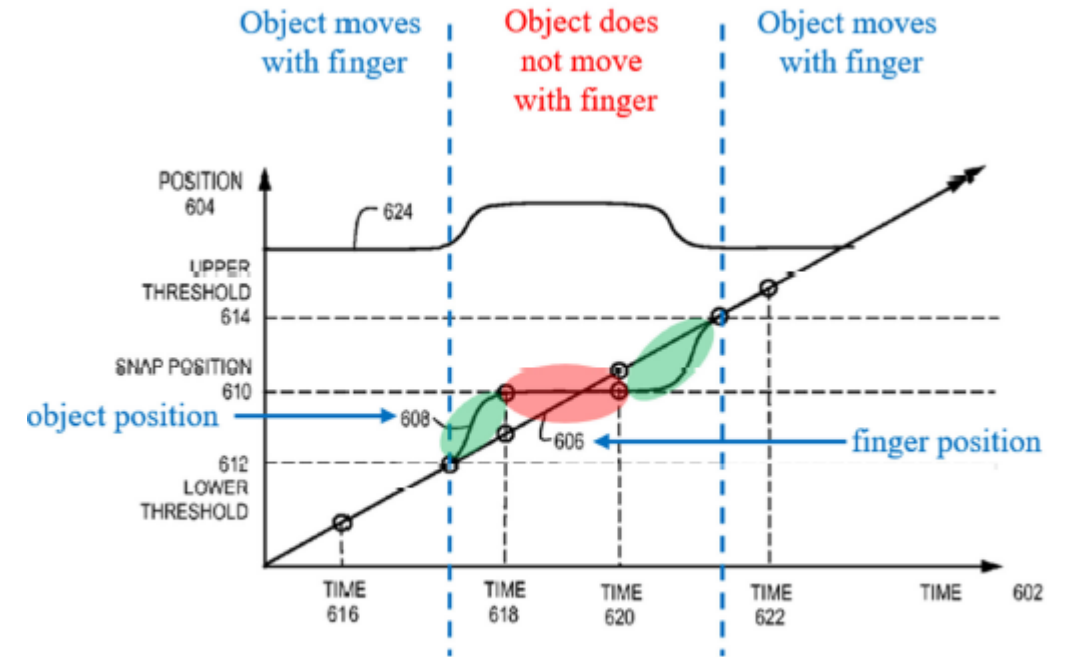


FIG. 6

EX1027 at FIG. 6; sur-reply at 28.

Jaeger's "jump" is irrelevant



Jaeger

[0008] Another concern with respect to the "snap to grid" option is that, when this option is active, a text or object being moved over the grid by the user **jumps from one position to another** in predefined distances. Thus, the user **cannot move the text or object in a continuously smooth fashion**, which presents an unusual or unnatural movement for a dragged text or object.

EX2014 at [0018]; Reply at 24.



Petition (Shiplacoff)

Notably, though, Shiplacoff describes that "a transition effect is performed to **enhance the smoothness** of the transition as cards 301 move and/or snap into place." EX1014, [0094].

Pet., 49



'754 Patent – Claim 1

1. An electronic **device**, comprising ... **programs including instructions for:**
 - moving the first user interface element in a first direction on the display at a first speed; [and]
 - moving the second user interface element on the display at a second speed greater than the first speed

Overview

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- Dependent Claims
- **Ground 1B**
 - Claim 1
 - **Claim 208**

Claim 208

Claim 208

208. The apparatus **of claim 2,** wherein the apparatus is configured such that:

[208.b] the at least part of the gesture on the touch screen is detected when a particular application interface of a particular application is displayed;

[208.f] when the magnitude, including a distance magnitude, of the gesture detected on the touch screen is not detected to increase above a distance threshold, a home screen for choosing among a plurality of application is displayed; and

