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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JOHN HENRY KRAHENBUHL,
LOUIS JEROME LUNDELL, and JIRI SLABY

Appeal 2016-003883
Application 12/756,583
Technology Center 2600

Before JONI Y. CHANG, JUSTIN T. ARBES, and
BARBARA A. BENOIT, *Administrative Patent Judges*.

BENOIT, *Administrative Patent Judge*.

DECISION ON APPEAL¹

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner’s final rejection of claims 1–20, which constitute all the claims pending in this application. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b).

We reverse.

¹ This Decision refers to Appellants’ Appeal Brief (“Br.,” filed Apr. 17, 2015), Examiner’s Answer (“Ans.,” mailed Sept. 24, 2015), and Final Office Action (“Final Act.,” mailed Nov. 19, 2014). According to Appellants, the real party in interest is Google Technology Holdings LLC. Br. 3.

The Invention

The invention relates to “using a user input attachment that can be attachable to a touch sensitive display or surface in an electronic device.” Spec. ¶ 2. In some embodiments, the user input attachment may be configured with tactile keys “to function as a keypad and/or provide tactile, mechanical feedback when a key is depressed.” *Id.* ¶ 36. According to the Specification, providing tactile feedback so that a user knows when a “button” on a touch screen display has been pressed improves the user experience. *Id.* ¶ 6. Figure 1 is set forth below.

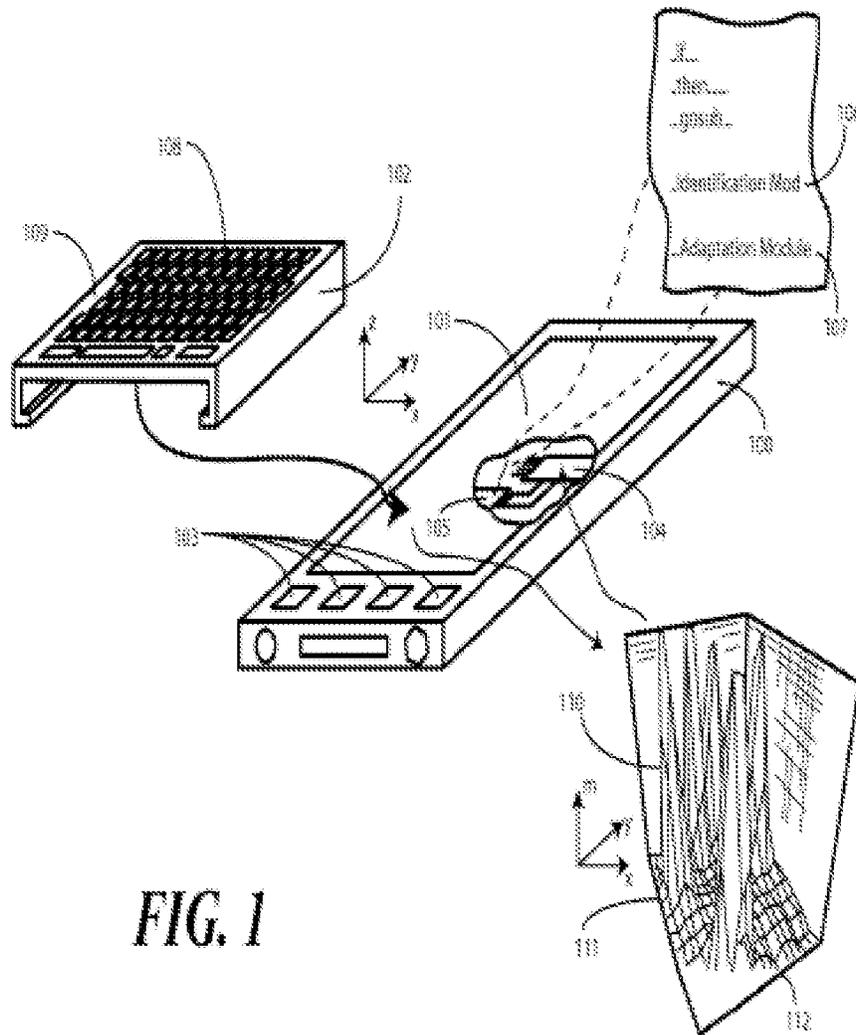


FIG. 1

Figure 1 depicts electronic device 100 and user input attachment 102, which is “configured as an accessory that a user can conveniently attach and detach from the electronic device 100.” *Id.* ¶ 55. Electronic device 100 includes touch screen display 101, which may include “an electromagnetic field sensor that is configured to detect the presence of an object—such as a user’s finger or conductive stylus—proximately located with touch sensitive display 101.” *Id.*

