

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC, SAMSUNG ELECTRONICS CO. LTD.,
AND SAMSUNG ELECTRONICS AMERICA, INC.,
Petitioner

v.

MULTIMODAL MEDIA LLC,
Patent Owner.

Case No. IPR2024-00064
U.S. Patent No. 10,552,030

**PETITION FOR *INTER PARTES* REVIEW
OF U.S. PATENT NO. 10,552,030**

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LIST OF EXHIBITS¹

Ex-1001	U.S. Patent No. 10,552,030
Ex-1002	Declaration of Dr. Benjamin B. Bederson
Ex-1003	Curriculum Vitae of Dr. Benjamin B. Bederson
Ex-1004	File History of U.S. Patent No. 10,552,030
Ex-1005	INTENTIONALLY LEFT BLANK
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Ex-1007	INTENTIONALLY LEFT BLANK
Ex-1008	INTENTIONALLY LEFT BLANK
Ex-1009	INTENTIONALLY LEFT BLANK
Ex-1010	INTENTIONALLY LEFT BLANK
Ex-1011	INTENTIONALLY LEFT BLANK
Ex-1012	INTENTIONALLY LEFT BLANK
Ex-1013	INTENTIONALLY LEFT BLANK
Ex-1014	U.S. Patent No. 8,812,041 (“Lee’041”)
Ex-1015	U.S. Patent No. 8,948,804 (“Lee’804”)
Ex-1016	INTENTIONALLY LEFT BLANK
Ex-1017	U.S. Patent Publication No. 2012/0229410 (“Ohashi”)
Ex-1018	U.S. Patent Publication No. 2012/0014684 (“D’Souza”)
Ex-1019	INTENTIONALLY LEFT BLANK
Ex-1020	Claim Mapping Table

¹ Four-digit pin citations that begin with 0 are to the branded numbers added by Petitioner in the bottom right corner of the exhibits. All other pin citations are to original page, column, paragraph, or line numbers.

Ex-1021	<i>Multimodal Media LLC v. Guangdong Oppo Mobile Telecommunications Corp., Ltd.</i> , 2:21-cv-00436, D.I. 65 (E.D. Tex. Apr. 24, 2023) (Claim Construction Order) (“ <i>Oppo</i> Litigation”)
Ex-1022	<i>Multimodal Media LLC v. TCL Technology Group Corporation et al.</i> , 2:22-cv-00463, D.I. 23 (E.D. Tex. Feb. 22, 2023) (Stay Order) (“ <i>TCL</i> litigation”)
Ex-1023	<i>Multimodal Media LLC v. Samsung Electronics Co., Ltd. et al.</i> , 2:22-cv-00462, Infringement Contentions (E.D. Tex. May 30, 2023) (“Samsung Infringement Contentions”)
Ex-1024	INTENTIONALLY LEFT BLANK
Ex-1025	INTENTIONALLY LEFT BLANK
Ex-1026	Benjamin B. Bederson & James D. Hollan, Pad++: A Zooming Graphical Interface for Exploring Alternate Interface Physics, UIST ‘94 Proceedings of the 7th Annual ACM Symposium on User Interface Software and Technology 17 (1994), DOI: http://dx.doi.org/10.1145/192426.192435
Ex-1027	INTENTIONALLY LEFT BLANK
Ex-1028	INTENTIONALLY LEFT BLANK
Ex-1029	INTENTIONALLY LEFT BLANK
Ex-1030	INTENTIONALLY LEFT BLANK
Ex-1031	David Dearman, Amy Karlson, Brian Meyers, and Ben Bederson, Multi-modal text entry and selection on a mobile device (2010), In Proceedings of Graphics Interface 2010 (GI ‘10), Canadian Information Processing Society, CAN, 19–26
Ex-1032	INTENTIONALLY LEFT BLANK
Ex-1033	INTENTIONALLY LEFT BLANK
Ex-1034	INTENTIONALLY LEFT BLANK
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Ex-1037	INTENTIONALLY LEFT BLANK
Ex-1038	INTENTIONALLY LEFT BLANK
Ex-1039	INTENTIONALLY LEFT BLANK
Ex-1040	INTENTIONALLY LEFT BLANK
Ex-1041	INTENTIONALLY LEFT BLANK
Ex-1042	INTENTIONALLY LEFT BLANK
Ex-1043	INTENTIONALLY LEFT BLANK
Ex-1044	INTENTIONALLY LEFT BLANK
Ex-1045	Ben Shneiderman & Catherine Plaisant, <i>Designing the User Interface</i> (4th ed., 2005)
Ex-1046	<i>Multimodal Media LLC v. Guangdong Oppo Mobile Telecommunications Corp., Ltd.</i> , 2:21-cv-00436, D.I. 74 (E.D. Tex. Sept. 6, 2023) (Order of Dismissal)
Ex-1047	INTENTIONALLY LEFT BLANK
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Ex-1052	INTENTIONALLY LEFT BLANK
Ex-1053	INTENTIONALLY LEFT BLANK
Ex-1054	INTENTIONALLY LEFT BLANK
Ex-1055	INTENTIONALLY LEFT BLANK
Ex-1056	Ivan Edward Sutherland, <i>Sketchpad: A man-machine graphical communication system</i> , University of Cambridge Technical Report UCAM-CL-TR-574, ISSN 1476-2986, Number 574 (2003), available at: https://www.cl.cam.ac.uk/techreports/UCAM-CL-TR-

	574.pdf
Ex-1057	S.K. Lee, William Buxton, & K.C. Smith, A multi-touch three-dimensional touch-sensitive tablet, Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '85), 21-25 (Apr. 1985), available at: DOI: https://doi.org/10.1145/317456.317461
Ex-1058	U.S. Patent No. 3,482,241
Ex-1059	U.S. Patent No. 10,140,301
Ex-1060	U.S. Patent Publication No. 2013/0019175
Ex-1061	U.S. Patent No. 9,767,681
Ex-1062	Tarmo Anttalainen, Introduction to Telecommunications Network Engineering, 77-84 (2d ed., 2003), available at: https://ieeexplore.ieee.org/document/9106127
Ex-1063	U.S. Patent Publication No. 2013/0227456
Ex-1064	U.S. Patent Publication No. 2014/0063313
Ex-1065	Rick Broida & Dave Johnson, How to Do Everything Palm® Pre™ (2010)
Ex-1066	Ken Hinckley et al., Design and Analysis of Delimiters for Selection-Action Pen Gesture Phrases in Scriboli, CHI 2005 (Apr. 2-7, 2005)
Ex-1067	PCT Publication WO2011/151501 (“Dolenc”)
Ex-1068	Kay Hofmeester & Jennifer Wolfe, Self-Revealing Gestures: Teaching New Touch Interactions in Windows 8, CHI 2012 (May 5-12, 2012)
Ex-1069	Xiangshi Ren & Shinju Moriya, Improving selection performance on pen-based systems: a study of pen-based interaction for selection tasks, 7 ACM Trans. Comput.-Hum. Interact. 3, 384-416 (Sept. 2000), available at: https://doi.org/10.1145/355324.355328
Ex-1070	Andrew Sears & Ben Shneiderman, High Precision Touchscreens: Design Strategies and Comparisons with a Mouse (Jan. 23, 1989),

	available at: https://api.drum.lib.umd.edu/server/api/core/bitstreams/9352f26a-e793-429a-80f8-65f606f41969/content
Ex-1071	Seon Joo Kim et al., Brush-and-Drag: A Multi-touch Interface for Photo Triaging, MobileHCI'12 (Sept. 21-24, 2012)
Ex-1072	U.S. Patent No. 9,195,330
Ex-1073	U.S. Patent Publication No. 2009/0015703
Ex-1074	U.S. Patent Publication No. 2013/0063645
Ex-1075	U.S. Patent Publication No. 2014/0078371
Ex-1076	U.S. Patent Publication No. 2010/0177157
Ex-1077	Microsoft Computer Dictionary 499 (5th ed., 2002)
Ex-1078	U.S. Patent Publication No. 2011/0099513
Ex-1079	U.S. Patent Publication No. 2012/0072866
Ex-1080	Newsroom, Apple Presents iPhone 4 (June 7, 2010), available at: https://www.apple.com/newsroom/2010/06/07Apple-Presents-iPhone-4/
Ex-1081	Wikipedia, Walkie-talkie, available at: https://en.wikipedia.org/wiki/Walkie-talkie

I. INTRODUCTION

Google LLC, Samsung Electronics Co. Ltd., and Samsung Electronics America, Inc. (collectively, “Petitioner”) request *inter partes* review (“IPR”) of Claims 1-14 of U.S. Patent No. 10,552,030 (“the ’030 Patent”) (Ex-1001), currently assigned to Multimodal Media LLC (“PO”).

The challenged claims are generally directed to recording media data such as a voice message in multiple recording modes based on user gestures that are detected on a graphical user interface of an electronic device by a gesture based media recording application. Ex-1001, Abstract. The gesture based media recording application may detect, for example, a “Press and Hold” or “Slide and Hold” gesture on the user interface and start and continue the recording of audio based on touch gestures on the interface. *Id.*, C1. 1.

The prior art teaches the claimed gesture based recording application—including the well-known configuration of detecting gestures on a user interface, switching recording modes based on detected gestures, and showing different functions and content on the user interface based on detected gestures—and renders the challenged claims unpatentable. Accordingly, Claims 1-14 of the ’030 Patent are invalid as obvious over the prior art.

This Petition presents grounds that the examiner did not consider during prosecution. These grounds are more than reasonably likely to prevail, and this

Petition should be granted.

II. **MANDATORY NOTICES UNDER 37 C.F.R. §42.8**

Real Parties-in-Interest: Petitioner identifies the following real parties-in-interest: Google LLC², Samsung Electronics Co. Ltd., and Samsung Electronics America, Inc.

Related Matters: A decision in this proceeding could affect or be affected by the following proceedings, which assert infringement of the challenged '030 Patent: (1) *Multimodal Media LLC v. Samsung Electronics Co. Ltd., et al.*, 2:22-CV-00462 (E.D. Tex.); and (2) *Multimodal Media LLC v. TCL Technology Group Corporation et al.*, 2:22-cv-00463 (E.D. Tex.). Co-Petitioner Google has not been named in, and is not a party to, any litigation involving the '030 Patent.

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² Google LLC is a subsidiary of XXVI Holdings Inc., a subsidiary of Alphabet Inc. XXVI Holdings Inc. and Alphabet Inc. are not real parties-in-interest here.

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III. FEE AUTHORIZATION

Pursuant to 37 C.F.R. §42.15(a) and §42.103(a), the PTO is authorized to charge any and all fees to Deposit Account No. LA500639.

IV. GROUND FOR STANDING

Petitioner certifies that the '030 Patent is available for review, this Petition is timely filed, and Petitioner is not barred or estopped from requesting review.

V. PRECISE RELIEF REQUESTED

Petitioner requests review and cancellation of Claims 1-14 as unpatentable based on the following grounds, supported by a declaration from Dr. Benjamin Bederson. Ex-1002 ¶¶1-31.

