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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte L. VAN THOMAS CRISCO

Appeal 2019-006938
Application 15/088,447
Technology Center 3700

Before STEFAN STAICOVICI, LEE L. STEPINA, and
ERIC C. JESCHKE, *Administrative Patent Judges*.

JESCHKE, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant¹ seeks review, under 35 U.S.C. § 134(a), of the Examiner’s decision, as set forth in the Final Office Action dated October 30, 2018, rejecting claims 1–20. The record includes a transcript of the remote oral hearing held on September 1, 2020 (“Tr.”). We have jurisdiction under 35 U.S.C. § 6(b).

We affirm in part.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies Access Flow Systems, LLC as the real party in interest. Appeal Br. 2.

BACKGROUND

The disclosed subject matter relates to “percutaneous methods for performing a coronary artery bypass graft (CABG) procedure on a patient.”

Spec. ¶ 2. Claims 1 and 10 are independent. Claim 1 is reproduced below.

1. A system for performing a percutaneous vascular or cardiac procedure, the system comprising:

a percutaneous catheter having a distal end for insertion into a vein or artery of a patient;

a sealing portion at the distal end which is configured to releasably form a hemostatic connection between the catheter and an inner wall of the vein or artery to form an interface between the sealing portion and the inner wall of the vein or artery, wherein the sealing portion is configured to form the hemostatic connection around a portion of the inner wall of the vein or artery, the hemostatic connection substantially preventing blood from flowing through the interface;

a balloon configured to releasably secure the sealing portion against the inner wall to form the hemostatic connection, wherein the balloon surrounds the catheter; and

a penetration device configured to pass through the catheter and form an aperture through the vein or artery while maintaining the hemostatic connection between the catheter and the inner wall, the aperture being bounded by the hemostatic connection.

REJECTIONS

1. Claims 1–20² stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.
2. Claims 1–3, 5–9, and 15–20 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Goldsteen (US 2004/0116946 A1, published June 17, 2004), LaFontaine '526 (US 6,092,526, issued July 25, 2000), and Schweich (US 5,716,340, issued Feb. 10, 1998).
3. Claim 4 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Goldsteen, LaFontaine '526, Schweich, and Ressemann (US 6,155,264, issued Dec. 5, 2000).
4. Claims 10–14 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Goldsteen, Khitin (US 2007/0185566 A1, published Aug. 9, 2007), LaFontaine '526, and Schweich.
5. Claims 1, 5, 7–11, 13–15, and 17–20 stand rejected under 35 U.S.C. § 103(a) as unpatentable over LaFontaine '985 (US 2001/0003985 A1, published June 21, 2001) and Valley (US 2001/0001812 A1, published May 24, 2001).
6. Claims 2 and 3 stand rejected under 35 U.S.C. § 103(a) as unpatentable over LaFontaine '985, Valley, and LaFontaine '526.
7. Claim 4 stands rejected under 35 U.S.C. § 103(a) as unpatentable over LaFontaine '985, Valley, and Ressemann.

² The Examiner discusses claims 1, 6, 10, and 12 in the body of the Rejection in the Office Action and in the Answer (Final Act. 2–4; Ans. 4–7), but only lists claims 6 and 12 in the lead paragraph to this Rejection (Final Act. 2). Because claims 2–9 and 15–20 depend from claim 1 and claims 11–14 depend from claim 10, we consider claims 1–20 as rejected on this basis.

8. Claims 6 and 12 stand rejected under 35 U.S.C. § 103(a) as unpatentable over LaFontaine '985, Valley, and Termin (US 5,071,407, issued Dec. 10, 1991).

9. Claim 16 stands rejected under 35 U.S.C. § 103(a) as unpatentable over LaFontaine '985, Valley, and Goldsteen.

DISCUSSION

Rejection 1 – The rejection of claims 1–20 under 35 U.S.C. § 112, first paragraph

A. Claims 6 and 12

Claim 6 depends from claim 1 and recites: “The system of claim 1, *further comprising a counter-support* extending from the catheter in a direction opposite the sealing portion.” Appeal Br. 21 (Claims App.) (emphasis added). The Examiner stated that “claim 6 in view of the limitations of claim 1 does not have sufficient support in the original disclosure and is considered as new matter.” Final Act. 3. According to the Examiner, “[c]laim 1 recites the balloon which is shown in the embodiment shown in Figure 5” whereas “[t]he counter-support(s) 119 is/are shown in a different/alternative embodiment as shown in Figure 6.” *Id.* The Examiner stated that “[t]he original disclosure does not disclose a single embodiment that has both the balloon and the counter-support.” *Id.*

Claim 12 depends from claim 10 and recites: “The method of claim 10, wherein releasably forming the hemostatic connection between the catheter and the inner wall comprises extending a counter-support from the catheter in a direction opposite the sealing portion.” Appeal Br. 23 (Claims App.). The Examiner stated that “claim 12 in view of the limitations of claim 10 does not have sufficient support in the original disclosure and is

considered as new matter” for the same reasons discussed above as to claim 6. Final Act. 3–4.

