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Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO. Includes details for application 14/425,925 and 94264 7590, listing inventor Marcus H. CRAWFORD, attorney THE LAW FIRM OF ANDREA HENCE EVANS, LLC, examiner SHOSTAK, ANDREY, art unit 3791, and notification date 10/31/2019.

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MARCUS H. CRAWFORD

Appeal 2019-003359
Application 14/425,925
Technology Center 3700

Before MICHAEL L. HOELTER, ANNETTE R. REIMERS, and
LISA M. GUIJT, *Administrative Patent Judges*.

HOELTER, *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 1–5, 7–12, and 14–16. Final Act. 1 (Office Action Summary). We have jurisdiction under 35 U.S.C. § 6(b). For the reasons explained below, we do not find error in the Examiner's rejection of these claims. Accordingly, we AFFIRM the Examiner's rejections.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as “Marcus Crawford.” Br. 2.

CLAIMED SUBJECT MATTER

The disclosed subject matter “relates, in general, to a combination grounding cuff featuring a sphygmomanometer combined with a return electrode strip dedicated for use as a return ground for an electrosurgical unit or device.” Spec. 1:3–5. Claims 1 and 10 are independent.

Claim 1 is illustrative of the claims on appeal and is reproduced below.

1. A combination grounding cuff, comprising:
 - a sphygmomanometer, having an inner cuff surface for maintaining contact on a patient and taking blood pressure readings;
 - at least one return electrode strip, said at least one return electrode strip being positioned and affixed on said inner cuff surface, thereby enabling contact of said at least one return electrode strip with said patient, wherein the at least one return electrode strip collects current delivered to the patient and transports the current away from the patient and wherein the at least one return electrode strip acts as a return ground point of at least one electrosurgical unit;
 - at least one female return electrode adapter, electrically connected to said at least one return electrode strip; and
 - at least one mount affixed on said inner cuff surface, said at least one mount is configured to enable electrical connection between said at least one return electrode strip and said at least one female return electrode adapter.

REFERENCES

Peters	US 3,812,861	May 28, 1974
Seebach et al.	US 4,738,263	Apr. 19, 1988
Maurer et al.	US 5,046,511	Sept. 10, 1991
Woloszko	US 2003/0014051 A1	Jan. 16, 2003
Thompson et al.	US 2004/0097916 A1	May 20, 2004
Platt et al.	US 2007/0100247 A1	May 03, 2007
Simon et al.	US 2009/0259274 A1	Oct. 15, 2009
Kim, I	US 2013/0261474 A1	Oct. 03, 2013

THE REJECTIONS ON APPEAL²

Claims 1, 2, 4, 8, and 9 are rejected under 35 U.S.C. § 103 as being unpatentable over Simon, Platt, Thompson, and Kim, and as evidenced by Peters.

Claim 3 is rejected under 35 U.S.C. § 103 as being unpatentable over Simon, Platt, Thompson, Kim, and Woloszko, and as evidenced by Peters.

Claim 5 is rejected under 35 U.S.C. § 103 as being unpatentable over Simon, Platt, Thompson, Kim, and Maurer, and as evidenced by Peters.

Claim 7 is rejected under 35 U.S.C. § 103 as being unpatentable over Simon, Platt, Thompson, Kim, and Seebach, and as evidenced by Peters.

Claims 10–12, 14, and 16 are rejected under 35 U.S.C. § 103 as being unpatentable over Simon, Platt, and Kim, and as evidenced by Peters.

Claim 15 is rejected under 35 U.S.C. § 103 as being unpatentable over Simon, Platt, Kim, and Seebach, and as evidenced by Peters.

ANALYSIS

The rejection of claims 1, 2, 4, 8, and 9 as being obvious over Simon, Platt, Thompson, and Kim, and as evidenced by Peters

Appellant argues claims 1, 2, 4, 8, and 9 together. *See* Br. 8–18. We select claim 1 for review, with claims 2, 4, 8, and 9 standing or falling therewith. *See* 37 C.F.R. § 41.37(c)(1)(iv).

