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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte RITA PARADA, LINA ESTER LINER,
CHARLIE MATTHEW SUTTON, BRODY JAY LARSON,
MICHELLE CHRISTINE SHILSTONE, LAURA GIGI LEE,
NICK JOHN FOSTER, and MARKUS EKLUND

Appeal 2019-000632
Application 13/722,356
Technology Center 2600

Before ERIC S. FRAHM, JOYCE CRAIG, and
MATTHEW J. McNEILL, *Administrative Patent Judges*.

FRAHM, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant¹ appeals under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1–22, 26, and 27. Claims 23–25 have been canceled (*see* Final Act. 2; Appeal Br. 19). We have jurisdiction under 35 U.S.C. § 6(b).

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. “The word ‘applicant’ when used in this title refers to the inventor or all of the joint inventors, or to the person applying for a patent as provided in §§ 1.43, 1.45, or 1.46.” 37 C.F.R. § 1.42(a). According to Appellant, Nokia Technologies Oy is the real party in interest (Appeal Br. 2).

We reverse all of the Examiner's obviousness rejections, and enter a new ground of rejection for independent claims 1, 8, and 15.

INVENTION

The invention relates to the determination of whether a subject requires medical assistance based upon information provided by an interface system carried by a head worn device of the subject. *See Spec.* ¶ 1; Fig. 1; claim 1. According to Appellant,

The apparatus 20, such as the processor 22 or the like, may also be configured to determine whether the subject is considered to require medical assistance based upon the information regarding this subject. See block 34 of FIG. 3. The apparatus, such as the processor, may be configured to determine that the subject is considered to require medical assistance in various manners. In one embodiment, however, the apparatus, such as the processor, may reference predefined acceptable values or ranges, such as may be stored by the memory device 24, for the information provided by an interface system 16 such that the apparatus, such as the processor, will not consider the subject to require medical assistance so long as the information satisfies or is otherwise consistent with the acceptable value(s) or range. However, in an instance in which the information provided by the interface system deviates from the acceptable value(s) or range, the apparatus, such as the processor, may consider the subject to require medical assistance or may at least require further analysis, such as further analysis of the information provided by the interface system or further analysis of other information, to confirm whether medical assistance is required for the subject. By way of example, the apparatus, such as the processor, may be configured to reference one or more predefined thresholds associated with the information provided by an interface system. In an instance in which the threshold is unsatisfied, the apparatus, such as the processor, may utilize the information provided by the interface system for non-medical purposes. *However, in an instance in which the threshold is satisfied, the apparatus, such as the processor, may determine that the subject requires medical assistance or may at least determine that further*

analysis is required, such as further analysis of the information provided by the interface system or further analysis of other information, in order to determine whether the subject requires medical assistance. As such, the apparatus may include means, such as the processor or the like, for determining whether the subject is considered to require medical assistance based upon the information from the interface system regarding the subject.

Spec. ¶ 33 (emphasis added).

Claim 1, reproduced below with bracketed lettering and emphases added, is illustrative of the claimed subject matter:

1. A method comprising:

receiving information regarding a subject from an interface system carried by a head worn device of the subject, wherein the information is provided by the interface system during performance of a predefined activity and is utilized for non-medical purposes in conjunction with the predefined activity;

determining, with a processor, whether the subject is considered to require medical assistance based upon the information regarding the subject;

[A1] following an initial determination that the subject is considered to require medical attention based upon received information regarding the subject in an instance in which the subject has experienced an accident, [A2] further analyzing *additional information of a different type regarding the subject in order to confirm that the subject is considered to require medical assistance*, [A3] wherein *the additional information of the different type received after the accident indicates the subject requires medical assistance*; and

causing notification of a medical response service of the subject in an instance in which it has been confirmed that the subject is considered to require medical assistance.

Appeal Br. 14, Claims Appendix (bracketed lettering and emphases added).

REFERENCES

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

Hartwell	US 2003/0071766 A1	Apr. 17, 2003
Rudhard	US 2003/0197608 A1	Oct. 23, 2003
Ferguson	US 7,347,551 B2	Mar. 25, 2008
Hertz	US 2010/0102970 A1	Apr. 29, 2010
Skowronek	US 2010/0102123 A1	Apr. 29, 2010
Chaum	US 2010/0110368 A1	May 6, 2010

REJECTIONS

The Examiner made the following rejections:

Claims 1, 5–8, 12–15, and 19–21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Rudhard and Hertz. Final Act. 2–5.

Claims 2–4, 9–11, and 16–18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Rudhard, Hertz, and Ferguson. Final Act. 6–8.

Claim 22 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Rudhard, Hertz, and Chaum. Final Act. 8.

Claim 26 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Rudhard, Hertz, and Hartwell. Final Act. 8–10.

Claim 27 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Rudhard, Hertz, and Skowronek. Final Act. 10.