Appellant asserts that paragraph 29 of the Specification supports the “counter-support” of claims 6 and 12 being used *in combination with* the “balloon” of their respective independent claims. *See* Appeal Br. 7. Specifically, Appellant highlights the statement in paragraph 29 that “[t]he hemostatic connection between the catheter and the inner aortic wall may be made using any suitable technique,” and then Appellant quotes the rest of that paragraph, which, according to Appellant, “describes certain techniques.” *Id.* Appellant also quotes the disclosures in paragraph 29 that (1) “the hemostatic connection 112 may be created by forming sutures 116 through the catheter wall 110 to the inner aortic wall 18” and (2) “[t]he hemostatic connection 112 also may be created by inflating a non-occluding balloon 117 within the aorta 16.” *Id.* (quoting Spec. ¶ 29, with emphasis added by Appellant). According to Appellant, “[i]n a similar manner, one skilled in the art would understand that use of the described non-occluding balloon and one or more counter-supports also may be combined to provide a suitable hemostatic connection.” *Id.*

The test for compliance with the written description requirement is “whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.” *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc). Appellant has not shown error in the Examiner’s finding that the Specification does not reasonably convey to one of ordinary skill in the art that the inventor had possession of the “counter-support” of claims 6 and 12 being used *in combination with* the “balloon” of the independent claims. Although the term “also” is included

in the disclosure of the use of non-occluding balloon 117 to create the hemostatic connection, that term need not mean that balloon 117 is used *in combination with* another of the disclosed “technique[s]” to create the hemostatic connection. Instead, we view the use of the term “also”—as does the Examiner—as indicating an *alternative* technique to creating the hemostatic connection. *See* Spec. ¶ 29; Final Act. 3 (“The original disclosure does not disclose a single embodiment that has both the balloon and the counter-support.”); *see also* Appeal Br. 7 (acknowledging that “[t]he described use of sutures, a non-occluding balloon, and one or more counter-supports *are illustrated separately* in Figures 3A, 5, and 6, respectively” (emphasis added)).

Here, Appellant has not identified record evidence (such as, for example, a declaration) supporting the assertions as to the understanding of one of ordinary skill in the art. *See In re Pearson*, 494 F.2d 1399, 1405 (CCPA 1974) (“Attorney’s argument in a brief cannot take the place of evidence.”); Appeal Br. 7 (arguing that “one skilled in the art would appreciate from the corresponding description [of Figure 3A, 5, and 6], when viewed as a whole, that such techniques also may be used in combination as a ‘suitable technique’ contemplated by the inventor” and that “one skilled in the art would understand that use of the described non-occluding balloon and one or more counter-supports also may be combined to provide a suitable hemostatic connection”). For these reasons, we sustain the rejection of claims 6 and 12 under 35 U.S.C. § 112, first paragraph.

B. Claims 1–5, 7–11, and 13–20

The Examiner rejected independent claims 1 and 10, finding that the phrases “the balloon surrounds the catheter” in claim 1 and “the balloon surrounds the at least one catheter” in claim 10 lack adequate written

description support and are new matter. *See* Final Act. 2–3. The Examiner made the same findings for both claims. *See id.* Specifically, the Examiner stated that the Specification “is silent on whether the balloon surrounds (encloses on all sides) the catheter.” *Id.* at 2, 3. The Examiner stated, “Figure 5 is the only figure that shows that balloon 117. However, part of the balloon [1]17 is not shown as it’s blocked by the distal end of the catheter and the flange 114 in Figure 5.” *Id.* at 2–3. According to the Examiner, “[t]he balloon may not have the structure that covers or encloses the part of the catheter on the left side of the catheter as shown in Figure 5.” *Id.* at 3. Claims 2–9 and 11–20 are rejected on the same basis due to their dependence from either claim 1 or claim 10. *See supra* note 2.

