

PATENT ASSIGNMENT

Electronic Version v1.1

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
Transvascular, Inc.	09/09/2003
RECEIVING PARTY DATA	
Name:	Medtronic AVE, Inc.
Street Address:	3576 Unocal Place
City:	Santa Rosa
State/Country:	CALIFORNIA
Postal Code:	95403
PROPERTY NUMBERS Total: 2	
Property Type	Number
Application Number:	09275797
Patent Number:	6569145
CORRESPONDENCE DATA	
Fax Number:	(707)543-5420
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
Phone:	(707) 591-2515
Email:	kimberly.melvin@medtronic.com
Correspondent Name:	Medtronic Vascular, Inc.
Address Line 1:	3576 Unocal Place
Address Line 4:	Santa Rosa, CALIFORNIA 95403
ATTORNEY DOCKET NUMBER:	P2022
NAME OF SUBMITTER:	William L. Haynes/
Total Attachments: 6 source=P2022TransvasculartoMedtronicAVE#page1.tif source=P2022TransvasculartoMedtronicAVE#page2.tif source=P2022TransvasculartoMedtronicAVE#page3.tif	

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PATENT ASSIGNMENT

WHEREAS, TransVascular, Inc., a California corporation ("Assignor"), is the owner of the United States patents and patent applications identified on Exhibit A and of the foreign patents and patent applications identified on the attached Exhibit B; and

WHEREAS, Medtronic AVE, Inc., a Delaware corporation, ("Assignee") desires to acquire the entire right, title and interest in and to the United States and foreign patents and patent applications and in and to the inventions described and claimed therein;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, Assignor hereby sells, assigns and transfers to Assignee, its successors and assigns: the entire right, title and interest in and to the patents and patent applications listed on Exhibits A and B hereto including the inventions therein described and claimed; all rights for past infringement thereof; all renewals, reissues, extensions, substitutions, continuations, continuations-in-part, or divisions thereof, or any applications that claim any priority rights thereof; all foreign applications based thereon; and the right to apply for patents in foreign countries in its own name, including the right to claim any priority rights to which such foreign applications are entitled under international conventions, treaties, or otherwise.

Assignor further agrees to execute and deliver without further consideration any further application, assignments or other documents and to perform such other lawful acts as Assignee, its successors and assigns may deem reasonably necessary to fully secure, maintain and enforce its rights, title or interest as specified herein.

Assignor hereby authorizes and requests the appropriate patent offices to issue to Assignee any patents that may be granted in accordance with this Assignment.

TRANSVASCULAR, INC.

By: [Signature]

Name Printed: NBH/GOODSPEED

Title: CEO

STATE OF CALIFORNIA }

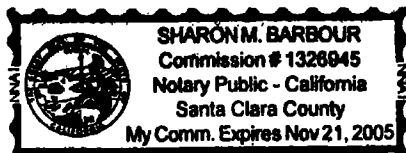
ss.

COUNTY OF Santa Clara

On September 9, 2003, before me, Sharon M. Barbour, personally appeared Norwick B.H. Goodspeed personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

[SEAL]



[Signature]
Notary Signature

Exhibit A
U.S. Patents and Patent Applications

Outside #	Title	Serial #	Filing Type	Date Filed	Status
TRNSV-018Z	Deflector Guiding Catheter	06/504,141	Parent	14-Jun-83	Issued 4,774,949
TRNSV-020A	Coronary Intravascular Ultrasound Imaging Method and Apparatus	07/700,625	Parent	15-May-91	Issued 5,193,546
TRNSV-054A	Method for Treatment of Ischemic Heart Disease by Providing Transvenous Myocardial Perfusion	08/714,466	Parent	16-Sep-96	Issued 5,655,548
TRNSV-054G	Apparatus for Treatment of Ischemic Heart Disease by Providing Transvenous Myocardial Perfusion	08/798,700	Divisional	12-Feb-97	Issued 5,824,071
TRNSV-003A	A Device, System and Method for Interstitial Transvascular Intervention	08/730,496	Parent	11-Oct-96	Issued 5,830,222
TRNSV-046A	Catheter Apparatus and Methodology for Generating a Fistula On-Demand Between Closely Associated Blood Vessels at a Pre-Chosen Anatomic Site In-Vivo	08/616,588	Parent	15-Mar-96	Issued 5,830,224
TRNSV-052A	Device for Forming Holes in Tissue	09/009,135	Parent	20-Jan-98	Issued 6,015,504
212/047	Transvascular TMR Device and Method	08/745,869	Parent	8-Nov-96	Issued 6,042,581
212/067	Transvascular TMR Device and Method	08/819,948	CIP	18-Mar-97	Issued 6,053,911
TRNSV-003C	Methods for Interstitial Transvascular Intervention and Revascularization	09/179,809	Continuation	27-Oct-98	Issued 6,068,638
TRNSV-017A	Transluminal Methods and Devices for Closing, Forming Attachments to, and/or Forming Anastomotic Junctions in, Luminal Anatomic	08/896,307	Parent	28-Jun-97	Issued 6,071,292
TRNSV-046G1	Catheter Apparatus and Methodology for Generating a Fistula On-Demand Between Closely Associated Blood Vessels at a Pre-Chosen Anatomic Site In-Vivo	09/134,995	Divisional	17-Aug-98	Issued 6,099,542
TRNSV-051A	Steerable Catheter with External Guidewire As Catheter Tip Deflector	09/329,386	Parent	10-Jun-99	Issued 6,126,649
TRNSV-003G2	Device for Interstitial Transvascular Intervention and Revascularization	09/181,013	Divisional	27-Oct-98	Issued 6,159,225
TRNSV-054B/B2	Methods and Apparatus for Treating Ischemic Heart Disease by providing Transvenous Myocardial Perfusion	09/208,807	CIP	9-Dec-98	Issued 6,186,972
TRNSV-001A	Methods and Apparatus for Bypassing Arterial Obstructions and/or Performing Other Transvascular Procedures	08/730,327	Parent	11-Oct-96	Issued 6,190,353
TRNSV-003G3	Devices for Connecting Anatomical Conduits such as Vascular Structures	09/267,943	Divisional	11-Mar-99	Issued 6,231,587

Outside #	Title	Serial #	Filing Type	Date Filed	Status
TRNSV-003B	Percutaneous In Situ Coronary Bypass Method and Apparatus	09/192,554	Parent	10-Aug-98	Issued 6,283,983
14768-7001	Systems and Methods for Delivering Drugs to Selected Locations Within the Body	09/048,147	CIP	25-Mar-98	Issued 6,283,951
TRNSV-017G	Transluminal Methods and Devices for Closing, Forming Attachments to, and/or Forming Anastomotic Junctions in, Luminal Anatomic	09/543,251	Divisional	5-Apr-00	Issued 6,287,317
TRNSV-015A	Catheters and Related Devices for Forming Passageways Between Blood Vessels or Other Anatomical Structures	08/837,294	CIP	11-Apr-97	Issued 6,302,875
14768-7002	Deformable Scaffolding Multicellular Stent	09/089,032	CIP	2-Jun-98	Issued 6,330,884
TRNSV-029A	Tissue Penetrating Catheters having Integral Imaging Transducers and their Methods of Use	09/282,774	Parent	30-Jul-99	Issued 6,375,615
14768-7004	Systems and Methods for Directing and Snaring Guidewires	09/179,737	CIP	27-Oct-98	Issued 6,379,319
TRNSV-022A	Devices for Forming and/or Maintaining Connections Between Adjacent Anatomical Conduits	08/970,694	CIP	14-Nov-97	Issued 6,432,127
TRNSV-054B	Methods and Apparatus for Treating Ischemic Heart Disease by Providing Transvenous Myocardial Perfusion	08/929,076	CIP	15-Sep-97	Issued 6,447,539
TRNSV-017G2	Transluminal Methods and Devices for Closing, Forming Attachments to, and/or Forming Anastomotic Junctions in, Luminal Anatomic	09/908,337	Continuation	18-Jul-01	Issued 6,491,707
TRNSV-028A	Catheters, Systems and Methods for Percutaneous In Situ Arterio-Venous Bypass	09/282,276	Parent	31-Mar-99	Issued 6,544,230
TRNSV-024A	Transluminal Devices, Systems and Methods for Enlarging Interstitial Penetration Tracts	09/056,589	Parent	7-Apr-98	Issued 6,561,998
TRNSV-014US	Methods and Apparatus for Connecting Openings Formed in Adjacent Blood Vessels or Other Anatomical Structures	09/117,520	US/PCT	29-Jul-98	Issued 6,616,675
TRNSV-016US	Methods and Apparatus for Blocking Flow Through Blood Vessels	09/117,516	Parent	29-Jul-98	Pending Allowed
TRNSV-016US-G	Methods and Apparatus for Blocking Flow Through Blood Vessels	TBD	Divisional	29-Aug-03	Pending
TRNSV-005US	A Device, System and Method for Interstitial Transvascular Intervention	09/117,515	Parent	2-Aug-98	Issued 6,567,311
TRNSV-003G1	System and Method for Delivery of Therapeutic Agents to Intracorporeal Sites	09/181,701	Divisional	28-Oct-98	Pending Allowed
TRNSV-003G1-C	System and Method for Delivery of Therapeutic Agents to Intracorporeal Sites	TBD	Continuation	5-Aug-03	Pending

Outside #	Title	Serial #	Filing Type	Date Filed	Status
TRNSV-056A	Pressure-Controlled Continuous Coronary Sinus Occlusion Device and Methods of Use	09/275,797	Parent	25-Mar-99	Issued 6,569,145
TRNSV-037A	Sterility Barriers for Insertion of Non-Sterile Apparatus Into Catheters or Other Medical Devices	09/505,149	Parent	15-Feb-00	Issued 6,589,164
TRNSV-043A	Catheter-Based Methods, Apparatuses and Systems for Enlarging Blood Vessels to Facilitate the Formation of Penetration Tracts, Fistulas and/or Blood Flow Channels	09/507,139	Parent	18-Feb-00	Issued 6,508,824
212/247	Transvascular TMR Device and Method	09/557,628	Continuation	25-Apr-00	Pending
TRNSV-001G	Methods and Apparatus for Bypassing Arterial Obstructions and/or Performing Other Transvascular Procedures	09/639,963	Divisional	16-Aug-00	Pending
TRNSV-057A	Methods and Apparatus for Acute or Chronic Delivery of Substances or Apparatus to Extravascular Treatment Sites	09/766,502	Parent	17-Jan-01	Issued 6,602,241
TRNSV-057C	Methods and Apparatus for Acute or Chronic Delivery of Substances or Apparatus to Extravascular Treatment Sites	TBD	Continuation	10-Jun-03	Pending
TRNSV-065A	Methods for Bypassing Total or Near-Total Obstructions in Arteries or other Anatomical Conduits	09/860,147	CIP	17-May-01	Pending
24768-7013	Apparatus and Methods for Creating a Channel Between Adjacent Body Lumens	09/539,639	Parent	30-Mar-00	Pending
212/481	Transvascular TMR Device and Method	TBA	Continuation	15-May-03	Pending
TRNSV-055B/B2	Apparatus for Providing Coronary Retroperfusion and Methods of Use	09/320,172	CIP	26-May-99	Pending
14768-7003	Over-The-Wire Apparatus and Method for Open Surgery Making of a Fluid Connection Between Two neighboring Vessels	09/478,109	Parent	4-Jan-00	Pending
212/245	TransVascular TMR Device and Method	09/536,622	Continuation	28-Mar-00	Pending
TRNSV-044A	Stabilized Tissue Penetrating Catheters	09/538,119	CIP	29-Mar-00	Pending
TRNSV-053A	Transluminally Deliverable Vascular Blockers and Methods for Facilitating Retrograde Flow or Arterial Blood through Veins	09/613,675	Parent	11-Jul-00	Pending
TRNSV-001C	Methods and Apparatus for Bypassing Arterial Obstructions and/or Performing Other Transvascular Procedures	09/708,932	Continuation	18-Nov-00	Pending
TRNSV-013BC	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	09/710,332	Continuation	9-Nov-00	Pending
TRNSV-055C	Apparatus for Providing Coronary Retroperfusion and/or Left Ventricular Assist and Methods of Use	09/794,297	Continuation	27-Feb-01	Pending

Outside #	Title	Serial #	Filing Type	Date Filed	Status
24768-7021	Systems and Methods for Delivering Drugs to Selected Locations Within the Body	09/826,049	Divisional	3-Apr-01	Pending
TRNSV-022C	Devices for Forming and/or Maintaining Connections Between Openings in an Anatomical Conduits	09/845,372	Continuation	30-Apr-01	Pending
TRNSV-015G	Catheters and Related Devices for Forming Passageways Between Blood Vessels or Other Anatomical Structures	09/912,122	Divisional	24-Jul-01	Pending
TRNSV-022G	Devices for Forming and/or Maintaining Connections Between Adjacent Anatomical Conduits	09/911,975	Divisional	24-Jul-01	Pending
7030190001	Deformable Scaffolding Multicellular Stent	09/933,295	Divisional	20-Aug-01	Pending
TRNSV-046G2C	Catheter Apparatus and Methodology for Generating a Fistula On-Demand Between Closely Associated Blood Vessels at a Pre-Chosen Anatomic Site In-Vivo	09/960,003	Continuation	21-Sep-01	Pending
TRNSV-013BC2	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	09/994,222	Continuation	26-Nov-01	Pending
TRNSV-029C	Tissue penetrating catheters having integral imaging transducers and their methods of use	10/033,836	Continuation	26-Dec-01	Pending/ Allowed
273/098	Systems and Methods for Directing and Snaring Guidewires	10/136,929	Divisional	30-Apr-02	Pending
TRNSV-013BC3	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	10/150,306	Continuation	16-May-02	Pending
TRNSV-017G3	Transluminal Methods and Devices for Closing, Forming Attachments to, and/or Forming Anastomotic Junctions in, Luminal Anatomic	10/259,210	Divisional	27-Sep-02	Pending
TRNSV-024C	Transluminal Devices, Systems and Methods for Enlarging Interstitial Penetration Tracts	10/346,556	Continuation	17-Jan-03	Pending
TRNSV-065C <i>P2025 CON 2</i>	Methods for Bypassing Total or Near-Total Obstructions in Arteries or other Anatomical Conduits	10/370,201 <i>10/370 231</i>	Continuation	19-Feb-03	Pending
TRNSV-028G	Catheters, Systems and Methods for Percutaneous In Situ Arterio-Venous Bypass	10/370,429	Divisional	20-Feb-03	Pending
TRNSV-096N	Optically Guided Penetration Catheters and Their Methods of Use	60/455,015	Provisional	13-Mar-03	Pending
TRNSV-083A	Implantable Lumen Occluding Devices and Methods	10/391,481	Parent	17-Mar-03	Pending
TRNSV-086A	Devices and Methods for Transluminal - Interstitial Electrode Placement	10/411,891	Parent	11-Apr-03	Pending
TRNSV-001G2	Devices for Forming and/or Maintaining Connections Between Adjacent Anatomical Conduits	10/425,543	Divisional	29-Apr-03	Pending

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TRNSV-005C	A Device, System and Method for Interstitial Transvascular Intervention	10/425,756	Continuation	29-Apr-03	Pending
TRNSV-014C	Methods and Apparatus for Connecting Openings Formed in Adjacent Blood Vessels or Other Anatomical Structures	10/436,016	Continuation	12-May-03	Pending
TRNSV-064PC	Methods and Apparatus for Guided Transluminal Interventions using Vessel Wall Penetrating Catheters and other Apparatus	PCT/US02/ PCT 03941		6-Feb-02	Pending
TRNSV-083PC	Implantable Lumen Occluding Devices and Methods	PCT/US03/ PCT 08015		17-Mar-03	Pending
TRNSV-086PC	Devices and Methods for Transluminal - Interstitial Electrode Placement	PCT/US03/ PCT 11284		11-Apr-03	Pending
TRNSV-052A	Device for Forming Holes in Tissue	09/009,135	Parent	20-Jan-98	Issued
TRNSV-051A	Steerable Catheter with External Guidewire As Catheter Tip Deflector	09/329,386	Parent	10-Jun-99	Issued 6,015,504
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TRNSV-005US	A Device, System and Method for Interstitial Transvascular Intervention	09/117,515	Parent	2-Aug-98	Pending