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EXAMINER

NGUYEN, HIEN NGOC

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte AZITA SOLTANI,
RAYMOND M. WOLNIEWCZ III, BRENTON NISTAL,
CURTIS GENSTLER, ROBERT L. WILCOX, and
RONALD L. HAAS

Appeal 2018-003226
Application 13/219,403
Technology Center 3700

Before JENNIFER D. BAHR, MICHELLE R. OSINSKI, and
BRANDON J. WARNER, *Administrative Patent Judges*.

BAHR, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Azita Soltani et al. (Appellants)¹ appeal under 35 U.S.C. § 134 from the Examiner's decision rejecting claims 1, 3–16, and 18–25. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

¹ According to Appellants, the real party in interest is EKOS Corporation. Appeal Br. 3.

THE CLAIMED SUBJECT MATTER

Claim 1, reproduced below, is illustrative of the claimed subject matter.

1. An ultrasound catheter for treatment of a blood clot resulting from an intracranial hemorrhage comprising:

an elongate tubular body having a distal portion and a proximal portion, the elongate tubular body comprising an inner surface defining a lumen and an outer surface;

a plurality of ultrasound radiating elements positioned in the distal portion of the elongate tubular body between the inner and outer surfaces of the tubular body;

a surface configured to form an electrical connection on the proximal portion of the tubular body comprising annular rings in electrical connection with the plurality of radiating elements and a proximal port located on the proximal portion of the tubular body, the proximal port adjacent and distal to the electrical connection,

wherein the lumen includes a plurality of ports on the distal portion of the elongate tubular body configured to allow fluid to flow therethrough; and

a stylet configured to be received within the lumen.

REJECTIONS

- I. Claims 1, 3–6, 9, 14, 15, and 22–25 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Wilson '296 (US 2007/0112296 A1, published May 17, 2007), Khanna (US 2007/0005121 A1, published Jan. 4, 2007), Saadat (US 2003/0088187 A1, published May 8, 2003), and Wilson '189 (US 2004/0068189 A1, published Apr. 8, 2004).
- II. Claims 7 and 8 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Wilson '296, Khanna, Saadat, Wilson '189,

and Dala-Krishna (US 2008/0312536 A1, published Dec. 18, 2008).

- III. Claims 10–13 and 16 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Wilson '296, Khanna, Saadat, Wilson '189, and Abrahamson (US 2005/0215942 A1, published Sept. 29, 2005).
- IV. Claim 21 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Wilson '296, Khanna, Saadat, Wilson '189, and Morris (US 2003/0199831 A1, published Oct. 23, 2003).
- V. Claims 18 and 20 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Wilson '296, Khanna, Wilson '189, Morris, and Ackerman (US 2002/0133081 A1, published Sept. 19, 2002).
- VI. Claim 19 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Wilson '296, Khanna, Wilson '189, Morris, Ackerman, and Werneth (US 2006/0106375 A1, published May 18, 2006).

DISCUSSION

Rejection I

Independent claim 1 recites, in relevant part, “a proximal port located on the proximal portion of the tubular body, the proximal port adjacent and distal to the electrical connection.” Appeal Br. 14 (Claims App.).

Appellants contest the Examiner’s finding that Wilson '189 discloses this feature. *See* Appeal Br. 8–9 (asserting that they “respectfully disagree[] with the Final Office Action’s characterization of Wilson [’189]”); Reply Br. 2–3.

We agree with Appellants that a sustainable case of obviousness has not been established.

In rejecting claim 1, the Examiner finds that Wilson '296 does not disclose, *inter alia*, “a proximal port located on the proximal portion of the tubular body, the proximal port adjacent and distal to the electrical connection.” Final Act. 5. However, the Examiner finds that Wilson '189 “discloses a proximal port located on the proximal portion of the tubular body, the proximal port adjacent and distal to the electrical connection (see Fig. 1, [0045] and [0051]; 116–117 are proximal ports that are adjacent and distal to the electrical control box connector 120).” *Id.* On the basis of this finding, the Examiner determines that it would have been obvious to modify Wilson '296 “to have a proximal port located on the proximal portion of the tubular body, the proximal port adjacent and distal to the electrical connection as taught by Wilson ['189] because port allow physician to inject drug to the patient and electrical connector provide power to device [*sic*].” *Id.* (citing Wilson '189 ¶¶ 45, 51).

