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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* ENRICO NICOLO

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Appeal 2014-005801  
Application 13/078,338  
Technology Center 3700

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Before LINDA E. HORNER, THOMAS F. SMEGAL, and LISA M. GUIJT,  
*Administrative Patent Judges.*

HORNER, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

Enrico Nicolo (Appellant) seeks our review under 35 U.S.C. § 134 of the Examiner's decision rejecting claims 1–20. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

CLAIMED SUBJECT MATTER

Appellant's claimed subject matter relates to "inguinal hernia repair." Spec., para. 3. Claims 1, 13, and 19 are independent. Claims 1, 13, and 19 are reproduced below.

1. A method of repairing an inguinal hernia in a patient comprising the steps of

using a hernia prosthetic having a narrow aspect within the inguinal canal to proximate the muscle to the ligament structure while maintaining substantially tension free tissue to provide for both repair of the inguinal hernia and reconstitution of the pre-hernia muscle physiology

wherein the step of using the hernia prosthetic having a narrow aspect within the inguinal canal includes placement of the patient's spermatic cord to the lateral side of the hernia prosthetic whereby the spermatic cord is not encircled by prosthetic material.

13. An inguinal hernia prosthesis configured to repair an inguinal hernia of a patient, said inguinal hernia prosthesis including a cord locating structure formed by a recess positioned along a longitudinal peripheral edge of the prosthesis, wherein the prosthesis and the cord locating structure is configured to only surround a portion of the patient's spermatic cord with the remaining spermatic cord circumference being positioned by the cord locating structure against the patient's muscle tissue.

19. An inguinal hernia prosthetic configured to repair an inguinal hernia of a patient, said inguinal hernia prosthesis having a narrow aspect configured to proximate the muscle to the ligament structure while maintaining substantially tension free tissue to provide for both repair of the inguinal hernia and reconstitution of the pre-hernia muscle physiology, wherein the length to width ratio of the prosthesis is at least 3.0.

#### REJECTIONS

The Final Office Action, dated June 13, 2013 ("Final Act."), from which this appeal is taken, included the following grounds of rejection:

1. Claims 13 and 16 under 35 U.S.C. § 102(b) as anticipated by Nicolo (US 6,497,650 B1, issued December 24, 2002).

2. Claims 17 and 18 under 35 U.S.C. § 102(b) as anticipated by, or alternatively under 35 U.S.C. § 103(a) as unpatentable over, Nicolo.
3. Claims 1, 2, and 6–10 under 35 U.S.C. § 103(a) as unpatentable over Nicolo and Bendavid (US 4,769,038, issued September 6, 1988).
4. Claims 3–5, 11, and 12 under 35 U.S.C. § 103(a) as unpatentable over Nicolo, Bendavid, and Amid (US 6,610,006 B1, issued August 26, 2003).
5. Claims 14, 15, 19, and 20 under 35 U.S.C. § 103(a) as unpatentable over Nicolo and Amid.

#### ANALYSIS

##### *First Ground of Rejection*

The Examiner found that Nicolo discloses “an inguinal hernia prosthesis 10 . . . [including] a cord locating structure (opening 18) formed by a recess positioned along a longitudinal peripheral edge of the prosthesis” as called for in independent claim 13. Final Act. 2 (citing Nicolo, Fig. 1a).

The Examiner explained:

A longitudinal edge is a direction along an edge or a direction of an axis, not necessarily directly relating to a length of the edge. The claim language does not require a specific length to be associated with the longitudinal peripheral edge and therefore the recess may be considered to be along the longitudinal peripheral edge of the width of the prosthesis.

Ans. 2.

The Specification describes, with respect to the embodiment of Figure 1, that Appellant's "prosthesis 10 has a longitudinal length 12 and a width 14." Spec., para. 43. The longitudinal length is described as being longer than the width. *Id.* The Specification further describes that prosthesis 10 includes longitudinally extending edges 32, 42, 52, and 62, and that cord locating structure 40 is formed in longitudinally extending edge 32. *Id.*, paras. 54, 56, Fig. 1. Figure 1 shows the longitudinally extending edges 32, 42, 52, 62 along the longitudinal length 12 of prosthesis 10. The Specification discusses that the location of the cord in the specified location "helps to protect the cord as the cord will be positioned in a location that will be avoided with fasteners (sutures or the like)" and that "the structure 40 is located on the prosthesis 10 to best locate the cord relative to the prosthesis 10 and the physiology." *Id.*, para. 58. As such, the Specification associates the term "longitudinal" with the lengthwise direction of the prosthesis, which is the dimension shown in the direction opposite the width and in the direction of the long axis of the prosthesis.

The Examiner does not provide any support for the broad interpretation of "longitudinal" relied on in the rejection. In our review, we found that ordinary meanings of "longitudinal" include: "[e]xtending in the direction of the long axis of the body or a body part" and "[e]xtending or proceeding in the direction of the length of an object; running lengthwise."<sup>1</sup>

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<sup>1</sup> Oxford English Dictionary, definitions 1.a. and 1.b., available at <http://www.oed.com/view/Entry/110039?redirectedFrom=longitudinal#eid>, last accessed November 1, 2016.

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These ordinary meanings, associating “longitudinal” with the length of an object, are consistent with the manner in which Appellant employed the term in the Specification. The Examiner’s interpretation of “longitudinal edge” as meaning “along an edge or a direction of an axis” appears to read the term “longitudinal” entirely out of the claim phrase. As such, we find that the Examiner’s interpretation of “longitudinal peripheral edge” as encompassing a recess disposed along an edge of the width of the prosthesis is unreasonably broad.