Appellant argues claims 1 and 10 together, highlighting paragraphs 28 and 29 as well as Figures 2 and 5 as allegedly supporting the limitations at issue. *See* Appeal Br. 5. We reproduce Appellant’s Figures 2 and 5 below.

FIG. 2

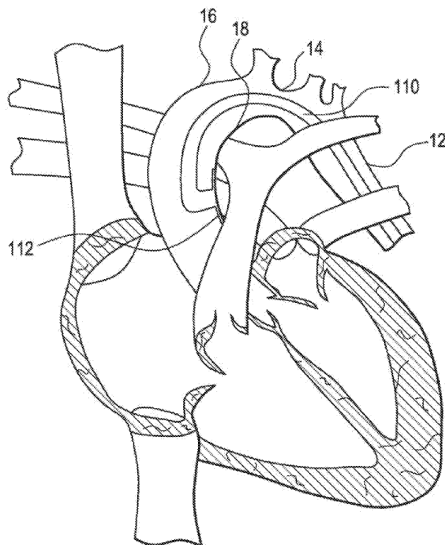
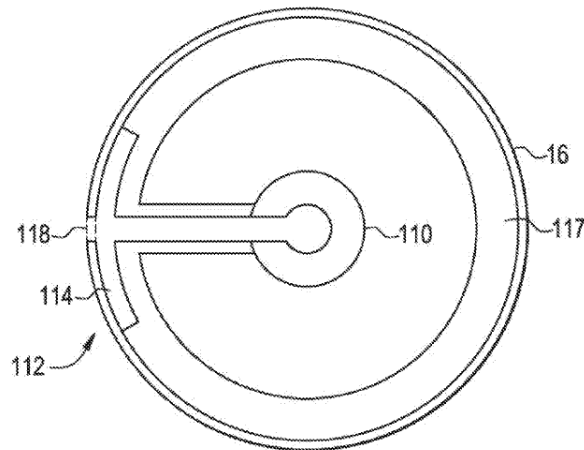


FIG. 5



Spec., Figs. 2, 5. Figure 2 “illustrates a view of the heart of F[igure] 1 with a hemostatic connection between the catheter and aorta” and Figure 5

“illustrates a device and method for forming a hemostatic connection between the catheter and aorta.” Spec. ¶¶ 9, 13. As to Figure 2, Appellant highlights two disclosures in paragraph 28: (1) “In one embodiment, the catheter 110 is used to form a hemostatic connection 112 with the inner aortic wall 18 in an anterolateral, or otherwise preferred, projection” and (2) “In one embodiment, the catheter 110 includes a flange 114.” Appeal Br. 5 (quoting Spec. ¶ 28). According to Appellant, “Figure 2 shows the hemostatic connection 112 formed by the flange 114 positioned at a distal end of the catheter 110.” *Id.*

As to Figure 5, Appellant highlights two disclosures in paragraph 29: (1) “The hemostatic connection 112 also may be created by inflating a non-occluding balloon 117 within the aorta 16 (F[igure] 5)” and (2) “The non-occluding balloon should be inflated in such a way that it provides a sufficient amount of pressure against the flange 114, thereby forming a hemostatic connection between the flange and the inner aortic wall 18.” Appeal Br. 5 (quoting Spec. ¶ 29). According to Appellant, “Figure 5 shows the hemostatic connection 112 formed by the flange 114.” *Id.* Appellant argues that, in view of these disclosures, “one skilled in the art would appreciate that the ‘left side’ of the illustrated system, where the flange 114 forms the hemostatic connection 112, is the distal end of the system” and would also “understand that the balloon 117, as shown in Figure 5, surrounds the catheter 110 to provide the described pressure against the flange 114, while leaving the sealing face of the flange 114 (at the distal end of the system) exposed to form the hemostatic connection 112.” *Id.* at 6.

