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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MARIE THERESE ROBIN

Appeal 2018-008026
Application 14/330,812
Technology Center 3700

Before JENNIFER D. BAHR, EDWARD A. BROWN, and CHARLES N. GREENHUT, *Administrative Patent Judges.*

GREENHUT, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant[1] appeals from the Examiner's decision to reject claims 19, 20 22, 23, 25–30, 33, 34, 36–39, and 41–43. *See* Final Act. 1. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

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[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 Endologix, Inc., which is the assignee of record. Appeal Br. 2.

CLAIMED SUBJECT MATTER

The claims are directed to apparatus for repairing aneurysms. Claim 19, reproduced below, is illustrative of the claimed subject matter:

> 19. An apparatus, comprising:
>
> an inner graft tube that bifurcates at a bifurcation point into a first branch of the inner graft tube and a second branch of the inner graft tube; and
>
> an outer inflatable balloon attached to the inner graft tube;
>
> the outer inflatable balloon extending from a first location above the bifurcation point to a second location below the bifurcation point and defining an inflatable space that is inflatable with a settable substance, the inflatable space of the outer inflatable balloon including a continuous volume below the bifurcation point from a bottom of the outer inflatable balloon on the first branch of the inner graft tube to a bottom of the outer inflatable balloon on the second branch of the inner graft tube.

REFERENCES

The prior art relied upon by the Examiner is:

Reference Name	**Document ID**	**Pub. Date**
Rogers	US 5,534,024	July 9, 1996
Rhodes	US 5,665,117	Sept. 9, 1997
Abolfathi	US 5,785,679	July 28, 1998
Dehdashtian	WO 01/21108 Al	Mar. 29, 2001

REJECTIONS[2]

Claims 19, 20, 22, 23, 25–27, 30, and 33 are rejected as anticipated by, or, in the alternative, under 35 U.S.C. § 103(a) as obvious over, Dehdashtian as evidenced by Rogers. Final Act. 4.

[2] The Examiner withdrew a rejection under 35 U.S.C. § 112, first paragraph. Ans. 10.

Claims 19, 23, 25, 30, and 33 are rejected as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Rogers. Final Act. 7.

Claim 22, 26–29, 34, 36–39, and 41–43 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Rogers and Rhodes as evidenced by Abolfathi. Final Act. 10.

OPINION

Dehdashtian alone

The Examiner first takes the position that Dehdashtian anticipates each of the independent claims before us, claims 19, 30 and 33, because "[u]nder inherency, 'an outer balloon' can be reasonably interpreted as comprising three segments." Final Act. 5. The Examiner's statement conflates the principle of inherency—necessarily present but not expressly mentioned aspects of subject matter in the prior art—with the principle of affording claim terms their broadest reasonable interpretation. *See* MPEP §§ 2111, 2112. Even were we to agree with what seems to be the Examiner's ultimate position with this statement, that there is nothing in the claim precluding "an outer balloon" from reasonably being interpreted to comprise three discrete inflatable balloon segments, there remains insufficient evidence to conclude that Dehdashtian actually discloses that. The entirety of Dehdashtian's disclosure concerning the Figure 3 embodiment relied upon by the Examiner is reproduced below:

> In the embodiment of the invention depicted in Figure 3, the implant 10 comprises three individual segments. This embodiment is adapted such that it may be used in respect of an aneurysm spanning the area of the aorta 12 that bifurcates to form the common iliac arteries 13. The portions of the implant may be attached to an intraluminal graft 11 of [sic] may be inserted into the distinct areas of the aneurysm 20 separately.

Dehdashtian 8:15–20.

Although this disclosure mentions "three individual segments," those segments are segments of the "implant 10." There is not enough information to determine whether those three segments combine to reasonably be regarded as "an outer balloon." They may just as likely comprise three individual discrete balloons forming segments of the implant. As Appellant correctly points out, without the same balloon having both attributes of "extending from a first location above the bifurcation point to a second location below the bifurcation point" and "including a continuous volume below the bifurcation point" the Examiner's position clearly fails. App. Br. 13.

Dehdashtian and In re Larson[3]

The Examiner next takes the position that "[u]nder obviousness, [i]f 'an outer balloon' cannot . . . reasonably be described as comprising three portion[s]. . . It is the examiner position that it would have been obvious to one having ordinary skill in the art to have made the three portion outer balloon integral as a single outer balloon as merely a matter of obvious engineering choice." Final Act. 5–6 (citing MPEP § 2144.04 and *In re Larson*, 340 F.2d 965, 968 (CCPA 1965)).

In relying on MPEP § 2144.04 the Examiner has apparently failed to consider the very first paragraph of MPEP § 2144 which "caution[s] against treating any line of reasoning [contained therein] as a per se rule." Here, the examiner has improperly applied the holding of *Larson* as a per se rule. In other words, the examiner essentially finds that integrating any two things

[3] 340 F.2d 965 (CCPA 1965)

into one thing must be obvious regardless of the individual facts in the case. That makes the present case easily distinguishable from *Larson* where a fact-specific technical analysis was conducted. App. Br. 15. As our reviewing court has pointed out: "This method of analysis is founded on legal error because it substitutes supposed *per se* rules for the particularized inquiry required by section 103. It necessarily produces erroneous results." *In re Ochiai*, 71 F. 3d 1565, 1571 (Fed. Cir. 1995).

> The use of *per se* rules, while undoubtedly less laborious than a searching comparison of the claimed invention — including all its limitations — with the teachings of the prior art, flouts section 103 and the fundamental case law applying it. *Per se* rules that eliminate the need for fact-specific analysis of claims and prior art may be administratively convenient for PTO examiners and the Board . . . But reliance on *per se* rules of obviousness is legally incorrect and must cease. Any such administrative convenience is simply inconsistent with section 103, which, according to Graham and its progeny, entitles an applicant to issuance of an otherwise proper patent unless the PTO establishes that the invention as claimed in the application is obvious over cited prior art, based on the specific comparison of that prior art with claim limitations.

Id at 1572.

The examiner has failed to articulate any fact-specific analysis demonstrating consideration was given to the particular problems associated with combining separate balloon segments in discrete locations into a single balloon. It was improper for the examiner to apply the holding in *Larson* without regard for the particular nature of the claimed subject matter.

Dehdashtian and Rogers

The Examiner's third and final position with regard to the rejection predicated on Dehdashtian is that Rogers "teach[s] a single outer balloon

was known in the art." Final Act. 6. This statement is the extent of the Examiner's reasoning in support of rejecting the claims based on the combined teachings of Dehdashtian and Rogers. First, this clearly falls short of the necessary "articulated reasoning with some rational underpinning to support the legal conclusion of obviousness" required by our reviewing court. *See In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006), cited with approval in *KSR Int'l. v. Teleflex*, 550 U.S. 398, 418 (2007). Second, as the balloon segments in Rogers purposefully contain discrete cylinders essentially acting as bulkheads between the balloon segments, it is not apparent, and the Examiner does not explain, why one skilled in the art would combine the teachings of Dehdashtian and Rogers to arrive at the claimed subject matter, which must include a "continuous volume below the bifurcation point." App. Br. 16–18.

Rogers alone

The Examiner's first theory of anticipation based on Rogers is that "[t]he 'inflatable space' is reasonably interpreted to include the outer inflatable balloon itself." Final Act. 8. Appellant correctly argues interpreting the balloon itself—a solid object—as "space" is an unreasonable interpretation of the "inflatable space" *defined by* the balloon. App. Br. 21–22. To the extent the Examiner intended to refer to the space ultimately *occupied by* the balloon, such an interpretation is also inconsistent with the claims which require the space to be "inflatable with a settable substance." This requirement makes clear the claim is referring to a contained space, i.e., *within* the balloon.

The Examiner's second theory of anticipation based on Rogers is that "[t]he [claim] language does not exclude the continuous volume below the

bifurcation point including connecting via camber/manifold 32 above the bifurcation point." Final Act. 8. The only explanation as to how this allows Rogers' device to satisfy the claim language is that "[Rogers'] cylinders below the bifurcation point as claimed are all continuously connected." Ans. 15. The existence of a continuous connection by having the cylinders joined *somewhere* does not, without more, demonstrate the existence of a continuous volume below the bifurcation point. At most this demonstrates that there is a continuous volume in Rogers, a portion of which extends below the bifurcation point on one side and a different portion of which extends below the bifurcation point on the other side. However, this is not what the claims call for. Rather, the characteristic of being "below the bifurcation point" and extending between the first and second branches is attributed to the "continuous volume" itself, not merely two discrete portions of a continuous volume. The Examiner is unable to point to any volume in Rogers having the requisite characteristics according to the independent claims.

The Examiner's third theory of unpatentability premised on Rogers is that "it would have been obvious to one having ordinary skill in the art to have placed the manifold below the inner graft tube bifurcation point (as one of a variety of locations) such that all cylinders including the inside cylinders could be inflatable (meeting the claim language)." Final Act. 9. The Examiner points out that Rogers states "the chamber[/manifold] 32 can be positioned in a variety of locations along the length of the chamber." Ans. 16 (quoting, without expressly citing, Rogers col. 2, ll. 39–42). As Appellant correctly argues, the quoted disclosure of Rogers relates to the cylindrical embodiment depicted in Figures 1, 2, and 4 of Rogers as opposed to the relied-on bifurcated embodiment depicted in Figure 7. Reply. Br. 10

(reproducing a portion of Rogers col. 2, ll. 33–42). As a fluid manifold is typically arranged at a *common* location, to or from which multiple branches are directed, it would seem directly contrary to ordinary mechanical wisdom to rearrange the manifold chamber 32 of Rogers so as to have a volume situated to instead encompass the multiple branches of Rogers' embodiment depicted in Figure 7. The Examiner does not provide any technical reasoning for locating the manifold chamber 32 of Rogers in this unusual way. Thus, it appears, on the record before us, the only reason for the Examiner proposing to do so is to recreate Appellant's claimed subject matter though hindsight. Of course, it is improper to base a conclusion of obviousness upon facts gleaned only through hindsight. To draw on hindsight knowledge of the patented invention, when the prior art does not contain or suggest that knowledge, is to use the invention as a template for its own reconstruction—an illogical and inappropriate process by which to determine patentability. *Sensonics Inc. v. Aerosonic Corp*., 81 F.3d 1566, 1570 (Fed. Cir. 1996) (citing *W.L. Gore & Assoc. v. Garlock, Inc.*, 721 F.2d 1540, 1553 (Fed. Cir. 1983)).

CONCLUSION

For the foregoing reasons, the Examiner's rejections are REVERSED.

DECISION SUMMARY

Claims	**35 U.S.C. §**	**Basis/References**	**Affirmed**	**Reversed**
19, 20, 22, 23, 25–27, 30, 33	102/103	Dehdashtian Rogers		19, 20, 22, 23, 25–27, 30, 33
19, 23, 25, 30, 33	102/103	Rogers		19, 23, 25, 30, 33
22, 26–29, 34, 36–39, 41–43	103(a)	Rogers, Rhodes, Abolfathi		22, 26–29, 34, 36–39, 41–43
Overall Outcome				19, 20, 22, 23, 25–30, 33, 34, 36–39, 41–43

REVERSED