Ground	Summary
1	Claims 1, 3-8, and 10-14 are obvious over Lee'041 (Ex-1014)

Ground	Summary
2	Claims 1, 3-8, and 10-14 are obvious over Lee'041 in view of Ohashi (Ex-1017)
3	Claims 2 and 9 are obvious over Lee'041 in view of Ohashi in further view of Lee'804 (Ex-1015) and D'Souza (Ex-1018)

VI. THE CHALLENGED PATENT

The '030 Patent purports to describe a method for recording media data in a plurality of recording modes based on user gestures that are detected on an electronic device's display screen by a gesture based media recording application, and switching recording modes when different gestures are detected. Ex-1001, Abstract, Cl. 1; Ex-1002 ¶¶73-74. Figures 4A-4D (annotated) illustrate the method of the invention:

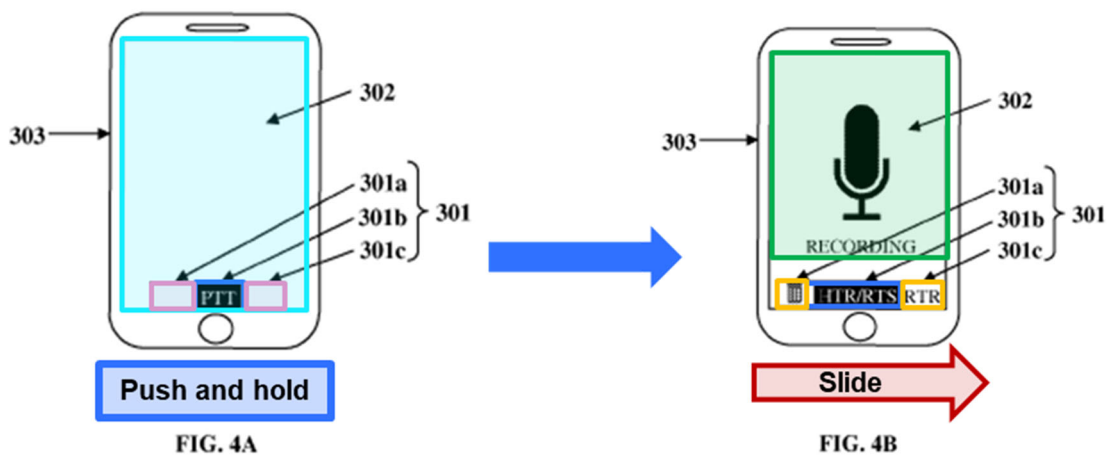




FIG. 4C

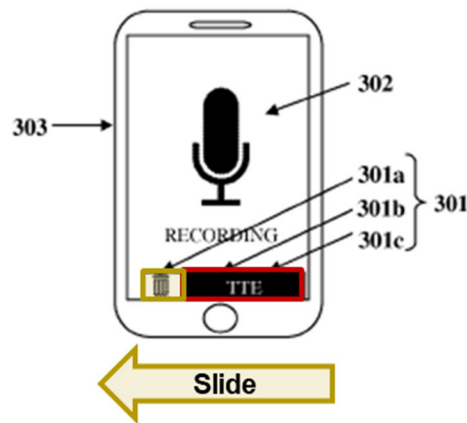


FIG. 4D

As the figures illustrate, a “user performs a press and hold gesture” on interface region 301b (blue), which the application detects and begins recording the media. Ex-1001, 12:22-29, Fig. 4A. A new predefined “hold to record (HTR)/release to stop (RTS)” function associated with region 301b appears on the interface along with new “cancel and delete” and “release to record (RTR)” functions for regions 301a and 301c, respectively. *Id.*, 12:29-39, Fig. 4B (yellow). If the user wants to continue recording without having to continually press region 301b, they perform a slide gesture from region 301b to 301c to switch recording modes from Push-to-Talk³ to RTR. *Id.*, 12:39-63, Figs. 4B-4C (red). A new predefined Tap-to-End function is then associated with regions 301b and 301c, which the user can tap to terminate the recording. *Id.*, 12:63-13:2, Fig. 4D (red). The user may also slide and

³ The '030 Patent and prior art references do not consistently use hyphenation for the recording mode terms. Petitioner has hyphenated the recording mode terms herein for consistency.

release to cancel the recording. *Id.*, Cl. 2, Fig. 4D (gold).

VII. PROSECUTION HISTORY OF THE '030 PATENT

The '030 Patent was filed on October 11, 2013. The claims were rejected in five office actions. Ex-1004. After a number of amendments and arguments, the applicant argued the prior art does not teach “a method for recording media data in a plurality of recording modes based on one or more gestures” or switching recording modes “upon detection of the second gesture.” *Id.*, 506-507. The '030 Patent issued on February 4, 2020. Ex-1002 ¶¶75-76.

VIII. LEVEL OF ORDINARY SKILL IN THE ART

A person of ordinary skill in the art at the relevant time (“POSITA”) would have had a bachelor’s degree in electrical engineering, computer science, computer engineering, or a related field, and two-three years of experience with multimedia and touch interface technologies, or the equivalent, with additional education substituting for experience and vice versa. Ex-1002 ¶¶28-30.

IX. PRIORITY DATE

The earliest possible priority for the '030 Patent is October 15, 2012. Petitioner takes no position on the proper priority date for each claim of the '030 Patent. Assuming this earliest date, all prior art references asserted in this petition are prior art. Ex-1002 ¶77.

X. CLAIM CONSTRUCTION⁴

Petitioner interprets the claims of the '030 Patent according to the *Phillips* claim construction standard. For the purposes of this Petition, Petitioner does not believe that any term requires explicit construction to resolve the issues presented in this Petition except for the terms below, including several that were construed pursuant to §112(6).⁵ All others should be given their plain and ordinary meaning. To the extent that terms were construed or agreed upon by the parties in the *Oppo* district court litigation against an unrelated party,⁶ Petitioner applies these constructions for purposes of this Petition. Ex-1002 ¶¶78-85.

A. “interface regions” (Claims 1, 2, 8, 9)

The parties in the *Oppo* litigation agreed that this claim term should be construed to mean “areas provided on the GUI of an electronic device that enable

⁴ Petitioner has adopted these constructions only for purposes of this Petition and reserves the right to propose and/or adopt any construction in any pending litigation matter.

⁵ For purposes of this proceeding, Petitioner relies on the *Oppo* district court’s construction of the software “module” terms below pursuant to §112(6) and the Court’s recitation of the function and structure below. *See also* 37 C.F.R. §42.100(b) (“Any prior claim construction determination concerning a term of the claim in a civil action ... will be considered.”). Claim construction in the *Samsung* litigation is in the early stages. Accordingly, Petitioner does not waive any potential argument in the district court that the structure for performing the claimed function of each term is not sufficiently disclosed.

⁶ On September 6, 2023, the *Oppo* litigation was dismissed due to settlement (Ex-1046).

interfacing and interactions with a user of the electronic device.” Ex-1021, 28.

B. “gesture” (Claims 1-4, 6, 8-11, and 13)

The Court in the *Oppo* litigation construed this claim term to mean “a user action or an actuation by a user performed manually, for example, by use of a finger, a thumb, a hand, etc., on the GUI, or by using an input device, for example, a physical button, a computer mouse, a pointing device, a light pen, a touch pad, a touch sensitive display device, a track ball, a pointing stick, any device capable of sensing a tactile input, etc.” Ex-1021, 33.

C. “interface definition module” (Claim 8)

The Court in the *Oppo* litigation found that this claim term should be given the following §112(6) construction:

Function: “defining a plurality of interface regions on said graphical user interface of said electronic device, and dynamically changing functions associated with said one or more defined interface regions based on said detected first gesture on said one of said defined interface regions.”

Structure: “a software component of the gesture based media recording application that is (a) configured to define multiple interface regions on the graphical user interface and associate a predefined function with each of the defined user interface regions and (b) configured to dynamically change the functionality of the interface regions to a different predefined function; and equivalents thereof.” Ex-

1021, 40-41.

D. “detection module” (Claims 8-11)

The Court in the *Oppo* litigation found that this claim term should be given the following §112(6) construction:

Function: “detecting a first gesture from among multiple gestures on a first of said defined interface regions, and detecting a second gesture from among said multiple gestures.”

Structure: “a software component of the gesture based media recording application configured to detect one or more physical touch or other gesture on a defined region of a graphical user interface; and equivalents thereof.” Ex-1021, 43.

E. “action management module” (Claim 8)

The Court in the *Oppo* litigation found that this claim term should be given the following §112(6) construction:

Function: “starting said recording of media data in a push to talk (PTT) recording mode, on said detection of said first gesture on said first of said defined interface regions.”

Structure: “a software component of the gesture based media recording application configured to perform a predefined action based on the detection of a gesture on a defined region of a graphical user interface.” Ex-1021, 45.

XI. BRIEF DESCRIPTION OF THE APPLIED PRIOR ART

A. Lee'041 (Ex-1014)

Lee'041 was filed on July 3, 2012 and issued as US8,812,041 on August 19, 2014. Lee'041 is §102(e) prior art.

Lee'041 purports to teach a Push-to-Talk (PTT) application running on the user's mobile device that changes recording modes based on the detected gestures. Ex-1014, Abstract, 1:18-21.

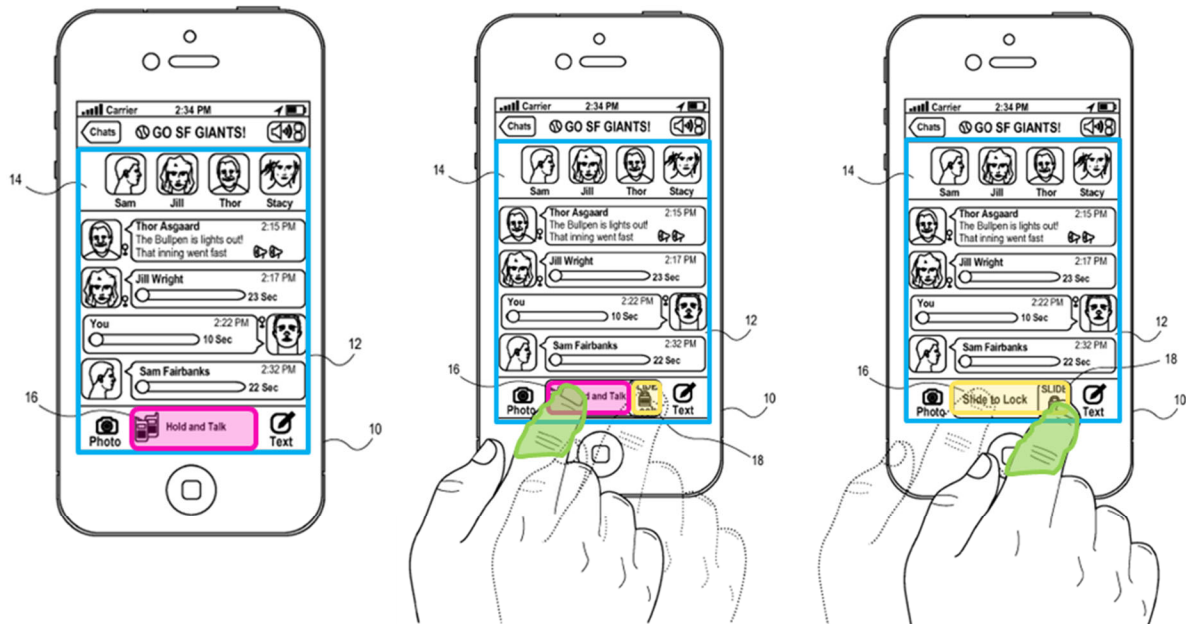


FIG. 2A

FIG. 2B

FIG. 2C

As the figures illustrate, the user maintains “finger contact with the ‘Hold-and-

Talk”⁷ region 16 “for the duration of the message” to record in a PTT mode. *Id.*, 3:67-4:2, Fig. 2A (pink). When the “Hold-and-Talk” interface region 16 is touched by the user, a “Slide-to-Lock” feature appears in region 18 (Fig. 2B (yellow)). Ex-1014, 3:30-35. The user activates the “Slide-to-Lock” feature by “sliding a finger from left to right” over region 16 until region 18 is contacted. *Id.*, 3:37-42. Detection of the sliding motion causes the displayed text in region 16 to change from “Hold-and-Talk” to “Slide-to-Lock” (Fig. 2C (yellow)). *Id.*, 3:42-44. This results in “activation of a PTT locking function” on the device, which allows the user to “simply speak into the microphone” without having to contact or hold region 16 or 18. *Id.*, 3:45-51. When the user removes their finger following the slide gesture, “a ‘Tap-to-End’ region 90 appears” as shown in Figure 6C (orange). *Id.*, 5:33-34; Ex-1002 ¶¶86-88.