User input attachment 102 is a “passive” user input attachment, referring to the fact that “user input attachment 102 does not need a power source or active electronic components, such as amplifiers, power switches, or control devices, to deliver user actuation input signals to the touch sensitive display 101.” *Id.* ¶ 56. “[T]he user input attachment 102 is mechanically configured to be attachable and detachable from the touch sensitive display 101.” *Id.* ¶ 60. In addition, “the user input attachment 102 is configured to deliver a temporal signature signal 110 to the touch sensitive display 101 upon attachment.” *Id.* ¶ 61. Signature signal 110 “is a series of signal magnitudes (m-axis), detected over time, spread along a surface (x-y plane) of the touch sensitive display.” *Id.* ¶ 62. Signature signal 110 “is temporal because it changes over time,” which “can be accomplished, for example, by using a plurality of conductive pads disposed along the underside of the user input attachment 102 that interact with the electromagnetic field sensor of the touch sensitive display 101.” *Id.* ¶ 61.

Claims 1, 13, and 16, reproduced below, are independent claims and representative:

Claim 1: A passive user input attachment for an electronic device having a touch sensitive surface, the passive user input attachment comprising:

a plurality of conductive pads disposed along the passive user input attachment configured to deliver a temporal signature signal to the touch sensitive surface when the plurality of conductive pads are attached to the touch sensitive surface;

one or more user actuation components disposed along the passive user input attachment, each user actuation component being configured to cause an electromagnetic field perturbation at the touch sensitive surface upon actuation of a user actuated component; and

a mechanical coupling configured to retain the passive user input attachment against at least a portion of the touch sensitive surface.

Br. 23 (Claims App'x) (disputed limitation underlined).

Claim 13: An electronic device, comprising:

a touch sensitive surface comprising an electromagnetic field sensor;

a controller operable with the touch sensitive surface;

a passive user input attachment, attachable to and removable from the touch sensitive surface, and configured to deliver a temporal signature signal to the touch sensitive surface when attached;

an identification module, operable with the controller, and configured to identify the passive user input attachment from the temporal signature signal; and

a retention device configured to maintain a physical connection between the passive user input attachment and the touch sensitive surface when the passive user input attachment is removed from the touch sensitive surface.

Id. at 26.

Claim 16: A user input attachment for an electronic device having a touch sensitive surface and one or more of an electroluminescent layer or light emitting diode backlight, the user input attachment comprising:

a plurality of conductive pads disposed along the user input attachment configured to deliver a temporal signature signal to the touch sensitive surface when the plurality of conductive pads are attached to the touch sensitive surface;

one or more user actuation components disposed along the user input attachment, each user actuation component being configured to cause an electromagnetic field perturbation at the touch sensitive surface through one or more of the plurality of conductive pads upon actuation of the user actuation component; and

one or more light transport elements configured to pass light from the one or more of the electroluminescent layer or the light emitting diode backlight through the user input attachment.

Id. at 27.

The Prior Art

The prior art relied on in rejecting the claims on appeal is:

Liu	US Pat. Pub. No. 2002/0050983 A1	May 2, 2002
Patel	US Pat. Pub. No. 2003/0016985 A1	Jan. 23, 2003
Morag	US Pat. Pub. No. 2004/0095333 A1	May 20, 2004
Rabbitt	US Pat. Pub. No. 2005/0118705 A1	June 2, 2005
Nakamura	US Pat. Pub. No. 2006/0055314 A1	Mar. 16, 2006
Huppi	US Pat. Pub. No. 2006/0256090 A1	Nov. 16, 2006
Rimon	US Pat. Pub. No. 2009/0251434 A1	Oct. 8, 2009
Mittleman	US Pat. Pub. No. 2009/0272639 A1	Nov. 5, 2009
Hotelling	US Pat. Pub. No. 2009/0315851 A1	Dec. 24, 2009

The Rejections

Claims 1, 4–7, and 9–12 were finally rejected under 35 U.S.C.

§ 103(a) as unpatentable over Huppi, Morag, and Rabbitt. Final Act. 2.

Claims 2 and 3 were finally rejected under 35 U.S.C. § 103(a) as unpatentable over Huppi, Morag, Rabbitt, and Liu. *Id.* at 6.

Claim 8 was finally rejected under 35 U.S.C. § 103(a) as unpatentable

over Huppi, Morag, Rabbitt, and Patel. *Id.* at 7.

Claims 13–15 were finally rejected under 35 U.S.C. § 103(a) as unpatentable over Huppi, Rimon, and Hotelling. *Id.* at 8.

Claims 16, 17, 19, and 20 were finally rejected under 35 U.S.C. § 103(a) as unpatentable over Nakamura, Morag, and Rabbitt. *Id.* at 10.

