

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MEDTRONIC, INC., MEDTRONIC VASCULAR, INC.,
and MEDTRONIC COREVALVE, LLC,
Petitioner,

v.

TROY R. NORRED, M.D.,
Patent Owner.

Case IPR2014-00110
Patent 6,482,228 B1

Before SHERIDAN K. SNEDDEN, BARRY L. GROSSMAN, and
MITCHELL G. WEATHERLY, *Administrative Patent Judges*.

SNEDDEN, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

Medtronic, Inc., Medtronic Vascular, Inc., and Medtronic Corevalve, LLC (collectively, “Petitioner”) filed a Petition requesting *inter partes* review of claims 16–19 (Paper 4, “Pet.”) of US 6,482,228 B1 (Ex. 1001, “the ’228 patent”). We instituted trial for the challenged claims on the following grounds of unpatentability asserted by Petitioner:

Reference	Basis	Claims Challenged
DiMatteo ¹	§ 102(e)	16–19
Wolfe ²	§ 102(b)	16–18

Decision to Institute (Paper 10, “Dec.”), 15.

After institution, Troy R. Norred, M.D. (“Patent Owner”) filed a Patent Owner’s Response (Paper 15, “Resp.”). Petitioner filed a Reply (Paper 25, “Reply”).

Petitioner relies upon the declaration of Alexander J. Hill, Ph.D. (Ex. 1018, “Hill Decl.”) in support of its Petition.

Patent Owner relies upon the declarations of Timothy T. Catchings, M.D., (Ex. 2095, “Catchings Decl.”), Troy R. Norred, M.D. (Exhibit 2093, “Norred Decl.”), James J. Kernell (Ex. 2094, “Kernell Decl.”), Dr. Stephen J. Lombardo (Ex. 2096, “Lombardo Declaration”), and Dr. Carl T. Rutledge (Ex. 2097, “Rutledge Decl.”) in support of its Response.

Patent Owner filed a Motion to Amend Claims (Paper 18, “Mot. to Amend”). Petitioner filed an Opposition to Patent Owner’s Motion to

¹ DiMatteo, US 6,440,164 B1, issued Aug. 27, 2002 (Ex. 1003).

² Wolfe, US 4,030,142, issued June 21, 1977 (Ex. 1006).

Amend (Paper 26, “Opp.”). Patent Owner filed a Reply in Support of Patent Owner’s Motion to Amend (Paper 31, “Amend Reply”).

Oral argument was conducted on January 27, 2015. A transcript is entered as Paper 45 (“Tr.”).

This Final Written Decision addresses challenges to the patentability of claims 16–19. Petitioner has shown by a preponderance of the evidence that claims 16–19 of the ’228 patent are unpatentable.

Patent Owner’s Motion to Amend Claims is denied.

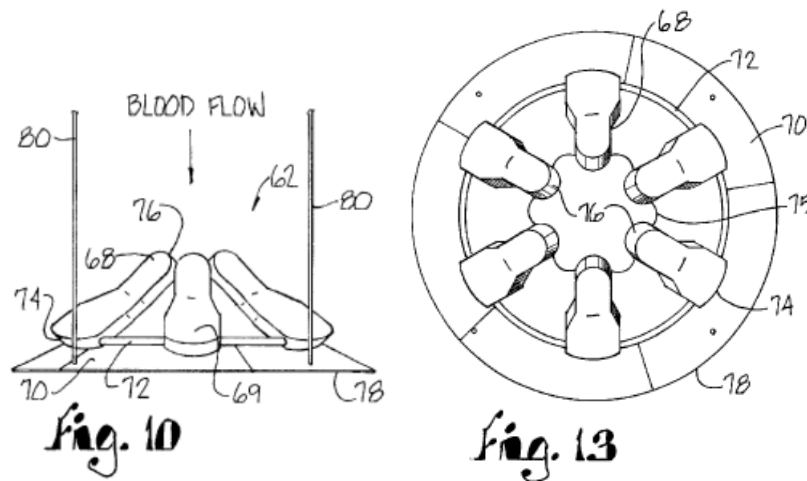
A. Related Matters

The parties represent that the ’228 patent is the subject of a district court case filed February 6, 2013, by Patent Owner against Petitioner in the U.S. District Court for the District of Kansas, entitled *Troy R. Norred, M.D. v. Medtronic, Inc.*, Case No. 2:13-cv-02061. Pet. 1; Paper 6, 2; Paper 13.

The ’228 patent is the subject of two other *inter partes* review proceedings: IPR2014-00111 and IPR2014-00395.

B. The ’228 Patent (Ex. 1001)

The ’228 patent relates to a percutaneous aortic heart valve that is placed by catheter and held in place with a stent system. Ex. 1001, 1:6–9, 1:29–31. Figures 10 and 13 of the ’228 patent are reproduced below.



Figures 10 and 13 show different views of a cone-shaped aortic valve. Valve 66 consists of interconnected fingers 68, a generally ring-shaped base 70, and ring 72 secured to base 70. *Id.* at 4:54–64. Base 70 may be seated against the root of aortic valve 34. *Id.* at 5:17–19. Rim 78 of base 70 is made of a pliable biocompatible material and seals against the root of the native aortic valve to reduce peri-valvular leaks. *Id.* at 5:18–20. Valve 66 is anchored along the root of the aortic valve with connecting rods 80 which are connected to stents. *Id.* at 5:21–23.

C. Challenged Claims

Challenged claims 16–19 are reproduced below:

16. An aortic valve for regulating a blood flow through an aortic channel surrounded by an aortic wall upon placement therein, said valve comprising:

a ring member having a circumference adapted to seat about an aortic wall surrounding an aortic channel, said ring including an aperture for blood flow therethrough;

a membrane having first and second spaced-apart open ends, said membrane made of a material resistant to a fluid flow therethrough; and

means for mounting said first open end of said membrane about said ring aperture with said second open end displaced

therefrom, said means moving said membrane second end between a first open position to allow a blood flow therethrough and a second closed position to preclude a blood flow therethrough.

17. The aortic valve as claimed in claim 16 wherein said mounting means comprises at least one arm having a first end hingedly secured to said ring member and a free end spaced therefrom, said first end of said at least one arm secured to said first end of said membrane, said free end of said at least one arm secured to said second end of said membrane, said at least one arm responsive to a blood flow within the channel for movement with said membrane between said first open and second closed positions.

18. The aortic valve as claimed in claim 17 wherein said at least one arm extends generally along a path of said blood flow at said first open position, and generally traverses a blood flow path when at said second closed position.

19. The aortic valve as claimed in claim 16 further comprising means for maintaining said ring member in said seat about the aortic wall.

II. ANALYSIS

A. *Claim Interpretation*

In an *inter partes* review, claim terms in an unexpired patent are interpreted according to their broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b); accord *In re Cuozzo Speed Techs., LLC*, 778 F.3d 1271, 1278–82 (Fed. Cir. 2015). Claim terms are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed.

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.