⁷ Lee’041 does not consistently use “Hold-and-Talk” and “Hold-and-Talk.” Figures 2A-2B depict this feature as “Hold-and-Talk.” For consistency purposes, the Petition uses “Hold-and-Talk” when discussing both terms.

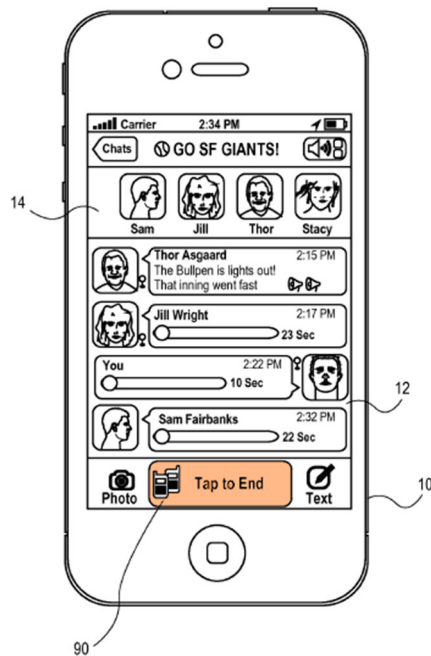


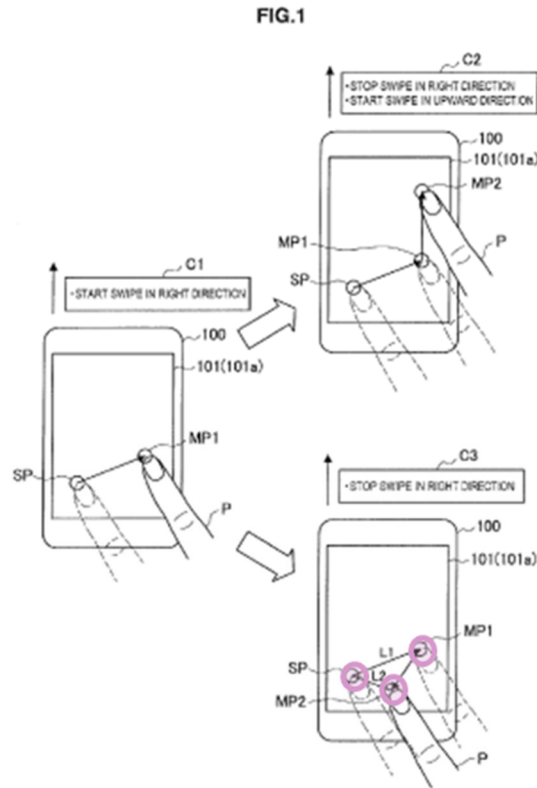
FIG. 6C

B. Ohashi (Ex-1017)

Ohashi was filed on May 16, 2012 and published as US2012/0229410 on September 13, 2012. Ohashi is §102(e) prior art.

Ohashi discloses detecting a “swipe and hold” gesture on a display panel of an electronic device “in which a finger or the like touches an arbitrary point in the contact detecting region of the touch panel, and the finger or the like is swiped while touching the touch panel and then is held on the touch panel while touching the touch panel.” Ex-1017 ¶3. Specifically, Ohashi discloses that “[a] continuous control such as a control from the contact starting point SP to a first swipe point MP1, to a second swipe point MP2 ... is done in the swipe and hold control while maintaining the

contact.” *Id.* ¶34, Fig. 1 (annotated). In response to the swipe and hold, “the played content can be ... fast-forwarded/rewound.” *Id.* ¶104; Ex-1002 ¶¶89-90.



C. Lee'804 (Ex-1015)

Lee'804 was filed on May 4, 2012 and issued as US8,948,804 on February 3, 2015. Lee'804 is §102(e) prior art.

Lee'804 is related to and incorporated by reference in Lee'041 (Ex-1014, 1:9-13), and contains all of the Lee'041 disclosures regarding Figures 2A-2C described in Section XI.A. Ex-1015, 3:19-49. As with Lee'041, Lee'804's user purports to activate a “Slide-to-Lock” feature by “sliding a finger from left to right” over interface region 16 until region 18 is contacted to activate PTT locking function on

the device, which allows the user to “simply speak into the microphone” without having to contact or hold region 16 or 18. *Id.*, 3:31-45. When the PTT locking function is deactivated, the message is terminated. Ex-1015, Cls. 16-17, Fig. 2D (annotated); Ex-1002 ¶¶91-92.

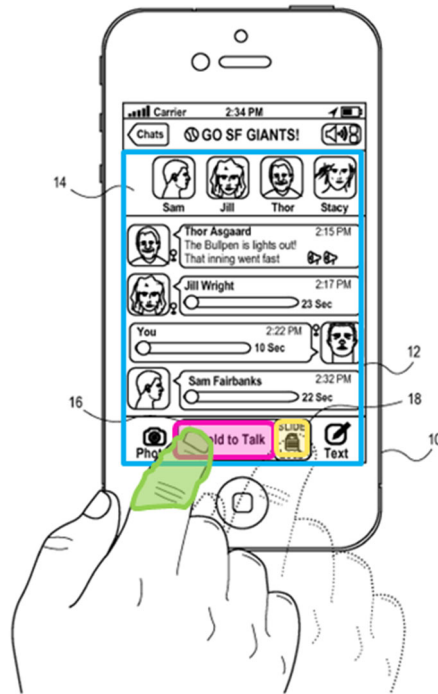


FIG. 2D

D. D'Souza (Ex-1018)

D'Souza was filed on January 5, 2011 and published as US2012/0014684 on January 19, 2012. D'Souza is §102(e) prior art.

D'Souza teaches a method for canceling an impending capture of media data, such as a photograph, using a swipe and release gesture. Ex-1018 ¶29, Cl. 11. For example, if the user decides that they do not want to take a picture, the user slides

their “finger away from the shutter button 300 such that contact is no longer made with any portion of” it “but such that contact is maintained with the touch screen 200 throughout the sliding motion” and “[w]hen the user then lifts his or her finger from the touch screen 200, a photograph would not be taken and the autofocus and/or any other photography-related functions ... would be deactivated.” *Id.* ¶17, Fig. 4 (annotated); Ex-1002 ¶¶93-94.

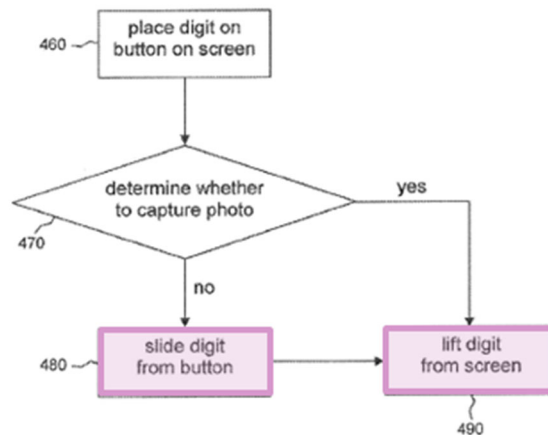


Figure 4

XII. DETAILED EXPLANATION OF THE UNPATENTABILITY GROUNDS

Claims 1-14 of the '030 Patent are substantially similar. Like claim elements are discussed together in the below element-by-element analysis. *See* Ex-1020 (summary table). To the extent that there are meaningful differences, such differences are individually identified and discussed. As explained below, the challenged claims are disclosed and/or taught by the prior art. Ex-1002 ¶¶32-72, 95;

Exs-1056-1080, 1045.

A. Ground 1: Claims 1, 3-8, and 10-14 are obvious over Lee’041

1. Independent Claims 1 and 8

a. Elements 1[Pre]/8[Pre]: A computer implemented method for recording media data, comprising:

Lee’041 teaches the preambles of Claims 1 and 8. Ex-1002 ¶¶96-97. Lee’041 discloses embedded “computer code” that runs on a communication device (Ex-1014, Cl. 1), such as a mobile phone. *Id.*, 6:1-5. The code is configured to display on the screen of the communication device running a PTT⁸ application, features such as Tap-to-end (TTE) and Slide-to-Lock. *Id.*, Cl. 1. The application allows a user to “speak into the microphone, or generate other types of media,” without having to hold the screen. *Id.*, 3:49-51. Media includes “voice, video, ... or any other type of streaming or non-streaming media.” *Id.*, 5:57-60.

b. Element 8[A]: a processor;

Element 8[B(i)]: a non-transitory computer readable storage medium communicatively coupled to said processor,

Lee’041 teaches Elements 8[A]/8[B(i)], for the same reasons explained in the previous section. Ex-1002 ¶98. Lee’041 discloses “computer code embedded in a non-transitory computer readable medium” that runs on a communication device

⁸ A POSITA would have understood “Push-to-Talk” or “PTT” as a well-known term of art that dates back to early radio transmission systems over half-duplex communication channels. Ex-1002 ¶¶40-43, 96; Ex-1062; Ex-1081.

(Ex-1014, Cl. 1), such as a mobile phone. *Id.*, 6:1-5. Moreover, Lee’041 discloses a controller⁹ and a memory “for storing the PTT application” that is run on the device. *Id.*, 4:65-67, Fig. 5. A POSITA would thus have understood that the communication device would include a processor communicatively coupled to the non-transitory computer readable storage medium to access the memory contents. Ex-1002 ¶98; Ex-1080.

- c. **Element 1[A]: providing a gesture based media recording application executable by at least one processor configured to manage a graphical user interface of an electronic device for said recording of media data in one or more recording modes on said electronic device;**

Element 8[B(ii)]: said non-transitory computer readable storage medium configured to store a gesture based media recording application,

Element 8[B(iii)]: wherein said gesture based media recording application, when executed by said processor, manages a graphical user interface of an electronic device for said recording of media data;

Element 8[B(iv)]: said gesture based media recording application comprising:

Lee’041 teaches Elements 1[A]/8[B(ii)]-[B(iv)]. Ex-1002 ¶99. As described above, Lee’041’s non-transitory computer readable storage medium has embedded

⁹ The ’030 Patent uses the term microprocessor to include microcontroller (Ex-1001, 16:39-62), and a POSITA would have understood them to be functionally the same in this context. Ex-1002 ¶98.

computer code that is configured to display certain features on the screen of the communication device running a PTT application (8[B(ii)]). Ex-1014, Cl. 1, 4:65-67.

Lee'041 teaches a gesture based media recording application (executing on a processor) to manage a graphical user interface of an electronic device for the recording of media data in one or more recording modes on the electronic device (1[A] and 8[B(iii)-(iv)]). Ex-1002 ¶100. Lee'041's application includes a "Slide-to-Lock" feature that is "activated by the user sliding a finger [(Fig. 2B (green))] from left to right over the region 16" on the touch-sensitive display of the user's mobile device (pink), "until the Slide-to-Lock feature 18 is contacted" (yellow). Ex-1014, 3:37-40. When Slide-to-Lock is activated, the "text displayed in the region 16" on the graphical user interface "changes from 'Hold-and-Talk' [first recording mode] to 'Slide-to-Lock.'" *Id.*, 3:41-44, Fig. 2C (yellow).

