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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte RACHID M. ALAMEH, PATRICK J. CAUWELS, and PAUL
STEUER

Appeal 2018-004681
Application 14/595,261
Technology Center 2600

Before MAHSHID D. SAADAT, ELENI MANTIS MERCADER, and
SCOTT E. BAIN, *Administrative Patent Judges*.

MANTIS MERCADER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the
Examiner’s decision to reject claims 1–20. *See* Non-Final Act. 1. We have
jurisdiction under 35 U.S.C. § 6(b).

We Affirm.

¹ We use the word Appellant to refer to “applicant” as defined in 37 C.F.R.
§ 1.42 (a) (2017). Appellant identifies the real party in interest as Motorola
Mobility LLC. Appeal Br. 1.

CLAIMED SUBJECT MATTER

The claims are directed to a portable electronic device with dual, diagonal proximity sensors and mode switching functionality. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. An electronic device, comprising:
 - a housing;
 - a user interface;
 - one or more processors operable with the user interface;
 - at least one proximity sensor component, disposed behind a grille defining one or more reception beams in which infrared emissions can be received, and operable with the one or more processors and comprising an infrared signal receiver to receive an infrared emission from an object external to the housing; and
 - the one or more processors operable to actuate one or more user interface devices when the infrared signal receiver receives the infrared emission from the object.

REFERENCES

The prior art relied upon by the Examiner is:

Name	Reference	Date
Fadell	US 7,714,265 B2	May 11, 2010
Watanabe	US 2008/0185485 A1	Aug. 7, 2008
Suggs	US 2014/0075230 A1	Mar. 13, 2014

REJECTIONS

Claims 1, 3, 4, 6–8, 10, 12–17, 19, and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Suggs in view of Watanabe.

Claims 2, 5, 9, 11, and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Suggs in view of Watanabe and Fadell.

OPINION

Claims 1, 3, 4, 6-8, 10, 12-17, 19, and 20 stand rejected under 35 U.S.C. § 103 as being unpatentable over Suggs in view of Watanabe

Appellant argues that Suggs and Watanabe either alone or in combination do not teach the limitation of “one proximity sensor component, disposed behind a grille” as recited in independent claim 1 and similarly recited in claim 14. Appeal Br. 11–16. In particular, Appellant argues that Watanabe teaches nothing more than a large grille net placed over various elements including an “infrared light receiving portion 80” for the purpose of “preventing dust.” See Appeal Br. 14–15 (citing Watanabe paras. 29 and 31). According to Appellant, the net fails to define a plurality of reception beams through which infrared emissions are received. *Id.* at 15. Appellant asserts that a large, porous, dust protection net fails to provide any reception beams enabling proximity sensor components to determine along *which* reception beam each emission is received so that the proximity sensor components can detect motion. *Id.*

We do not agree with Appellant. Claim 1 recites the limitation of “at least one proximity sensor component, disposed behind a grille defining one or more reception beams in which infrared emissions can be received.” We agree with the Examiner’s finding that Suggs teaches a proximity sensor which can be an infrared sensor. See Ans. 7 (citing para. 36 and Non-Final Act. 4 (citing para. 12)). We further agree with the Examiner’s finding that Watanabe’s Figure 3 shows the IR light receiving portion (80) disposed behind the grille net such that there is an overlapping physical presence of the grille net in front of the IR light receiving portion. Ans. 6. Therefore, we agree with the Examiner’s finding that the physical presence of the grille net of Watanabe in front of an IR receiver necessarily results in incoming

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signals being divided into beams by the solid portions of the grille net in front of the receiver. *Id.* Accordingly, we also agree with the Examiner that the combination of Suggs and Watanabe teaches or suggests the limitation of “at least one proximity sensor component, disposed behind a grille defining one or more reception beams in which infrared emissions can be received.”

