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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|----------------------|------------------|
| 13/130,694 | 05/23/2011 | Mark Gillies | BIDI0101PUSA | 9818 |
| 22045 | 7590 | 02/20/2018 | EXAMINER | |
| BROOKS KUSHMAN P.C. 1000 TOWN CENTER TWENTY-SECOND FLOOR SOUTHFIELD, MI 48075 | | | TSAI, MICHAEL JASPER | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3771 | |
| | | | NOTIFICATION DATE | DELIVERY MODE |
| | | | 02/20/2018 | ELECTRONIC |

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MARK GILLIES

Appeal 2016-001622
Application 13/130,694¹
Technology Center 3700

Before WILLIAM A. CAPP, LEE L. STEPINA, and ERIC C. JESCHKE,
Administrative Patent Judges.

JESCHKE, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

Mark Gillies (“Appellant”) seeks review under 35 U.S.C. § 134(a) of the Examiner’s decision, as set forth in the Final Office Action dated February, 12, 2015 (“Final Act.”), rejecting claims 1, 6–12, 14, and 19. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ Appellant identifies Bidibots PTY LTD as the real party in interest. Appeal Br. 2.

BACKGROUND

The disclosed subject matter “relates to delivery of continuous positive airway pressure to an individual, such as an infant, to thereby provide respiratory assistance.” Spec. 1, ll. 5–6. Claim 1, the sole independent claim, is reproduced below, with emphasis added and reformatted from the version provided by Appellant:

1. A pressurized air delivery device for providing respiratory assistance to an infant human, said device comprising:

a pair of nasal conduits each having a nasal prong for insertion into a nostril of an infant and *an arm oriented at approximately 90° to the nasal prong forming an elbow shape;*

an adjustable spacer for assembly including a first and a second portion each connected to a different one of the pair of nasal conduit arms wherein the adjustable spacer maintains the nasal prongs in spaced apart parallel orientation with the arms extending in an opposed outward orientation aligned along a common transverse axis, the first and second portions adjustably cooperating with one another to enable the spacing between the nasal prongs to be varied to fit the infant; and

a pair of supply conduits having ends in fluid communication with the outwardly oriented ends of the pair of nasal conduits, the supply conduits having opposed ends connectible to a source of pressurized breathable gas.

REJECTIONS

1. Claims 1, 6, 8, 10–12, 14, and 19 stand rejected under 35 U.S.C. § 102(b) as anticipated by Wondka (US 2005/0066976 A1, published Mar. 31, 2005).
2. Claim 7 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Wondka.
3. Claim 9 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Wondka and Doshi (US 7,856,979 B2, issued Dec. 28, 2010).
4. Claim 7 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Wondka and Cardoso (US 7,156,097 B2, issued Jan. 2, 2007).²

DISCUSSION

Rejection 1 – The rejection of claims 1, 6, 8, 10–12, 14, and 19 under 35 U.S.C. § 102(b)

For this Rejection, Appellant argues the patentability of independent claim 1 and does not separately argue claims 6, 8, 10–12, 14, and 19, which depend from claim 1. *See* Appeal Br. 5–7. Thus, we address claim 1, with claims 6, 8, 10–12, 14, and 19, standing or falling with claim 1. *See* 37 C.F.R. § 41.37(c)(1)(iv) (2014).

Claim 1 recites, among other limitations, “a pair of nasal conduits each having a nasal prong for insertion into a nostril of an infant and an arm oriented at approximately 90° to the nasal prong forming an elbow shape.”

² The Examiner adds this as a new ground of rejection in the Answer. *See* Ans. 7.

Appeal Br., App. 1. The Examiner found that Wondka disclosed “a plurality of nasal conduits 37 (delivery tubes) each having a nasal prong 100 (terminal section) insertion into a nostril and an arm oriented approximately 90 degrees to the nasal prong forming an elbow shape as shown in Wondka’s FIG. 11B.” Final Act. 2.

