

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROBERT BURGMEIER
and DANIEL J. HORN,
Appellants

Appeal 2008-5371
Application 10/961,666¹
Technology Center 1700

Decided: September 29, 2008

Before THOMAS A. WALTZ, CATHERINE Q. TIMM, and
MARK NAGUMO, *Administrative Patent Judges*.

NAGUMO, *Administrative Patent Judge*.

DECISION ON APPEAL

¹ Application 10/961,666, *Medical Devices Coated with Diamond-like Carbon*, filed 8 October 2004. The specification is cited as “Spec.” The real party in interest is listed as Boston Scientific Scimed, Inc., which is said to be a subsidiary of Boston Scientific Corporation. (Corrected Brief on Appeal filed 26 November 2007 (“Br.”), 1.)

A. Introduction

Robert Burgmeier and Daniel J. Horn (“Burgmeier”) timely appeal under 35 U.S.C. § 134(a) from the final rejection of claims 1, 3-8, 10, and 23-28. We REVERSE.

The subject matter on appeal relates to medical devices primarily in the form of polymeric tubes that are coated on the inside with a diamond-like carbon coating (abbreviated “DLC coating” *infra*). Claims 1, 7, and 23 are representative:

Claim 1

A medical device comprising a continuous tube of polymer material having an interior lumen and a sliding surface in said lumen wherein the sliding surface is modified with a diamond-like carbon (DLC) coating.

Claim 7

A medical device that includes a tubular polymeric portion having an interior lumen without side openings wherein at least a portion of said interior lumen surface is coated with a diamond-like carbon (DLC).

Claim 23

A medical device that has surfaces that must be peeled from contact with another in normal use of the device, wherein at least one of said surfaces has a coating of diamond-like carbon (DLC) thereon.

(Claims App., Br. 23.)

The Rejections

The Examiner has maintained the following grounds of rejection.²

- A. Claims 7, 8, and 26-28 stand rejected under 35 U.S.C. § 112(1), for lack of an adequate written description of the limitation “without side openings.”
- B. Claims 1, 3, 4, 6-8, 10, and 23-28 stand rejected under 35 U.S.C. § 102(b) in view of Lawes,³ “with evidence by Holman⁴ for claims 23-25.”
- C. Claims 1, 3-8, 10, and 23-28 stand rejected under 35 U.S.C. § 102(b) in view of McLaughlin,⁵ “with evidence by Holman for claims 23-25.”
- D. Claims 1, 3-8, 10, and 26-28 stand rejected under 35 U.S.C. § 102(b) in view of Woo.⁶

B. Discussion

The burden is on Burgmeier, as the Appellant, to prove reversible error in the Examiner’s rejections. *See, e.g., Gechter v. Davidson*, 116 F.3d

² Examiner’s Answer mailed 27 December 2007 (“Ans.”). A rejection of claim 25 under 35 U.S.C. § 112(1) for lack of an adequate written description has been withdrawn (Ans. 2).

³ Peter Lawes and Nigel Smith, *A Process for Improving Start Up and Steady Rate Friction of Soft/Compliant Polyurethanes*, EP 0,876,821 A2 (1998).

⁴ Thomas J. Holman et al., *Catheter with Removable Balloon Protector and Stent Delivery System with Removable Stent Protector*, U.S. Patent Application Publication US/2001/0001128 A1 (2001).

⁵ James A. McLaughlin et al., *Apparatus and Method for Coating Substrates with Vacuum Depositable Materials*, U.S. Patent Application Publication US 2002/0026899 A1 (2002).

⁶ Yi-Ren Woo et al., *Medical Article with a Diamond-Like Carbon Coated Polymer*, WO 01/43790 A2 (2001).

1454, 1460 (Fed. Cir. 1997) ("[W]e expect that the Board's anticipation analysis be conducted on a limitation by limitation basis, with specific fact findings for each contested limitation and satisfactory explanations for such findings.").

Written Description

The Examiner finds that the limitation in claim 7 and dependent claims "without side openings" is new matter. (Ans. 3.) The Examiner argues that "[t]he mere absence of a positive recitation is not basis for an exclusion." (*Id.*, citing MPEP 2173.05(i).) In the Response to Argument section of the Answer, the Examiner argues further that the embodiments in the 666 Specification are not necessarily without side openings because "the tubular device can have side openings that are sealed to provide isolation of the interior gas but still contain side openings." (*Id.* at 6.)