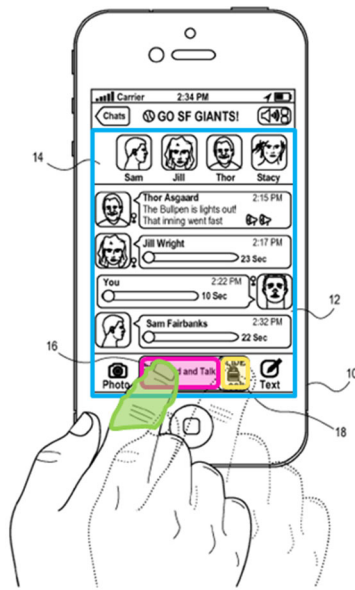


FIG. 2B

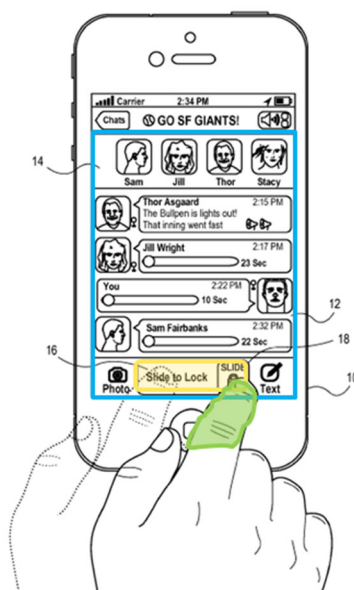


FIG. 2C

Once activated, a “second recording mode” called a “PTT locking function” allows the user to “simply speak into the microphone, or generate other types of media,” such as voice or video messages, without having to contact or hold region 16 and/or 18 while creating a message. *Id.*, 3:45-51, 5:57-60.

Lee’041’s Slide-to-Lock detection unit detects the user’s sliding motion on the display screen when the Slide-to-Lock feature is activated or deactivated, and notifies the controller to activate or deactivate the PTT locking function, respectively. *Id.*, 5:1-7, 5:17-19.

Accordingly, a POSITA would have understood that Lee’041’s PTT application is a gesture based media recording application that manages a graphical user interface of an electronic device for the recording of media data in one or more

recording modes on the electronic device. Ex-1002 ¶¶101-103; Ex-1080.

- d. **Element 1[B]: defining one or more interface regions on said graphical user interface of said electronic device by said gesture based media recording application;**

Element 8[C]: an interface definition module configured to define a plurality of interface regions on said graphical user interface of said electronic device;

Lee'041 teaches Elements 1[B]/8[C]. Ex-1002 ¶104. Lee'041 teaches that its gesture based media recording application defines one or more graphical user interface regions, such as regions 16 and 18, that enable interfacing and interactions with a user of the mobile device. *Id.* “Slide-to-Lock” feature 18 (Fig. 2B (yellow)) appears on the display screen of the user’s mobile device when the Hold-and-Talk region 16 (pink) is contacted by the user (green). Ex-1014, 3:33-36, Figs. 2A-2B.¹⁰

¹⁰ This is similar to the comparable disclosure of the '030 Patent. Ex-1001, 12:29-39 (interface region 301b enables a “hold to record (HTR)/release to stop (RTS)” function and “a slide gesture” to interface region 301c enables a “release to record (RTR)” function).

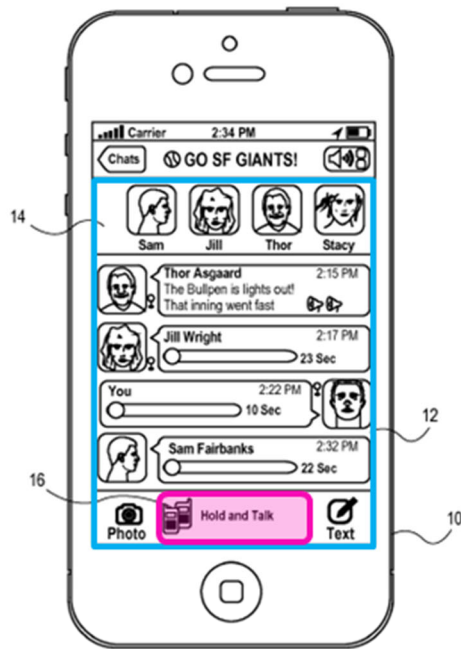


FIG. 2A

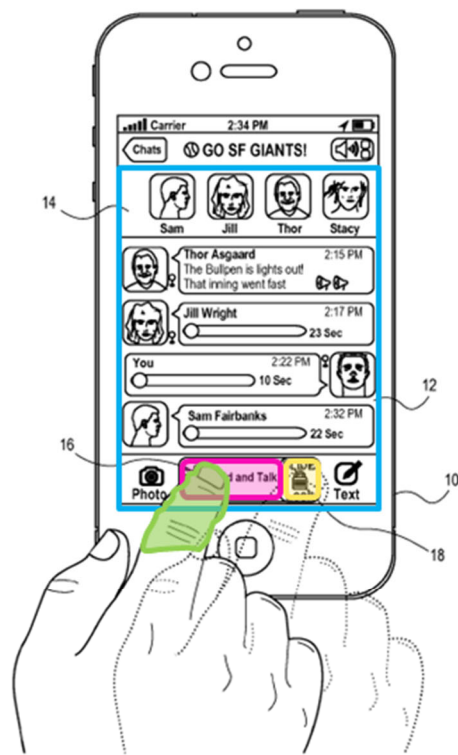


FIG. 2B

A POSITA would have understood that Lee'041's PTT application comprises an interface definition module or "a software component" that is "configured to define multiple interface regions on the graphical user interface and associate a predefined function with each of the defined user interface regions" because its display screen includes interface regions 16 and 18 that are associated with predefined functions of Hold-and-Talk (PTT recording mode) and Slide-to-Lock (RTR recording mode), respectively. Ex-1002 ¶¶105-106.

- e. **Element 1[C]/8[D]: [detecting / a detection module configured to detect] a first gesture from among multiple gestures on a first of said defined interface regions, by said gesture based media recording application, wherein said first gesture is a press and hold gesture;**

Lee'041 teaches Elements 1[C]/8[D]. Ex-1002 ¶107. Lee'041 teaches that its PTT application detects a first user action performed manually by the user's finger on interface region 16 of the display screen, wherein the first user action is a press and hold gesture (a first gesture). *Id.* When the Hold-and-Talk region 16 (pink) is contacted by the user (green), the user "can simply maintain finger contact with the 'Hold-and-Talk' region 16, or a similar PTT feature, for the duration of the message." Ex-1014, 3:67-4:2, Figs. 2A-2B (annotated).

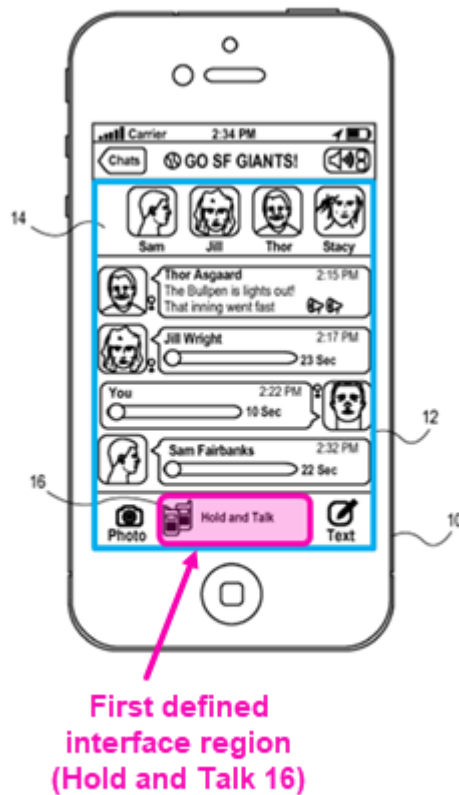


FIG. 2A

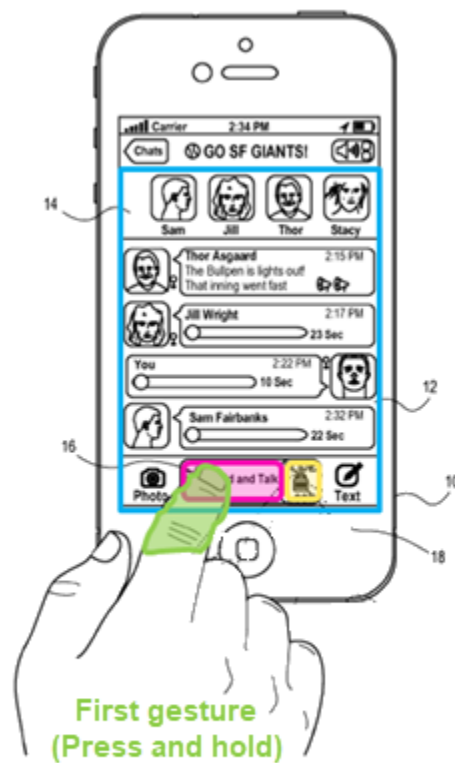


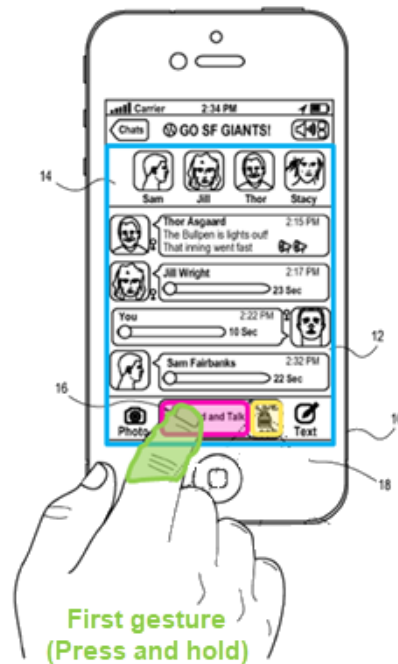
FIG. 2B

A POSITA would have understood that Lee'041's PTT application comprises a detection module or "a software component" that is "configured to detect one or more physical touch or other gesture on a defined region of a graphical user interface" because its controller—which "may be implemented in ... software"—operates together with the display screen to detect a user's press and hold gesture on region 16. Ex-1014, 5:17-21; Ex-1002 ¶108.

- f. Element 1[D]/8[E]: [starting said recording / an action management module configured to start said recording] of media data in a push to talk (PTT) recording mode, by said gesture based media recording application, on said detection of said first gesture on said first of said defined interface regions;**

Lee'041 teaches Elements 1[D]/8[E]. Ex-1002 ¶109. Lee'041 teaches that its gesture based media recording application starts the recording of media data in a PTT recording mode, specifically, “a virtual PTT region 16, labeled ‘Hold-and-Talk,’ is provided” on the display screen of the user’s mobile device. Ex-1014, 3:30-32, Fig. 2B (pink). To record media, the user can simply contact and “maintain finger contact with the ‘Hold-and-Talk’” (a first gesture) on interface region 16 on the display screen (first of said defined interface regions), “or a similar PTT feature, for

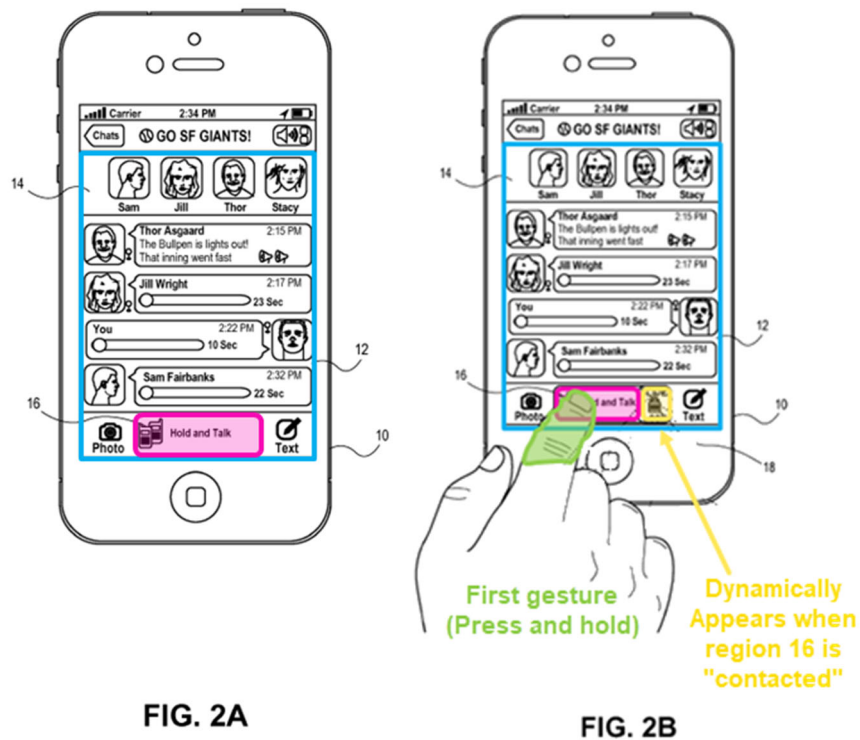
the duration of the message.” Ex-1014, 3:67-4:2.



