

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MOTOROLA MOBILITY LLC AND GOOGLE LLC,
Petitioners,

v.

MULTIFOLD INTERNATIONAL INC. PTE. LTD.,
Patent Owner.

Case IPR2025-00059
Patent 9,141,135

EXHIBIT 2002

DECLARATION OF RAJEEV SURATI, Ph.D.

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I. INTRODUCTION

1. My name is Dr. Rajeev Surati. I have been retained as an expert witness to provide my independent opinion in regards with matters at issue in the *inter partes* review IPR2025-00059 concerning U.S. Pat. No. 9,141,135 (“the ’135 Patent”). I have been retained by Multifold International Inc. Pte. Ltd. (“Multifold”), the Patent Owner, in this proceeding. I have been informed that the Petitioners are Motorola Mobility LLC and Google LLC.

2. Unless otherwise noted, the statements made herein are based on my personal knowledge, and if called to testify about this declaration, I could and would do so competently and truthfully.

3. A detailed record of my professional qualifications including cases in which I was an expert is being submitted herewith as Exhibit 2003 and is summarized in Section II, *infra*.

4. I am being compensated for my work in this matter at the rate of \$665/hour. I am also being reimbursed for reasonable and customary expenses associated with my work and testimony in this investigation. My compensation is not contingent on the outcome of this matter or the specifics of my testimony.

5. I am not a legal expert and offer no opinions on the law. However, I have been informed by counsel of the various legal standards that apply, and I have applied those standards in arriving at my conclusions.

6. In this declaration, I have been asked to address certain invalidity opinions relating to the '135 Patent, specifically those provided by Google and Motorola in their Petition, Paper 1 ("Petition") challenging the '135 Patent and the accompanying declaration of Dr. Sandeep Chatterjee, Ex. 1002 ("Chatterjee declaration"), regarding the alleged invalidity of the '135 Patent. The Petition and Dr. Chatterjee contend that claims 1-3, 5-9, 15, 16, 19 and 20 ("Challenged Claims") are unpatentable. This declaration addresses the validity of claims 1, 3, 5, 6, 9, 15, and 20. I have not been asked to opine on the validity of any other claims, and I have not considered the validity of any other claims.

7. In this expert declaration, I provide my opinions in response to Grounds 1 and 3 for claims 1, 5, 6, 9, 15, and 20 and all Grounds for claim 3 in the Petition and the Chatterjee declaration, as well as the basis for my opinions. Other than for claim 3, I have not been asked to nor have I considered the validity of any claim under Grounds 2 or 4. As I explain in detail later in this expert report, based on my study of the '135 Patent, the Chatterjee declaration, and various references cited by Petitioners and Dr. Chatterjee, it is my opinion that the cited references have deficiencies that do not render Claims 1, 3, 5, 6, 9, 15, and 20 unpatentable, either alone or in combination.

8. I have found limitations in Claims 1, 3, 5, 6, 9, 15, and 20 that are not disclosed by any reference or proposed combination of references. I identify these

undisclosed limitations below. My decision not to address a limitation of a claim should not be interpreted as an admission that such a limitation is found in the art in the Ground cited by Petitioners and Dr. Chatterjee, or that a POSITA would have an apparent reason to combine or modify references in a manner meeting the limitation.

9. I submit this declaration having reviewed the '135 Patent, Claims 1, 3, 5, 6, 9, 15, and 20, the Institution Decision in this IPR, and the prior art cited by Petitioners in the Petition. The material I have considered includes but is not limited to the items set forth below:

MATERIALS CONSIDERED	
Paper 1	Petition
Paper 8	Institution Decision
Ex. 1001	'135 Patent
Ex. 1002	Declaration of Dr. Chatterjee
Ex. 1005	U.S. Patent Application Publication No. 2010/0248788 ("Yook")
Ex. 1007	U.S. Patent No. 7,996,045 ("Bauer")
Ex. 1008	U.S. Patent No. 8,265,705 ("Lee")

10. My opinions as set forth in this expert declaration are based on these sources of information, together with my education, training, and experience, including my work in the field of the '135 Patent.

II. QUALIFICATIONS AND PROFESSIONAL EXPERIENCE

11. My complete qualifications and professional experience are described in my Curriculum Vitae, a copy of which is submitted as Ex. 2003. The following is a brief summary of my relevant qualifications and professional experience.

12. I have provided my full background in the curriculum vitae included here as Exhibit 2003. My CV details my experience in electrical engineering and computer science and also includes a list of publications I have authored or co-authored.

13. I attended the Massachusetts Institute of Technology (MIT) from 1988 to 1999, during which, I earned a Bachelor of Science (1992), Master of Science (1995) and a Doctor of Philosophy (1999) in Electrical Engineering and Computer Science. My Ph.D. thesis was entitled "Scalable Self-Calibrating Technology for Large Scale Displays."

14. Between 1989-1999 I was employed as a researcher/programmer at the MIT Artificial Intelligence Lab. At the lab I worked for Thomas F. Knight Jr. Ph.D., one of the noted inventors of the first bit mapped displays for computers as well as

many other notable accomplishments. The lab is also noted for its excellence in machine vision.

15. In 1996 I began working on a Ph.D. thesis related to display of multimedia. My Ph.D. thesis system was a special kind of display allowing one to create ultra-high resolution displays composed of multiple projectors tiled with a slight overlap so that a camera-based feedback system could create an inverse map to drive the system such that a person would only see a continuous seamless display with no bezel or overlap. The camera-based system required imaging and decoding of 2d fiducials, and thus I became an expert at machine vision for the purpose of decoding and encoding 2d fiducials such as bar codes – the optical systems involved, the systems programming, etc. Today, this technology is better known as automatic calibration for projection mapping or structured light. My experience, along with a patent I developed and licensed based on my Ph.D. thesis, were used to create a new startup company named Scalable Display Technologies that works with a variety of Pro AV display companies' products.

16. I am a named inventor on U.S. Pat. No. 6,456,339, "Super-resolution Display," which reflects my Ph.D. work.

17. In 2004, I founded Scalable Display Technologies (SDT), and I have been the President and Chairman of the company since the founding. Among its operations, SDT operates in the Audio Video domain and has licensed software and

firmware to various companies including Hitachi and NEC. I also wrote a network-synchronized media playback system involving encoding and decoding of video and audio content as well as real time recording and video capture, a product known as “ScalablePlayer.” This product was written on top of the DirectShow system from Microsoft. In conjunction with this, for some show demonstration systems, I wrote a desktop application in C# that allowed one to preview and select different inputs and outputs.

18. As part of this system I worked on several home theater systems that involved graphical user interfaces (GUIs) for displaying multimedia. These were computer systems and hardware systems that managed the input and display of content on 110 inch plus often curved screens. In these systems, GUIs managed the display of a multitude of input and output ranging from tv tuners, to cablebox input etc, to dvd and xbox360s.

19. Additionally, at SDT I have worked with most of the major video wall control manufacturers on customizing their displays. These include Jupiter Systems, RGB Spectrum Matrox, and Datapath. In addition, I helped architect and specify some special video wall GPU functions for both AMD and NVIDIA.

20. I have received additional patents, including: U.S. Pat. No. 8,817,111, “System and method of calibrating a display system free of variation in system input resolution”; U.S. Pat. No. 8,994,757, “System and method for providing improved

display quality by display adjustment and image processing using optical feedback”; U.S. Pat. No. 9,215,455, “System and method of calibrating a display system free of variation in system input resolution”; U.S. Pat. No. 9,369,683, “System and method for calibrating a display system using manual and semi-manual techniques”; and U.S. Pat. No. 9,497,447, “System and method for color and intensity calibrating of a display system for practical usage.”

21. As part of my work, I am familiar with user interfaces in digital displays as of October 2010.

22. In 2000, I started a company known as “photo.net” which was a large online photography community where I worked with many consumer electronics manufacturers in the digital camera business. There, I implemented a photo sharing system involving the delivery of multimedia content. Additionally, I worked on e-commerce capabilities that involved some product configuration options. The photo.net system includes user interfaces for sharing and displaying multimedia, as well as super high performance image encoding/decoding systems and real time delivery of high bandwidth content.

23. In 1996, I founded Flash Communications, which was focused on technology related to U.S. Pat. No. 5,943,478 and associated technology that I had developed related to pop-up two-way messaging over the Internet. I am one of the named co-inventors of U.S. Pat. No. 5,943,478, which is entitled “System for

Immediate Popup Messaging across the Internet,” which describes a two-way messaging system like AOL Instant Messenger and MIT’s Zephyr service built at Internet scale.

24. In 1998, Flash Communications was sold to Microsoft Corporation, and Flash Communications’ messaging technology was incorporated into Microsoft’s Messenger service and Microsoft Exchange 2000 Instant Messaging Server.

25. While working at Microsoft between 1999 and 2000, I implemented an XML-based protocol that formed a basis for the Extensible Messaging and Presence Protocol (XMPP), which is now an IETF standard for the Exchange Instant Messaging Server. I participated internally with the program management team on helping specify this protocol for the IETF standardization process.

26. Also while at Microsoft, I invented and was named as an inventor on other patents related to instant messaging, including: U.S. Pat. No. 6,415,318, “Inter-enterprise messaging system using bridgehead servers”; U.S. Pat. No. 6,604,133, “Inter-enterprise messaging system using bridgehead servers”; and U.S. Pat. No. 6,260,148, “Methods and systems for message forwarding and property notifications using electronic subscriptions.”

27. Between 2000 and 2004, I worked as a consultant and investor at Nexaweb Corporation, where I helped implement several two-way messaging features over HTTP.

28. I am on the advisory boards of several technology companies, including UnifySquare, which is a unified communications/real time collaboration consultancy; Paneve, which develops general purpose ASICs coupled with compiler technology; Nexaweb, which develops real time web application frameworks using HTTPS; Antix Labs, which develops compiler technology for universal gaming platform; and Permabit, which develops content addressable storage.

29. For my contributions as an inventor and entrepreneur, I have received several awards, including the Global Indus Technovator Award 2009 and Laureate of 2009 Computer World Honors Program.

III. RELEVANT LEGAL STANDARDS

A. Burden of Proof

30. I understand that Petitioner has the burden of proving unpatentability by a preponderance of the evidence. 35 U.S.C. § 316(e). Preponderance of the evidence “means the greater weight of evidence, evidence which is more convincing than the evidence which is offered in opposition to it.” *Hale v. Dep't of Transp.*, 772 F.2d 882, 885 (Fed. Cir. 1985).

B. Obviousness (35 U.S.C. § 103)

31. I also understand that a patent may be rendered “obvious” based on an alleged prior art reference or a combination of such references in view of what a person of ordinary skill in the art would understand based on his or her knowledge

and the references. I understand that a patent cannot be properly granted for subject matter that would have been obvious to a person of ordinary skill in the art at the time of the alleged invention, and that a patent claim directed to such obvious subject matter is invalid under 35 U.S.C. § 103. It is also my understanding that in assessing the obviousness of claimed subject matter one should evaluate obviousness over the prior art from the perspective of one of ordinary skill in the art at the time the invention was made (and not from the perspective of either a layman or a genius in that art).

32. I have been informed that the following factors must be evaluated to determine whether the Petitioner has met its burden of proof that a claimed invention is obvious:

1. The scope and content of the prior art relied upon by Petitioner;
2. The difference or differences, if any, between each claim of the patent and the prior art;
3. The level of ordinary skill in the art at the time the invention of the patent was made; and
4. Any objective indicia of non-obviousness, such as: (1) commercial success of an embodiment; (2) a long-felt need; (3) skepticism; (4) failure by others to find the solution provided by the claimed invention; (5) copying by others of the subject matter of the claim invention; (6) unexpected results

of the claimed invention; (7) acceptance of others and industry praise; and (8) licensing of the patents.

33. I have been informed that to prevail on obviousness the Petitioner must establish that (1) the prior art teaches or suggests each of the limitations of the claim; (2) there exists an apparent reason to combine and/or modify the prior art as proposed; and (3) a person of ordinary skill would have a reasonable expectation of success that the proposed combination and/or modification of the prior art would operate for its intended purpose.

34. I have been informed that a claim is not proved obvious merely by demonstrating that each of the elements was independently known in the prior art. I have been informed that many, if not all, inventions rely on building blocks already known, and claimed inventions almost of necessity will likely be combinations of what is already known.

35. I have been informed that it is important in the obviousness inquiry to identify whether a POSITA at the time of the invention would have motivation to combine or modify the prior art references in the manner proposed by the Petitioner so as to arrive at the claimed invention. Put another way, a finding of obviousness should be supported by an apparent reason to combine or modify the prior art references as proposed by the Petitioner.

36. I have been informed that it is important in the obviousness inquiry that it is understood how the references are combined, including how the combination of references is supposed to work. An explanation of the operation of the combined references is often a prerequisite to determining whether a POSITA would have been motivated or had a reason to make the proposed combination/modification and would have had a reasonable expectation of success.

37. In assessing obviousness, I have been instructed to consider both the ordinary creativity and common sense of the person of ordinary skill in the art. I also understand that it is normally impermissible for common sense or common knowledge to be applied to fill gaps in prior art that fails to teach or suggest a limitation of the claim. I also understand that the obviousness inquiry should guard against hindsight bias or hindsight reconstruction where after-the-fact reasoning is applied to combine prior art elements using the claim as a template, without establishing that, as of the date of the invention, there exists a motivation to combine or apparent reason to combine or modify the prior art as proposed.

38. In assessing obviousness, I have been instructed that, in order to qualify as proper prior art for an obviousness analysis, a reference must qualify as analogous art. I have been informed that a reference qualifies as analogous art with respect to the claims if it is either: (1) from the same field or endeavor as the patent; or (2) the reference is reasonably pertinent to the particular problem addressed by the

invention. I have also been informed that for a reference to be reasonably pertinent, it must logically have commended itself during the ordinary course of development to an inventor's attention in considering the problem.