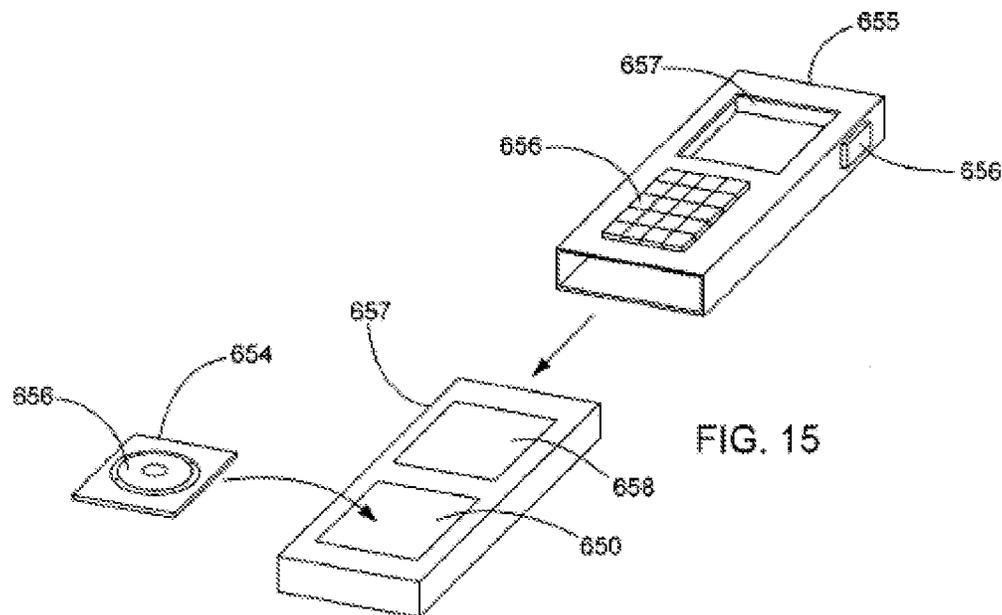
Claim 18 was finally rejected under 35 U.S.C. § 103(a) as unpatentable over Nakamura, Morag, Rabbitt, and Mittleman. *Id.* at 12.

ANALYSIS

Summary of Prior Art Disclosures

1. Huppi

Huppi is a U.S. patent application publication directed to “[m]echanical overlays for placement over touch sensing devices.” Huppi, Abstract. Huppi’s Figure 15 is set forth below.



As shown in Figure 15, “touch sensing input device 650 is built into a handheld electronic device 652.^[2]” *Id.* ¶ 101. A mechanical overlay may be “configured as a skin 655 that is slipped over a substantial portion of the handheld device 652.” *Id.* ¶ 102. “The skin 655 may include mechanical actuators 656 on any of its surfaces so as to interface with one or more touch sensing devices located on the many surfaces of the handheld device.” *Id.*

2. Morag

Morag is a U.S. patent application publication describing a “digitizer for user interaction via an object with an electronically refreshable display screen.” Morag, Abstract. Morag describes technology that relates to “a transparent digitizer with a cordless stylus or like input device.” *Id.* ¶ 2. For context, Morag indicates that touch technologies are “commonly used as input devices,” including being used for mobile devices, such as “Web-Pads, Web Tablets, PDAs, Tablet PCs and wireless Flat Screen Displays.” *Id.* ¶ 4.

3. Rabbitt

Rabbitt is a U.S. patent application publication titled “Electrical Detectors for Microanalysis” and describes techniques “for performing microanalysis of particles using a microelectrical-mechanical system (MEMS) chip to electrically interrogate the particles.” Rabbit, Abstract, (54). Rabbitt indicates that the described techniques “improve upon traditional methods for studying single cell electrophysiology” in several respects. *Id.* ¶ 13.

² Element 652 (handheld electronic device) is not labelled in Figure 15.

Figure 1 is set forth below.

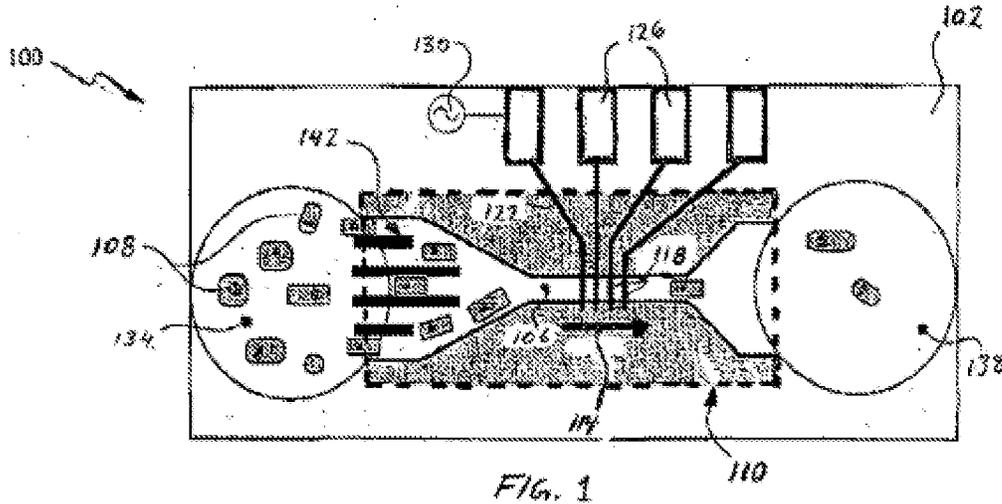


Figure 1 illustrates particle detector 100 “structured to operate as a microelectric impedance analyzer, and includes a microelectro-mechanical system (MEMS) chip 102.” *Id.* ¶ 46. “Chip 102 may be characterized as a microfabricated electric impedance-based flow chip.” *Id.* MEMS chip 102 “includes a microchannel 106 structure to provide flow of fluid and fluid-entrained particles 108, through an interrogation zone generally indicated at 110.” *Id.* ¶ 47. Rabbitt describes an embodiment in which blood cells are analyzed. *Id.* ¶ 48.

MEMS chip 102 also includes electrodes 118 disposed to transmit electrical signals along microchannel 106. *Id.* ¶ 49. Electrically conductive lead elements 122 “are arranged individually to place . . . electrode 118 into electrical communication with a corresponding remote electrical contact pad 126.” *Id.*

Rabbitt indicates that “[d]ifferent electrical interrogation signals can be used . . . to help distinguish between cell types, structure and state.” *Id.* ¶ 60. In one example, “voltages and currents between electrodes are used

to [form] a spatial ‘image’ of the cell to augment the temporal signature.” *Id.* In this example, “the system would generate spatial images of the electrical properties of cells at subcellular resolution—images that would change over time as the electrical properties of the cell membranes and/or constituents change with stimuli.” *Id.* Rabbitt further explains that, “because white blood cells (WBC)[,] red blood cells (RBC) and platelets can each be characterized by the dielectric properties of its cellular media . . . [and] cellular membrane,” among other elements, the system “provide[s] an effective way to characterize major components of whole blood based on the electrical properties of its cellular structure.” *Id.*

Furthermore, Rabbitt’s Figure 4 illustrates remote contact pads and is set forth below.

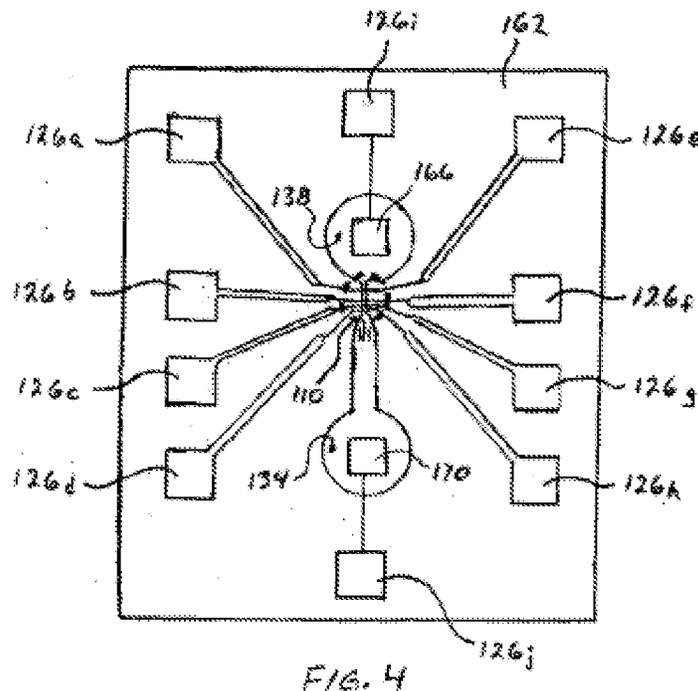
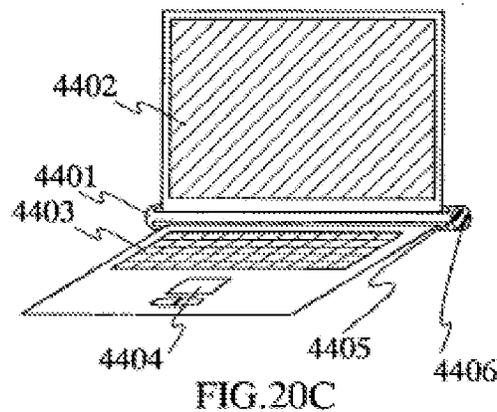