We agree with Appellant that Nicolo discloses cord opening 18 disposed along a width of prosthesis 10, and that the edge of prosthesis 10 along a width direction is not the claimed “longitudinal peripheral edge of the prosthesis,” as recited in claim 13. Br. 10–11. For this reason, Nicolo does not disclose by a preponderance of the evidence each and every element of independent claim 13 or its dependent claim 16. Accordingly, we do not sustain the rejection of claims 13 and 16 under 35 U.S.C. § 102(b) as anticipated by Nicolo.

*Second Ground of Rejection*

Claims 17 and 18 depend from claim 13. The rejection of these dependent claims relies on the same asserted finding that Nicolo discloses “a cord locating structure formed by a recess positioned along a longitudinal peripheral edge of the prosthesis” that we found deficient in the rejection of claim 13. As such, for the same reasons discussed above for the first ground of rejection, we likewise do not sustain the rejection of claims 17 and 18

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under 35 U.S.C. § 102(b) as anticipated by, or alternatively under 35 U.S.C. § 103(a) as unpatentable over, Nicolo.

*Third Ground of Rejection*

The Examiner found that Nicolo discloses a method of repairing an inguinal hernia in a patient as called for in independent claim 1, including “placement of the patient’s spermatic cord to the lateral side of the hernia prosthetic.” Final Act. 4. The Specification equates the lateral side with the longitudinal side edge of the prosthesis, explaining:

The cord locating structure 40 may be referenced as a non-encircling lateral cord locating structure. The term lateral in reference to structure on a prosthesis 10 within the meaning of the present application will reference structure extending to a longitudinally extending side edge (e.g., 32, 42, 52 and 62, described below) of the prosthesis 10.

Spec., para. 56. The Examiner’s finding that Nicolo teaches placement of the patient’s spermatic cord to the lateral side of the hernia prosthetic is not supported by a preponderance of the evidence for the same reasons set forth above in the analysis of claim 13. Specifically, Nicolo teaches placement of the patient’s spermatic cord in the cord opening 18, which is not disposed on the lateral side of the prosthesis. Nicolo, col. 3, ll. 43–45, Fig. 1a. The Examiner did not rely on Bendavid to cure this deficiency in Nicolo. Final Act. 4–5 (citing Bendavid for teaching a method of repairing an inguinal hernia using a prosthetic to approximate the muscle to the tissue to provide for both repair of the inguinal hernia and reconstitution of the pre-hernia muscle physiology). Thus, the Examiner has failed to demonstrate how the combined teachings of Nicolo and Bendavid would have led one having

ordinary skill in the art to the method of independent claim 1, or its dependent claims 2 and 6–10. Accordingly, we do not sustain the rejection of claims 1, 2, and 6–10 under 35 U.S.C. § 103(a) as unpatentable over Nicolo and Bendavid.

*Fourth Ground of Rejection*

Claims 3–5, 11, and 12 depend from claim 1. The rejection of these dependent claims relies on the same asserted finding that Nicolo discloses “placement of the patient’s spermatic cord to the lateral side of the hernia prosthetic” that we found deficient in the rejection of claim 1. Final Act. 6. The Examiner does not rely on Amid to cure the deficiency in Nicolo. *Id.* (citing Amid to teach the claimed aspect ratio). We further note that Amid, like Nicolo, shows a cord retaining slit 38 on the short or width side of the prosthesis opposite the lateral side. Amid, Fig. 6. As such, for the same reasons discussed above for the third ground of rejection, we likewise do not sustain the rejection of claims 3–5, 11, and 12 under 35 U.S.C. § 103(a) as unpatentable over Nicolo, Bendavid, and Amid.

*Fifth Ground of Rejection*

Claims 14 and 15 depend from claim 13. The rejection of these dependent claims relies on the same asserted finding that Nicolo discloses “a cord locating structure formed by a recess positioned along a longitudinal peripheral edge of the prosthesis” that we found deficient in the rejection of claim 13. As such, for the same reasons discussed above for the first ground of rejection, we likewise do not sustain the rejection of claims 14 and 15 under 35 U.S.C. § 103(a) as unpatentable over Nicolo and Amid.

Independent claim 19 is directed to an inguinal hernia prosthetic “having a narrow aspect configured to proximate the muscle to the ligament structure while maintaining substantially tension free tissue to provide for both repair of the inguinal hernia and reconstitution of the pre-hernia muscle physiology.” Br. 24 (Claims App.). The Examiner found that Nicolo’s prosthesis is configured as claimed. Final Act. 7.<sup>2</sup>

Appellant contends that Nicolo’s prosthesis is not “configured to proximate the muscle to the ligament structure . . . to provide for . . . reconstitution of the pre-hernia muscle physiology.” Br. 20 (referring to similar arguments presented for claim 1). In particular, Appellant argues that Nicolo “merely bridges the defect, which addresses the hernia but does not attend to anything to reconstitute the muscle physiology.” Br. 14–15. Indeed, in the rejection of method claim 1, the Examiner appears to rely on Bendavid “to modify Nicolo with a method providing substantially tension free tissue and reconstitution of the muscle physiology.” Final Act. 5. The Examiner has not explained adequately in the rejection of claim 19 the basis for the finding that the prosthesis of Nicolo, without any modification, is “configured to proximate the muscle to the ligament structure while maintaining substantially free tissue to provide for both repair of the inguinal hernia and reconstitution of the pre-hernia muscle physiology” as called for in claim 19. For this reason, we do not sustain the rejection of independent

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<sup>2</sup> The Examiner relied on Amid to teach the claimed length-to-width ratio of the prosthesis. Final Act. 7.

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claim 19, or its dependent claim 20, under 35 U.S.C. § 103(a) as unpatentable over Nicolo and Amid.

DECISION

The decision of the Examiner to reject claims 1–20 is REVERSED.

REVERSED