In regard to claim 1, the Examiner finds that Simon discloses “a grounding system (Figure 3), comprising: a sphygmomanometer, having an

² The Examiner has withdrawn the 35 U.S.C. § 112(b) indefiniteness rejection and the objection in relation to claim 10. *See* Ans. 3–4; *see also* Final Act. 3.

inner cuff surface for maintaining contact on a patient and taking blood pressure readings (paragraph 0074),” “at least one return electrode strip that is in contact with said patient (paragraphs 0016 and 0055),” “and a means for electrical connection between said at least one return electrode strip and said at least one electrosurgical device (paragraphs 0055 and 0056[;] Figure 3).” Final Act. 4.

The Examiner acknowledges that Simon “is silent regarding the return electrode strip being positioned and affixed on said inner cuff surface.” Final Act. 4. The Examiner finds, however, that Platt discloses “in a similar field of endeavor of blood pressure monitoring (Abstract), to position and affix a return electrode strip for an electrical device on the inner cuff surface of its sphygmomanometer (paragraph 0038; Figure 1).” Final Act. 4. The Examiner also indicates that “it is evidenced by Peters that providing a grounding electrode for electrosurgery in a cuff form factor can reduce the risk of breaking contact because of the electrode being actively secured to the patient by the wrapped configuration (Figure 1; Col. 1, lines 1–44).” Final Act. 4. Thus, the Examiner concludes that it would have been obvious to modify the system of Simon to have “the grounding system being a combination grounding cuff, wherein said at least one return electrode strip is positioned and affixed on said inner cuff surface, thereby enabling contact of said at least one return electrode strip with said patient,” as taught by Platt, “in order to reduce the number of additional components in the surgery room while reducing the chances of the return electrode breaking contact with the patient’s skin by positioning it in a cuff-based form factor that is already available to Simon,” as taught by Peters. Final Act. 4–5.

The Examiner also acknowledges that Simon “is silent regarding the electrical connection means between said at least one return electrode strip and said at least one electrosurgical device comprising a female adapter” as recited. Final Act. 5. The Examiner, however, finds that Thompson discloses that “electrical connection can be made between a return electrode in contact with the skin of the patient (paragraph 0024) and an electrosurgical device by providing a female return electrode adapter electrically connected to its return electrode (Figure 1; paragraphs 0020 and 0024).” Final Act. 5. The Examiner concludes that it would have been obvious to incorporate into the modified system of Simon “the electrical connection means comprising at least one female return electrode adapter, electrically connected to said at least one return electrode strip,” as taught by Thompson, “as an application of a known type of electrical connector used to connect the same two types of components of an electrosurgical system.” Final Act. 5.

The Examiner further acknowledges that the combination of Simon, Platt, and Thompson (in view of Peters) “is silent regarding at least one mount affixed on said inner surface, said at least one mount being configured to enable electrical connection between said at least one return electrode strip and said at least one female return electrode adapter.” Final Act. 5–6. The Examiner, however, finds that Kim discloses

in a similar field of endeavor of providing an electrode on the inner cuff surface of a sphygmomanometer (Figure 2; Abstract), to demountably affix said electrode to said inner cuff surface by a mount affixed on said inner surface that is configured to enable electrical connection between said electrode and an electrical component (paragraphs 0039 and 0040; Figures 6 and 7), so that

the cuff can be used separately when the use of the electrode is not required (paragraph 0029; Figure 8).

Final Act. 6. The Examiner concludes that it would have been obvious to incorporate into the modified system of Simon “at least one mount affixed on said inner surface, said at least one mount being configured to enable electrical connection between said at least one return electrode strip and said at least one female return electrode adapter,” as taught by Kim, “so that the cuff can be used separately when the use of the return electrode strip is not required, such as for post-surgical monitoring.” Final Act. 6.

Appellant initially contends, “[t]he references are from art non-analogous to each other and to that of the claims.” Br. 8 (emphasis omitted).

On this point, we have been informed that:

[t]wo criteria have evolved for determining whether prior art is analogous: (1) whether the art is from the same field of endeavor, regardless of the problem addressed, and (2) if the reference is not within the field of the inventor’s endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved.