Wilson '189 discloses ultrasound catheter 100 including multi-component tubular body 102 having proximal end 104 and distal end 106. *See* Wilson '189 ¶ 40, Fig. 1. Wilson '189 also discloses that tubular body 102 includes outer sheath 108 and inner core 110, which defines, in part, delivery lumen 112. *See id.* ¶¶ 43, 45. Delivery lumen 112 continues through back end hub 118 attached to proximal end 104 of outer sheath 108 and has proximal access port 116, which is defined by drug inlet port 117 of back end hub 118. *See id.* ¶ 45; Fig. 1. Back end hub 118 attaches to control box connector 120. *Id.* ¶ 45.

Proximal port 116/117 is located on back end hub 118, not on tubular body 102, of Wilson '189. Similarly, control box connector 120 is attached to back end hub 118, not located on the proximal portion of tubular body 102. Even considering back end hub 118 to be a proximal portion of the tubular body, such that proximal port 116/117 and control box connector 120 would be considered to be located on the proximal portion of the tubular body, *control box connector 120* is on back end hub 118 (and thus on the proximal portion of the tubular body) at a location *distal* to proximal port 116/117. *See* Wilson '189, Fig. 1. In other words, proximal port 116/117 is located *proximal* (not *distal*) to control box connector 120 on back end hub 118.

Appellants interpret “control box connector 120” of Wilson '189 to be the actual connector located at the very end of the long coiled cord shown attached to back end hub 118 in Figure 1. *See* Appeal Br. 9 (arguing that “the proximal access port 116 and the inlet port 117 are ***not adjacent to*** the control box connector 120 which is located at the very end of a long cord”); Reply Br. 3 (arguing same). The Examiner appears to accept Appellants’ interpretation. *See* Ans. 14 (stating that proximal port 116/117 “is in contact with 120 through the cord” and “lies just before element 120”). Applying this interpretation of “control box connector 120,” proximal port 116/117 may be *distal* to control box connector 120, but cannot reasonably be considered to be *adjacent* to control box connector 120, which is separated from back end hub 118 and proximal port 116/117 by a cord depicted as having a length similar to that of tubular body 102.

For the above reasons, the Examiner has not established by a preponderance of the evidence that Wilson '189 discloses “a proximal port

located on the proximal portion of the tubular body, the proximal port adjacent and distal to the electrical connection,” as recited in claim 1, nor has the Examiner adequately explained why one of ordinary skill in the art would have been prompted to modify Wilson ’296 to include this feature.

Accordingly, based on the record before us, the Examiner has not met the burden of establishing a proper case that claim 1 is unpatentable based on the cited references. On this basis, we do not sustain the rejection of independent claim 1, or its dependent claims 3–6, 9, 14, 15, and 22–25, as unpatentable over Wilson ’296, Khanna, Saadat, and Wilson ’189.

Rejections II–IV

In the rejections of claims 7, 8, 10–13, 16, and 21, which depend directly or indirectly from independent claim 1, the Examiner does not articulate any findings or reasoning, or rely on any teachings of Dala-Krishna, Abrahamson, or Morris that would remedy the aforementioned deficiency in the combination of Wilson ’296, Khanna, Saadat, and Wilson ’189. *See* Final Act. 6–9. Accordingly, for the same reasons, we do not sustain the rejections of claims 7, 8, 10–13, 16, and 21 under 35 U.S.C. § 103(a).

Rejections V and VI

Independent claim 18 recites, in pertinent part, “a surface configured to form an electrical connection on the proximal portion of the elongate tubular body and a proximal port located adjacent and distal to the electrical connection.” Appeal Br. 15–16 (Claims App.). In rejecting independent claim 18, and its dependent claims 19 and 20, the Examiner relies on the

same purported finding regarding Wilson '189 discussed above in connection with the rejection of independent claim 1. *See* Final Act. 12 (finding that Wilson '189 “discloses a proximal port located on the proximal portion of the tubular body, the proximal port adjacent and distal to the electrical connection (see Fig. 1, [0045] and [0051]; 116–117 are ports that are adjacent and distal to the electrical control box connector 120)”). The Examiner does not articulate any additional findings or reasoning, or rely on any teachings of Morris, Ackerman, or Werneth that would remedy the aforementioned deficiency in the Examiner’s finding with respect to Wilson '189. *See id.* at 9–13. Accordingly, we also do not sustain the rejections of claims 18–20 under 35 U.S.C. § 103(a).

DECISION

The Examiner’s decision rejecting claims 1, 3–16, and 18–25 is REVERSED.

REVERSED