For the reasons stated by Appellant as summarized above, we agree that paragraphs 28 and 29, as well as Figures 2 and 5, support the limitations at issue. In light of these disclosures, we understand “surrounds” in the

limitations at issue as requiring the balloon to fully encircle the catheter about at least some of the catheter’s longitudinal axis, but not necessarily requiring the balloon to cover the ends of the catheter. *See* Tr. 8:19–23. Indeed, if “surrounds” meant “encloses on *all* sides”—as asserted by the Examiner (Final Act. 2, 3 (emphasis added))—flange 114 would not be able to exit catheter 110 and then form a hemostatic connection after receiving “a sufficient amount of pressure” from balloon 117, as disclosed in paragraph 29. *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996) (stating that a construction that excludes a preferred embodiment “is rarely, if ever, correct and would require highly persuasive evidentiary support”). Further, our construction of “surrounds” is supported by extrinsic evidence identified by the Examiner. *See* App. A (Merriam-Webster, www.merriam-webster.com/dictionary/surround (last visited September 23, 2020) (Definition 1(d): “to extend around the margin or edge of: ENCIRCLE // a wall *surrounds* the old city”), *discussed at* Ans. 8–9, 10–11.

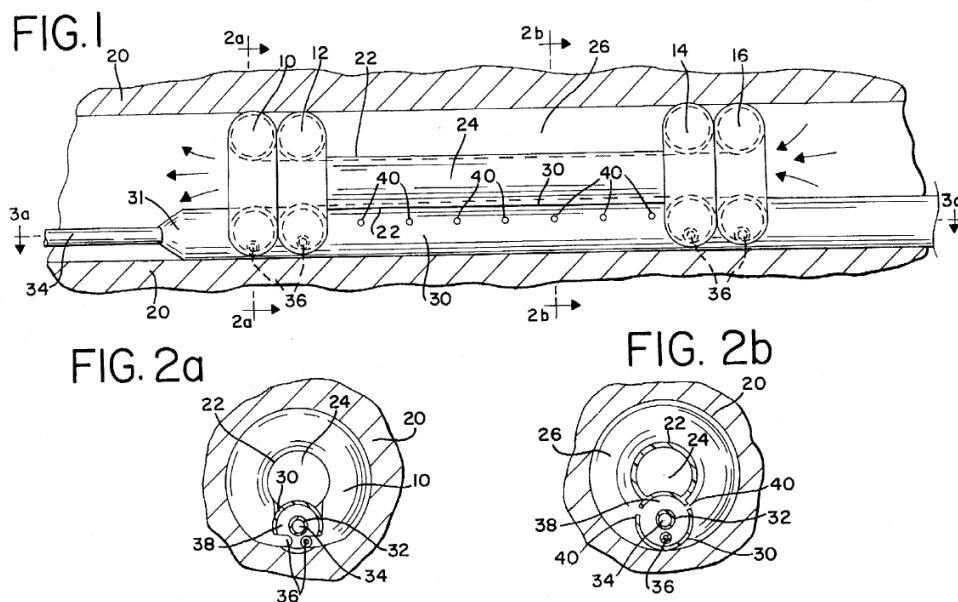
In the Answer, the Examiner questions the specific location where Figure 5 is “taken.” Ans. 4; *see also* Ans. 6 (providing an annotated version of a portion of Figure 3B, with “B” and “C1” added as potential locations for Figure 5). We need not resolve that issue, however, to answer the question at hand. As argued by Appellant, regardless of the specific viewpoint, Figure 5 shows balloon 117 *surrounding* catheter 110—as well as all but one surface of flange 114, which is part of catheter 110 (Spec. ¶ 28)—as the term “surrounds” is defined above. *See* Reply Br. 3–4. Although the left surface of flange 114 is not covered by balloon 117, under the construction above, it need not be. The Examiner also questions whether balloon 117 in this embodiment is “fully circular or substantially C-shaped.” Ans. 5. Based on

the aspects of the Specification discussed above, we agree with Appellant that balloon 117 is disclosed as circular. *See* Reply Br. 3–4.

For these reasons, we do not sustain the rejection of independent claims 1 and 10, and also do not sustain *this* rejection of claims 2–9, and 15–20 (which depend from claim 1) and claims 11–14 (which depend from claim 10) under 35 U.S.C. § 112, first paragraph.³

Rejection 2 – The rejection of claims 1–3, 5–9, and 15–20 based on Goldsteen, LaFontaine '526, and Schweich

Independent claim 1 recites, among other limitations, that “the balloon surrounds the catheter.” Appeal Br. 21 (Claims App.). For this limitation, the Examiner relied on Schweich, stating, “a balloon (10 or alternatively the combination of 10, 12, 14, 16, and 24, Figs. 1–2b) surround a catheter (30, Fig. 1).” Final Act. 7. Figures 1, 2a, and 2b in Schweich are reproduced below.



³ As discussed above (*see supra* Rejection 1 § A), we sustain the rejection of claims 6 and 12 under 35 U.S.C. § 112, first paragraph, on a different basis.