Appellant further argues that the Examiner’s reason to combine “for improved lifetime and increased reliability” is a conclusory statement. Appeal Br. 12–14. In particular, Appellant argues that it is unclear how adding the large, porous, expansive, dust prevention net from Watanabe’s display rack to Suggs’ “personal computer or a mobile computing device” would be beneficial, would either improve lifetime or increase reliability, or how the same could be mechanically achieved without disrupting the desired portability and compactness occurring in the primary reference. *Id.* at 14.

The Examiner finds, and we agree, that when combining a grille, as taught by Watanabe, with Suggs’ proximity sensor, the grille would inherently provide an added layer of physical protection. Ans. 4. We further agree with the Examiner that this added protective layer improves the lifetime of the device and increases reliability of the proximity sensing since the proximity sensing component is less likely to be tampered with or damaged in operation of the device which would impact the functionality of the sensing. *Id.* In this case, the rationale provided by the Examiner is more than just a mere conclusory statement. In our view, such a statement suffices as an articulated reason with a rational underpinning to support the proffered combination.

With respect to claim 4, Appellant argues that while Suggs teaches a proximity sensor and an intent to use a sensor, the reference makes clear that these devices are always ON. Appeal Br. 16 (citing paras. 12–15).

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Appellant asserts that when Suggs is combined with Watanabe, there is no actuation as set forth in Appellant's claim 4. *Id.*

We do not agree with Appellant. Claim 4 recites "the one or more user interface devices comprising a motion detector" referring back to claim's 1 limitation of "the one or more processors operable *to actuate one or more user interface devices* when the infrared signal receiver receives the infrared emission from the object" (emphasis added). *See* claims 1 and 4. Thus, Appellant's reference to the proximity sensor and the intent to use a sensor as being always "ON" is misguided because according to Appellant's claimed limitations what is being activated is one or more user interfaces—not the sensors.

Furthermore, we agree with the Examiner's finding that Suggs teaches the one or more user interface devices comprising a motion detector. *See* Non-Final Act. 5 (citing para. 27).

Appellant further argues that the combination of Suggs and Watanabe fails to teach either prioritization or actuating different user interface devices as a function of object distance from the electronic device, as required by claim 7. Appeal Br. 17.

We do not agree. We agree with the Examiner's finding that Suggs teaches a motion detector as a user interface where the motion detector is active after a first proximity detection (para. 27) and activating a second user interface when an object is a second distance from the housing, the second distance less than the first distance (para. 20). Non-Final Act. 6. We further agree with the Examiner that it would have been obvious to one of ordinary skill in the art to modify the teaching of Suggs and Watanabe to prioritize user interface devices, by actuating a first user interface device when the object is a first distance from the housing, and actuating a second user

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interface device when the object is a second distance from the housing, the second distance less than the first distance as taught by Suggs because controlling an electronic device based on the intent of a user may result in a better perception of a user experience with the electronic device (para. 9).

Accordingly, we affirm the Examiner's rejection of claims 1, 4, and 7 the rejections of claims 3, 6, 8, 10, 12–17, 19, and 20, which were not separately argued.

Claims 2, 5, 9, 11, and 18 rejected under 35 U.S.C. § 103(a) as being unpatentable over Suggs in view of Watanabe and Fadell.

Appellant argues that Fadell fails to teach disposing the proximity sensor behind a grille, and thus, does not cure the above cited deficiencies. Appeal Br. 19.

We do not agree for the reasons stated above, and thus, we also affirm the Examiner's rejection of claims 2, 5, 9, 11, and 18.

CONCLUSION

The Examiner's rejection is Affirmed.

In summary:

DECISION SUMMARY

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1, 3, 4, 6–8, 10, 12–17, 19, 20	103	Suggs, Watanabe	1, 3, 4, 6–8, 10, 12–17, 19, 20	
2, 5, 9, 11, 18	103	Suggs, Watanabe, Fadell	2, 5, 9, 11, 18	
Overall Outcome:			1–20	

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TIME PERIOD FOR RESPONSE

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED