

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 41

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOHN Y. YAN and RANDY CHAN

Appeal No. 2003-1470
Application No. 08/847,763

ON BRIEF

Before GARRIS, WARREN, and DELMENDO, Administrative Patent Judges.

GARRIS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the final rejection of claims 1-3, 5, 8-11, 14, 16 and 17. The only other claim remaining in the application, which is claim 6, stands allowed by the examiner.

The subject matter on appeal relates to a device such as a stent which is implantable within a lumen of the vascular system

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and which comprises surfaces capable of contacting vessel walls of the lumen and surfaces incapable of contacting the vessel walls upon implantation. The device further comprises a coating exclusively deposited on surfaces of the device that are incapable of contacting the vessel walls whereby a toxic effect to the patient's vasculature is avoided (i.e., by avoiding contact of the coating with the vessel walls). This appealed subject matter is adequately illustrated by independent claim 1 which reads as follows:

1. A device, comprising:

a body that is implantable within a lumen of the vascular system, such lumen being defined by vessel walls and wherein said body has surfaces capable of contacting said vessel walls and surfaces incapable of contacting said vessel walls upon implantation; and

a coating devoid of heparin exclusively deposited on surfaces of said body that are incapable of contacting said vessel walls wherein such coating is formed of material that adheres to said body and includes function groups to attract heparin and form a bond therewith when such material is exposed to a solution containing heparin

whereby a toxic effect to the patient's vasculature is avoided.

The references set forth below are relied upon by the examiner as evidence of obviousness:

Ward et al. (Ward)	4,164,524	Aug. 14, 1979
Hu et al. (Hu)	4,865,870	Sep. 12, 1989

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De Goicoechea et al. (De Goicoechea)	5,383,927	Jan. 24, 1995
Marchant	5,455,040	Oct. 8, 1995
Pinchuk et al. (Pinchuk)	5,804,318 ¹	Sep. 8, 1998 (filed Oct 26, 1995)
Whitbourne	5,997,517	Dec. 7, 1999 (filed Jan. 27, 1997)

The following rejections under 35 U.S.C. § 103(a) are before us on this appeal:²

Claims 1-3, 5 and 11 stand rejected over Whitbourne in view of Ward or De Goicoechea; claims 8 and 10 stand rejected over Whitbourne in view of Ward or De Goicoechea and further in view of Hu; claims 1-3, 5 and 8 stand rejected over Marchant in view of Ward or De Goicoechea; and claims 1-3, 9, 14, 16 and 17 stand rejected over Pinchuk in view of Ward or De Goicoechea.

We refer to the brief and reply brief and to the answer for a thorough discussion of the opposing viewpoints expressed by the

¹ On page 3 of the answer, the examiner erroneously lists Pinchuk Patent No. 5,053,048 as one of the prior art references relied upon in the rejections before us. The file record clearly reflects, however, that it is Pinchuk Patent No. 5,804,318 which has been applied by the examiner in the rejections of record and advanced on this appeal.

² The examiner's section 112, first paragraph, rejection has been withdrawn; see page 2 of the answer.

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appellants and by the examiner concerning the above noted rejections.

OPINION

For the reasons set forth below, none of these rejections can be sustained.

The examiner finds that each of the primary references, namely, Whitbourne, Marchant and Pinchuk discloses a coated device for implantation within a lumen of the vascular system but fails to disclose the specific surfaces of the device which should be coated. Thus, the independent claims on appeal distinguish over each of these primary references via the claim requirement that the coating is exclusively deposited on surfaces of the device body which are incapable of contacting the lumen vessel walls. According to the examiner, however, it would have been obvious for one with an ordinary level of skill in this art to provide the primary reference devices with a coating exclusively deposited on surfaces that are incapable of contacting the vessel walls in view of either Ward or De Goicoechea.

The examiner's obviousness conclusion is not well founded. As correctly argued by the appellants, neither Ward nor

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De Goicoechea contains any teaching or suggestion for modifying the primary reference devices in the manner proposed by the examiner and required by the appealed claims.

In this regard, we emphasize the appellants' point that Ward is not directed to an implantable device but instead to blood containing vessels such as tubings and containers which include a coating on surfaces which come into contact with the blood. Because Ward's vessels are not implantable devices, the aforementioned surfaces typically are interior surfaces of the vessel. Nevertheless, this fact does not support the examiner's conclusion that Ward would have suggested providing the primary reference devices with a coating exclusively deposited on surfaces that are incapable of contacting vessel walls. Indeed, such a conclusion is antithetical to Ward's teaching of treating or coating his vessel surfaces which come into contact with blood (e.g., see lines 52-55 in column 3). Further, this conclusion is even more antithetical to Ward's teaching that his invention can also be used to treat the exterior surface of an article such as a vessel or a tube (see lines 14-21 in column 4).

As for the De Goicoechea patent, this patent does not support the examiner's obviousness conclusion. On the contrary, the teachings of this patent militate against the modification

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proposed by the examiner. This is because, as correctly explained by the appellants, patentee explicitly and repeatedly teaches depositing a heparin coating on both the outer as well as the inner surfaces of the prosthesis (e.g., see the first sentence of the Abstract, lines 26-48 in column 2 and lines 33-40 in column 7). Moreover, patentee's intention regarding this teaching is clarified by his definition of the outer surface as being a surface which is in contact with body tissues other than blood (see lines 58-62 in column 3). Under these circumstances, we cannot agree with the examiner that De Goicoechea would have suggested depositing the coating of the primary reference devices exclusively on surfaces that are incapable of contacting vessel walls as required by the appealed claims.

In light of the deficiencies discussed above, the applied prior art does not support the examiner's conclusion of obviousness. It follows that we cannot sustain any of the section 103 rejections before us on this appeal.

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The decision of the examiner is reversed.

REVERSED

Bradley R. Garris)	
Administrative Patent Judge)	
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Charles F. Warren)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
)	
)	
Romulo H. Delmendo)	
Administrative Patent Judge)	

BRG:tdl

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Fulwider Patton Lee & Utecht, LLP
200 Oceangate, Suite 1550
Long Beach, CA 90802