These arguments are without merit. Whether the original specification describes subsequently claimed subject matter is a question of fact. Relevant to the inquiry is whether persons of ordinary skill in the art would have recognized from the original disclosure that the applicant invented what is claimed. *In re Gosteli*, 872, F.2d 1008, 1012 (Fed. Cir. 1989). The Examiner has not come forward with any such evidence in support of the rejection. Moreover, Burgmeier has pointed to the description of embodiments in which the interior of the tubular substrate is subjected to a DLC-generating plasma at the same time that a fluorinating or oxidizing gas is provided around the outside. (Br. 5-6, citing Spec. 10:20-24.) As the Examiner implicitly concedes (Ans. 6), that device was without side openings when it was coated. The Examiner does not explain why claim 7

requires more, or why the ordinary skilled worker would not have recognized the subject matter of claim 7 in this disclosure. Nor is the Examiner's objection that side openings could have been temporarily sealed relevant in the absence of evidence that such embodiments were so much the norm than the ordinary worker would not have considered Appellants' disclosure a fair description of coating tubes without side openings.

Anticipation

The Examiner finds that each of Lawes, McLaughlin, and Woo describes medical devices that are coated at least in part with DLC. Some of the devices comprise tubes, such as catheters, and contact with body tissues and fluids is mentioned. Lawes is primarily concerned with knee joint replacement parts. The replacement parts, although described as being polymeric and coated with diamond-like carbon (Lawes 2:39-41), are not disclosed as tubes coated on their interior with DLC coatings. Likewise, there is no disclosure in Woo of the inner surfaces of polymeric tubes being coated with DLC. McLaughlin is concerned with coating conductive substrates with DLC (McLaughlin 2: [0016]) so the substrate can be used as the cathode in the coating apparatus (*id.* at 1: [0010].) Although McLaughlin, like the other references, discusses improving the surface-body fluid interfaces (*id.* at 2: [0021]), the discussion is in terms of the exterior of the device. Even though the Examiner does not direct our attention to any specific descriptions or embodiments in which a tubular polymeric portion is coated on the interior with a DLC coating, the Examiner concludes that the subject matter of independent claims 1, 7, and 10, and the corresponding dependent claims is anticipated by these references.

These rejections are without merit. According to the statute an invention is not patentable if it was “described in a printed publication . . .” 35 U.S.C. § 102(b). Description, however, does not extend to that which is merely obvious. Cf. *Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997). Here, the Examiner has not begun to explain why the ordinary worker would have understood the references to describe polymeric tubes coated on the inside with DLC.

The Examiner’s reliance on Holman for teachings that stents may have removable stent protectors that would be in contact with a portion of the stent that could be coated by a DLC fails to establish a *prima facie* case of anticipation by inherency of the subject matter of claims 23-25. As our reviewing court explained, “[t]o establish inherency, the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.’” *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999) (citation omitted.) The Examiner has not explained, and it is not plausible, that every stent must have a removable stent protector.

Finally, the Examiner argues in rebuttal with respect to Lawes that a portion of the interior of the tubes would have been coated with a DLC “via the ends of the tubular structure.” This is not persuasive because “[a]n accidental or unwitting duplication of an invention cannot constitute an anticipation.” *In re Felton*, 484 F.2d 495, 500 (CCPA 1973) (citation omitted) (reversing a rejection of claims to a liquid drop dispenser).

C. Summary

In view of the record and the foregoing considerations, it is:

ORDERED that the rejection of claims 7, 8, and 26-28 under 35 U.S.C. § 112(1) is REVERSED;

FURTHER ORDERED that the rejection of claims 1, 3, 4, 6-8, 10, and 23-28 under 35 U.S.C. § 102(b) in view of Lawes, “with evidence by Holman” for claims 23-25 is REVERSED;

FURTHER ORDERED that the rejection of claims 1, 3-8, 10, and 23-28 under 35 U.S.C. § 102(b) in view of McLaughlin, “with evidence by Holman for claims 23-25” is REVERSED;

FURTHER ORDERED that the rejection of claims 1, 3-8, 10, and 26-28 under 35 U.S.C. § 102(b) in view of Woo is REVERSED.

REVERSED

rvb

VIDAS, ARRETT & STEINKRAUS, P.A.
Suite 400
6640 Shady Oak Road
Eden Prairie, MN 55344