			04-27-2001							
FORM PTO-1584	ASSIGNMENT RECOR	DATION FORM COVER SHEE								
1-31-92		ENTS ONLY) LANALARI ISHI KANSALI UMISALI UMIM AANNA JALAH TAMAKA JANA KANALANI UMIM							
p9634 To the Honorable Con	missioner of Patents and Tradama	when Diana and the	101691391							
1. Name of conveying party(ies): D. Curtis Deno	massioner of Patents and Madema	rks: Please record the attached origin 2. Name and address	al accuments or copy thereof. of receiving party(ies):							
Lawrence J. Mulligan Tom D. Bennett David A. Igel	4-12-01	Name:	MEDTRONIC, INC.							
Michael R.S. Hill	g party(ies) attached? []Yes [X]N	Internal Address: <u>M.S. 3</u>	Internal Address: M.S. 301							
3. Nature of conveyance:			Street Address: 710 MEDTRONIC PARKWAY NORTHEAST							
[X] Assignment	[] Merger	City: <u>MINNEAPOLIS</u>	State: MN Zip: 55432-5640							
[] Security Agreement	[] Change of Name									
[] Other			AFR 11 Zan							
Execution Date: <u>D. Curtis Den</u> Lawrence I.	<u>0 – March 12, 2001</u> Mulligan – March 13, 2001	Additional name(s) & address(es) attached? []Yes [X]No							
Tom D. Benne	<u>ett – April 2, 2001</u> – March 15, 2001		and and the final second se							
<u>Michael R. S.</u> Richard J. Sh	<u>Hill – March 30, 2001</u> aw – March 12, 2001	8 9 2	1. M. TWAN P. Days							
4. Application number(s) or pater	t number(s): 09/750.631	execution date of the application is:_								
 A. Patent Application No.(s) Additional numbers attached? 										
5. Name and address of party to w concerning document should be		6. Total number of app patents involved:	plications and 							
Name <u>BETH L. MCMAH</u>	<u></u>	7. Total fee (37 CFR 3.	41): \$40.00							
Address: MEDTRONIC, 710 Medtronic M.S. LC340		[] Enclosed [X] Authorized to be	charged to deposit account							
	linnesota 5543-5640	8. Deposit Account Nu (Attach duplicate co								
	DO NOT U	SE THIS SPACE								
9. Statement and signature.										
	e and belief, the foregoing inform	nation is true and correct and any att	ached copy is a true copy of the original							
document.										
BETH L. MCMAHON	Butto 2 m	chahon	$\frac{4/9/01}{Date}$							
Name of Person Signing S	ignature	The local second including	g cover sheet, attachments and document:							
OMB No. 0651-0011 (exp. 4/94)		Total number of pages including								
	Do not de	etach this portion								
Mail documents to be recorded with require	Conumissional	of Patents and Trademarks ox Assignments ington, D.C. 20231								
Public burden reporting for this sau gathering the data needed, and completing information systems. PK2-1000C, Was 1Washington D.C. 20203.	mple cover sheet is estimated to average ab	out 30 minutes per document to be recorded,	including time for reviewing the document and the U.S. Patent and Trademark Office, Office of Reduction Project (0651-0011),							
/										

PATENT REEL: 011721 FRAME: 0888

ASSIGNMENT

WHEREAS, WE, <u>D. Curtis. Deno, Lawrence J. Mulligan, Tom D. Bennett, David A. Igel, Michael R.</u> <u>S. Hill and Richard J. Shaw, are the inventors of <u>IMPLANTABLE MEDICAL DEVICE FOR TREATING</u> <u>CARDIAC MECHANICAL DYSFUNCTION BY ELECTRICAL STIMULATION</u> for which we have executed an application for filing in the United States Patent and Trademark Office preparatory to obtaining Letters Patent of the United States first on 12 March 2001; therefor; and</u>

WHEREAS, <u>MEDTRONIC, INC.</u> a corporation organized and existing under the laws of the <u>State</u> of <u>Minnesota</u> and having a principal place of business at <u>710 Medtronic Parkway N.E.</u>, <u>Minneapolis</u>, <u>Minnesota 55432-5640</u>, hereinafter referred to as "Corporation," is desirous of acquiring the entire right, title and interest in and to said invention for the United States and for all foreign countries and in and to any and all foreign and domestic Letters Patent which may be granted therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I have sold, assigned, transferred and set over and by these presents do sell, assign, transfer and set over unto Corporation, its successors and assigns, the entire right, title and interest in and to said invention and the entire right, title and interest in and to any and all Letters Patent of the United States and any foreign countries which may be granted therefor including my rights under the International Convention for the Protection of Industrial Property, and in and to any and all extensions, divisions, continuations, continuations-in-part or reissues of said Letters Patent that may be granted, the same to be held and enjoyed by Corporation for its own use and behoof and use and behoof of its successors and assigns to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me had this assignment and sale not been made;

