

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today
(1) was not written for publication in a law journal and
(2) is not binding precedent of the Board.

Paper No. 17

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte CORDIS CORP.

Appeal No. 97-0053
Reexamination Proceeding 90/003,439¹

ON BRIEF

MAILED

JAN 8 1997

PAT.&T.M. OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES

Before McCANDLISH, Senior Administrative Patent Judge, and ABRAMS
and McQUADE, Administrative Patent Judges.

McQUADE, Administrative Patent Judge.

¹ Request filed May 18, 1994, Control No. 90/003,439, for the Reexamination of Patent No. 5,116,350, issued May 26, 1992, based on Application Serial No. 07/538,389, filed June 14, 1990, which is a continuation of Application Serial No. 07/370,115, filed June 21, 1989, now Patent No. 4,936,845, issued June 26, 1990, which is a continuation of Application Serial No. 07/083,859, filed August 10, 1987, abandoned, which is a continuation-in-part of Application Serial No. 07/027,186, filed March 17, 1987, abandoned.

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DECISION ON APPEAL

This appeal is from the final rejection of claim 5. The examiner has indicated that claims 1 through 4, 6 and 7, the only other claims pending in this reexamination proceeding, recite patentable subject matter.

The patent under reexamination "relates to a catheter system for opening a totally or partially occluded blood vessel" (column 1, lines 13 and 14). Appealed claim 5 reads as follows:

5. A method for widening an obstructed region of a blood vessel comprising the steps of:

inserting an elongated guide catheter having a center passage into a subject and routing a distal end of the elongated guide catheter to the obstructed region of the blood vessel;

inserting an elongated drive catheter having an elongated drive shaft and an enlarged distal member for widening the obstructed region into a proximal end of the elongated guide catheter;

guiding said elongated drive catheter through the guide catheter to cause the distal member to exit from a distal end of the guide catheter and approach said obstructed region;

coupling a reciprocating output shaft of a motor to a proximal end of the drive shaft of said elongated drive catheter; and

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actuating the motor causing the proximal end of the drive shaft to reciprocate in and out with respect to the guide catheter to cause said distal member to ram the obstructed region with a repetitive back and forth motion to open or widen a passageway through material obstructing blood flow through said vessel.

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

Delaney	3,352,303	Nov. 14, 1967
Auth ²	4,445,509	May 1, 1984

Claim 5 stands rejected under 35 U.S.C. § 103 as being unpatentable over Delaney in view of Auth. A detailed explanation of the rejection appears in the final rejection (Paper No. 13) and is incorporated by reference into the answer (Paper No. 16).

Delaney discloses a method for "the lysis of blood clots in the blood vessels of living human beings by the direct application to the clot of sonic or supersonic energy vibrations"

² Although the listing on page 2 in the answer (Paper No. 16) of the prior art of record relied upon by the examiner includes U.S. Patent No. 4,646,736 to Auth instead of U.S. Patent No. 4,445,509 to Auth, the explanation of the appealed rejection in the final rejection (Paper No. 13) indicates that the examiner is actually relying on the latter Auth patent, rather than the former.

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(column 1, lines 9 through 11). The method includes the steps of inserting an elongated guide catheter 30 into a blood vessel and routing the distal end thereof to the region obstructed by a clot, inserting an elongated drive catheter 20' into the proximal end of the guide catheter, guiding the drive catheter through the guide catheter to cause its distal end to exit from the distal end of the guide catheter and approach the obstructed region of the blood vessel, coupling the proximal end of the drive catheter to a ultrasonic generator-transducer assembly 21-27, and actuating such assembly to cause the distal end of the drive catheter to ram and lyse the blood clot with a repetitive back and forth motion, thereby opening the obstructed blood vessel.

Auth discloses a method for the removal of relatively hard plaque deposits from blood vessels without damaging the relatively soft vascular tissue. This method includes the steps of inserting an elongated guide catheter 3 into a blood vessel and routing the distal end thereof to the region obstructed by plaque, inserting an elongated drive catheter 2 having an enlarged distal member 1 into the proximal end of the guide

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catheter, guiding the drive catheter through the guide catheter to cause the distal member to exit from the distal end of the guide catheter and approach the obstructed region of the blood vessel, coupling the proximal end of the drive catheter to a torque-generating pneumatic or electric motor 4, and actuating the motor to cause the distal member to rotate and cut away the plaque, thereby opening the obstructed blood vessel. The enlarged distal member 1 is particularly configured to perform its cutting function without harming the blood vessel.

The method disclosed by Delaney meets all of the limitations in claim 5 except for those relating to the enlarged distal member on the drive catheter. Delaney makes no disclosure of such a member and even appears to teach away from one (see column 3, lines 36 through 39). The appellant's argument that Delaney's method also fails to meet the limitations in claim 5 relating to the reciprocating motor output shaft and the repetitive back and forth ramming motion generated thereby (see pages 7 and 8 in the brief, Paper No. 14½) is not persuasive. Such limitations

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clearly find response in Delaney's generator-transducer assembly 21-27 and the disclosed use thereof.

The method disclosed by Auth meets all of the limitations in claim 5 except for those relating to the reciprocating motor output shaft and the repetitive back and forth ramming motion generated thereby.

There is nothing in the collective teachings of Delaney and Auth, however, which would have suggested combining these references so as to overcome the foregoing deficiencies of each and arrive at the method recited in claim 5. Such a combination would entail the use of Delaney's generator-transducer assembly and the repetitive back and forth ramming motion generated thereby with a drive catheter having Auth's enlarged distal member which is particularly designed for rotatable cutting action. The only suggestion for utilizing these manifestly disparate features of the prior art in conjunction with one another stems from hindsight knowledge derived from the appellant's own teachings. The use of such hindsight knowledge to support a conclusion of obviousness under 35 U.S.C.

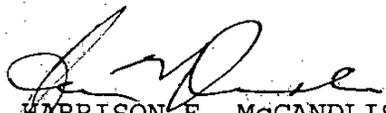
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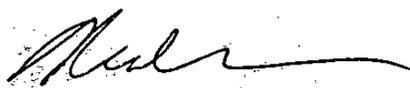
§ 103 is, of course, impermissible (see In re Eritch, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992); W.L. Gore & Assocs. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984)).

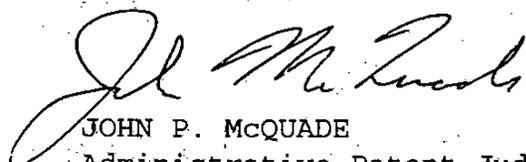
Accordingly, we shall not sustain the standing 35 U.S.C. § 103 rejection of claim 5 as being unpatentable over Delaney in view of Auth.

The decision of the examiner is reversed.

REVERSED


HARRISON E. MCCANDLISH, Senior)
Administrative Patent Judge)


NEAL E. ABRAMS) BOARD OF PATENT
Administrative Patent Judge) APPEALS AND


JOHN P. McQUADE) INTERFERENCES
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