Appellant argues that Wondka “does not disclose ‘a pair of nasal conduits each having a nasal prong for insertion into a nostril of an infant and **an arm oriented at approximately 90° to the nasal prong forming an elbow shape**’ and therefore does not anticipate claim 1.” Appeal Br. 7. Appellant states that the Examiner relies on Figure 11B of Wondka to address the limitation at issue (shown in emphasis by Appellant and in the recitation of claim 1 above). *Id.* at 5. Appellant argues that “Figures 11A and 11B illustrate the same interface device 30 at two different perspectives” and that “[i]n Figure 11A[,] the tube 32 appears to bend at an approximately 143° angle, and in Figure 11B[,] the tube 32 appears to bend at an approximately 94° angle.” *Id.* (discussing Wondka ¶ 110). Appellant contends that “Figures 11A and 11B illustrate the bend of the tube 32 at different perspectives” and that “[t]his causes the bend to **appear** to have different angles in the Figures 11A and 11B.” *Id.* Appellant states that “[t]his phenomenon is illustrated in Exhibit A, which illustrates that a 120° angle appears differently depending upon the viewing axis.” *Id.*; *see also* Appeal Br., App. 3 (Exhibit A).

We first address the contention that “Figures 11A and 11B illustrate the same interface device 30 at two different perspectives.” Appeal Br. 5. Although we agree that Figures 11A and 11B both depict interface device 30 and we also agree that Figures 11A and 11B each show a different

perspective, the record does not support the position that Figures 11A and 11B depict interface device 30 *in the same configuration* relative to the user.

The understanding that Figures 11A and 11B depict interface device 30 in *different configurations* is supported by the description of those Figures in Wondka. As noted by the Examiner, Wondka describes Figure 11B as depicting the “various angles of adjustment of the interface tubes of FIG. 11A.” Wondka ¶ 45 (quoted at Ans. 8). Moreover, a comparison of Figures 11A and 11B shows that interface device 30 is depicted in a different configuration relative to the user. For example, (1) Figure 11B depicts distal tips 160 of interface device 30 in the user’s nostrils whereas Figure 11A does not, and (2) Figure 11B depicts interface tubes 32 of interface device 30 running along the user’s upper lip and jawline whereas Figure 11A does not. Further, paragraph 110 of Wondka, which describes Figures 11A and 11B together, discloses the ability to reconfigure the disclosed structures to properly fit different users.

We turn now to Appellant’s statements that “[o]ne of ordinary skill in the art knows that a true angle of a bend or elbow can only be measured when viewed from an axis perpendicular to the plane in which the angle lies” and that “[t]he fact that the off-axis view of Figure 11B causes the bend to appear around 94° is irrelevant.” Appeal Br. 6.

The Examiner states that “the claim requires the arm be oriented to the nasal prong at ‘approximately’ 90° and does not require exactly 90 degrees” and states that “Wondka’s FIG 11B clearly shows an arm of the nasal conduit being oriented at ‘approximately 90°’ to the nasal prong.” Ans. 8.

A preponderance of the evidence supports the Examiner’s factual finding as to the relevant angle shown in Figure 11B. *See Bosies v.*

Benedict, 27 F.3d 539, 542 (Fed. Cir. 1994) (noting that the preponderance of the evidence standard “only requires the fact finder ‘to believe that the existence of a fact is more probable than its nonexistence’” (quoting *In re Winship*, 397 U.S. 358, 371 (1970))). Figure 11B in *Wondka* differs from the examples in Appellant’s Exhibit A in that Figure 11B depicts facial features behind the angle in question (i.e., “a user’s facial anatomy” (§ 110)), which provides context for a viewer to assess the angle. Thus, even assuming that the perspective of Figure 11B is not on “an axis perpendicular to the plane in which the angle lies” (Appeal Br. 6), the preponderance of the evidence supports the finding that the angle shown—when viewed in the context of Figure 11B as a whole—falls within the scope of “approximately 90°.” See *Anchor Wall Sys. v. Rockwood Retaining Walls, Inc.*, 340 F.3d 1298, 1310–11 (Fed. Cir. 2003) (“[W]e note that words of approximation, such as ‘generally’ and ‘substantially,’ are descriptive terms ‘commonly used in patent claims ‘to avoid a strict numerical boundary to the specified parameter.’” (quoting *Ecolab, Inc. v. Envirochem, Inc.*, 264 F.3d 1358, 1367 (Fed. Cir. 2001))).

As to the argument that the Examiner “has failed to cite to any text of *Wondka* to support his position and instead relies solely on a single drawing” (Appeal Br. 7), we note that an Examiner may rely on a figure to satisfy a claim limitation, even if the relevant aspect is not addressed in the text of the reference. See *In re Aslanian*, 590 F.2d 911, 914 (CCPA 1979) (“[A] drawing in a utility patent can be cited against the claims of a utility patent application even though the feature shown in the drawing was unintended or unexplained in the specification of the reference patent.”); see also *In re*

Mraz, 455 F.2d 1069, 1072–73 (CCPA 1972) (discussing the use of drawings regarding limitations related to angles between components).