AND, for the consideration aforesaid, I materially represent to Corporation, its successors and assigns, that at the time of the execution and delivery of these presents, I am the sole lawful owners of the entire right, title and interest in and to the invention, application and Letters Patent above mentioned, and that the same are unencumbered, and that I have good right and lawful authority to sell and convey the same in the manner herein set forth;

AND, for the consideration aforesaid, I hereby individually covenant and agree to and with Corporation, its successors and assigns, that whenever its counsel or the counsel of its successors or assigns, learned in the law, shall advise that an amendment or division of, or continuation or any continuation-in-part thereof, or any other proceeding in connection with the filing or prosecution of said domestic or foreign patent applications, including interference proceedings, is lawful and desirable, or that a reissue of extension of said Letters Patent is lawful and desirable, I, or my executors, administrators or assigns will sign all papers and drawings, take all rightful oaths, and do all acts necessary or required to be done for the procurement of valid Letters Patent for said invention, or for the reissue or extension of the same, without charge to Corporation, its successors or assigns, but at Corporation's expense.

PATENT REEL: 011721 FRAME: 0889

12+4 IN WITNESS WHEREOF, I have hereunto set my hand on this dav of *march*, 2001.

Curtis D. Deno

D. Cuitis Deno A

STATE OF MINNESOTA

SS.

COUNTY OF ANOKA lare th On this 12 day of

On this $\underline{///////}$, 2001, before me personally appeared Curtis D. Deno, to me known to be the person described in and who executed the foregoing instrument and acknowledged that he executed the same as his free act and deed.

Notary/Public

FRAYDA M. NITSCHKE NOTARY PUBLIC - MINNESOTA My Commission Expires Jan 1, 2005

IN WITNESS WHEREOF, I have hereunto set my hand on this _____3___ day of March_____, 2001.

Lawrence J. Mulligan

STATE OF MINNESOTA

COUNTY OF ANOKA

On this $13^{\prime\prime}$ day of <u>Match</u>, 2001, before me personally appeared Lawrence J. Mulligan, to me known to be the person described in and who executed the foregoing instrument and acknowledged that he executed the same as his free act and deed.

SS.

John C. Bally lotary Public



IN WITNESS WHEREOF, I have hereunto set my hand on this ______ day of $A_{\ell r}$, (_____, 2001.

Thomas D. Bennett R B

STATE OF MINNESOTA

COUNTY OF ANOKA

On this 2nd day of 4prel, 2001, before me personally appeared Thomas D. Bennett, to me known to be the person described in and who executed the foregoing instrument and acknowledged that he executed the same as his free act and deed.

SS.



Harm Notary Public

IN WITNESS WHEREOF, I have hereunto set my hand on this day of 1912 R F , 2001. David A. Igel

STATE OF MINNESOTA

COUNTY OF ANOKA

SS.

Marca IN ____, 2001, before me personally appeared David day of On this /3A. Igel, to me known to be the person described in and who executed the foregoing instrument and acknowledged that he executed the same as his free act and deed.

b

Notary Public

FRAYDA M. NITSCHKE NOTARY PUBLIC - MINNESOTA My Commission Expires Jan 1, 2005

IN WITNESS WHEREOF, I have hereunto set my hand on this 30 day of 2001. R. Hill S. STATE OF MINNESOTA 30 SS.

COUNTY OF ANOKA

On this 30^{n} day of γ 30^{n} , 2001, before me personally appeared Michael R. Hill, to me known to be the person described in and who executed the foregoing instrument and acknowledged that he executed the same as his free act and deed.

e l'Anla



March	WITNESS	WHEREOF, , 2001.	١	have	hereunto	set	my	hand	on	this	12**	day	of
									\sim				

J. Shaw Richard

STATE OF MINNESOTA

COUNTY OF ANOKA

On this 12^{4} day of $Mach_, 2001$, before me personally appeared Richard J. Shaw, to me known to be the person described in and who executed the foregoing instrument and acknowledged that he executed the same as his free act and deed.

SS.

IN WITNESS WHEREOF, I have hereunto affixed my official signature with the seal of my office, the day and year above written.

e a Bale Notary Public



RECORDED: 04/12/2001