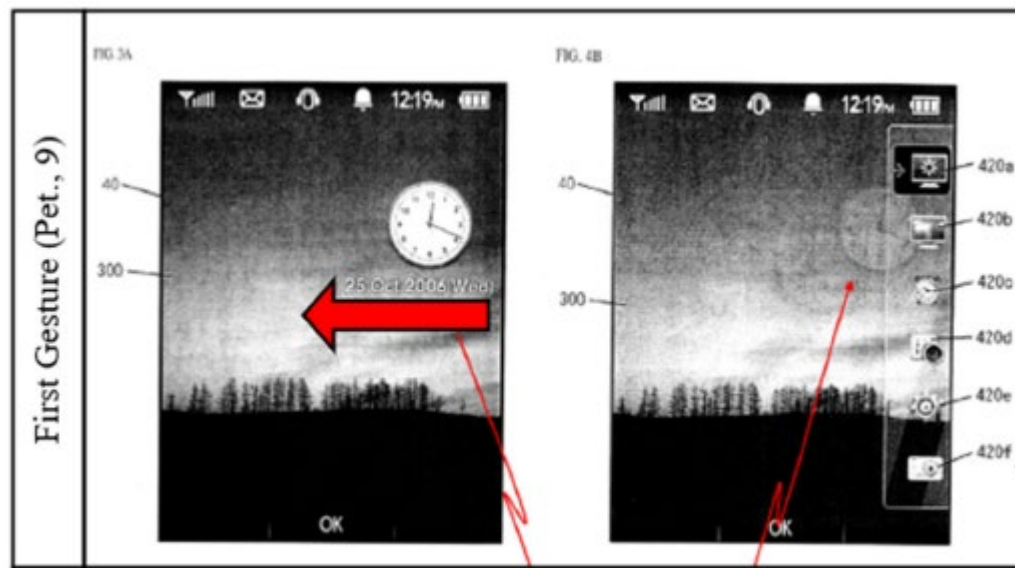
[208.g] when the magnitude, including the distance magnitude, of the gesture detected on the touch screen is detected to increase above the distance threshold, a multitasking interface for choosing among a plurality of active applications is displayed, such that: ...

Petitioner's theory relies on two distinct gestures on two different interfaces



Petition Theory – Claim 2

Claim 2: “detect at least part of **a gesture** on the touch screen” and “during detection of at least a portion of **the gesture** before a completion thereof is detected, blur ...”

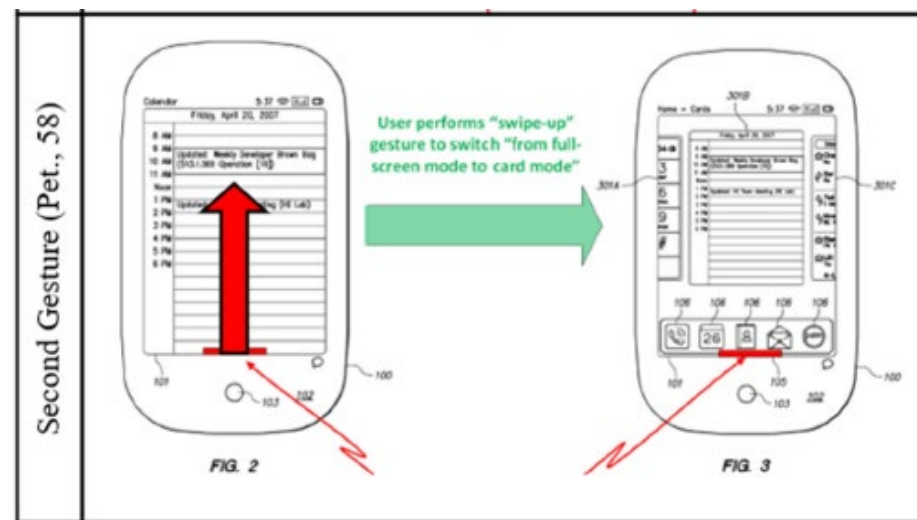


EX1004 at FIGs. 3A, 4B; POR, 82-84; sur-reply, 34.



Petition Theory – Claim 208

Claim 208: “The apparatus of claim 2, wherein” “the at least part of **the gesture** on the touch screen is detected when a particular application interface of a particular application is displayed” and “when the magnitude, including a distance magnitude, of **the gesture** detected on the touch screen is [detected/]not detected to increase above a distance threshold ...”



EX1013 at FIGs. 2, 3; POR, 82-84; sur-reply, 34.

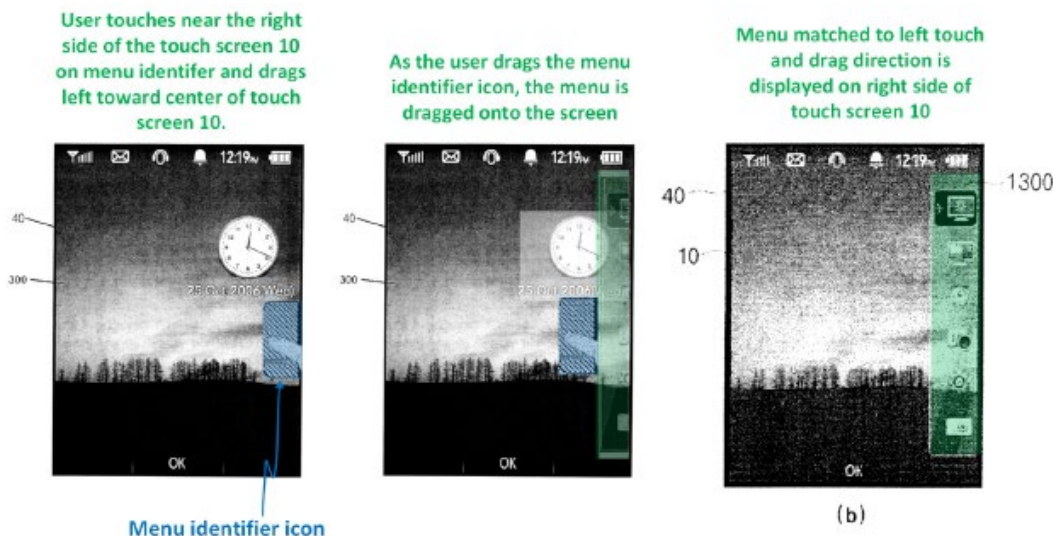
Petitioner's theory relies on two distinct gestures on two different interfaces



Claim 2 Gesture Progressively Drags Menu Over Clock

A. Ahn and Chaudhri-842 Render Obvious Menus Following a User's Finger as It Is Sliding on the Screen

"Both theories rely upon the obviousness of the menus in the Ahn-Chaudhri combination following a user's finger as the user performs the dragging gesture to open the menu."

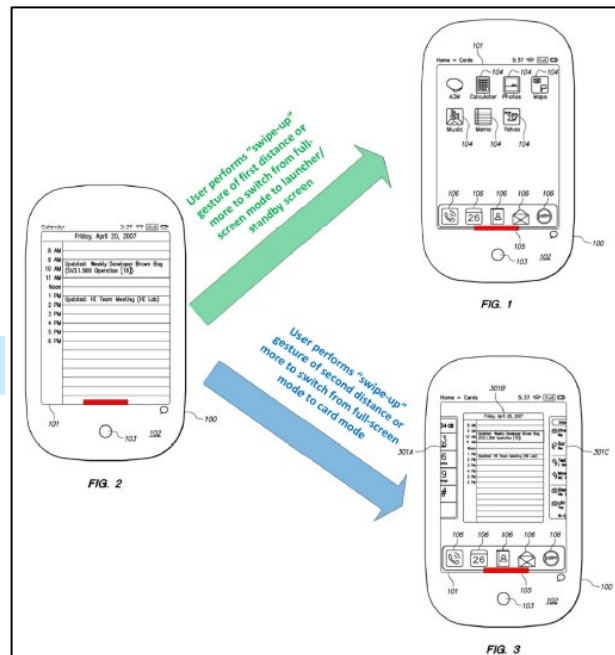


Reply at 2-6



Claim 208 Gesture Changes Interfaces Based on Threshold Distance

For example, if controller 50 determines that a drag distance of the detected swipe up gesture is a first distance or more, then controller 50 controls to display to transition from a full screen mode to a launcher screen. On the other hand, if controller 50 determines that a drag distance of the detected swipe up gesture is a second distance or more, then controller 50 controls to display to transition from a full screen mode to a card mode.



Pet., 59-61

Operation does NOT progressively blur clock



Claim 208 Operation

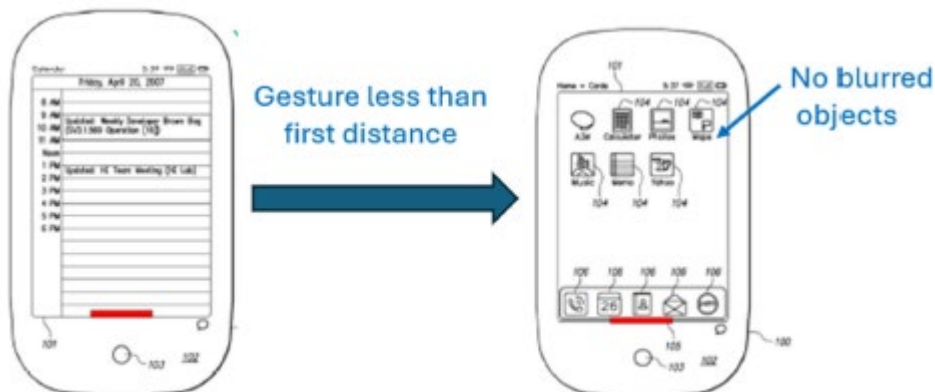


FIG. 2

FIG. 1

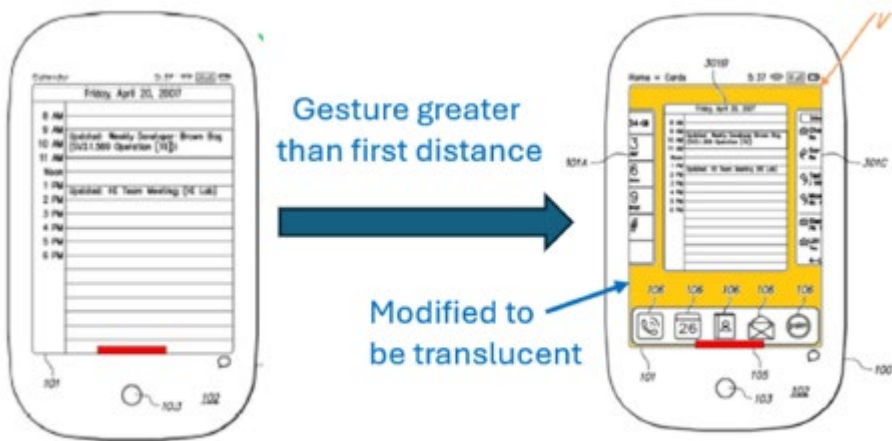


FIG. 2

FIG. 3



Dr. Rosenberg

- The clock widget (or any icon displayed on Shiplacoff's launcher screen) is not depicted at any time during the swipe-up gesture. Without the 'at least one other object' ever being depicted during the gesture, it cannot be blurred.
- No explanation as to how [transitioning from full-screen mode to card mode] would result in blurring of the clock widget (1) 'during detection of ... the gesture before a completion thereof' and (2) 'based on a change in a magnitude of the gesture being detected.'
- Card mode would not be displayed "on" the standby screen—it has its own interface that is different from the standby screen

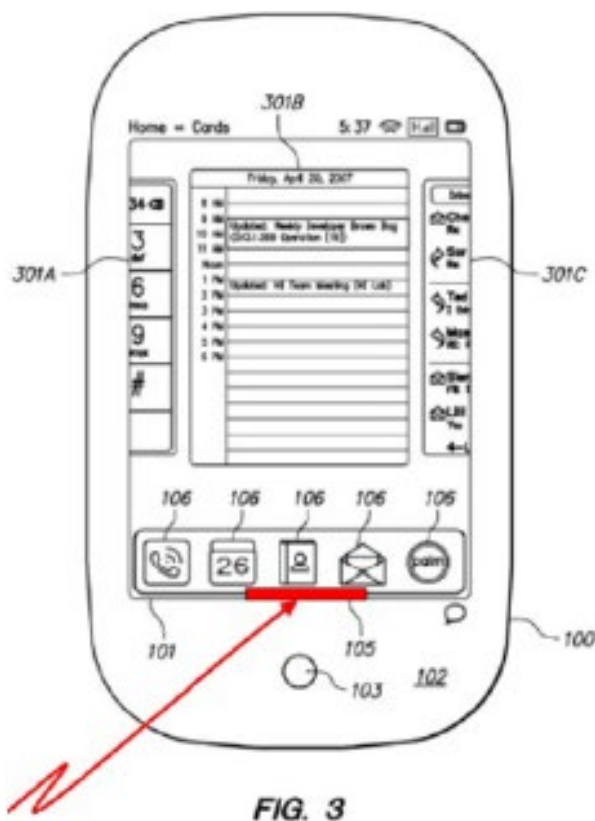
EX1013 at FIGs. 1-3; sur-reply, 38-39.

EX2018 at ¶¶192-195; POR at 86-89.