Figure 4 shows “an alternative configuration disposing eight electrodes 118 in the interrogation zone 110.” *Id.* ¶ 63. Rabbitt’s Figure 4

illustrates individual electrodes 118 (not shown) in the interrogation zone 110 “are in electrical communication with individual remote contact pads 126a-h.” *Id.*

4. Nakamura

Nakamura is a U.S. patent application publication directed to techniques for manufacturing display devices. Nakamura, Abstract, ¶ 2. Nakamura describes display devices using light emitting elements, which do not need backlights required by liquid crystal display devices. *Id.* ¶ 4. Figure 20C is set forth below.



Nakamura’s Figure 20C shows a computer having display portion 4402, keyboard 4403, and touch-sensitive pad 4404, among other components. *Id.* ¶ 208.

Nakamura's Figure 18 is set forth below.

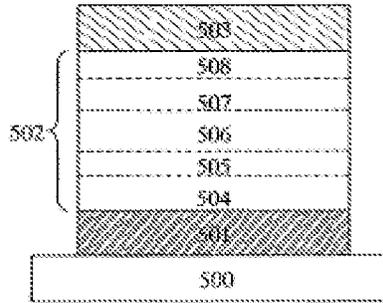


FIG.18

Figure 18 depicts a structure of a light emitting element. *Id.* ¶ 178. As shown, the structure includes “a first electrode 501 formed over a substrate 500, an electroluminescent layer 502 formed on the first electrode 501, and a second electrode 503 formed on the electroluminescent layer 502.” *Id.* ¶ 179.

Rejections of Claims 1–12

Claims 2–12 depend directly or indirectly from independent claim 1. Claims 1, 4–7, and 9–12 were finally rejected as unpatentable over Huppi, Morag, and Rabbitt; claims 2 and 3 were finally rejected as unpatentable over Huppi, Morag, Rabbitt, and Liu; and claim 8 was finally rejected as unpatentable over Huppi, Morag, Rabbitt, and Patel. Final Act. 2, 6, 7.

Claim 1 is directed to “[a] user input attachment for an electronic device having a touch sensitive surface.” Br. 23 (Claims App’x). Among other limitations, claim 1 requires the passive user input attachment to include:

a plurality of conductive pads disposed along the passive user input attachment configured to deliver a temporal signature signal to the touch sensitive surface when the plurality of conductive pads are attached to the touch sensitive surface.

Id. In other words, the claim requires the conductive pads to be “disposed along the passive user input attachment.” The claim also requires the conductive pads to be “configured to deliver a temporal signature signal” to a particular element—“the touch sensitive surface”—under a particular condition—“when the plurality of conductive pads are attached to the touch sensitive surface.”

In concluding that the user input attachment recited in claim 1 would have been obvious over Huppi, Morag, and Rabbitt, the Examiner relies on Huppi’s skin 655, which is slipped over a handheld electronic device having touch sensitive service 650 (¶¶ 101–102, Fig. 15), as conveying to one of ordinary skill in the art the recited passive user input attachment. Final Act. 2–3; Ans. 14. The Examiner relies on Rabbitt’s conductive pads 126 (¶¶ 50, 67, Fig. 4) as being configured to deliver a temporal signature signal (¶ 60). *Id.* at 3–4; Ans. 14. The Examiner further relies on Morag’s touch sensitive surface (¶ 4) and concludes that “it would [have been] obvious to attach the conductive pads [of Rabbitt] to the touch sensitive surface taught by Morag.” Ans. 14; *see* Final Act. 4. The Examiner also concludes that “it would [have been] obvious to deliver [Rabbitt’s] temporal signature to the touch sensitive surface taught by Morag.” Ans. 14; *see* Final Act. 4.

In sum, the Examiner acknowledges that the combination of Huppi and Morag “does not teach . . . conductive pads configured to deliver a temporal signature signal to the touch sensitive surface when the plurality of conductive pads are attached to the touch sensitive surface.” Final Act. 3. For this limitation, the Examiner turns to Rabbitt’s conductive pads

configured to deliver a temporal signature signal ([0060]) to the touch sensitive surface (please note that it would be obvious to deliver the temporal signature to the touch sensitive surface

taught by Morag above (see [0004])) when the plurality of conductive pads (fig. 4 [126]) are attached to the touch sensitive surface (please note that it would obvious to attach the conductive pads to the touch sensitive surface taught by Morag above (see [0004])).

Id. at 3–4; *see* Ans. 14.

Appellants contend that the Examiner’s reason as to why one of ordinary skill in the art would have combined the teachings of Huppi, Morag, and Rabbitt in the manner claimed is insufficient. Br. 7–10.

First, we agree with Appellants (*id.* at 7–8) that the record does not contain sufficient evidence or articulated reasoning by the Examiner as to why a person of ordinary skill in the art would have combined the teachings of Huppi, Morag, and Rabbitt to achieve the recited conductive pads positioned as required by the claim—“disposed along the passive user input attachment”—or to be “configured to deliver a temporal signature signal” to a particular element—“the touch sensitive surface”—under a particular condition—“when the plurality of conductive pads are attached to the touch sensitive surface.” *See KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. 398, 418 (2007) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness” (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (alteration in original))).

For example, there is insufficient reasoning as to why one of ordinary skill in the art would have found it obvious to attach Rabbitt’s remote electrical contact pads that provide enhanced structure operable to establish a connection for electrical communication between a source and an electrode (¶ 50) to Morag’s touch sensitive surface (Ans. 14; Final Act. 4). The

Examiner's parenthetical conclusion is conclusory and, therefore, insufficient. Final Act. 4 (“(please note that it would [have been] obvious to attach the conductive pads to the touch sensitive surface taught by Morag above (see [0004]))”). Morag's paragraph four, cited by the Examiner, indicates that touch technologies are commonly used as input devices for a variety of products, but this does not explain why one of ordinary skill in the art would have attached Rabbitt's contact pads to Morag's touch sensitive surface.

Similarly, there also is insufficient reasoning as to why one of ordinary skill in the art would have found it “obvious to deliver [Rabbitt's] temporal signature to the touch sensitive surface taught by Morag.” Ans. 14; *see* Final Act. 4. We recognize that Rabbitt uses the term “temporal signature” in the context of distinguishing cell types, structure, and state and, in one embodiment, Rabbitt describes “voltages and currents between electrodes [being] used to [form] a spatial ‘image’ of the cell to augment the temporal signature” (¶ 60). The Examiner's parenthetical conclusion that “it would [have been] obvious to deliver [Rabbitt's] temporal signature to the touch sensitive surface taught by Morag” (Ans. 14) does not explain why one of ordinary skill in the art would have had a reason to make the combination of the prior art to arrive at the claimed invention. *See Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1073 (Fed. Cir. 2015) (“[O]bviousness concerns whether a skilled artisan not only could have made but would have been motivated to make the combinations or modifications of prior art to arrive at the claimed invention.”).

Nor does the Examiner explain sufficiently how the combination of references would have conveyed to one of ordinary skill in the art

conductive pads configured to deliver a temporal signature signal to the touch sensitive surface under the particular condition required by the claim—“when the plurality of conductive pads are attached to the touch sensitive surface.” Further explanation is needed as to how Rabbitt’s contact pads, Rabbitt’s temporal signature, Morag’s touch sensitive screen, and Huppi’s mechanical coupling would have been combined to achieve the conductive pads required by the claim.

Second, we turn to the Examiner’s reason that one of ordinary skill in the art would have combined the references in the manner claimed “so the system would generate spatial images of the electrical properties of cells at subcellular resolution.” Final Act. 4 (citing Rabbitt ¶ 60). More specifically, the Examiner concludes that

it would have been obvious to [one of] ordinary skill in the art at the time the invention have been made to combine Huppi as modified by Morag’s [m]echanical overlay with the teaching of Rabbitt’s touch pads to deliver temporal signature, so the system would generate spatial images of the electrical properties of cells at subcellular resolution (see Rabbitt [0060]).

Id. Appellants contend that the Examiner’s stated motivation for combining the three references to arrive at the claimed invention—to “generate spatial images of the electrical properties of cells at subcellular resolution”—does not provide a sufficient articulated reason for the combination. Br. 9–10.

On the record before us, we agree with Appellants. Beneficial spatial imaging of electrical properties of cells, without further explanation, is insufficient to explain why one of ordinary skill in the art would have combined (i) Huppi’s skin 655, which is slipped over a handheld electronic device having a touch sensitive service 650 (¶¶ 101–102, Fig. 15), (ii) Rabbitt’s conductive pads 126 (¶¶ 50, 67, Fig. 4), (iii) Rabbitt’s temporal

signature signal (¶ 60), and (iv) Morag's touch sensitive surface (¶ 4) in the manner required by claim 1. Adequate explanation as to why one of ordinary skill in the art would have combined the references to produce the claimed invention guards against impermissible hindsight reconstruction of references. *Cf. KSR*, 550 U.S. at 421.