39. In assessing obviousness, I have also been instructed that, as noted above, secondary considerations can often be probative evidence of non-obviousness and can serve to avoid hindsight bias. I have been instructed that secondary considerations can be sufficient to overcome a prima facie case of obviousness.

IV. LEVEL OF ORDINARY SKILL IN THE ART AND PRIORITY DATE

40. My opinions in this declaration are based on the understandings of a person of ordinary skill in the art, which I understand is sometimes referred to as an "ordinary artisan" or by the acronym "POSITA" (Person of Ordinary Skill in the Art), as of the time of the invention. For purposes of this Declaration, I have been instructed to use October 1, 2010, as the time of invention (priority date), which I understand is the date that the Petitioners are using. *See* Pet., 5.

41. I understand that the person of ordinary skill in the art is a hypothetical person who is presumed to have known the relevant art at the time of the invention. By "relevant," I mean relevant to claims 1, 3, 5, 6, 9, 15, and 20 of the '135 Patent.

42. I understand that, in assessing the level of skill of a person of ordinary skill in the art, one should consider the type of problems encountered in the art, the prior solutions to those problems found in the prior art, the rapidity with which

innovations are made, the sophistication of the technology, the level of education of active workers in the field, and my own experience working with those of skill in the art at the time of the invention.

43. In this case, Petitioners assert that a person of ordinary skill in the art as of the time of the '135 Patent “would have had an undergraduate degree in electrical engineering, computer engineering, computer science or a related field along with two years of work experience in the field of user interface technologies, including e.g., graphical user interface technologies, or a related field. More education can supplement practical experience and vice versa.” Pet., 5-6.

44. I have applied this definition in my analysis for the purposes of this declaration. I was at the time of invention, and am currently, one of more than ordinary skill in the art through my education, research, and work experience. As of the date of the invention, I was very familiar with the types of problems encountered in the field. Indeed, I am very familiar with people having this level of skill in the area of user interfaces and human-computer interaction in the field of display systems.

V. THE '135 PATENT

45. The Petition challenges claims 1-3, 5-9, 15, 16, 19, and 20 of the '135 Patent as obvious under four grounds:

- Ground 1: Claims 1, 5-6, 9, 15, and 20 as obvious over Yook;

- Ground 2: Claims 2-3, 7-8, and 19 as obvious over Yook and Bauer;
- Ground 3: Claims 1, 5-6, 9, 15, and 20 as obvious over Yook and Lee; and
- Ground 4: Claims 2, 3, 7-8, 16, and 19 as obvious over Yook, Bauer, and Lee.

See Pet., i-ii.

46. I have not been asked to opine on the validity of claims 2, 7-8, 16 and 19 under Grounds 2 and 4, nor do I have an opinion as to the validity of these claims.

A. Overview of the '135 Patent and Invention

47. The '135 Patent relates to methods for displaying information on a multi-display device. Ex. 1001, abstract, claim 1. Some multi-display device according to the invention feature an annunciator window that spans at least two displays. Ex. 1001, abstract. This annunciator window selectively presents information such as device status, connectivity, or messaging alerts. Ex. 1001, abstract.

48. The '135 Patent informs the POSITA that the term “display” refers to a portion of one or more screens used to display the output of a computer to a user. *Id.*, 4:43-44. By contrast, the term “screen,” “touch screen,” or “touchscreen” refers to a physical structure that includes one or more hardware components that provide

the device with the ability to render a user interface and/or receive user input. *Id.*, 4:10-14.

49. Figure 1 of the '135 patent illustrates an exemplary dual-screen device:

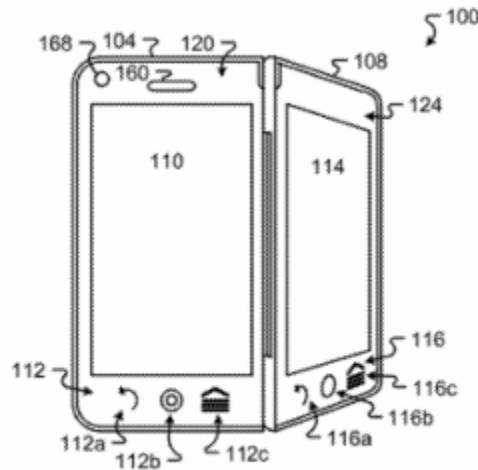


FIG. 1A

Ex. 1001, Fig. 1. In this example, the primary screen 104 includes a display 110.

The secondary screen 108 includes a display 114. Ex. 1001, Fig. 1A.

50. In some embodiments, applications are shown on both displays. For example, one application may appear on display 110 while another appears on display 114, as shown by Fig. 10A:

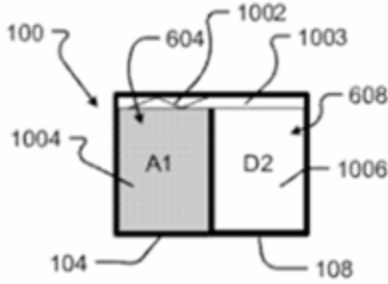


FIG. 10A

Ex. 1001, Fig. 10A.

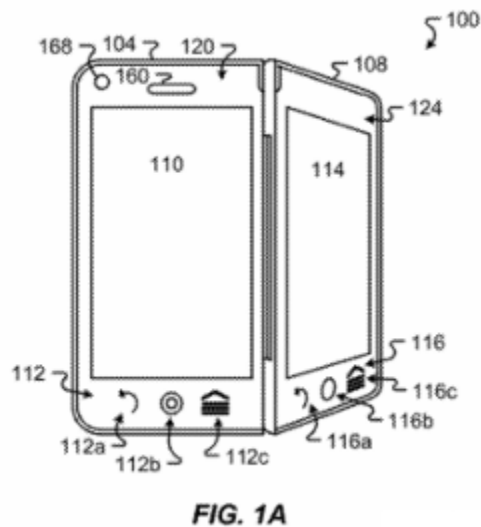
51. User gestures can trigger various display behaviors, including selecting a desktop or application to display on the first display (Ex. 1001, 17:48-67), selecting a desktop or application to display on the second display (*id.*), maximizing a desktop or application on both displays (Ex. 1001, 31:43-53), or minimizing an application displayed on both displays onto only the primary or secondary display (Ex. 1001, 31:60-67). This configuration enables users to intuitively manage multiple applications or desktops running simultaneously. Ex. 1001, abstract.

52. Traditionally, messages, alerts, and other annunciations were displayed on a single screen. Ex. 1001, 1:59-62. However, this format was not always user-friendly. Ex. 1001, 1:62-2:2. To address this, the '135 Patent introduces an annunciator window that spans both the primary and secondary screens. Ex. 1001, 2:3–17. The '135 patent outlines several benefits of this approach, including larger annunciator windows allowing for clearer message display; no requirement to abbreviate alerts, as the window spans a continuous surface across both screens, and

the ability to position the annunciator window along screen edges, which typically do not display critical application content. Ex. 1001, 2:3-17.