In re Clay, 966 F.2d 656, 658 (Fed. Cir. 1992).

First, to the extent that Appellant is arguing that the field of endeavor is grounding cuffs that are combined with a sphygmomanometer (*see* Br. 10), the Examiner disagrees. The Examiner explains, “the field is not so specific as to be limited to a combination sphygmomanometer and return electrode” but that “[t]he field further includes blood pressure cuffs with electrode arrangements and electrical connections.” Ans. 4. In other words, the Examiner is not limiting the field of endeavor to only cuffs having affixed thereto a return electrode as specifically recited in claim 1, but rather to a field of endeavor pertaining to the use of cuffs “with electrode

arrangements and electrical connections.” Ans. 4. Here, Simon addresses the use of both a blood pressure cuff and a return electrode during a procedure (*see, e.g.*, Simon ¶¶ 16, 74) while both Platt and Kim describe a blood pressure cuff/electrode combination in their respective Abstracts. When our reviewing court faced a similar dilemma regarding competing field of endeavors, they held that a reference to a toothbrush was in the same field of endeavor as the recited hair brush because a toothbrush may easily be used to brush facial hair. *See In re Bigio*, 381 F.3d 1320, 1324–26 (Fed. Cir. 2004); MPEP § 2141.01(a)(IV). Following such guidance, we agree with the Examiner’s interpretation since an electrode having electrical connections can likewise be easily used “as a return ground point of at least one electrosurgical unit” as recited.

Second, the Examiner also explains that the problems that Appellant are attempting to address are

taken to be those specified in the Summary section of Appellant’s specification as filed (page 1, line 20 to page 5, line 12). These include: how to maintain grounding contact with a patient during surgery, including during patient movement; how to obtain blood pressure measurements in addition to confirming grounding; how to make components reusable after e.g. cleaning, how to make the return electrode configurations usable by a larger spectrum of patients, how to minimize the size of electrodes, and how to adapt the device for use with multiple electrosurgical devices.

Ans. 4–5. These are problems addressed by Peters (*see* Peters 1:1–44, Fig. 1) and Thompson (*see* Thompson ¶¶ 20, 24). Thus, in view of the above, Simon, Platt, Peters, Thompson, and Kim are either reasonably applicable to the same field of endeavor or are reasonably pertinent to the particular problem(s) with which Appellant is involved. As a consequence,

Appellant's arguments seeking to differentiate each of these references are not persuasive of Examiner error. *See* Br. 8–11.

Appellant also contends, “[t]he prior art references teach away from the claims.” Br. 12. Thereafter, Appellant merely recites passages from § 2143.03 of the MPEP and case law. *See* Br. 12–13. Appellant does not provide any argument or reasoning as to why the prior art references teach away as stated, apart from this bald assertion. *See* Br. 12–13.

Accordingly, Appellant's assertion is not persuasive of Examiner error.

Appellant also contends there is a “**Change of Principle of Operation of Prior Art References.**” Br. 13. Appellant contends that Simon “requires positioning the return electrode on the patient's body, rather than on any element of the disclosed system at a location removed from the current delivery electrode [and as such, Simon] teaches away from placing the return electrode on the inner cuff surface.” Br. 14 (referencing Simon ¶¶ 55 and 94. This argument is unpersuasive because Appellant does not direct us to any passage in Simon that discredits, criticizes, or disparages any limitations claimed. Simon discloses “[t]his is *preferably* achieved by applying the return electrode **350** to an external portion of the patient, such as to at least one of the upper-back, the chest, and/or the stomach” and “[a] return electrode . . . is placed at any convenient location on the exterior of the patient's body.” Simon ¶¶ 55, 94 (emphasis added). At best, Simon discloses preferred locations for placing the return electrodes. Regardless, disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure of non-preferred embodiments. *See In re Susi*, 440 F.2d 442, 446 n.3 (CCPA 1971). *See also Merck & Co. Inc. v. Biocraft Labs. Inc.*, 874 F.2d 804, 807 (Fed. Cir. 1989) (quoting *In re*

Lamberti, 545 F.2d 747, 750 (CCPA 1976)) (“[T]he fact that a specific [embodiment] is taught to be preferred is not controlling, since all disclosures of the prior art, including unpreferred embodiments, must be considered.”). Like our appellate reviewing court, “[w]e will not read into a reference a teaching away from a process where no such language exists.” *DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1364 (Fed. Cir. 2006). Here, because Peters teaches that providing a grounding electrode in a cuff form around a limb of a patient can reduce the risk of breaking contact with the patient (*see, e.g.*, Peters 1:35–41), we are not persuaded that there is a change in the principle operation of the recited references, as Appellant alleges (*see supra*). Thus, Appellant does not apprise us of error on this point.

Appellant also argues that Peters “teaches a cuff with fully conductive surfaces 15 and 16” which would teach away from “a sphygmomanometer having an inner cuff surface upon which the at least one return electrode strip is positioned and affixed, thereby implying that the surface of the entire cuff is not conductive, with the only conductive part being the electrode.” Br. 16. This argument is unpersuasive because it does not address the rejection. First, as the Examiner explains, Peters “does not require that the surfaces 15 and 16 cover the whole of a sphygmomanometer cuff.” Ans. 8. Further, the Examiner points out that “Peters was cited for its teaching that electrosurgery ground electrodes could be arranged in a cuff form-factor, thereby enabling them to be actively secured to the patient, with attendant benefits.” Ans. 8. In other words, Peters “is relied on as evidence of the advantage of providing a grounding electrode in a cuff shape.” Ans. 9.

Appellant also argues that Simon’s system “cannot function as a sphygmomanometer.” Br. 14. Appellant’s contention is unpersuasive because Simon clearly discloses “[b]lood pressure measurements were taken every few minutes with an automatic blood pressure cuff to monitor any changes in blood pressure.” Simon ¶ 74. Further, the Examiner combines Simon’s teaching of a return electrode with use of a sphygmomanometer stating, “the system of Simon [] already has a sphygmomanometer (paragraph 0074), it would have been obvious . . . to incorporate into the system of Simon [], the grounding system being a combination grounding cuff, wherein said at least one return electrode strip is positioned and affixed on said inner cuff surface,” as disclosed in Platt. *See* Final Act. 4–5.

Appellant contends that “[t]o place the electrodes of Simon on the inner surface area of the cuff, as claimed, would be improper hindsight and destroy Simon.” Br. 14; *see also id.* at 15 (arguing that “there is no motivation to take an electrode” of Simon “and place it on the inner surface of the cuff”). However, Appellant does not explain why placing electrodes on the inner surface of “an automatic blood pressure cuff” as disclosed in Simon’s paragraph 74, would “destroy Simon.” Br. 14. On the other hand, and as stated above, the Examiner explains that the proposed modification would “reduce the number of additional components in the surgery room while reducing the chances of the return electrode breaking contact with the patient’s skin by positioning it in a cuff-based form factor that is already available to Simon,” as taught by Peters. Final Act. 4–5. Accordingly, we are not persuaded the Examiner relied on “improper hindsight” or that placement of the electrode as indicated by the Examiner would “destroy Simon.” Br. 14; *see also* Ans. 7–8.

Appellant further argues that placing Platt's electrode on the inner surface of Simon's device "would render the latter inoperable for its intended purpose which requires that the return electrode be placed on the patient's body and located such that it is distant from the current delivery electrode." Br. 14–15. However, as the Examiner explains, "[t]he current delivery electrode of Simon would still be located at a distance from the return electrode of Platt if [the return electrode] was incorporated into the cuff. Indeed, Simon contemplates locating the return electrode at locations other than where electrosurgery is being performed (§ 0055)." Ans. 9.

Lastly, Appellant contends that modifying Thompson's device with the teachings of Kim would render Thompson's device inoperable for its intended purpose. Br. 16. Appellant argues that modifying Thompson's device "with the groove 51 and protrusion 52" taught by Kim would render Thompson's device "inoperable for its intended purpose of using a cord to connect its return electrode 30 with the female sockets of connector plug 56" and that Kim's groove 51 "is incapable of connection with [the] male prongs 80" of Thompson's device. Br. 17.

Appellant's arguments are not persuasive. We note that Appellant's Specification discloses

[r]eturn electrodes 204 and 206 may, in another aspect of an embodiment of the present invention, be affixed onto cuff 202 by way of respective mounts (not shown). These mounts may be configured to enable electrical connection between return electrodes 204 and 206 with female return electrode adapters 208 and 210 respectively.

Spec. 7:15–19; *see also* Br. 6. Thus, if Appellant considers that modifying Thompson's device or Simon's device to have both a female electrode adapter and at least one mount affixed on the inner surface cuff would render

Thompson's device or Simon's device inoperable, then Appellant's claimed combination cuff would appear to likewise be inoperable. Notwithstanding this conflicting reasoning, the Examiner relies on Thompson for teaching "[t]he female connector plug could [] connect with the male prongs" and "Kim does not break this connection [as] it teaches an *interface* between the *cuff* and the return electrode." Ans. 10 (emphasis added). Further, to the extent that Appellant is arguing that the groove 51 and protrusion 52 of Kim cannot be added to the device of Thompson or Simon due to the male prongs 80 of Thompson, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. *See In re Keller*, 642 F.2d 413, 425 (CCPA 1981).

Accordingly, and based on the record presented, we are not persuaded the Examiner erred in rejecting claim 1 as being unpatentable over Simon, Platt, Thompson, and Kim, and as evidenced by Peters. We thus sustain the rejection of claims 1, 2, 4, 8, and 9.

*The rejection of claims 10–12, 14, and 16
as being obvious over Simon, Platt, and Kim, and as evidenced by Peters*

Appellant contends that the Examiner "fail[s] to establish a *prima facie* case of obviousness for precisely the same reasons set forth above in connection with the rejection of claim 1." Br. 18. Because we find no deficiencies in the Examiner's rejection of claim 1, we likewise sustain the

Examiner's rejection of claims 10–12, 14, and 16 for the same reasons discussed above.

The rejections of (a) claim 3 as being obvious over Simon, Platt, Thompson, Kim, and Woloszko, and as evidenced by Peters; (b) claim 5 as being obvious over Simon, Platt, Thompson, Kim, and Maurer, and as evidenced by Peters; (c) claim 7 as being obvious over Simon, Platt, Thompson, Kim, and Seebach, and as evidenced by Peters; and (d) claim 15 as being obvious over Simon, Platt, Kim, and Seebach, and as evidenced by Peters

For these rejections, Appellant does not provide any substantive arguments and instead relies on arguments previously presented for claims 1 and 10. *See* Br. 8–19. Because we find no deficiencies in the Examiner's rejection of independent claim 1 as being obvious over Simon, Platt, Thompson, and Kim, and as evidenced by Peters or of independent claim 10 as being obvious over Simon, Platt, and Kim, and as evidenced by Peters, we likewise sustain the Examiner's rejections of claims 3, 5, 7, and 15 as being obvious over the various combinations of cited prior art identified above.

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	Basis	Affirmed	Reversed
1, 2, 4, 8, 9	103	Simon, Platt, Thompson, Kim, as evidenced by Peters	1, 2, 4, 8, 9	
3	103	Simon, Platt, Thompson, Kim, Woloszko, as evidenced by Peters	3	
5	103	Simon, Platt, Thompson, Kim,	5	

Claims Rejected	35 U.S.C. §	Basis	Affirmed	Reversed
		Maurer, as evidenced by Peters		
7	103	Simon, Platt, Thompson, Kim, Seebach, as evidenced by Peters	7	
10–12, 14, 16	103	Simon, Platt, Kim, as evidenced by Peters	10–12, 14, 16	
15	103	Simon, Platt, Kim, Seebach, as evidenced by Peters	15	
Overall Outcome			1–5, 7–12, and 14–16	

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

AFFIRMED