For these reasons, we conclude that the Examiner has not provided sufficient evidence or articulated reasoning why one of ordinary skill in the art would have combined the references in the manner proposed by the Examiner. Accordingly, the Examiner has not established that independent claim 1 or its dependent claims 2–12 would have been obvious.

Rejection of Claims 16–20

Claims 17–20 depend directly or indirectly from independent claim 16. Claims 16, 17, 19, and 20 were finally rejected under 35 U.S.C. § 103(a) as unpatentable over Nakamura, Morag, and Rabbitt. Final Act. 10. Claim 18 was finally rejected under 35 U.S.C. § 103(a) as unpatentable over Nakamura, Morag, Rabbitt, and Mittleman. *Id.* at 12.

Like independent claim 1, independent claim 16 recites “a plurality of conductive pads disposed along the user input attachment configured to deliver a temporal signature signal to the touch sensitive surface when the plurality of conductive pads are attached to the touch sensitive surface.” Br. 27 (Claims App'x). In determining claim 16 would have been obvious, the Examiner again relies on Rabbitt's conductive pads for this limitation. Final Act. 11; *see id.* at 3–4 (response to arguments). After acknowledging that the combination of Nakamura and Morag does not teach the conductive pad limitation, the Examiner indicates:

However, Rabbitt teaches wherein said a plurality of conductive pads disposed along the user input attachment ([0050], fig. 4 [126]) configured to deliver a temporal signature signal ([0060]) to the touch sensitive surface when the plurality of conductive pads are attached to the touch sensitive surface ([0060]); Rabbitt also teaches wherein said through one or more of the plurality of conductive pads (Rabbitt [0050]) upon actuation of the user actuation component ([0050], fig. 4 [126]).

Final Act. 11; *see id.* at 3–4 (citing Rabbitt ¶ 60, Fig. 4 (element 126));
Ans. 14 (citing Rabbitt ¶¶ 50, 60, 67, Fig. 4 (element 126)).

Thus, regarding the conductive pads recited in claim 16, the Examiner relies on the same teachings in Rabbitt for the conductive pads recited in claim 1. *Compare* Final Act. 3–4 (regarding claim 1), *with id.* at 11 (regarding claim 16); *see, e.g.*, Ans. 18 (responding to Appellants’ arguments for the conductive pad limitation in claim 16 by referring to the Examiner’s response with respect to claim 1). Regarding a reason to combine Rabbitt with Nakamura and Morag, the Examiner again relies on Rabbitt’s teaching of enhanced images of the electrical properties of cells. Final Act. 11 (contending, without further explanation, that it would have been obvious “to combine Nakamura as modified by Morag[’s] display device with the teaching of Rabbitt’s conductive pads to conduct temporal signals, so the system would generate spatial images of the electrical properties of cells at subcellular resolution (see Rabbitt [0060]).”).

Appellants contend that this reason is insufficient to support a finding of obviousness. Br. 19–20. Although the Examiner responds to many of Appellants’ other arguments, the Examiner does not provide a response regarding Appellants’ contention that generating spatial images of cells is insufficient to support a conclusion of obviousness. *See, e.g.*, Final Act. 21–

22; Ans. 13–14 (regarding claim 1), 18 (addressing claim 16 argument by citing Answer’s response in claim 1).

For the reasons discussed previously with respect to claim 1, we agree with Appellants and, therefore, conclude that the Examiner has not provided sufficient evidence or articulated reasoning why one of ordinary skill in the art would have combined the references in the manner proposed.

Accordingly, the Examiner has not established that independent claim 16 or its dependent claims 17–20 would have been obvious.

Rejection of Claims 13–15

Claims 13–15 were finally rejected under 35 U.S.C. § 103(a) as unpatentable over Huppi, Rimon, and Hotelling. Final Act. 8. Independent claim 13, from which claims 14 and 15 depend, is directed to an electronic device that includes “a passive user input attachment, attachable to and removable from the touch sensitive surface, and configured to deliver a temporal signature signal to the touch sensitive surface when attached.” Br. 26 (Claims App’x).

The Examiner acknowledges that the combination of Huppi and Rimon does not teach “a passive user input attachment, attachable to and removable from the touch sensitive surface, and configured to deliver a temporal signature signal to the touch sensitive surface when attached.” Final Act. 9. For this limitation, the Examiner relies on Hotelling:

However, Hotelling teaches . . . a passive user input attachment, (fig. 3 [70]), attachable to and removable from the touch sensitive surface (fig. 3 [70]), and configured to deliver a temporal signature signal to the touch sensitive surface when attached ([0034]).