Schweich, Figs. 1, 2a, 2b. Figure 1 depicts an embodiment of a drug delivery catheter, and Figures 2a and 2b depict cross-sectional views at the locations indicated in Figure 1. *See id.* at 5:13–18.

Appellant argues that “Schweich does not actually teach or suggest a balloon as recited in claim 1.” Appeal Br. 9. According to Appellant, “[n]othing in Schweich indicates or suggests that any of the balloons 10, 12, 14, 16 surrounds the tubular shaft 30,” and instead, “Figures 1–2b clearly indicate that the balloons 10, 12, 14, 16 do not pass around the lower region of the tubular shaft 30 that contacts the vessel wall 20.” *Id.* at 10.

The Examiner responds by referencing the proposed definition of “surround” discussed in the context of the written description rejection—“encloses on all sides of”—and then proposes an alternative definition—“to extend around the margin or edge of.” Ans. 8 (citing www.merriam-webster.com). According to the Examiner, “Schweich. Jr.’s balloon 10 surrounds (extends around the margin or edge of) the catheter 30 (Figs. 1 and 2a).” *Id.* at 9.

The record supports Appellant’s position. As discussed above, we construe “surrounds” in the limitation at issue in line with the Examiner’s alternative construction. In the Reply Brief, Appellant argues that, in the context of that proposed construction, “the term ‘surrounds’ means ‘to extend around the margin or edge of’ *the entire object.*” Reply Br. 5 (emphasis added). The record supports Appellant’s understanding. After providing that definition, the relevant entry in Merriam-Webster’s online dictionary states: “ENCIRCLE” and then provide the exemplary phrase “a wall *surrounds* the old city.” *See* App. A (Definition 1(d)). Applying this understanding of the Examiner’s second proposed construction, for the reason argued by Appellant, Schweich does not disclose the limitation at

issue because the identified balloon does not *fully* encircle the catheter about at least some of the catheter's longitudinal axis. *See* Appeal Br. 10; Schweich, Fig. 2a. Thus, we do not sustain this rejection of claim 1, or this rejection of claims 2, 3, 5–9, and 15–20, which depend from claim 1, under 35 U.S.C. § 103(a).

Rejection 3 – The rejection of claim 4 based on Goldsteen, LaFontaine '526, Schweich, and Ressemann

Claim 4 depends from claim 1. Appeal Br. 21 (Claims App.). The Examiner's added reliance on Ressemann does not remedy the deficiencies in the rejection based on Goldsteen, LaFontaine '526, and Schweich, regarding claim 1 (*see supra* Rejection 2). Thus, for the same reasons discussed above, we do not sustain the rejection of claim 4 under 35 U.S.C. § 103(a).

Rejection 4 – The rejection of claims 10–14 based on Goldsteen, Khitin, LaFontaine '526, and Schweich

Independent claim 10 recites, among other limitations, that “a balloon surrounds the at least one catheter.” Appeal Br. 22 (Claims App.). For this limitation, the Examiner relied on Schweich in the same manner as in the context of Rejection 2, stating: “a balloon (10 or alternatively the combination of 10, 12, 14, 16, and 24, Figs. 1–2b) surround a catheter (30, Fig. 1).” Final Act. 12–13; *see also* Final Act. 7 (same finding in the context of Rejection 2).

Appellant argues that, “for reasons similar to those presented above with respect to claim 1 [(i.e., Rejection 2)], Schweich does not actually teach or suggest a balloon as recited in claim 10 because the balloons 10, 12, 14, 16 do not surround the tubular shaft 30.” Appeal Br. 13 (citing Appeal Br.

9–10). The Examiner repeats the same arguments as in Rejection 2.
Compare Ans. 10–11 (Rejection 4), *with id.* at 8–9 (Rejection 2).

For the same reasons discussed above in the context of Rejection 2, Schweich does not disclose the limitation at issue under the proper construction of the term “surrounds,” as understood by a skilled artisan in light of Appellant’s Specification. Thus, we do not sustain this rejection of claim 10, or this rejection of claims 11–14, which depend from claim 10, under 35 U.S.C. § 103(a).