We turn now to Appellant’s argument that “[p]aragraph 92 [of Wondka] clearly contradicts the Examiner’s interpretation of Figure 11B as it states to avoid sharp bends, such as the claimed approximately 90° bend.” Appeal Br. 7. Appellant highlights the following statements from paragraph 92 (with emphasis modified by Appellant):

At the inferior base of these distal straight terminal sections 100 the interface tubes 32 assume the **most gradual curvatures 104 and 106 as possible** while still fitting within the anatomy This curved **non-angulated** configuration minimizes flow resistance thus minimizing turbulence, leakage, noise and the required pressure level.

Wondka ¶ 92 (discussing Figure 4).

We disagree that these statements show error in the Examiner’s findings regarding Figure 11B. The *general* statements in this disclosure do not address specific angle values and also do not undermine the *specific* configuration disclosed in Figure 11B. *See In re Meng*, 492 F.2d 843, 847 (CCPA 1974) (“[A] drawing is available as a reference for all that it teaches a person of ordinary skill in the art.”).

For the reasons above, we sustain the rejection of independent claim 1. Claims 6, 8, 10–12, 14, and 19 fall with claim 1.

*Rejection 2 – The rejection of claim 7 under
35 U.S.C. § 103(a) over Wondka*

Claim 7 depends directly from claim 1 and adds the limitation: “wherein the nasal conduits are formed of a material that is more rigid than the supply conduits.” Appeal Br., App. 1. The Examiner identified delivery tubes 37 in Wondka as the recited “nasal conduits” and connectors 33 as the

“supply conduits.” Final Act. 5, 3; *see also* Wondka, Fig. 4 (showing elements 33 and 37). The Examiner stated that Wondka “does not specifically disclose that the [identified] nasal conduits are formed of a material that is more rigid than the [identified] supply conduits.” Final Act. 5. The Examiner also stated:

However, since there is no criticality, one of ordinary skill in the art would have considered the materials difference between the nasal conduits and the supply conduits to be a matter of design consideration and would be able to choose a material for the nasal conduit to be more rigid than the material for the supply conduit.

Id. at 5–6.

First, Appellant argues that paragraph 102 of Wondka “teaches the opposite” of the limitation of claim 7. Appeal Br. 7. Specifically, Appellant quotes the statement in paragraph 102 that “the interface tubes 32 preferably have a durometer of about 30 A Shore to about 80 A Shore for the tubes 32 and a durometer of about 10 A to about 70 A for the distal end 36 and/or sealing cushions 46.” *Id.* (discussing Wondka, Fig. 4). Appellant argues that although “the ranges disclosed in paragraph 102 have overlap, the tube 32 is generally described as being harder (30–80 A Shore) than the distal end 36 (10–70 A Shore),” “[a] person having ordinary skill in the art . . . reading *Wondka* would not be taught or suggested to make the distal ends 36 harder than the tubes, as claimed in claim 7.” *Id.* at 8.

A reference teaches away “when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant.” *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994). Paragraph 102 in Wondka does not lead in a direction divergent from

claim 7 because, based on the significant overlap in the disclosed ranges (30 A Shore to 70 A Shore), numerous potential embodiments *would actually satisfy* claim 7. As such, paragraph 102 does not represent a teaching away. *See In re Fulton*, 391 F.3d 1195, 1201 (Fed. Cir. 2004) (“[M]ere disclosure of alternative designs does not teach away.”).

Second, Appellant contends that the Examiner’s discussion of claim 7 relied on “official notice.” Appeal Br. 8. Appellant then rephrases various aspects of the teaching away argument discussed above. *Id.* at 9.

We disagree that the original statement of the Rejection here relied on official notice. *See* Final Act. 5–6. Regardless, in the Answer, the Examiner states that “selection involves only a few options when there are two overlapping ranges being cited, namely the nasal conduits of Wondka can be selected to be softer, the same, or more rigid than the air supply conduit” and that “[i]t would have been obvious to choose a more rigid nasal conduit than the supply conduits to achieve desired functions of the respective parts.” Ans. 9. According to the Examiner, “it is known in the art that nasal conduits are necessary to be more rigid than the air supply conduits since the nasal conduits are needed to maintain their shapes so that air can be delivered into the patients without any distractions” whereas “air supply conduits are known to be flexible so as to allow the user to adjust the position of the air supply conduits with respect to the user’s face without irritating the user, see also FIG. 1 of Wondka which shows the air supply conduit 18 being less rigid than the nasal conduits 22.” *Id.* at 9–10.

In the Reply Brief, Appellant contends that the “Examiner admits that *Wondka* alone does not render claim 7 obvious.” Reply Br. 3. We disagree. In the Answer, the Examiner added Rejection 4 (based on *Wondka* and

Cardoso) but did not withdraw Rejection 2 (based on Wondka alone). *See* Ans. 7, 9–11. Although the Examiner’s discussion of Rejection 2 also makes certain findings regarding Cardoso, we view the discussion summarized in the prior paragraph here as further developing the reasoning to support the conclusion of obviousness of claim 7 based on Wondka alone (i.e., Rejection 2). In the Reply Brief, Appellant does not address the Examiner’s reasoning supporting Rejection 2. *See* Final Act. 5–6; Ans. 9–10. We determine that the Examiner’s reasoning supports a prima facie case of obviousness of claim 7 based on Wondka alone. *See In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). By not addressing the reasoning provided, Appellant has not shown error in the relevant findings or the conclusion as to obviousness.

For these reasons, we sustain the rejection of claim 7 under 35 U.S.C. § 103(a) as unpatentable over Wondka.

*Rejection 3 – The rejection of claim 9
under 35 U.S.C. § 103(a)*

Appellant does not separately argue claim 9, which depends from claim 1. Thus, for the reasons discussed above (*see supra* Rejection 1), we sustain the rejection of claim 9.

*Rejection 4 – The rejection of claim 7 under
35 U.S.C. § 103(a) over Wondka and Cardoso*

In the Answer, the Examiner provides a new ground of rejection of claim 7 under 35 U.S.C. § 103 as unpatentable over Wondka and Cardoso. *See* Ans. 7. The Examiner finds that “Cardoso teaches a pressurized air deliver[y] device comprising nasal conduits (10) (nasal cannula) and supply conduits (flexible feed tube from an oxygen tank or wall fitting).” *Id.*; *see*

also Cardoso, Fig. 2C (showing nasal cannula 10 and the unnumbered “flexible feed tube” connecting to cannula 10 at proximal end 4). The Examiner finds that Cardoso teaches that nasal cannula 10 is “more rigid” than the flexible feed tube because Cardoso discloses that “[t]he material used to construct the . . . nasal cannula 10 is preferably substantially rigid.” Cardoso, col. 4, ll. 50–52 (*cited at* Ans. 7). According to the Examiner,

it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the nasal conduits and the supply conduits of Wondka where the nasal conduits are formed of a material that is more rigid than the supply conduits as taught by Cardoso in order to maintain fixed alignment and connections with a patient’s nose while the supply conduits are flexible for flexing in different directions for different positions and configurations of a ventilator relative to the patient’s head.

Ans. 7.

Appellant argues, “all *Cardoso* adds is that the supply hose 64 (of *Wondka*) may be a flexible feed tube.” Reply Br. 3 (discussing *Wondka*, Fig. 4). According to Appellant, “[t]he fact that supply hose 64 is flexible says nothing about the relative rigidity between the delivery tubes 37 and the connectors 33”—i.e., the identified “nasal conduits” and “supply conduits.” *Id.*

With this argument, Appellant does not address the rejection as articulated. In this Rejection, the Examiner proposes to modify the identified “nasal conduits” and “supply conduits” of *Wondka*—i.e., delivery tubes 37 and connectors 33—based on teachings of *Cardoso* to satisfy the requirement of claim 7. *See* Ans. 7. The Examiner has not proposed modifying supply hose 64 of *Wondka*.

Thus, we sustain the rejection of claim 7 under 35 U.S.C. § 103(a) as unpatentable over *Wondka* and *Cardoso*.

DECISION

We *affirm* the decision to reject claims 1, 6, 8, 10–12, 14, and 19 under 35 U.S.C. § 102(b), we *affirm* the decision to reject claim 7 under 35 U.S.C. § 103(a) as unpatentable over Wondka, we *affirm* the decision to reject claim 9 under 35 U.S.C. § 103(a), and we *affirm* the decision to reject claim 7 under 35 U.S.C. § 103(a) as unpatentable over Wondka and Cardoso.

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). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED