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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JIM G. HARRISON, STEVE A. PICKETT,
LESLIE P. SHERWOOD, and MARSHA M. WEINER

Appeal 2019-006460
Application 13/534,788
Technology Center 3700

Before BRETT C. MARTIN, MICHELLE R. OSINSKI, and
JEREMEY M. PLENZLER, *Administrative Patent Judges*.

OSINSKI, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant¹ appeals under 35 U.S.C. § 134(a) from the Examiner's decision rejecting claims 1–5, 7–10, and 13–22.² We have jurisdiction over the appeal under 35 U.S.C. § 6(b).

We REVERSE.

¹ We use the term “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as Boston Scientific Scimed, Inc. Appeal Br. 2.

² Claims 6, 11, and 12 are cancelled. Reply to Non-Final Office Action (July 2, 2018), 2–3.

THE CLAIMED SUBJECT MATTER

Claims 1, 13, and 17 are independent. Claim 1 is reproduced below.

1. A stent delivery system, comprising:

a guide catheter;

a push catheter slidably disposed over the guide catheter;

a stent slidably disposed over the guide catheter and disposed adjacent to a distal end of the push catheter, the stent having an opening formed therein;

a cylindrical member disposed between the guide catheter and push catheter, the cylindrical member having a longitudinal notch formed therein; and

a cantilever disposed within the longitudinal notch, wherein the cantilever includes a proximal end fixed to the cylindrical member and a free distal end extending from the fixed proximal end, wherein the free distal end is configured to project into the stent opening.

EVIDENCE

The Examiner relied on the following evidence in rejecting the claims on appeal:

Name	Reference	Date
Pinchuk	US 2007/0282436 A1	Dec. 6, 2007
Rust	US 2011/0301702 A1	Dec. 8, 2011

REJECTIONS

- I. Claims 1–5, 7, 9, 10, and 13–22 stand rejected under 35 U.S.C. § 102(e) as anticipated by Rust. Final Act. 2–6.
- II. Claim 8 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Rust and Pinchuk. *Id.* at 7.

OPINION

Rejection I

The Examiner finds that Rust discloses, among other things, (i) a stent delivery system comprising a stent (prosthetic heart valve 114) disposed adjacent to a distal end of a push catheter (sheath 104) and (ii) a cylindrical member (coupling structure 502) disposed between a guide catheter (connector shaft 115) and the push catheter (sheath 104). Final Act. 2–3 (citing Rust Figs. 1B, 2B, 5B).

With respect to the stent (prosthetic heart valve 114) being disposed “adjacent” to a distal end of the push catheter (sheath 104) as claimed, the Examiner determines “that ‘adjacent’ is a broad term” (Final Act. 8) and interprets “adjacent” as meaning “situated near, close to, or adjoining” (Ans. 5). The Examiner takes the position that the term “adjacent” provides no indication as to whether adjacent elements overlap or not. Ans. 5. In other words, the Examiner takes the position that “[e]lements can be adjacent to each other when the[y] overlap, and elements can be adjacent to each other without overlapping.” *Id.* The Examiner continues that “Rust shows that the stent is disposed adjacent to the distal end of the sheath, when ‘adjacent’ is interpreted as discussed above.” *Id.* at 6.

More particularly the Examiner states, “Fig. 1B shows Rust’s delivery device, and shows stent 114 disposed adjacent to a distal end of sheath 104, because stent 114 is ‘situated near’ and is ‘close to’ the distal end of sheath 104” and that “Rust also shows this ‘adjacent’ relationship in Fig. 1C.” *Id.* Moreover, the Examiner notes that “in Fig. 1B, the distal end of the sheath 104 is ‘adjacent’ to stent 114 while still having the coupling structure (corresponding to the claimed cylindrical member) being disposed between

the connector shaft (corresponding to the claimed guide catheter) and the sheath (corresponding to the claimed push catheter).” *Id.* at 7.

Appellant disagrees with the Examiner regarding the proper interpretation to be accorded to the claim term “adjacent.” According to Appellant, “one of ordinary skill would readily understand the term ‘adjacent’ in the context of its plain meaning and the systems and method recited in claims 1, 13, and 17, to mean nearby, having a common endpoint or border, or immediately preceding or following; none of which refer to components with any sort of overlap (let alone complete overlap), as the Examiner argues.” Appeal Br. 12; Reply Br. 6. Appellant argues that the Examiner relies on “a strained and unreasonable interpretation of ‘adjacent’ in that it . . . allows the heart valve 114, which is disposed entirely within the sheath (104) . . . to be characterized as adjacent to a distal end of the sheath 104.” Appeal Br. 11.

We give claim terms “their broadest reasonable interpretation consistent with the specification” and “in light of the specification as it would be interpreted by one of ordinary skill in the art.” *In re Am. Acad. Of Sci. Tech Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004) (citations omitted).

According to the Federal Circuit:

The correct inquiry in giving a claim term its broadest reasonable interpretation in light of the specification is not whether the specification proscribes or precludes some broad reading of the claim term adopted by the examiner. And it is not simply an interpretation that is not inconsistent with the specification. It is an interpretation that corresponds with what and how the inventor describes his invention in the specification, i.e., an interpretation that is “consistent with the specification.” *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997) (citation and

internal quotation marks omitted); *see also In re Suitco Surface*, 603 F.3d 1255, 1259–60 (Fed. Cir. 2010).

In re Smith Int'l, Inc., 871 F.3d 1375, 1382-83 (Fed. Cir. 2017).

The Specification states that “[t]he stent 20 may be positioned on a distal portion of the guide catheter 12, which may be located distal of the push catheter 14, and the stent 20 may abut or otherwise be disposed *adjacent* to a distal end 30 of the push catheter 14.” Spec. 6:9–12 (emphasis omitted). We note that the Specification uses different language to describe the position of the stent relative to the distal portion of the guide catheter (i.e., “positioned on”), as opposed to the position of the stent relative to the distal end of the push catheter (i.e., “abut or otherwise be disposed adjacent to”). The use of the term “positioned on” with respect to hollow, cylindrical members like a stent and guide catheter would generally be viewed as describing an overlapping and/or concentric relationship between the components. That the Specification does not use “positioned on” when describing the stent relative to the distal end of the push catheter, and instead uses different terminology, is suggestive that the stent is not positioned on (i.e., overlapping with) the distal end of the push catheter. In addition, the claim also uses different language when describing the position of the stent relative to the guide catheter (i.e., “slidably disposed over”), as opposed to the position of the stent relative to the distal end of the push catheter (i.e., “disposed adjacent to”). The different terminology in the claim also suggests that a stent disposed adjacent to a distal end of the push catheter is not referring to a stent that is slidably disposed relative to a distal end of the push catheter.

Moreover, the claim term “push catheter” implies a catheter that is configured to transmit a pushing force to a component. The recitation that

the “stent . . . [is] disposed adjacent to a distal end of the push catheter” (i.e., a catheter that *pushes* the stent along the guide catheter by virtue of the stent being next to the push catheter) further supports that the stent is not simply being contained within or enveloped by the push catheter.

When read in light of the Specification, and in context with rest of the claim, we determine that it is unreasonable to interpret the term “adjacent” to mean merely “situated near” or “close to,” as the Examiner proposes. *See* American Heritage Online Dictionary (providing a first definition of “adjacent” as “[c]lose to; lying near”). This is because in the context of the Specification, the term “adjacent” relates to a positioning between the stent and the push catheter (i) which is different than the overlapping relationship between the stent and guide catheter and (ii) in which the push catheter can transmit a pushing force on the stent. Thus, in the context of the Specification, Appellant’s urged interpretation of “having a common endpoint or border” (Appeal Br. 12; Reply Br. 6; Merriam-Webster Online Dictionary (providing a second definition of “adjacent” as “having a common endpoint or border”)) is invoked. *See also* American Heritage Online Dictionary (providing a second definition of “adjacent” as “[n]ext to; adjoining”).

The Examiner’s finding that Smith discloses “a stent . . . disposed adjacent to a distal end of the push catheter” as recited in independent claims 1, 13, and 17 is not adequately supported when the term “adjacent” is given its broadest *reasonable* interpretation in light of the Specification, which requires the stent to “hav[e] a common endpoint or border” with the distal end of the push catheter, such that the push catheter is capable of transmitting a pushing force on the stent. The Examiner finds only that in

Rust's Figures 1B and 1C, stent 114 is close to the distal end of sheath 104, but makes no finding regarding stent 114 having a common endpoint or border with sheath 104, such that sheath 104 is capable of transmitting a pushing force on stent 114. We further agree with Appellant that, although sheath 104 is proximally retracted relative to stent 114 (Rust ¶¶ 23, 27; Fig. 1C), such a configuration "which [might] allegedly teach or suggest the recited 'adjacent' configuration necessarily/inherently lack[s] the recited 'between' configuration" of the coupling structure 122, 502 being "between the guide catheter [(connector shaft 115)] and push catheter [(sheath 104)]" as also required by independent claims 1, 13, and 17. Appeal Br. 12; Rust Fig. 1C (depicting coupling structure 122 disposed distally of withdrawn sheath 104).

For the foregoing reasons, we are persuaded by Appellant's arguments that the Examiner erred in finding that Rust discloses all of the limitations of independent claims 1, 13, and 17. We do not sustain the rejection of claims 1, 13, and 17, nor claims 2–5, 7, 9, 10, 14–16, and 18–22 which depend therefrom, under 35 U.S.C. § 102(e) as anticipated by Rust.

Rejection II

For the same reasons as discussed above in connection with Rejection I, the Examiner's rejection relies on the Examiner's erroneous finding that Rust discloses "a stent . . . disposed adjacent to a distal end of the push catheter" and "a cylindrical member disposed between the guide catheter and push catheter" as claimed. Final Act. 7. The Examiner does not explain how Pinchuk would remedy the deficiency of Rust. *Id.*

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Accordingly, we do not sustain the rejection of claim 8 under 35 U.S.C. § 103(a) as unpatentable over Rust and Pinchuk.

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1-5, 7, 9, 10, 13-22	102(e)	Rust		1-5, 7, 9, 10, 13-22
8	103(a)	Rust, Pinchuk		8
Overall Outcome				1-5, 7-10, 13-22

REVERSED