A POSITA would have understood that Lee’041’s PTT application comprises an action management module or “a software component” that is “configured to perform a predefined action based on the detection of a gesture on a defined region of a graphical user interface,” because its controller (implemented in software) operates together with the display screen to detect a user’s gesture on region 16 and perform a predefined Hold-and-Talk action based on the detected gesture. Ex-1014, 5:17-21; Ex-1002 ¶¶34-43, 110.

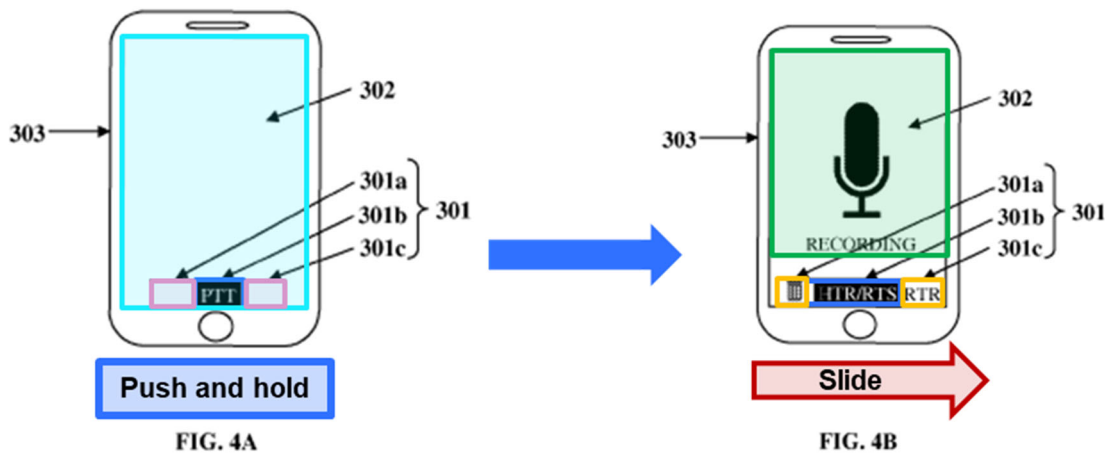
- g. Element 1[E]/8[F]: [dynamically changing, by said gesture based media recording application, / said interface definition module configured to dynamically change] functions associated with said one or more defined interface regions based on said detected first gesture on said one of said defined interface regions; and**

Lee'041 teaches Elements 1[E]/8[F]. Ex-1002 ¶111. Lee'041 teaches that its gesture based media recording application dynamically changes functions associated with one or more defined interface regions. *Id.* Specifically, when the Hold-and-Talk region 16 (Fig. 2A (pink)) is pressed and held by the user's finger (Fig. 2B (green)) (first gesture), a "Slide-to-Lock" feature 18 dynamically appears on the display screen (yellow) where a part of region 16 was previously. Ex-1014, 3:33-36.



This is similar to a comparable disclosure of the '030 Patent. Ex-1001, 12:22-

34 (when press and hold gesture is detected, the application “associates new predefined functions to” interface regions 301a, 301b, and 301c, such as “interface region 301b” for “hold to record (HTR)/release to stop (RTS)”), Figs. 4A-4B.



A POSITA would have understood that Lee’041’s PTT application comprises an interface definition module or “a software component” that is “configured to dynamically change the functionality of the interface regions to a different predefined function,” as shown in Figures 2A-2B, because the text displayed on the GUI changes from a predefined “Hold-and-Talk” function to a “Slide-to-Lock” function for interface region 16 based on detection of a user’s finger. Ex-1002 ¶¶68-72, 112-113.

- h. Element 1[F(i)]/8[G(i)]: [detecting a second gesture from among said multiple gestures, by said gesture based media recording application / said detection module further configured to detect a second gesture from among said multiple gestures], wherein said second gesture is a slide and hold gesture, or a swipe and hold gesture from said first of said defined interface regions to a second of said defined interface regions proximate to said first of said defined interface regions, and**

Lee'041 teaches Elements 1[F(i)]/8[G(i)]. Ex-1002 ¶114. Lee'041 teaches that the gesture based media recording application detects a second gesture from among multiple gestures. *Id.* Lee'041's "Slide-to-Lock" feature is "activated by the user sliding a finger from left to right over the region 16" on the display screen of the user's mobile device, and then holding their finger on the display screen until the "Slide-to-Lock" feature 18 is activated" (a second gesture). Ex-1014, 3:37-40, Figs. 2B-2C (annotated). Second interface region 18 is proximate to first interface region 16. *Id.*, Figs. 2B-2C. When this feature is activated, a recording mode called a "PTT locking function" is implemented, which allows the user to "simply speak into the microphone, or generate other types of media," such as voice or video messages, without having to hold region 16 and/or 18 while creating a message. *Id.*, 3:45-51, 5:57-60.

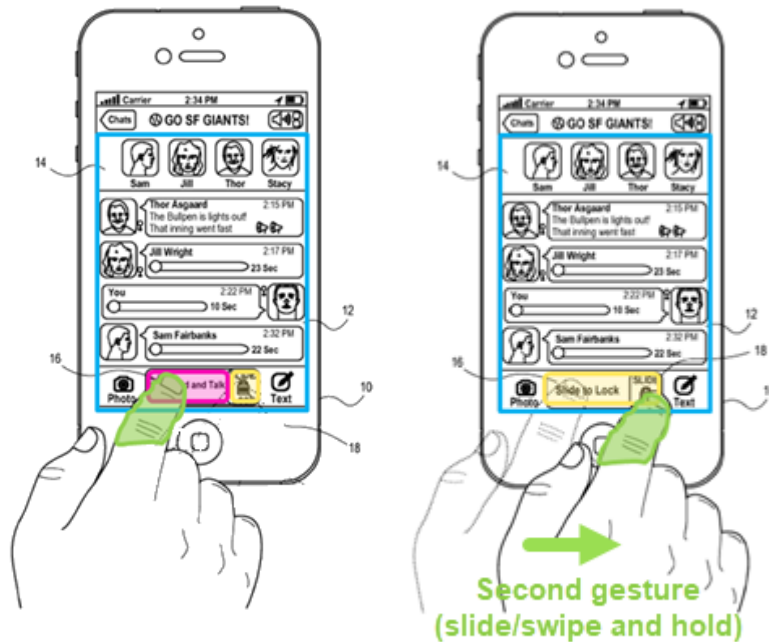


FIG. 2B

FIG. 2C

The '030 Patent does not define “hold” in the context of the “slide/swipe and hold” gestures claimed. Ex-1002 ¶115. However, Lee'041's sliding motion gesture is implemented in the same manner as the only gesture in the '030 Patent to which the claimed “slide and hold” gesture could possibly refer, where the user slides their finger from interface region 301b to region 301c and when the user releases their finger from interface region 301c, the application continues recording. Ex-1001, 12:39-63. A POSITA would have understood that in both Lee'041 and the '030 Patent, a user's sliding motion from one interface region to another while maintaining contact with the interface at the end of the motion changes the recording mode to allow the recording to continue to record without the user having to continue contact. Ex-1002 ¶¶44-49, 60-63, 116. Thus, a POSITA would have understood the

terms “slide/swipe and hold” in the context of the ’030 Patent to encompass a user holding their finger on the interface briefly after performing the swipe or slide motion. *Id.* ¶116. Lee’041 alone thus teaches this limitation. *See also* Ex-1067, 2:30-34, 16:9-31 (explaining the POSITA’s motivation to implement a “hold”).

A POSITA would also have understood that Lee’041’s PTT application comprises a detection module or “a software component” that is “configured to detect one or more physical touch or other gesture on a defined region of a graphical user interface” because its Slide-to-Lock detection unit and controller (implemented in software) operate together with the display screen to detect a user’s slide and hold action from region 16 to 18. Ex-1014, 5:17-21; Ex-1002 ¶117.

i. Element 1[F(ii)]/8[G(ii)]: wherein said recording of said media data continues uninterrupted during and after performance of said second gesture.

Lee’041 teaches Elements 1[F(ii)]/8[G(ii)]. Ex-1002 ¶118. Lee’041 teaches that the recording of the media data continues uninterrupted during and after performance of the second gesture. *Id.* Specifically, Lee’041 states that “[w]hen the PTT locking function is activated, the user ... no longer needs to select or hold the region 16 and/or 18 while creating a message”; instead, “the user can simply speak into the microphone” without having to hold interface region 16 and/or 18. Ex-1014, 3:46-51; *see also id.*, 5:31-33 (“after the Slide-to-Lock feature 18 is implemented ... the user no longer has to contact the region 18 to generate and transmit voice

media”).

2. **Dependent Claims 3-7 and 10-14**

- a. **Elements 3[A]/10[A]: [The computer implemented method of claim 1, further comprising: detecting / The computer implemented system of claim 8, further comprising: said detection module further configured to detect] a third gesture from among said multiple gestures on said second of said defined interface regions, by said gesture based media recording application, wherein said third gesture is a release gesture from said second of said interface regions, and**

Lee’041 teaches Elements 3[A]/10[A]. Ex-1002 ¶119. Lee’041 teaches a third gesture, which is a release gesture from the second interface region. *Id.* Specifically, after the swipe and hold gesture to engage the locking feature, Lee’041 teaches releasing the user’s finger from interface region 18. Ex-1014, 3:37-42, Fig. 2C (annotated). Once the user releases their finger from region 18 (the second region), the “Tap-to-End” display option (orange) appears. *Id.*, 5:31-34, Fig. 6C (annotated). Display of “Tap-to-End” on the interface is evidence that the release gesture was detected. Ex-1002 ¶119.



FIG. 2C

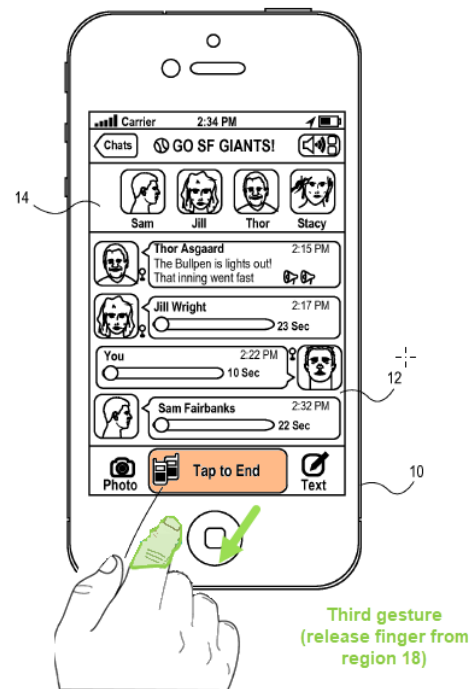


FIG. 6C

A POSITA would have understood that Lee'041's PTT application comprises a detection module or "a software component" that is "configured to detect one or more physical touch or other gesture on a defined region of a graphical user interface" because its Slide-to-Lock detection unit and controller (implemented in software) operate together with the display screen to detect a user's finger release on region 18. Ex-1014, 5:17-21; Ex-1002 ¶¶50-57, 120.

- b. Elements 3[B]/10[B]: switching said recording of said media data to a tap to end (TTE) mode, wherein said recording of said media data continues uninterrupted during and after performance of said third gesture.**

Lee'041 teaches Elements 3[B]/10[B]. Ex-1002 ¶121. Lee'041 teaches switching the recording of the media data to TTE mode, wherein recording of the

media data continues uninterrupted during and after performance of the third gesture. *Id.* Specifically, Lee'041 states that “[w]hen the PTT locking function is activated,” the user no longer has to hold region 16 or 18 when creating a message. Instead, “the user can simply speak into the microphone” without having to hold region 16 and/or 18. Ex-1014, 3:45-51. When the user removes their finger, “a ‘Tap-to-End’ region 90 appears,” as shown in Figure 6C (above, orange). Tapping region 90 terminates the message and the device “stops transmitting media.” *Id.*, 5:29-36.

- c. **Elements 4[A]/11[A]: [The computer implemented method of claim 3, further comprising: detecting / The computer implemented system of claim 10, further comprising: said detection module further configured to detect] a fourth gesture from among said multiple gestures on said one of said defined interface regions, by said gesture based media recording application, wherein said fourth gesture is a tap gesture, and**

Lee'041 teaches Elements 4[A]/11[A]. Ex-1002 ¶122. Specifically, Lee'041 teaches that its PTT application detects a fourth gesture when the user taps interface region 90 of the display screen. Ex-1014, 5:34-36, Fig. 6C (annotated). The “Tap-to-End feature is implemented by tapping the display screen.” Ex-1014, Cl. 2; *see also id.*, Cl. 7 (“[T]he computer code is responsive to the implementation of the Tap-to-End feature by touching the display screen.”).

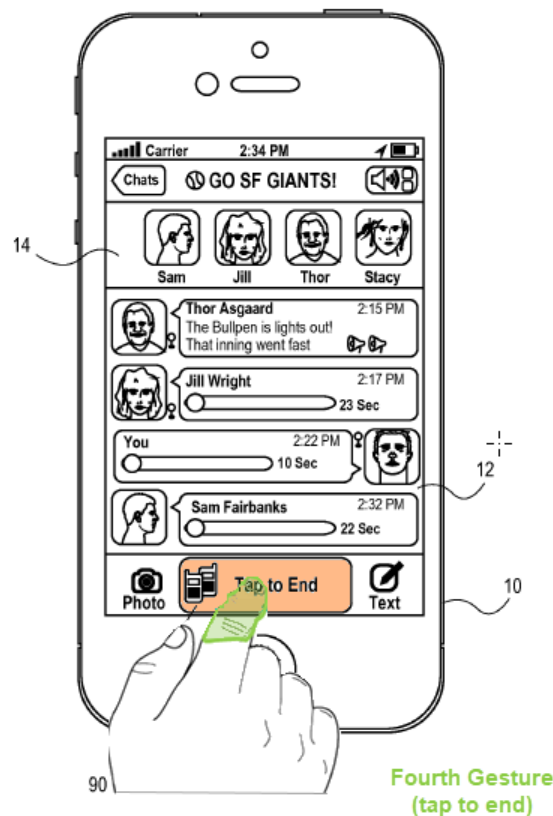


FIG. 6C

A POSITA would also have understood that Lee'041's PTT application comprises a detection module or "a software component" that is "configured to detect one or more physical touch or other gesture on a defined region of a graphical user interface" because its Slide-to-Lock detection unit and controller (implemented in software) operate together with the display screen to detect a user's finger tap on region 90. Ex-1014, 5:17-21; Ex-1002 ¶¶49, 58-59, 123-124; Ex-1067, 2:30-34, 16:9-31.

d. Elements 4[B]/11[B]: wherein said recording of said media data is ended on performing said fourth gesture.

Lee'041 teaches Elements 4[B]/11[B]. Ex-1002 ¶125. Lee'041 teaches that the recording of the media data is ended on performing the fourth gesture. *Id.* Specifically, Lee'041 states that “[w]hen the Tap-to-End region 90 is tapped, the message is terminated and the device 10 stops transmitting media.” Ex-1014, 5:34-36, Fig. 6C (orange).

e. Claims 5/12: [The computer implemented method of claim 4 / The computer implemented system of claim 11], wherein said recorded media data is one or more of saved locally, deleted, or transmitted to another electronic device or the server.

Lee'041 teaches Claims 5/12. Ex-1002 ¶126. Lee'041 states that the recorded media may be “progressively stored in memory 24” of the communication device (i.e., locally) “and progressively transmitted by transmitter 80 when the media is created, or initially stored in memory 24 and transmitted out of storage after the message is complete.” Ex-1014, 5:12-17, Fig. 5.

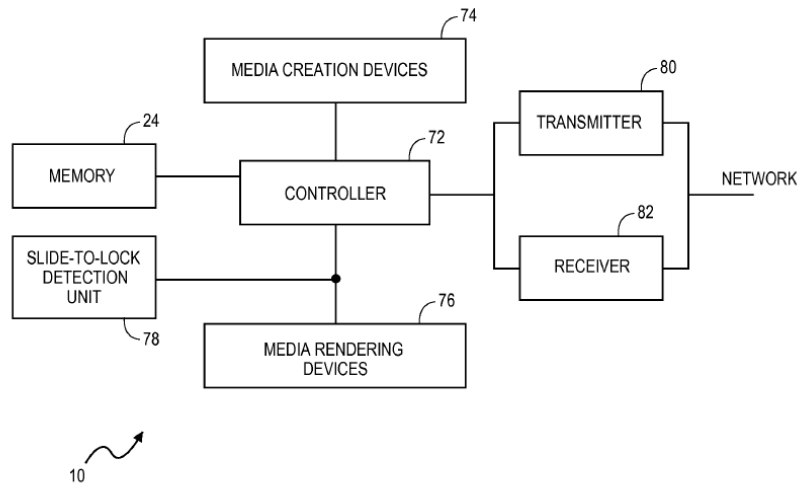


FIG. 5

- f. Claims 6/13: [The computer implemented method of claim 1 / The computer implemented system of claim 8], further comprising sending said media data to the server via a network at one of: (a) continuously while recording said media data, (b) at predefined time intervals after initiation of said recording of said media data, and (c) after completion of said recording of said media data by said gesture based media recording application.**

Lee'041 teaches Claims 6/13. Ex-1002 ¶127. Lee'041 teaches that its gesture based media recording application sends the media data to the server via a network (a) continuously while recording the media data or (c) after completion of the recording of the media data. *Id.* Specifically, Lee'041 states that the Slide-to-Lock feature “may be used with both (i) progressive type PTT applications where a message is transmitted as the media is created and progressively stored and (ii) store and forward type PTT applications where the message is transmitted out of storage after the message is complete.” Ex-1014, 4:6-11; *see also id.*, 5:7-12, Fig. 5.

Moreover, Lee'041 states that the communication device is coupled to a network and server (*id.*, 4:58-67) and a “jitter buffer may be optimized or tuned ... for rendering incoming media as it is received over the network in real-time.” *Id.*, 4:40-42. Lee'041 further states that “steps can be taken on the network to enhance near real-time or live communication, such as notifying servers ... on the network.” *Id.*, 4:46-51. A POSITA would thus have understood that the media data is sent to a *server* via the network. Ex-1002 ¶127.

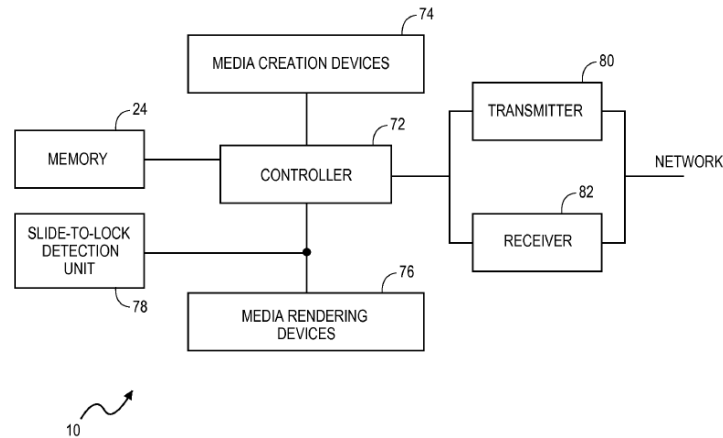


FIG. 5

- g. Claims 7/14: [The computer implemented method of claim 1/ The computer implemented system of claim 8], wherein said media data comprises one of audio data, video data, audiovisual data, image data, multimedia data, and any combination thereof.**

Lee'041 teaches Claims 7/14. Ex-1002 ¶128. Lee'041 states that “media may include but is not limited to, voice, video, text, photos, sensor data, GPS or positional data, or any other type of streaming or non-streaming media.” Ex-1014, 5:57-60.

B. Ground 2: Claims 1, 3-8, and 10-14 are obvious over Lee'041 in view of Ohashi ("Lee'041-Ohashi")

1. Independent Claims 1 and 8

- a. Element 1[F(i)]/8[G(i)]: [detecting a second gesture from among said multiple gestures, by said gesture based media recording application / said detection module further configured to detect a second gesture from among said multiple gestures], wherein said second gesture is a slide and hold gesture, or a swipe and hold gesture from said first of said defined interface regions to a second of said defined interface regions proximate to said first of said defined interface regions, and**

Lee'041-Ohashi teaches Elements 1[F(i)]/8[G(i)]. Ex-1002 ¶¶129-131.

Lee'041 alone teaches all of Claims 1 and 8, including Elements 1[F(i)]/8[G(i)] for the reasons described in Section XII.A.1.h. Ex-1002 ¶¶135-137.

The “slide and hold” feature is also disclosed by Ohashi, which describes detecting a “swipe and hold” gesture on a display panel of an electronic device “in which a finger or the like touches an arbitrary point in the contact detecting region of the touch panel, and the finger or the like is swiped while touching the touch panel and then is held on the touch panel while touching the touch panel.” Ex-1017 ¶3; *see also id.* ¶34 (“A continuous control such as a control from the contact starting point SP to a first swipe point MP1, to a second swipe point MP2 ... is done in the swipe and hold control while maintaining the contact.”). Moreover, Ohashi discloses

transmitting “a control command according to the detected result” of the swipe and hold gesture “to the electronic device.” *Id.* ¶2.

b. A POSITA would have been motivated to combine Lee’041 and Ohashi and had a reasonable expectation of success

A POSITA would have been motivated to implement Ohashi’s explicit swipe and ***hold*** gesture as a detected gesture with Lee’041’s system—to the extent it is not already taught by Lee’041’s “Slide-to-Lock” feature—to improve the reliability of the user’s selection to ensure that the user’s gesture is completed without inadvertent detections and that the appropriate associated predefined action is implemented. Ex-1002 ¶¶132, 138. Ohashi explains that “cancellation of the [user’s] contact” with the display panel “at an improper time [] fails to input a desired command,” which “sometimes decreases the operability” of the device. Ex-1017 ¶6. Likewise, Lee’041 states that “a user may inadvertently de-select the PTT feature in the middle of a message, causing an interruption or termination in the progressive storing and/or transmission of the media” resulting in “an interrupted, partial, message.” Ex-1014, 1:50-56. A POSITA would thus have recognized that implementing Ohashi’s “swipe and ***hold***” feature with Lee’041’s “Slide-to-Lock” gesture would ensure that Lee’041’s predefined action associated with this gesture (i.e., continuous recording) would be executed and avoid inadvertent termination of the recording. Ex-1002

¶¶44-49, 133, 139; *see also* Ex-1067, 2:30-34, 16:9-31 (explaining the POSITA’s motivation to implement a “hold”).

A POSITA would have had a reasonable expectation of success in implementing the combined teachings of Lee’041-Ohashi. Ex-1002 ¶¶134, 140. Lee’041 and Ohashi both disclose methods for detecting gestures on user interfaces and implementing associated actions using familiar elements such as mobile devices, user interfaces, and programming that a POSITA would have understood are amenable to various well-understood and predictable combinations. *Id.* As such, it would be well within the skill of a POSITA to implement the swipe and hold gesture on any of the computer systems of Lee’041 or Ohashi. *Id.*

2. **Dependent Claims 3-7 and 10-14**

Lee’041-Ohashi teaches dependent Claims 3-7 and 10-14 for the same reasons as Lee’041 alone. *See* Section XII.A.2. Ex-1002 ¶141.

C. **Ground 3: Claims 2 and 9 are obvious over Lee’041-Ohashi in further view of Lee’804 and D’Souza**

Lee’041 in view of Ohashi, Lee’804, and D’Souza (“Lee’041-Ohashi-Lee’804-D’Souza”) teaches Claims 2/9. Ex-1002 ¶142. In fact, as set forth below, Lee’041-Ohashi teach all of the limitations except for very specific and obvious design choices. *Id.*

1. **Dependent Claims 2 and 9**

- a. **Element 2[A]/9[A]: [The computer implemented method of claim 1, further comprising: detecting / The computer implemented system of claim 8, further comprising: said detection module further configured to detect] a third gesture from among said multiple gestures, by said gesture based media recording application, wherein said third gesture is a slide and release gesture, or a swipe and release gesture from said second of said defined interface regions to a third of said defined interface regions proximate to said first of said defined interface regions, and**

Lee'041-Ohashi-Lee'804-D'Souza teaches Elements 2[A]/9[A]. Ex-1002

¶143. Lee'041 teaches that its PTT application detects a third gesture by the user sliding its finger from interface region 18 (the Slide-to-Lock position) to interface region 16 of the display screen and releasing it at interface region 16. Ex-1014, 3:52-55. For example, Lee'041 states that “[t]he PTT locking function may be deactivated,” using the Slide-to-Lock feature “by sliding a finger from region 18 to region 16,” as shown in Figure 2D.¹¹ Ex-1014, 3:52-55. A POSITA would have understood that because Lee'041's application dynamically changes the functions associated with the defined interface regions based on the user's gestures (e.g., region 16 changes from PTT mode to TTE mode, as discussed in Section XII.A.1.g), region 16 becomes the third defined interface region whereby a right to left swipe

¹¹ Note that this is an alternative to the Tap-to-End embodiment described in Figure 6C, discussed with respect to Claims 3-4, 10-11. Ex-1014, 5:22-36.

deactivates the recording. Ex-1002 ¶143. A POSITA would have further understood that Lee'041-Lee'804's slide and release gesture from interface region 18 to region 16 deactivates the PTT lock function and returns the device to a PTT recording mode in which the recording is stopped and the message terminated (or canceled) when the user releases their finger from the screen. *Id.*

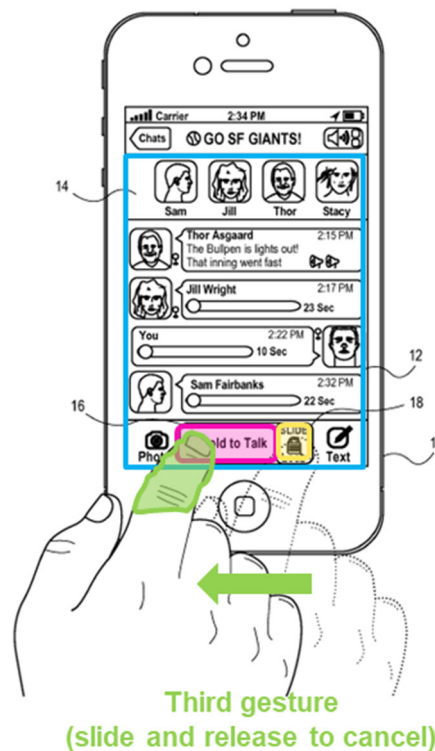


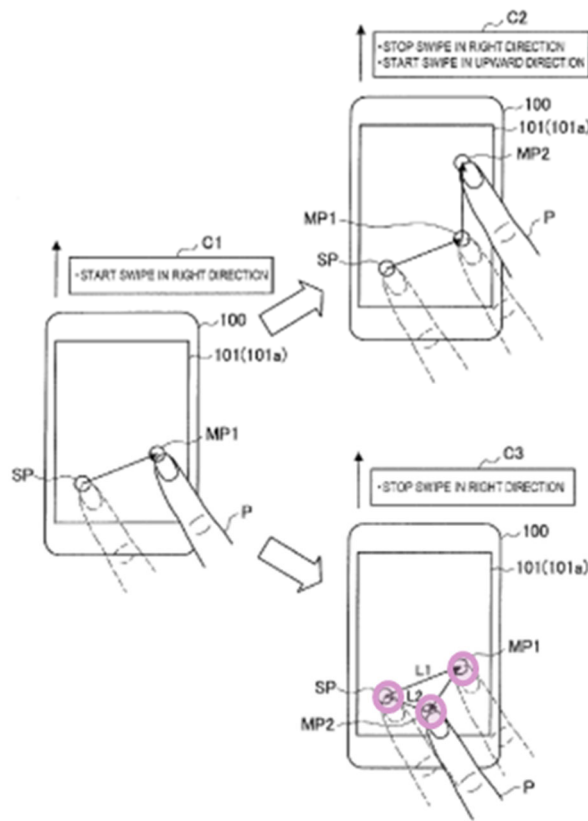
FIG. 2D

A POSITA would also have understood that Lee'041's PTT application comprises a detection module or "a software component" that is "configured to detect one or more physical touch or other gesture on a defined region of a graphical user interface" because its Slide-to-Lock detection unit and controller (implemented in software) operate together with the display screen to detect a user's slide and

release action from interface region 18 to 16 of the display screen. Ex-1014, 5:17-21; Ex-1002 ¶144.

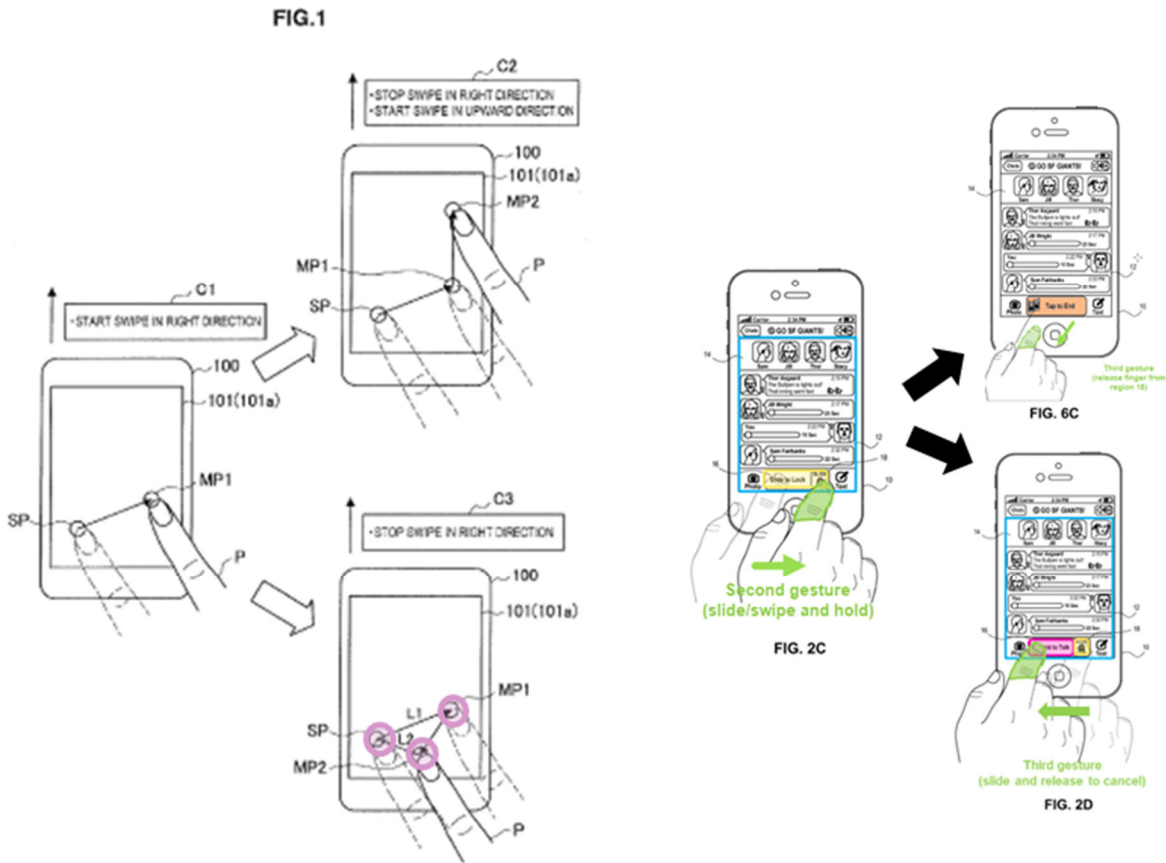
To the extent it is required that the swipe and release gesture end on an interface region that is geographically distinct on the display from where the recording started on region 16, this would have been obvious as a matter of routine design choice to a POSITA, as exemplified by Ohashi. Ex-1002 ¶145. Ohashi teaches detecting a gesture from the second defined interface region to a ***third defined interface region*** proximate to the first defined interface region on a display panel of an electronic device. *Id.* Specifically, Ohashi discloses that “[a] continuous control such as a control from the contact starting point SP to a first swipe point MP1, to a second swipe point ***MP2*** ... is done in the swipe and hold control while maintaining the contact.” Ex-1017 ¶34, Fig. 1 (annotated).

FIG.1



A POSITA would have been motivated to implement Ohashi's third interface region with Lee'041's system with a reasonable expectation of success to provide the user more gesture options. Ex-1002 ¶146. For example, Lee'041 teaches two “non-exclusive” embodiments, such as simultaneously enabling the third slide-and-release gesture of this claim (Ex-1014, Figure 2D) and Tap-to-End gesture (*id.*, Fig. 6C). *Id.*, 5:22-25. A POSITA would have implemented a geographically distinct third interface region to ensure accurate differentiation between gestures based on the specific region touched on the interface. Ex-1002 ¶¶146-147. Lee'041 notes that the Tap-to-End feature “may be implemented anywhere on the display screen 12”

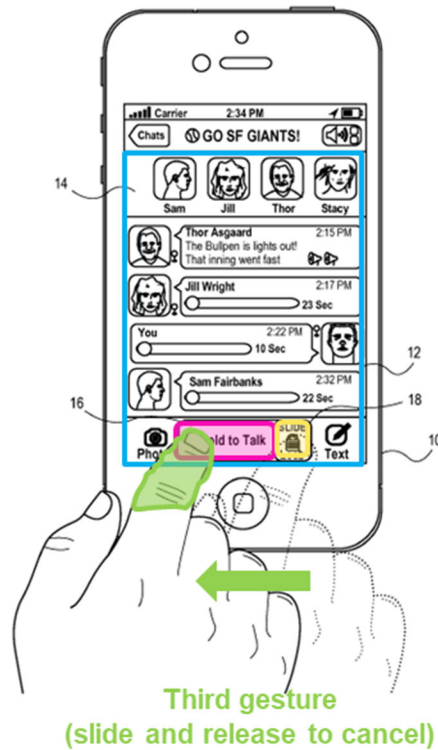
including in the “vicinity of where the virtual Slide-to-[L]ock 18 feature is implemented.” Ex-1014, 5:49-54. A POSITA would have recognized that third interface region could similarly have been implemented “in the vicinity” of the Slide-to-Lock region 18. Ex-1002 ¶¶146-147; *see also* Section XII.B.1.a.



- b. **Elements 2[B]/9[B] wherein said recording of said media data is canceled on performing said third gesture, and**

Elements 2[C]/9[C]: wherein there is no transmission of already recorded media data to another electronic device or a server.

Lee'041-Ohashi-Lee'804-D'Souza teaches Elements 2[B]-2[C]/9[B]-9[C]. Ex-1002 ¶148. Lee'041-Lee'804 teaches that the recording of the media data is canceled on performing the third gesture. *Id.* Lee'804, which is related to and incorporated by reference in Lee'041 (Ex-1014, 1:9-13), includes identical disclosures as Lee'041 for Figures 2A-2D. Ex-1015, 3:19-49. Moreover, Lee'804 describes “a message module configured to generate a message containing media when the PTT locking function is activated using the Slide-to-Lock feature” and “*terminate[] the message* when the PTT locking function is de-activated” by the slide and release gesture in Figure 2D. Ex-1015, Cls. 15-17. A POSITA would have understood that Lee'041-Lee'804's slide and release gesture from interface region 18 to region 16 deactivates the PTT lock function and returns the device to a PTT recording mode in which the recording is stopped and the message terminated (or canceled) when the user releases their finger from the screen. Ex-1002 ¶148.



Lee'041-Lee'804 further teaches that there is no transmission of already recorded media data to another electronic device or a server. Ex-1002 ¶149. Specifically, Lee'041-Lee'804 teaches a non-streaming embodiment wherein the created media is “initially stored in memory 24 and transmitted out of storage after the message is complete.” Ex-1014, 5:12-17, 5:55-60 (media includes “non-streaming media”); Ex-1015, 5:6-11, 5:19-22. Lee'804 also teaches that the message terminated by the messaging module when the PTT locking function is deactivated may contain “non-streaming media.” Ex-1015, Cls. 16-17. A POSITA would have understood that a terminated message containing non-streaming media would not be

“complete[d]” and, thus, would not be transmitted to another electronic device or a server. Ex-1002 ¶¶64-67, 149.

To the extent more implementation details were desired by a POSITA, D’Souza also teaches a swipe and release gesture to cancel an impending capture of media data such as a photograph. Ex-1002 ¶150; Ex-1018 ¶29. Specifically, D’Souza states that “the taking of a photograph can be canceled,” for example, “when the [user’s] finger is moved to another portion of the touchscreen and then lifted from the touch screen.” Ex-1018 ¶13. For instance, if the user decides that they do not want to take a picture, the user slides their “finger away from the shutter button 300 such that contact is no longer made with any portion of” it “but such that contact is maintained with the touch screen 200 throughout the sliding motion” and “[w]hen the user then lifts his or her finger from the touch screen 200, a photograph would not be taken and the autofocus and/or any other photography-related functions that had been activated by the pressing of the finger to the shutter button 300 would be deactivated.” *Id.* ¶17, Fig. 4 (annotated).

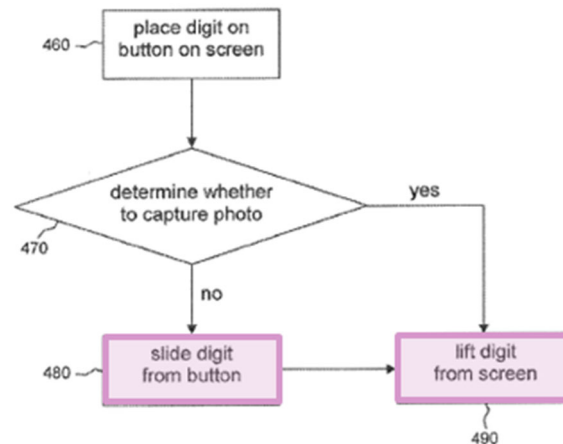


Figure 4

A POSITA would have been motivated to combine Lee’804 and D’Souza with the Lee’041-Ohashi combination with a reasonable expectation of success. Ex-1002 ¶151. Lee’804 is related to and incorporated by reference in Lee’041 and contains identical disclosures for Figures 2A-2D to Lee’041; thus, a POSITA’s motivation to combine Lee’804 with Ohashi and expectation of success would be the same as that described for Lee’041 in Sections XII.B.1.b and XII.C.1.a. Ex-1014, 1:9-13; Ex-1015, 3:19-49. In particular, a POSITA would have found it beneficial to include Lee’804’s more specific disclosures regarding termination of a message following a swipe and release gesture in the Lee’041-Ohashi combination (*see* Section XII.B.1.b) to ensure that a recording is not inadvertently terminated. Ex-1002 ¶151.

A POSITA would have been motivated to implement D’Souza’s swipe and release gesture to cancel the capture of media data with the combined Lee’041-

Lee’804-Ohashi system—to the extent it is not already included by Lee’804’s termination feature—for similar reasons, because it would ensure that a recording is not inadvertently terminated. Ex-1002 ¶152. On the other hand, it would also ensure that recorded information that the user did *not want* transmitted to another electronic device or server would not be inadvertently transmitted. *Id.* For example, Lee’041-Lee’804 states that “the Talk feature is often inadvertently selected, causing the creation of ‘false’ messages” and “[i]f the user is unaware of the situation, a potentially long, data intensive, message that consumes bandwidth may be transmitted.” Ex-1014, 2:6-10; Ex-1015, 1:63-67. Implementing D’Souza’s intentional swipe and release gesture to cancel the capture of media data in the combined system would avoid this inconvenience for the user. Ex-1002 ¶152.

A POSITA would have had a reasonable expectation of success in adding D’Souza to the Lee’041-Ohashi-Lee’804 combined system because all disclose methods for detecting gestures on user interfaces and implementing associated actions using familiar elements such as mobile devices, user interfaces, and programming that a POSITA would have understood are amenable to various well-understood and predictable combinations. Ex-1002 ¶¶153-155. As such, it would be well within the skill of a POSITA to implement the swipe and release to cancel gesture, with no transmission of media data to another device or server, on any of the computer systems of Lee’041-Ohashi-Lee’804-D’Souza. *Id.*

**XIII. THE BOARD SHOULD NOT USE ITS DISCRETION TO DENY
INSTITUTION UNDER *FINTIV***

The Board should decline any request by PO to exercise discretion to deny institution under 35 U.S.C. §314(a). While Director Vidal’s June 21, 2022 Guidance made clear that “*Fintiv* is limited to facts of that case,” for completeness, Petitioner addresses the factors set forth in *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential). As explained below, the six factors set out in *Fintiv* do not justify denying institution.

As an initial matter, there is no litigation currently pending against Co-petitioner Google. The ’030 Patent is asserted against Co-petitioner Samsung but not Co-petitioner Google. It is also asserted against non-party TCL in the *TCL* litigation, which is currently stayed. Accordingly, none of the *Fintiv* factors that depend on actions or activities of a petitioner in a co-pending litigation apply in any respect to Google. When each of these factors is weighed against Co-petitioner Google, they strongly weigh against denial. Accordingly, the Board should decline to exercise its discretion under 35 U.S.C. §314(a).

The **first *Fintiv* factor** applied against Co-petitioner Samsung alone is neutral here because Samsung has not yet moved to stay the district court proceedings pending IPR. Samsung may seek to stay the proceedings at a later date, and Petitioner will seek leave to submit a Preliminary Reply to address any post-filing

developments in this regard, as necessary. Regardless, the PTAB will not infer how the district court would rule should a stay be requested. *See, e.g., Hulu LLC v. SITO Mobile R&D IP, LLC et al.*, IPR2021-00298, Paper 11 at 10-11 (PTAB May 19, 2021). Additionally, the *TCL* litigation involving the '030 Patent is stayed pending service of TCL under the Hague Convention, which will likely occur around February 2024. Ex-1022. Accordingly, this factor is neutral as to the *Samsung* litigation. And in view of the lengthy stay in the *TCL* litigation, this factor weighs against denial.

For the **second *Fintiv* factor** applied against Co-petitioner Samsung alone, the district court has set a date to begin jury selection of October 28, 2024, approximately a year in the future. Even assuming that this date set about a year in the future holds, its timing does not tip in favor of denying the petition in this case. *See, e.g., Apple Inc. v. Koss Corp.*, IPR2021-00305, Paper 14 at 13 (PTAB June 3, 2021). Further, Samsung filed a Rule 12(c) motion for judgment on the pleadings under 35 U.S.C. §101 on September 20, 2023 (*Samsung Electronics Co., Ltd. et al.*, 2:22-cv-00462, D.I. 42 (E.D. Tex. Sept. 20, 2023)) and a motion to transfer on October 13, 2023 (*id.*, D.I. 46 (Oct. 13, 2023) (filed under seal)). The estimated trial date may therefore get extended, if the case is not dismissed entirely. Petitioner will notify the Board of any Court orders regarding the motion for judgment and motion to transfer, and expects to request a preliminary reply to address *Fintiv* based on

subsequent developments. In addition, given the pending stay in the *TCL* litigation, the timing of trial with respect to *TCL* cannot be predicted at this time but is likely to occur after a final decision here. As such, the *Samsung* trial date weighs against denial.

The **third *Fintiv* factor** applied against Co-petitioner Samsung alone, weighs strongly against denial. There has been very little activity in the case. Claim construction briefing has not yet begun. No depositions have yet been taken and expert discovery has not begun. There have been no substantive orders in the case, and the most cost intensive period in the district court case will likely occur around or after the institution decision. This alone weighs against denial. *See, e.g., Hulu*, Paper 11 at 13 (“We agree with Petitioner that the district court proceeding remains at the early stages, and a significant portion of work still remains to be done in the district court proceeding.”); *Skechers U.S.A., Inc. v. Nike, Inc.*, IPR2021-00160, Paper 10 at 12-13 (PTAB May 19, 2021) (“[N]either party has informed us that the District Court has undertaken a Markman hearing or entered a claim construction order. ... [T]his factor weighs against exercising our discretion.”). Moreover, there have been no development in the *TCL* litigation, which is stayed. This factor thus weighs against denial.

The **fourth *Fintiv* factor** also weighs against denial. The *Samsung* litigation is in the early stages and the *TCL* litigation is in its infancy and stayed. Co-petitioner

Google is not a party to either litigation, so this IPR is thus the only forum in which Google can present its invalidity challenge. This factor thus weighs against denial.

On the **fifth *Fintiv* factor**, the Board should give little weight to the fact that Co-petitioner Samsung and PO are the same parties as in one of the relevant district court proceedings. Here, Co-petitioner Google and the defendants (Samsung and non-party TCL) in the parallel litigations are not the same parties. Moreover, Petitioner Samsung is not a party to the *TCL* litigation. And Co-petitioner Google is not a party to either litigation. Therefore, this factor weighs against discretionary denial.

This petition presents “compelling merits” under the **sixth *Fintiv* factor**, which further weigh against discretionary denial. Where the Board “determines that the information presented at the institution stage presents a compelling unpatentability challenge, that determination alone demonstrates that the PTAB should not discretionarily deny institution under *Fintiv*.” USPTO Memorandum, Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation (June 21, 2022). The merits of the Petition are especially compelling here. For example, Lee’041-Ohashi renders obvious independent Claims 1 and 8, including limitations 1[C]/8[D], 1[F(i)]/8[G(i)], and 1[F(ii)]/8[G(ii)], which PO relied on during prosecution to overcome prior art. Ex-1004, 487-510 (arguing the prior art does not teach “a method for recording media

data in a plurality of recording modes based on one or more gestures” or switching recording modes “upon detection of the second gesture”).

Taken together, holistically, the *Fintiv/NHK* factors strongly weigh against denial.

XIV. CONCLUSION

For the reasons above, Petitioner requests institution of IPR for Claims 1-14 of the '030 Patent based on each of the grounds specified in this Petition.

Respectfully Submitted,

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CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. § 42.24(d), Petitioner certifies that this petition includes 8,639 words, as measured by Microsoft Word, exclusive of the table of contents, mandatory notices under § 42.8, certificates of service, word count, and exhibits.

CERTIFICATE OF SERVICE (37 C.F.R. § 42.6(e)(1))

The undersigned hereby certifies that the above document was served on December 5, 2023, by filing this document through the Patent Trial and Appeal Board P-TACTS System, as well as delivering a copy via express mail upon the following attorneys of record for the Patent Owner and Petitioner:

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