ISSUES

Based on Appellant's arguments in the Appeal Brief (Appeal Br. 7–13),² the following principal issue is presented on appeal:

Did the Examiner err in rejecting claims 1, 5–8, 12–15, and 19–21 under 35 U.S.C. § 103(a) as being unpatentable over the base combination of Rudhard and Hertz, because the combined teachings of Rudhard and Hertz fail to teach or suggest (a) “analysis of additional information of a different type regarding the user in order to confirm that the user is considered to require medical assistance,” and/or (b) that “the additional information of the different type received after the accident indicates the subject requires medical assistance,” as recited in limitations A2 and A3 of representative claim 1?

ANALYSIS

Obviousness Rejection of Representative Claim 1

We have reviewed the Examiner's rejection of claim 1 (Final Act. 2–4) in light of Appellant's arguments (Appeal Br. 7–10) that the Examiner has erred, as well as Examiner's response to Appellant's arguments in the Appeal Brief (Ans. 2–4). Appellant's arguments have persuaded us of error in the Examiner's rejection of all of the disputed claims under 35 U.S.C. § 103(a).

² Appellant relies on the arguments presented as to claim 1 as to the patentability of claims 8 and 15. Further, Appellant relies on the arguments presented as to claim 1 as to the patentability of claims 2–7, 9–14, 16–22, 26, and 27, and state that these claims stand/fall with claim 1. Therefore, we decide the outcome of the rejection of claims 2–7, 9–14, 16–22, 26, and 27, on the same basis as provided for claim 1.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on appellant's disclosure. *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991).

In the instant case on appeal, the Examiner rejects claim 1, finding that Rudhard discloses a two-condition verification process for determining and confirming whether a user requires medical attention, as required by limitation A2. Further, the Examiner finds that the second condition is based on additional information of a different type, as required by limitation A3 recited in claim 1. *See* Ans. 3. The Examiner further finds that Hertz discloses measuring vital information after an impact, for purposes of confirmation. *See* Ans. 3–4.

Appellant argues that Rudhard fails to consider any analysis of additional information of a different type regarding the user in order to confirm that the user is considered to require medical assistance. In particular, Appellant submits that while Rudhard discloses thermal detectors to determine if the helmet is being worn, such a determination does not satisfy limitations A2 and A3 of claim 1, as the thermal detectors do not receive information that would indicate the subject needs medical assistance. *See* Appeal Br. 9. Further, Appellant submits that Hertz, on the other hand,

discloses monitoring and saving vital data of a person in order to provide said information to emergency service teams upon arrival at the accident. *See* Appeal Br. 9–10. Appellant thus submits that although Hertz teaches monitoring and saving vital data after an accident occurred, in order to provide supplementing information in connection with the accident, Hertz’s vital data does not confirm that the subject requires medical assistance, but instead provides continuous measurement of vital data to the medical assistance team in order to provide appropriate care upon arrival at the scene of the accident. *See* Appeal Br. 10. Thus, again, Appellant submits that the teachings of Hertz fail to satisfy limitation A3 recited in claim 1. *Id.*

Here, we find Appellant’s arguments to be persuasive. Based on the record before us, the Examiner has not established that the additional information gathered by either Rudhard or Hertz after the accident is analyzed to indicate that the subject requires medical assistance, as required by limitations A2 and A3 of claim 1. In particular, the helmet usage detection in Rudhard is used as part of the initial determination of whether an emergency situation exists, not a subsequent analysis once another sensor has made an initial determination that an emergency situation exists. Further, Hertz fails to cure the deficiency noted in Rudhard, as the information collected by Hertz after an emergency situation is determined is not analyzed to verify that an emergency situation exists.

Appellant’s arguments have persuaded us of error in the Examiner’s rejection of independent claims 1, 8, and 15, and the claims which depend

thereupon.³ Accordingly, we do not sustain the Examiner's rejections of independent claims 1, 8, and 15, or dependent claims 2–7, 9–14, 16–22, 26, and 27 based upon the base combination of Rudhard and Hertz.

NEW GROUND OF REJECTION UNDER 37 C.F.R. § 41.50(b)

Under 37 C.F.R. § 41.50(b), we enter a new ground of rejection under 35 U.S.C. § 103(a) for claims 1, 8, and 15.

Claims 1, 8, and 15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over a combination of Rudhard, newly cited Carlton-Foss (US 2008/0129518 A1; June 5, 2008),⁴ and Hertz.

Regarding claims 1, 8, and 15: Rudhard discloses a method, an apparatus, and a computer program product, comprising: receiving information regarding a subject from an interface system (e.g., sensor box: BS, DMS, TS, TP, and GPS) mounted within a safety helmet, as shown in Figure 1, to monitor any impact, strain, thermal, temperature and location occurred during performance of a predefined activity (e.g., motorcyclist, mountain climber or a like) and is utilized for non-medical purposes (e.g., patient or hospital) in conjunction with the predefined activity (e.g., motorcyclist or mountain climber is considered of non-medical purposes) (*see* ¶ 8). Rudhard further discloses analyzing and initially determining with

³ Appellant provided separate arguments regarding claims 5, 12, and 19. However, since the rejection of the independent claims over the combination of Rudhard and Hertz is hereby reversed, there is no need to consider and discuss these separate arguments.

⁴ The Carlton-Foss reference was previously mentioned in an Advisory Action in response to claim amendments which were ultimately not entered, and are not subject to the instant appeal. *See* Advisory Act. 4.

a processor (microcontroller μ C), whether the subject is considered to require medical assistance (e.g. emergency service) based upon the information regarding the subject (e.g. impact or crash) (as cited at ¶¶ 9, 6, and 18–19). Finally, Rudhard teaches analyzing additional information of a different type (e.g., a temperature sensor or array of cameras incorporated among other sensors within the sensor box (cited at ¶ 12) for sensing temperature of user for confirming whether the helmet is worn when the accident occurred).

Rudhard does not explicitly teach that the additional information of a different type received after the accident indicates the subject requires medical assistance.

Carlton-Foss, however, discloses a method and system for fall detection. *See* abstract. As shown in Figure 12, and described starting at paragraph 127, Carlton-Foss teaches that a system detects an impact from impact sensor 42 (*see* ¶ 130) (noting that “an impact monitor can in certain cases be used to determine impact;” *see also*, Fig. 8, noting the inclusion of an impact sensor) to determine if a fall condition exists. Once a fall condition exists, data from an accelerometer is analyzed to determine if a call regarding the need for assistance is required. In addition, paragraph 132 of Carlton-Foss teaches that:

the details of the accelerometer 40 readings will depend on the nature of the motion. In case the person is motionless for a sufficiently long period of time, the fall detection system’s 20 final logical conclusion changes to TRUE, meaning that the person is substantially not moving and is injured, and the wearable fall detection monitor device 22 initiates a call for help.

Carlton-Foss, ¶ 132.

Additionally, Hertz teaches a system for detecting an accident comprises a helmet which includes sensors (12) (e.g., acceleration, pules, respiration, blood pressure, oxygen absorption and EEG) for measuring vital data of the person's body for a specific period of time before the accident **as well as at the time the accident occurred, and following the accident**, and sends an alarm about the accident, includes vital data information to emergency service. *See* ¶¶ 77–80. The vital data from after the accident is then made available to emergency personnel upon arrival at the scene of the accident. *Id.*

Based on the above disclosures, it would have been obvious to one having ordinary skill in the art at the time the invention was made, to modify Rudhard, as disclosed by Carlton-Foss, to analyze additional information of a different type, received after an accident, to indicate the subject requires medical assistance and notify medical personnel while preventing false positive notifications (*see* Carlton-Foss, Fig. 8; ¶¶ 2–3). Further, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Rudhard, as disclosed by Hertz, to include sensors which monitor a user's vital information to determine the need for medical assistance following an accident. *See* Hertz, ¶ 80.

Remaining Claims

The Patent Trial and Appeal Board is a review body, rather than a place of initial examination. We have made a rejection above under 37 C.F.R. § 41.50(b) for independent claims 1, 8, and 15. However, we have not reviewed the remaining claims to the extent necessary to determine whether these claims are unpatentable under 35 U.S.C. § 103(a). We leave it

to the Examiner to determine the appropriateness of any further rejections based thereon.⁵

CONCLUSION

We reverse the Examiner’s obviousness rejections of claims 1–22, 26, and 27 under 35 U.S.C. § 103(a) over the base combination of Rudhard and Hertz; and, we enter a new ground of rejection under 35 U.S.C. § 103(a) over Rudhard, Hertz, and Calton-Foss for claims 1, 8, and 15.

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/ Basis	Affirmed	Reversed	New Ground
1, 5–8, 12–15, 19–21	103(a)	Rudhard, Hertz		1, 5–8, 12–15, 19–21	
2–4, 9–11, 16–18	103(a)	Rudhard, Hertz, Fergason		2–4, 9–11, 16–18	
22	103(a)	Rudhard, Hertz, Chaum		22	
26	103(a)	Rudhard, Hertz, Hartwell		26	
27	103(a)	Rudhard, Hertz, Skowronek		27	
1, 8, 15	103(a)	Rudhard, Carlton-Foss, Hertz			1, 8, 15
Overall Outcome				1–22, 26, 27	1, 8, 15

⁵ In the event of further prosecution, we leave it to the Examiner to determine whether claims 1, 8, and 15 are judicially-exempted from patentability under 35 U.S.C. § 101 because they are directed to an abstract idea, without significantly more.

TIME PERIOD FOR RESPONSE

This decision contains a new ground of rejection pursuant to 37 C.F.R. § 41.50(b). 37 C.F.R. § 41.50(b) provides “[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review.”

37 C.F.R. § 41.50(b) also provides that Appellants, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new grounds of rejection to avoid termination of the appeal as to the rejected claims:

(1) *Reopen prosecution.* Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . .

(2) *Request rehearing.* Request that the proceeding be reheard under § 41.52 by the Board upon the same record. . . .

Further guidance on responding to a new ground of rejection can be found in the Manual of Patent Examining Procedure § 1214.01.

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

REVERSED
37 C.F.R. § 41.50(b)