53. In one embodiment, longer messages can temporarily span the entire annunciator window—masking other icons—until the user dismisses the message. Ex. 1001, 26:45-50.

54. Certain dependent claims, such as claim 9, refer specifically to a “screen” instead of a “display.” Based on the disclosures of “display” and “screen” discussed earlier, a person of ordinary skill would understand that these claims contemplate annunciator windows that span multiple physical screens, as shown in Figure 1A:



Ex. 1001, Fig. 1A.

VI. CLAIM CONSTRUCTION

55. I understand that claims of the patent-at-issue in this IPR are generally interpreted according to their ordinary and customary meaning in the art taking into consideration the so-called “intrinsic evidence” of the patent consisting of (1) the claim language; (2) the specification; and (3) the prosecution history.

56. I understand that claim terms may be explicitly defined in the patent specification, or they may be implicitly defined through consistent usage in the specification. I also understand that the scope of claim terms may be limited by statements in the specification or prosecution history where the applicant clearly disavows or disclaims subject matter, acts as his/her own lexicographer or otherwise indicates the meaning of claim terms through statements made by the applicant.

57. I understand that for purposes of the institution stage, the Board did not expressly construe any claim term. Instn. Dec., 8-12. I have been informed that Patent Owner has proposed a construction for “displays information selectively” as “displays information in a way that involves intentionally choosing some information to display and not others.”

58. For the purposes of my analysis, I have applied this construction. I have been asked to opine on whether this construction is consistent with [1] how a person of ordinary skill would read the claim language and [2] the term “masking at least one icon representing the device status, connectivity status, or messaging status” in

dependent claims 3, 8, and 12. I have not otherwise been asked to opine on whether this construction is correct (such as in view of the prosecution history or extrinsic evidence) and have not formed an opinion on whether the construction is supported by the prosecution history or extrinsic evidence.

59. Except for the term “displays information selectively,” I have applied the plain and ordinary meaning of the claim terms in establishing the patentability of the claims of the ’135 Patent.

A. “[W]herein the modified display of the annunciator window displays information selectively across the annunciator window”

60. The Institution Decision states that “the language of claims 1, 6, and 10 could support Patent Owner’s interpretation that selectively displaying information can mean ‘display[ing] information in a way that involves intentionally choosing some information to display and not others.’” Instn. Dec., 9. I agree with this determination.

61. In my opinion, a person of ordinary skill reading the phrase “the modified display of the annunciator window displays information selectively across the annunciator window” would understand that the word “selectively” modifies “displays information.” Therefore, the full phrase “the modified display of the annunciator window displays information selectively across the annunciator window” refers to the selective display of information across the annunciator window. Selective display of information requires selecting information for display.

62. I therefore agree with the Board that Patent Owner’s proposed construction is a plausible reading of the claim language.

63. The Institution Decision expressed concern that “displays information selectively” may have a broader meaning based on the term “masking at least one icon representing the device status, connectivity status, or messaging status” in dependent claims 3, 8, and 12. In my opinion, the term “masking at least one icon representing the device status, connectivity status, or messaging status” in dependent claims 3, 8, and 12 has a narrower meaning than the construction of “displays information selectively” proposed by Patent Owner. Therefore, the term “masking at least one icon representing the device status, connectivity status, or messaging status” in dependent claims 3, 8, and 12 does not suggest “displays information selectively” should be read broader than proposed by Patent Owner.

64. In my opinion, dependent claims 3, 8, and 12 do not indicate that “displays information selectively” should be read broader than proposed by Patent Owner because claims 3, 8, and 12 are directed to an embodiment that is narrower than Patent Owner’s proposed construction for the independent claim. A POSITA would understand that claims 3, 8, and 12 are directed to the embodiment in col. 26 ln. 45-50:

In another aspect of the invention, it is also contemplated that a longer alert or message having greater text or data content can span across the entire annunciator window 1100, thereby temporarily masking or

covering the other icons for a period of time until the alert or message is cleared by the user.

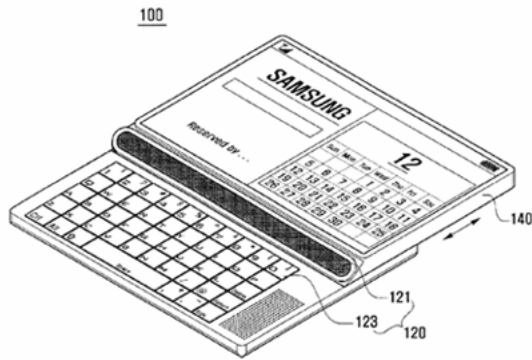
65. Here, the '135 Patent discloses an embodiment corresponding to dependent claims 3, 8, and 12 where a longer alert or message that spans across the entire annunciator window “mask[s] or cover[s] the other icons.” The word “masking” used here is consistent with the wording of dependent claims 3, 8, and 12 and refers to temporarily covering up other icons. Patent Owner’s proposed construction of “displays information selectively” is broader and encompasses both temporarily covering up icons and, for example, choosing not to display information at all.

66. Therefore, “masking” as used in claims 3, 8, and 12 is narrower than Patent Owner’s proposed construction of “displays information selectively” and does not indicate that “displays information selectively” should be construed broader than proposed by Patent Owner.

VII. SUMMARY OF THE PRINCIPLE APPLIED REFERENCES

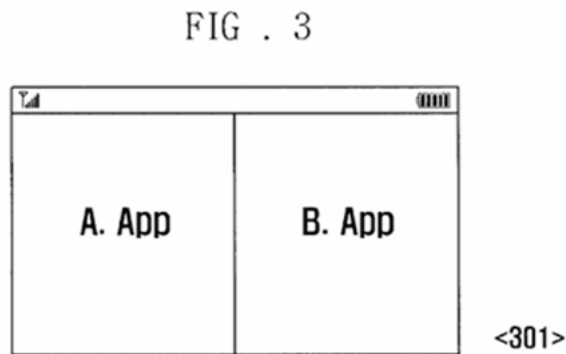
A. Yook (Ex. 1005)

67. Yook describes a single-screen mobile terminal as shown in Fig. 1:



Yook, Fig. 1.

68. A screen 140 can be divided into multiple "screen areas," as illustrated in Fig. 3:



Yook, Fig. 3.

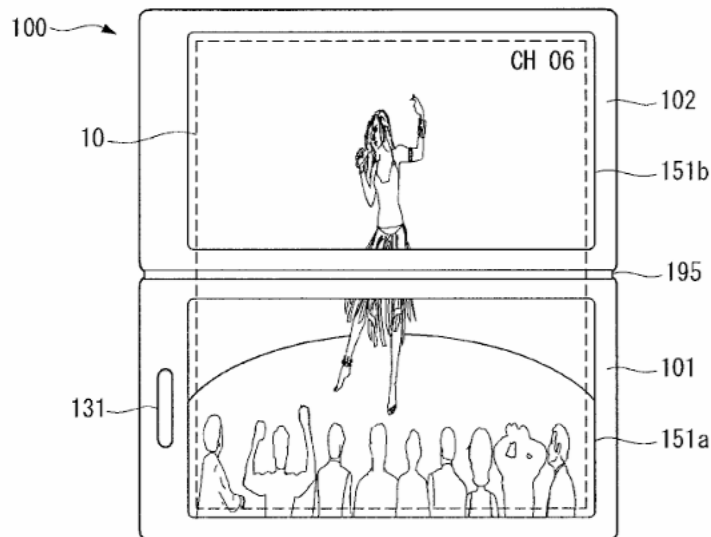
69. Fig. 3 also shows a bar at the top of the screen, spanning across the entire screen. However, Yook does not specify how the icons on this bar are selected or displayed.

70. Fig. 4 in Yook's disclosure illustrates possible functions for these divided areas. For instance, Fig. 4A shows the division of the touchscreen 140 into

two areas A and B. Yook, 44. Fig. 4B demonstrates different display options: function A may occupy the entire touchscreen 140, function C may do the same, or the screen may be divided into two areas, with function A in one and function C in the other. Yook, 46.

B. Lee (Ex. 1008)

71. Lee describes a mobile terminal 100 with a first screen 151a on a first body 101 and a second screen 151b on a second body 102, as shown in Fig. 6:



Lee, Fig. 6.

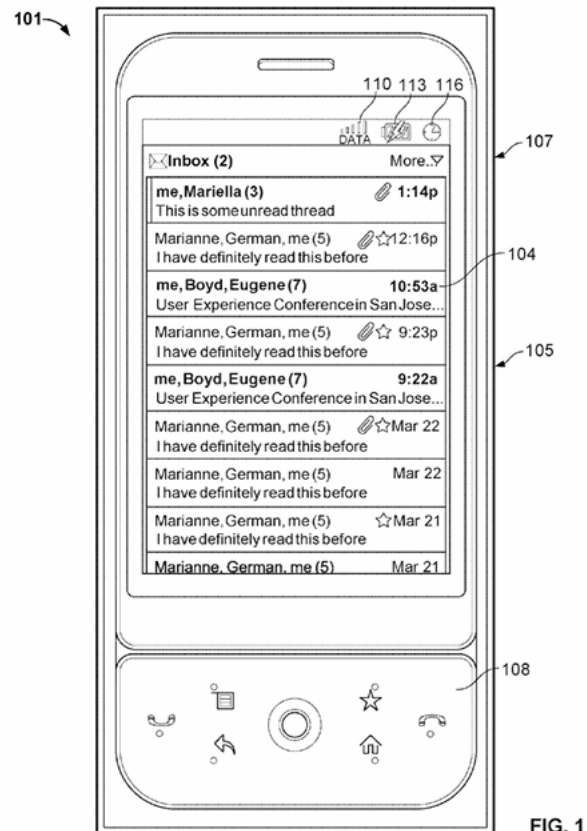
72. The terminal can display an application across both screens, treating them as a single screen. Lee, 8:46-48. Alternatively, the application can be displayed on either the first screen 151a or the second screen 151b individually. Lee, 8:37-40.

73. Notably the phone can be open or closed in “normal mode” whereby one touchscreen is off and the phone display in portrait mode. In the closed mode

the phone might be able to be held in one hand and in another with both, or sat on a table fully open.

C. Bauer (Ex. 1007)

74. Bauer describes a single-screen mobile communication device, as shown in Fig. 1:



Bauer, Fig. 1.

75. The mobile communication device can display "interactive alert information" in a "status area." Bauer, abstract. This status area may show static indicators, such as signal strength (element 110), remaining battery power (element 113), or the current time (element 116), all displayed in the status bar 107. Bauer, 13:50-57.

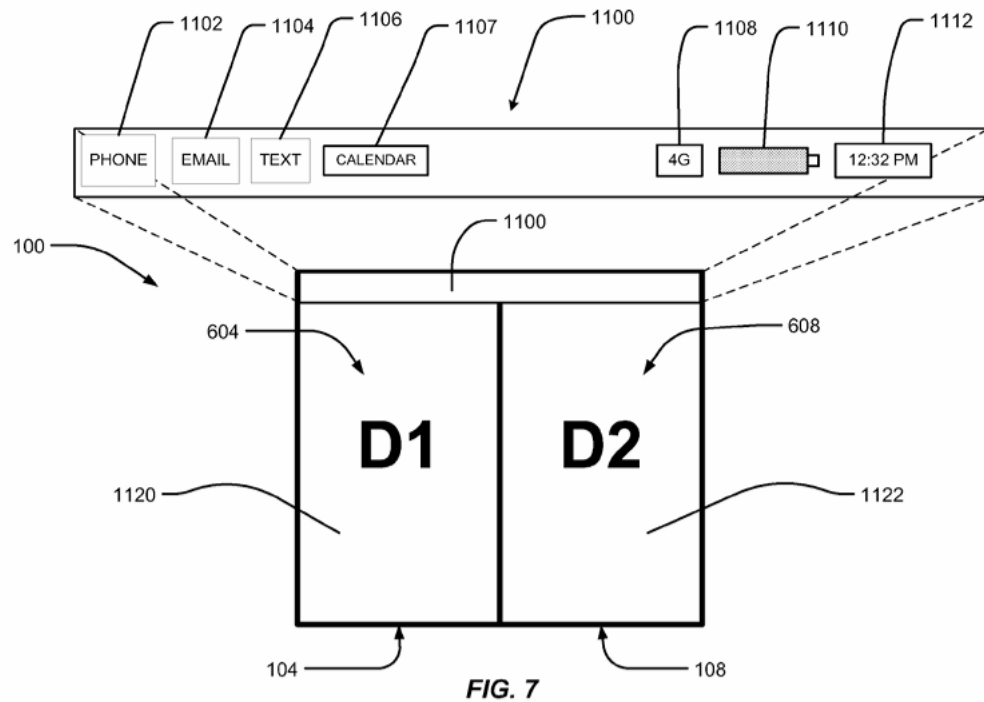
VIII. CLAIMS 1, 3, 5, 6, 9, 15, AND 20 ARE PATENTABLE OVER THE PRIOR ART

A. Yook and Lee do not suggest “the annunciator window [is displayed] across adjacent upper or lower edges of the first and second displays, wherein the first display is on a first screen of the multi-display device, and wherein the second display is on a different second screen of the multi-display device” as in claim 9

76. Claim 9 depends on independent claim 6 and further specifies that the annunciator window from claim 6 is displayed “across adjacent upper or lower edges of the first and second displays, wherein the first display is on a first screen of the multi-display device, and wherein the second display is on a different second screen of the multi-display device.” In my opinion. Yook and Lee do not suggest claim 9.

77. The '135 Patent informs the POSITA that “[t]he *term “screen” ... refers to a physical structure* that includes one or more hardware components that provide the device with the ability to render a user interface and/or receive user input.” Ex. 1001, 4:11-14. Therefore, the annunciator window in claim 9 must be displayed across the upper or lower edges of two physically distinct screens.

78. For example, the annunciator window 1100 shown in Figure 7 of the '135 Patent could be displayed across different physical screens, like screens 104 and 108 in Figure 6C of the '135 Patent:



Ex. 1001, Fig. 7.

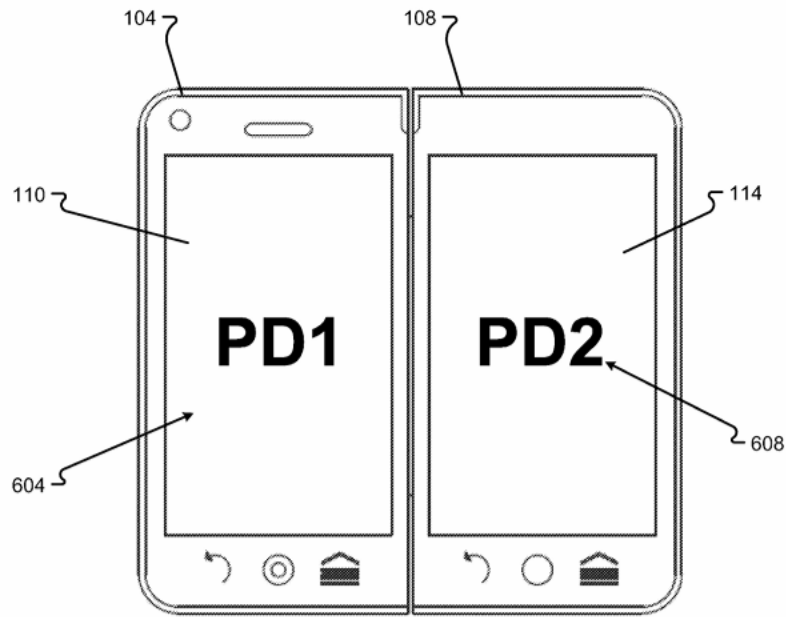


FIG. 6C

Ex. 1001, Fig. 6C.

79. For instance, the annunciator window may be displayed across the adjacent upper or lower edges of physical screens 104 and 108 in Fig. 6C as annotated:

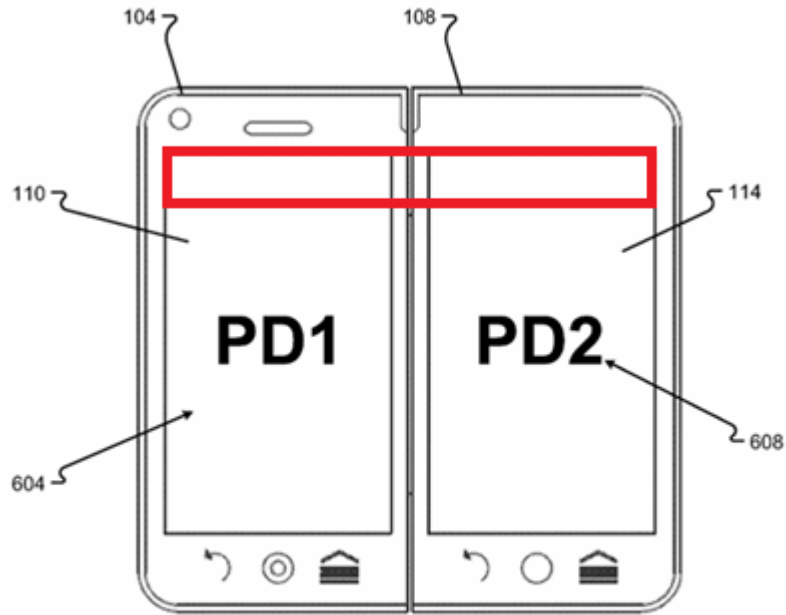
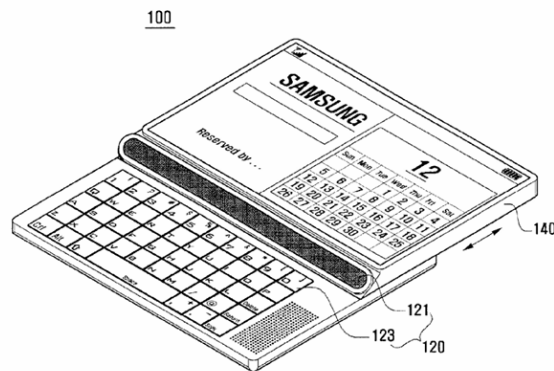


FIG. 6C

Ex. 1001, Fig. 6C (annotated).

80. Yook and Lee, however, do not suggest displaying an annunciator window across the edges of two different physical screens. Yook only discloses devices having a single physical screen. For example, the device in Yook's Figure 1 has a single screen 140:

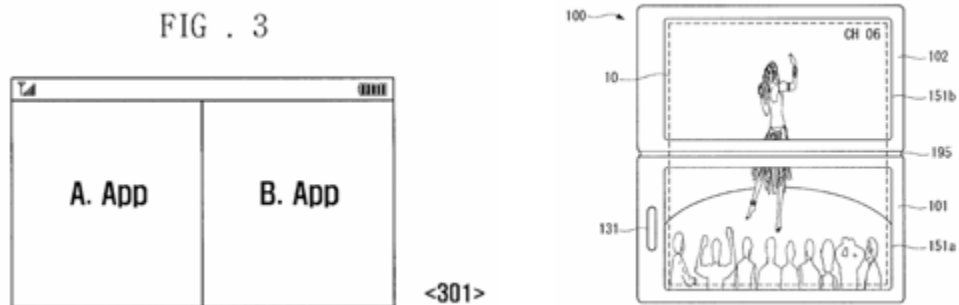


Ex. 1005, Fig. 1.

81. No embodiment in Yook is disclosed as having more than one physical screen. Since Yook only discloses a single screen, it cannot suggest to a POSITA a configuration where an annunciator window spans across the edges of two separate physical screens.

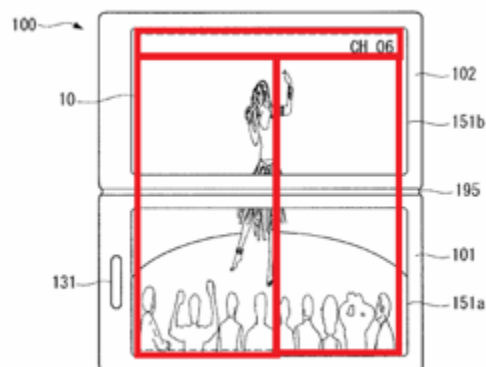
82. I understand that Petitioners allege in the alternative that a combination of Yook and Lee would make claim 9 obvious because “the combination discloses/suggests two physical screens.” Pet., 5. In my opinion, claim 9 is not obvious based on the Yook-Lee combination. There are several ways a POSITA could combine Yook and Lee, but none of them results in an annunciator window that is displayed across adjacent upper or lower edges of two different physical screens as claimed.

83. For example, if Petitioners propose that the screen areas in Yook are displayed on both of Lee's screens, a person skilled in the art would recognize that displaying Yook's screen areas on Lee's mobile terminal would result in Yook's status bar (the alleged annunciator window) appearing on only one screen, not across both. In this example, starting with Yook's Fig. 3 and Lee's Fig. 6:



Yook, Fig. 3 and Lee, Fig. 6.

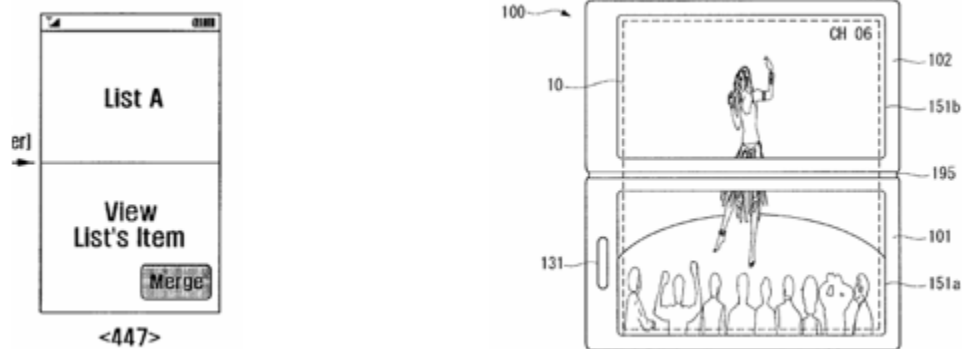
84. Displaying the screen with A.App and B.App shown in Yook's Fig. 3 on Lee's terminal with physical screens 151a and 151b would result in the following:



Lee, Fig. 6 (annotated).

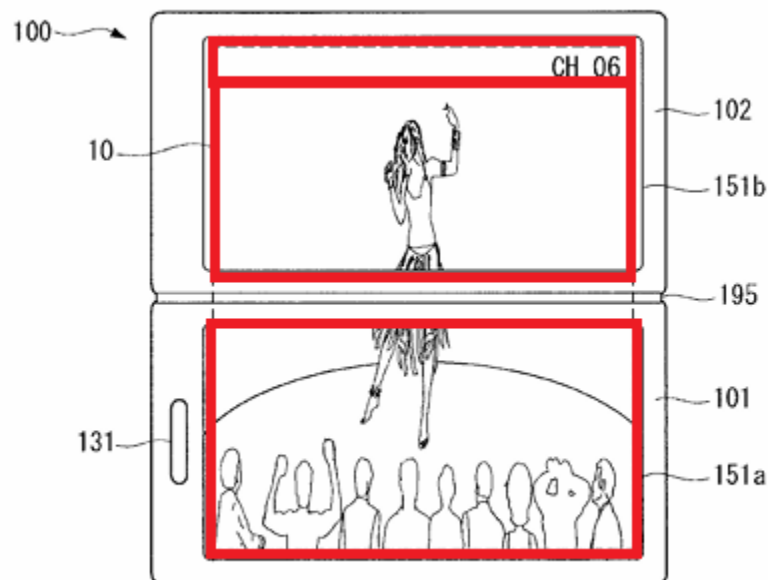
85. This combination does not show the status bar across both physical screens as required.

86. Similarly, starting with Yook's Fig. 4e and Lee's Fig. 6:



Yook, Fig. 4e and Lee, Fig. 6.

87. Displaying Yook's Fig. 4e on Lee's terminal, shown in Fig. 6, would result in the following:



Lee, Fig. 6 (annotated).

88. This combination also does not display the status bar across both physical screens as claimed. Combining Yook's single screen embodiment with Lee's device simply does not support a configuration where the status bar extends across two screens.

89. If Petitioners instead propose that each screen area from Yook is displayed on one of Lee's screens, a person skilled in the art would understand that Yook's status bar is not part of any screen area and therefore would not be displayed if each screen area is mapped to one of Lee's screens. Yook discloses in paragraph 83 that the status bar is in a "boundary region" separate from the display areas. Therefore, a person skilled in the art would not display the status bar when mapping Yook's screen areas to Lee's device.

90. For these reasons, a person skilled in the art would not understand the Yook-Lee combination to suggest an annunciator window displayed across adjacent upper or lower edges of two distinct physical screens, as required by claim 9.

B. Yook, Lee, and Bauer do not suggest "the first display is on a first screen of the multi-display device, and wherein the second display is on a different second screen of the multi-display device" and "the annunciator window to extend across a first portion of the first display and a second portion of the second display" as in claim 3

91. Claim 3 reads:

The method of claim 1, wherein modifying the display of the annunciator window further includes:

displaying the changed state across a portion of the annunciator window; and

masking at least one icon representing the device status, connectivity status, or messaging status, wherein the first display is on a first screen of the multi-display device, and wherein the second display is on a different second screen of the multi-display device.

92. Because claim 3 depends on claim 1, it also requires that "the annunciator window extends across a first portion of the first display and a second portion of the second display," as stated in claim 1. Thus, like claim 9 above, the annunciator window in claim 3 must extend across two different physical screens.

93. In my opinion, claim 3 is not obvious in view of Yook, Lee, and Bauer for the same reasons that claim 9 is not obvious in view of Yook and Lee. As explained in Section VIII.A above, Yook only discloses a single physical screen and therefore cannot suggest an annunciator window extending across two different physical screens as in claim 3.

94. Bauer – like Yook – only discloses devices having a single physical screen. For example, the device in Bauer's Figure 1 has single display screen 104:

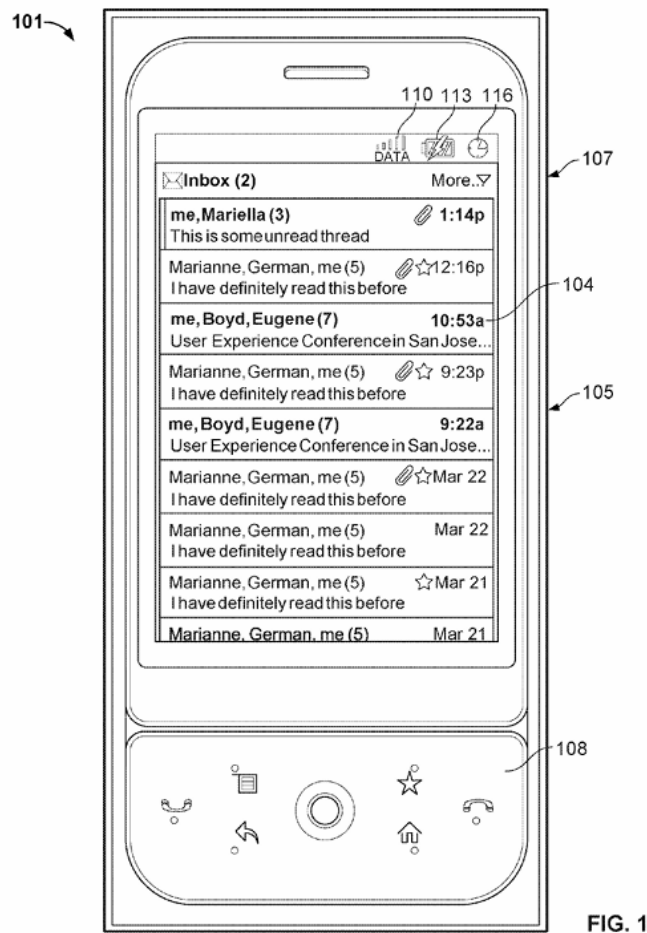


FIG. 1

Bauer, Fig. 1.

95. No embodiment of Bauer is disclosed as having more than one physical screen. Since Bauer only discloses a single physical screen, it also cannot suggest to a POSITA a configuration where an annunciator window extends across two different physical screens as in claim 3.

96. A person of ordinary skill would also not find claim 3 obvious based Yook, Lee, and Bauer for the reasons explained above. If Yook, Lee, and Bauer are combined by displaying Yook's screen areas on both of Lee's screens, a person of

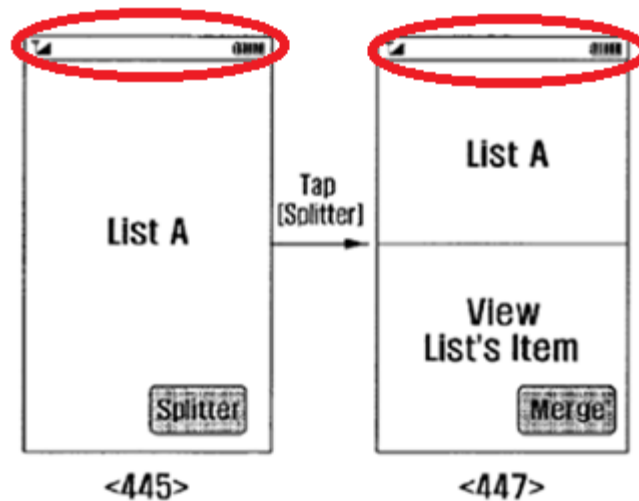
ordinary skill would understand that this would result in Yook's status bar (the alleged annunciator window) appearing on only one screen, not both. And if Yook, Lee, and Bauer are combined by displaying each of Yook's screen areas on one of Lee's screens, a person of ordinary skill would recognize that Yook's status bar is not part of any screen area and would not be displayed on either of Lee's screens, as discussed above.

97. Therefore, no combination of Yook, Lee, and Bauer suggests an annunciator window spanning two different physical screens, as claimed in claim 3.

C. Yook and Lee do not suggest “the first and second displays are both in a portrait mode” and “the annunciator window [extends] across a first portion of the first display and a second portion of the second display” as in claim 15

98. Claim 15 reads: “The device of claim 1, wherein the first and second displays are both in a portrait mode.” Since claim 15 is dependent on claim 1, it also requires that “the annunciator window extends across a first portion of the first display and a second portion of the second display,” as stated by claim 1. Together, these elements specify that an annunciator window extends across the first and second displays while the displays are both in portrait mode.

99. In my opinion, Yook does not suggest that the annunciator window extends across two displays in portrait mode. For example, Fig. 4e shows a status bar on top of only one display while in portrait mode:



Yook, Fig. 4e. Yook's paragraph 55 provide the only specification support for a portrait mode in Yook, and only refers to Fig. 4e. As a result, a person of ordinary skill in the art would not understand Yook's paragraph 55, Fig. 4e, or any other figure to suggest an annunciator window extending across two displays in portrait mode, as claimed.

100. It is also my opinion that it would not have been obvious to configure a status bar to extend across two displays while the displays are both in portrait mode. Every embodiment in Yook, as well as Lee and Bauer, shows that the status bar is oriented horizontally. In my opinion, a person of ordinary skill would understand that horizontal orientation of the status bar is common to all of these embodiments because this orientation is needed for the status bar to be readable. Orientating the status bar in a different manner to display it across two displays in

portrait mode would prevent the status bar from being read. Thus, no embodiment in Yook, Lee, or Bauer proposes a status bar that is not oriented horizontally.

101. Furthermore when considering the placement of the horizontal status bar one needs to consider the different modes and how one might hold the phones and how they are used. Lee for example only discloses a phone in portrait mode when it is in a normal mode where one touch screen is off.

102. For these reasons, Yook and Lee do not suggest an annunciator window extending across two displays in portrait mode, as in claim 15.

D. Yook and Lee do not suggest “wherein the modified display of the annunciator window displays information selectively across the annunciator window” as in claims 1 and 6

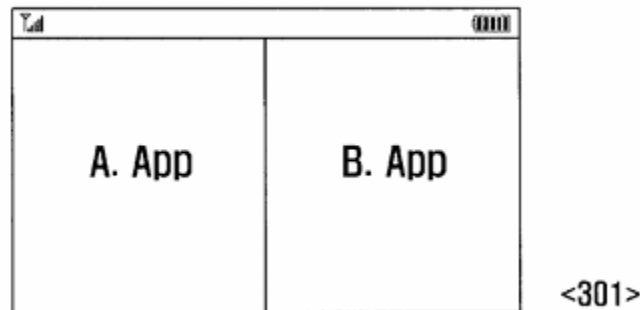
103. Claims 1 and 12 state that “the modified display of the annunciator window displays information selectively across the annunciator window.” As explained in Section VI, I have adopted patent owner’s construction of the term “displays information selectively” as “displays information in a way that involves intentionally choosing some information to display and not others.”

104. As explained in Section VI.A, it is my opinion that this construction is consistent with the claim language and the term “masking at least one icon representing the device status, connectivity status, or messaging status” in dependent claims 3, 8, and 12.

105. In my opinion, Yook and Lee do not suggest displaying information in a status bar in a way that involves intentionally choosing some information to display and not others.”

106. While a person of ordinary skill reviewing Yook may identify a status bar in, for example, Figure 3:

FIG . 3



Yook, Fig. 3. Yook does not provide any disclosure of the element in Fig. 3 that a person of ordinary skill may identify as a status bar. Yook does not describe what the bar is, what the icons on the bar are, or how the icons on the bar are selected. Because Yook does not disclose how the icons on the status bar are selected for display, Yook cannot suggest “display[ing] information [on the status bar] in a way that involves intentionally choosing some information to display and not others.”

107. Lee suffers from the same deficiency. While there are elements in the figures of Lee that a person of ordinary skill may identify as a status bar (for example, element 31 in Figure 8), Lee does not describe how icons on the bar are

selected for display. Therefore, Lee, like Yook, cannot suggest “display[ing] information [on the status bar] in a way that involves intentionally choosing some information to display and not others.”

108. For these reasons, it is my opinion that Yook and Lee do not suggest that “the modified display of the annunciator window displays information selectively across the annunciator window” as in claims 1 and 12.

IX. CONCLUSION

109. I hereby declare that all statements made herein of my own knowledge are true and all statements made herein on information and belief were and are believed by me to be true, and that all statements herein were and are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code and that any such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Respectfully submitted,



Rajeev Surati, Ph.D.

Dated: August 15, 2025