Petitioner's modification is disadvantageous



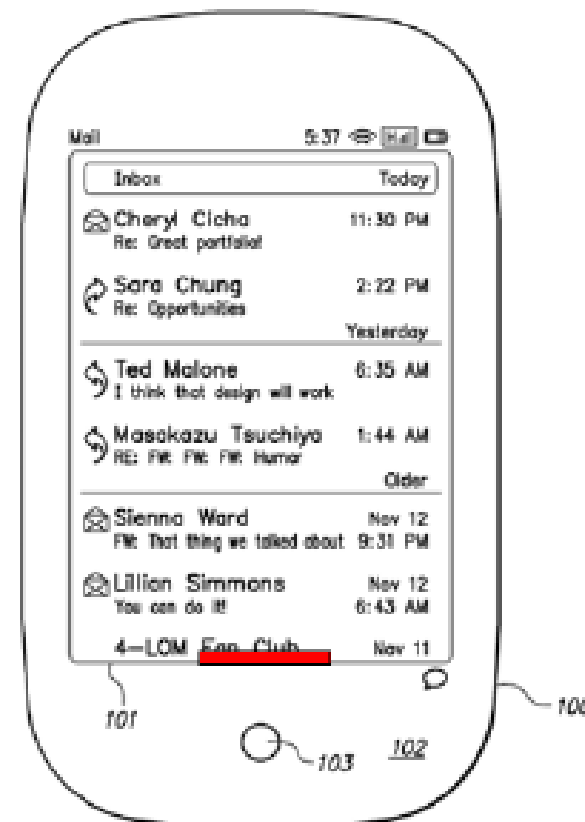
Object Interferes with Home Icons 106



EX1013, FIG. 3; EX2018, ¶204; POR at 93



Blocks Screen and Disrupts Scrolling



EX1013, FIG. 5; EX2018, ¶205; POR at 94

Shiplacoff's “swipe-up” does NOT occur on the screen



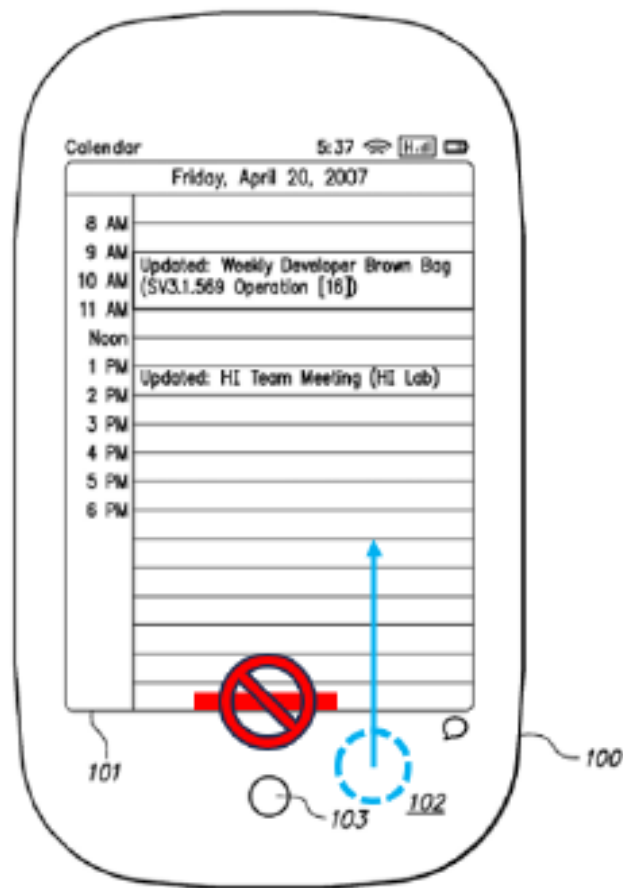
Shiplacoff

[0127] In another embodiment, the user can switch among the various modes by performing a gesture. One example of such a gesture is a “swipe up” gesture beginning in gesture area 102 and extending onto screen 101. In one embodiment, such a gesture switches from full-screen mode to card mode, or from card mode to shuffle mode, or from shuffle mode to grid mode. In another embodiment, such a gesture switches from full-screen mode to card mode, or from card mode to grid mode. In yet another embodiment, such a gesture switches from full-screen mode to card mode, or from card mode to a launcher screen.

EX1013, [0127]; POR at 91



Shiplacoff's Swipe-up



EX1013, FIG. 2; POR at 92