Id. Of particular relevance, the Examiner finds that element 70 of Hotelling’s Figure 3 would have conveyed to one of ordinary skill in the art both the recited passive user input attachment and the recited touch sensitive surface. *Id.* Appellants contend that the Examiner’s finding is in error. Br. 15 (contending that the Examiner’s position is based on “element 70 of Hotelling [being] both a passive user attachment and a touch sensitive surface”).

We agree with Appellants. The plain language of the claim requires both a passive user input attachment and a touch sensitive surface. First, the plain language of the claim requires the passive user input attachment be “attachable to and removable from the touch sensitive surface.” Second, the plain language of the claim requires the passive user input attachment be configured to deliver a particular type of signal “to the touch sensitive surface when attached.” Furthermore, the Specification depicts passive user input attachment 102 as a separate element from touch sensitive display 101 in Figure 1. Spec., Fig. 1, ¶ 56 (explaining user input attachment 102 is a passive user input attachment). The Specification also describes the illustrative embodiment of Figure 1 as showing passive user input attachment 102 as being “mechanically configured to be attachable and detachable from the touch sensitive display 101.” *Id.* ¶ 60. Thus, Hotelling’s touch screen element 70 cannot be both the recited passive user input attachment and the recited touch sensitive surface as required by the claim.

In response to Appellants’ contentions that element 70 of Hotelling could not correspond both to the recited passive user attachment and the

recited touch sensitive surface, the Examiner further explained that Hotelling's paragraph thirty-four

describes that touch screen 70 is a transparent panel that is positioned in front of the display device 68, and may be integrated with the display device 68 or it may be a separate component.[] Therefore, touchscreen 70 is attachable or removable . . . since [t]he touch panel is positioned in front of a display screen so that the touch sensitive surface covers the viewable area of the display screen (see Hotelling [0003]).

Final Act. 19; *see* Ans. 17 (indicating "that [0034] of Hotelling describes that touch screen 70 is a transparent panel that is positioned in front of the display device 68, and may be integrated with the display device 68 or it may be a separate component[]. Therefore, touchscreen 70 is attachable or removable . . . since [t]he touch panel is positioned in front of a display screen so that the touch sensitive surface covers the viewable area of the display screen (see Hotelling [0003]).").

We agree with the Examiner that Hotelling teaches, in paragraphs thirty-four and three, that the touch screen is positioned in front of the display device. We also agree with the Examiner that Hotelling's paragraph thirty-four teaches that touch screen 70 may be separate from display device 68 and, therefore, would have at least suggested to one of ordinary skill in the art that touch screen 70 is both attachable and removable.

The Examiner, however, does not address how Hotelling's description of touch screen 70 also would have conveyed to one of ordinary skill in the art the claim requirement of "a passive user input attachment, attachable to and removable *from the touch sensitive surface, and configured to deliver a temporal signature signal to the touch sensitive surface when attached.*" *See*

Final Act. 19 (emphasis added). That touch screen 70 is separate from the display device does not, on its face, address how Hotelling’s description of touch screen 70 would have conveyed to one of ordinary skill in the art both the recited passive user attachment and the recited touch sensitive surface in the manner required by claim 13 (i.e., two elements where one of the elements is configured in a particular manner—to “deliver a temporal signature signal” to the other element).

For these reasons, we conclude that the Examiner has not provided sufficient evidence or reasoning to support a finding that Hotelling would have conveyed to one of ordinary skill in the art the passive user input attachment and touch sensitive surface recited in independent claim 13. Accordingly, the Examiner has not established that independent claim 13 or its dependent claims 14 and 15 would have been obvious.

CONCLUSION

Appellants have shown error in the final rejection of (i) claims 1, 4–7, and 9–12 as obvious over Huppi, Morag, and Rabbitt, (ii) claims 2 and 3 as obvious over Huppi, Morag, Rabbitt, and Liu, (iii) claim 8 as obvious over Huppi, Morag, Rabbitt, and Patel, (iv) claims 13–15 as obvious over Huppi, Rimon, and Hotelling, (v) claims 16, 17, 19, and 20 as obvious over Nakamura, Morag, and Rabbitt, and (vi) claim 18 as obvious over Nakamura, Morag, Rabbitt, and Mittleman.

DECISION

The rejections of (i) claims 1, 4–7, and 9–12 as obvious over Huppi, Morag, and Rabbitt, (ii) claims 2 and 3 as obvious over Huppi, Morag,

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Rabbitt, and Liu, (iii) claim 8 as obvious over Huppi, Morag, Rabbitt, and Patel, (iv) claims 13–15 as obvious over Huppi, Rimon, and Hotelling, (v) claims 16, 17, 19, and 20 as obvious over Nakamura, Morag, and Rabbitt, and (vi) claim 18 as obvious over Nakamura, Morag, Rabbitt, and Mittleman are *reversed*.

REVERSED