*Rejection 5 – The rejection of claims 1, 5, 7–11, 13–15,
and 17–20 based on LaFontaine ’985 and Valley*

A. Claims 1, 5, 7–9, and 15

Independent claim 1 recites, among other limitations, “a balloon configured to releasably secure the sealing portion against the inner wall to form the hemostatic connection.” Appeal Br. 21 (Claims App.). For this limitation, the Examiner relied on Valley, identifying “(710, Fig. 14, 722, Fig. 15, or 780, Fig. 20B)” as the recited “balloon” and stating, “wherein the balloon is configured or fully capable to releasably secure the opening at distal end of the catheter against the inner wall to form the hemostatic connection (Figs. 14, 15, and 20B).” Final Act. 14–15. Relied-upon Figures 14, 15, and 20B in Valley are reproduced below:

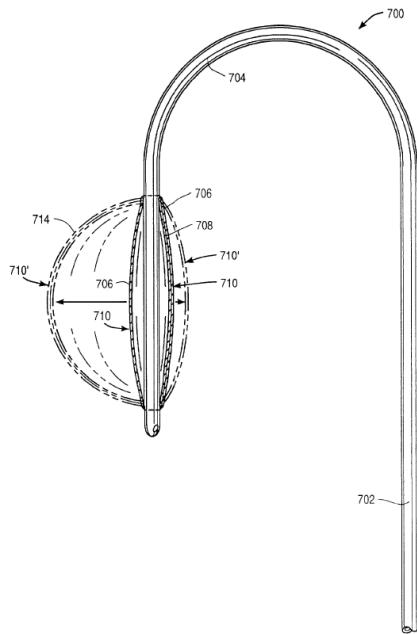


FIG. 14

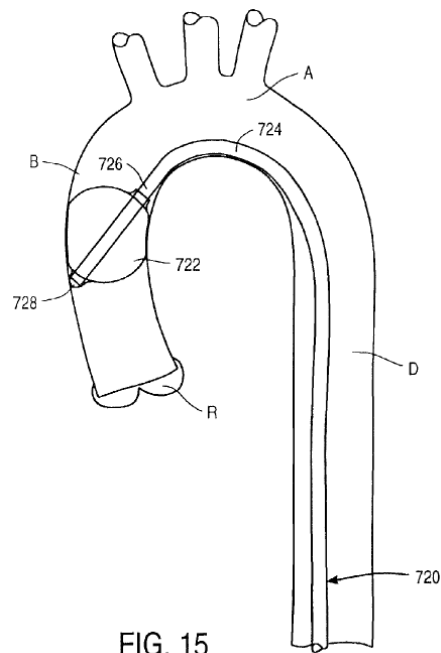


FIG. 15

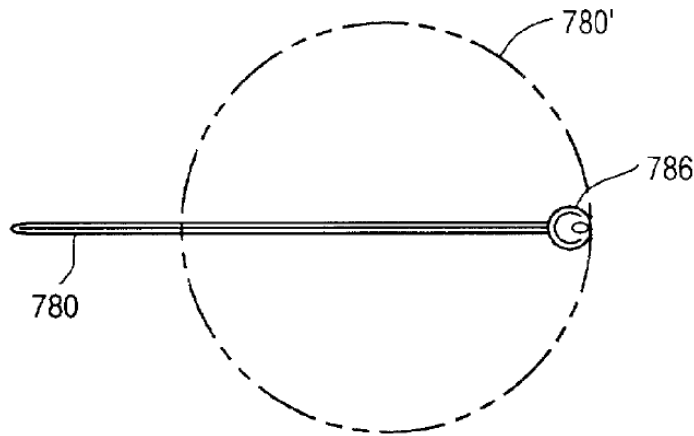


FIG. 20B

Valley, Figs. 14, 15, 20B. Figure 14 shows “a front view of an . . . endoaortic partitioning catheter having an eccentric aortic occlusion balloon.” Valley ¶ 70. Figure 15 is “a schematic partly cut-away representation of a patient’s aortic arch with an endoaortic partitioning catheter having a concentric occlusion balloon positioned in the ascending aorta.” *Id.* ¶ 71. Figure 20B is an end view of the endoaortic partitioning catheter shown in Figure 20A. *Id.* ¶¶ 80–81.

Appellant contends that “Valley describes an endoaortic partitioning catheter to facilitate distribution of cardioplegic fluid to coronary arteries of a patient.” Appeal Br. 15 (citing Valley ¶¶ 164–173, Figs. 14–20D). As to the relied-upon Figures 14 and 20B, Appellant argues that “nothing in Schweich [sic – Valley] indicates or suggests that the balloons 710, 780 are configured to releasably secure the distal tips of the catheter shafts 702, 786 *against the wall* of the aorta to form a hemostatic connection” as required by the limitation at issue. Appeal Br. 16 (emphasis added). According to Appellant, Valley discloses that “balloons 710, 780 are configured to help center the distal tips of the catheter shafts 702, 786 within the ascending aorta to facilitate uniform distribution of cardioplegic fluid injected through the infusion lumen and introduction of instruments through the infusion lumen.” *Id.* (citing Valley ¶ 173). And as to the relied-upon Figure 15, Appellant argues that, although that Figure shows

distal tip 728 contacting the wall of the aorta when the concentric aortic occlusion balloon 722 is inflated, Valley indicates that the illustrated positioning of the distal tip 728 is the problem that is solved by the eccentric aortic occlusion balloons of the embodiments shown in Figures 14 and 16–20.

Appeal Br. 16 (citing Valley ¶¶ 166, 173).

The Examiner responds that balloons 710, 722, 780 in Valley are “not only for centering a distal tip of a catheter” but “also for stabilizing/anchoring the catheter at the desire[d] location within the blood vessel in addition to directing/positioning the catheter inside the blood vessel.”

Ans. 13 (citing Valley ¶ 166, Fig. 20B). According to the Examiner, “[o]nce the eccentric balloon is inflated toward one side of the vessel wall, the balloon would be capable of exerting the force on the catheter to be against the other side of the vessel wall.” *Id.*

As to Figure 15, we agree with Appellant that paragraph 166 of Valley describes that system as an example of the “problem that is solved” by the embodiments in Figures 14 and 16–20. Appeal Br. 16. Although a prior art reference is generally “relevant for all that it teaches to those of ordinary skill in the art” (*In re Fritch*, 972 F.2d 1260, 1264 (Fed. Cir. 1992)), in the context of the invention described in Valley as seeking to “center the distal tip of the aortic partitioning catheter” (¶ 173), one of ordinary skill in the art would not have sought to employ the system in Figure 15, which does not center the distal tip. See Valley ¶ 166 (discussing Figure 15 and stating that “distal end 728 of the catheter *is not centered* in the aortic lumen despite the concentricity of the balloon 722 *because of the mismatch* between the catheter curve and the curve of the ascending aorta B” (emphasis added), *cited at* Appeal Br. 16); see also *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994) (“A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference”).

We turn now to Figures 14 and 20B. The Examiner acknowledges that, as argued by Appellant, balloons 710 and 780 are disclosed as *centering* the distal tip of the catheter. Ans. 13; Appeal Br. 16; Valley ¶ 173 (“The eccentrically shaped occlusion balloons of FIGS. 14 and 16–20 serve to help center the distal tip of the aortic partitioning catheter within the ascending aorta for uniform distribution of cardioplegic fluid injected through the infusion lumen and for aligning the tip of the catheter with the center of the aortic valve when other instruments are introduced through the infusion lumen.”). Further, the record does not support the Examiner’s apparent reliance on using those embodiments in a manner *not actually disclosed* in Valley—i.e., to push the catheter against the vessel wall. See

Ans. 13; Reply Br. 6 (arguing that “nothing in Valley indicates or suggests that the balloons 710, 780 are configured to releasably secure the distal tips of the catheter shafts 702, 786 against the wall of the aorta to form a hemostatic connection”).

In the Answer, the Examiner states that Figure 25B in Valley “also shows a similar scenario of directing and stabilizing the catheter tip toward the vessel wall.” Ans. 13. Figure 25B of Valley is reproduced below:

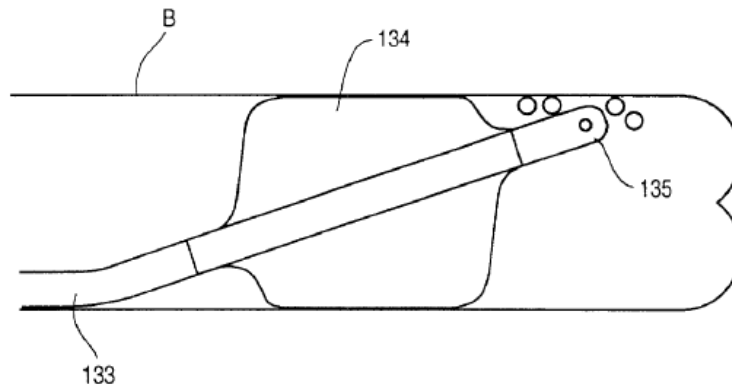


FIG. 25B

Valley, Fig. 25B. Figure 25B depicts “endoaortic partitioning catheter for de-airing the heart and ascending aorta.” Valley ¶ 90. Appellant responds that claim 1 does not recite “directing and stabilizing a catheter tip towards a vessel wall” but rather “a balloon configured to *releasably secure the sealing portion against the inner wall to form the hemostatic connection*, wherein the balloon surrounds the catheter.” Reply Br. 6 (quoting, with emphasis added, claim 1). We are persuaded by Appellant’s position. On the current record, the Examiner has not adequately explained why the Figure 25 embodiment in Valley discloses the limitation at issue in claim 1. For these reasons, we do not sustain this rejection of claim 1, or this rejection of claims 5, 7–9, and 15, which depend from claim 1, under 35 U.S.C. § 103(a).

B. Claim 10, 11, 13, and 14

Independent claim 10 recites, among other limitations, that the “balloon . . . is configured to releasably secure the sealing portion against an inner wall of the aorta.” Appeal Br. 22 (Claims App.). For this limitation, the Examiner relied on Valley in the same manner as in the context of claim 1, stating, “a balloon (710, Fig. 14, 722, Fig. 15, or 780, Fig. 20B) . . . wherein the connection between the catheter and the inner wall of the artery was formed with the aid of a balloon pressing the catheter against the inner wall of the artery (Figs. 14, 15, and 20B).” Final Act. 17; *see also id.* at 14–15 (similar findings regarding claim 1).

Appellant argues that, “for reasons similar to those presented above with respect to claim 1, Valley does not actually teach or suggest a balloon as recited in claim 10 because the aortic occlusion balloons of Valley are configured to help center the distal tips of the catheter shafts within the ascending aorta.” Appeal Br. 19 (citing Appeal Br. 15–16). The Examiner repeats the same arguments as provided in the context of claim 1. *Compare* Ans. 14–16 (addressing claim 10), *with id.* at 12–14 (addressing claim 1).

For the same reasons discussed above in the context of claim 1, Valley does not disclose the limitation at issue. Thus, we do not sustain this rejection of claim 10, or this rejection of claims 11, 13, and 14, which depend from claim 10, under 35 U.S.C. § 103(a).

Rejections 6–9 – The rejection of claims 2–4, 6, 12, and 16 based on LaFontaine '985, Valley, and other prior art

Claims 2–4, 6, and 16 depend from claim 1, and claim 12 depends from claim 10. Appeal Br. 21–23 (Claims App.). The Examiner’s added reliance on LaFontaine ’526 (regarding Rejection 6), Ressemann (regarding Rejection 7), Termin (regarding Rejection 8), and Goldsteen (regarding

Rejection 9) does not remedy the deficiencies in the rejection based on LaFontaine '985 and Valley, regarding claims 1 and 10 (*see supra* Rejection 5). Thus, for the same reasons discussed above, we do not sustain these rejections of claims 2–4, 6, 12, and 16 under 35 U.S.C. § 103(a).

CONCLUSION

We *affirm in part* the Examiner's rejection of claims 1–20.

More specifically, we (1) *affirm* the decision to reject claims 6 and 12 under 35 U.S.C. § 112, first paragraph, (2) *reverse* the decision to reject claims 1–5, 7–11, and 13–20 under 35 U.S.C. § 112, first paragraph, and (3) *reverse* the decision to reject claims 1–20 under 35 U.S.C. § 103(a).

DECISION SUMMARY

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–20	112 ¶ 1	Written Description	6, 12	1–5, 7–11, 13–20
1–3, 5–9, 15–20	103(a)	Goldsteen, LaFontaine '526, Schweich		1–3, 5–9, 15–20
4	103(a)	Goldsteen, LaFontaine '526, Schweich, Ressemann		4
10–14	103(a)	Goldsteen, Khitin, LaFontaine '526, Schweich		10–14
1, 5, 7–11, 13–15, 17–20	103(a)	LaFontaine '985, Valley		1, 5, 7–11, 13–15, 17–20

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2, 3	103(a)	LaFontaine '985, Valley, LaFontaine '526		2, 3
4	103(a)	LaFontaine '985, Valley, Ressemann		4
6, 12	103(a)	LaFontaine '985, Valley, Termin		6, 12
16	103(a)	LaFontaine '985, Valley, Goldsteen		16
Overall Outcome			6, 12	1-5, 7-11, 13-20

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 IN PART