

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT8181182

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
Name		Execution Date
METAVENTION, INC.		08/22/2023
RECEIVING PARTY DATA		
Name:	MEDTRONIC IRELAND MANUFACTURING UNLIMITED COMPANY	
Street Address:	10 EARLSFORT TERRACE	
City:	DUBLIN 2	
State/Country:	IRELAND	
Postal Code:	D02 T380	
PROPERTY NUMBERS Total: 25		
Property Type	Number	
Application Number:	13789521	
Application Number:	14061638	
Application Number:	14279740	
Application Number:	14530408	
Application Number:	14832302	
Application Number:	16119090	
Application Number:	14061462	
Application Number:	14497144	
Application Number:	13789509	
Application Number:	14069744	
Application Number:	14302262	
Application Number:	14075908	
Application Number:	14497153	
Application Number:	14583365	
Application Number:	14075941	
Application Number:	14075948	
Application Number:	14075949	
Application Number:	14075976	
Application Number:	14076008	
Application Number:	14870861	

PATENT

Property Type	Number
Application Number:	15159616
Application Number:	16123308
Application Number:	16563128
Application Number:	17108351
Application Number:	14076011

CORRESPONDENCE DATA

Fax Number: (651)735-1102

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 651-735-1100

Email: pairedocketing@ssiplaw.com, rs.patents.two@medtronic.com

Correspondent Name: SHUMAKER & SIEFFERT, P.A.

Address Line 1: 1625 RADIO DRIVE

Address Line 2: SUITE 300

Address Line 4: WOODBURY, MINNESOTA 55125

NAME OF SUBMITTER:	JONATHON ACHEY
SIGNATURE:	/jonathon achey/
DATE SIGNED:	09/21/2023

Total Attachments: 12

source=Metavention to MIM Assignment#page1.tif

source=Metavention to MIM Assignment#page2.tif

source=Metavention to MIM Assignment#page3.tif

source=Metavention to MIM Assignment#page4.tif

source=Metavention to MIM Assignment#page5.tif

source=Metavention to MIM Assignment#page6.tif

source=Metavention to MIM Assignment#page7.tif

source=Metavention to MIM Assignment#page8.tif

source=Metavention to MIM Assignment#page9.tif

source=Metavention to MIM Assignment#page10.tif

source=Metavention to MIM Assignment#page11.tif

source=Metavention to MIM Assignment#page12.tif

PATENT ASSIGNMENT

THIS PATENT ASSIGNMENT (this “Assignment”), dated August 22, 2023, is made by and between Metavention, Inc., a Delaware corporation (“Assignor”), and Medtronic Ireland Manufacturing Unlimited Company, a company organized under the laws of Ireland (“Assignee”). Assignor and Assignee may be referred to in this Assignment each as a “Party” and collectively as the “Parties.”

WHEREAS, Assignor and Assignee are parties to that certain Asset Purchase Agreement, dated as of August 22, 2023 (the “Purchase Agreement”), between Assignor and Assignee, pursuant to which, among other things, Assignor is selling, assigning, transferring and delivering to Assignee, and Assignee is purchasing from Assignor, all of the right, title, and interest in, to and under the patents, patent applications and other patent rights set forth on Schedule A attached hereto (collectively, the “Assigned Patent Rights”); and

WHEREAS, this Assignment is entered into pursuant to the Purchase Agreement.

NOW, THEREFORE, for good and valuable consideration and pursuant to the terms of the Purchase Agreement, Assignor hereby agrees as follows:

1. Assignor hereby sells, conveys, transfers, assigns and delivers to Assignee, and Assignee hereby accepts, purchases and assumes, all of Assignor’s right, title, and interest in and to the Assigned Patent Rights, together with all patents issuing on the Assigned Patent Rights, including (a) all national, regional and international applications for patent or other indicia of ownership of a design, industrial property, invention or discovery issued by a governmental authority, including provisional patent and utility model applications; (b) all applications claiming priority, directly or indirectly, from any of the foregoing, including divisionals, continuations, continuations-in-part, converted provisionals, continued prosecution applications and other pre-issue forms of any of the foregoing described in clauses (a); (c) any and all patents or other indicia of ownership of a design, industrial property, invention or discovery issued by a governmental authority that have issued or in the future issue from any of the foregoing described in clauses (a) and (b), including utility models, petty patents, innovation patents and design patents and certificates of invention; (d) any and all extensions or restorations by existing or future extension or restoration mechanisms, including revalidations, reissues, re-examinations and extensions (including any supplementary protection certificates and the like), and other post-issue forms of any of the foregoing described in clauses (a), (b) and (c); and (e) with respect to those foreign jurisdictions where legally codified, so-called pipeline protection or any importation, revalidation, confirmation or introduction patent or registration patent or patent of additions to any of the foregoing described in clauses (a) – (d), as each of the foregoing may exist anywhere in the world, and together with all rights to sue for past, present, and future infringement or misappropriation thereof, for any relief in law or in equity, and to recover any and all damages for such infringement or misappropriation in whatever form, including but not limited to lost profits or royalties (including the right to sue for pre-issuance royalties).

2. Assignor does hereby request and authorize the Commissioner of Patents and Trademarks of the United States and all other corresponding patent offices or authorities of other jurisdictions to issue letters patent, certificates of invention, utility models, or other governmental

grants or issuances that may be granted upon any of the Assigned Patent Rights and the inventions disclosed in the Assigned Patent Rights to Assignee or Assignee's nominee, successor, or assign.

3. Assignor agrees to execute all specific assignments, oaths, declarations, deeds, or other instruments, and to do all acts necessary or proper, in each case, that are reasonably requested by Assignee: (a) to transfer to Assignee the Assigned Patent Rights and the inventions disclosed therein; and (b) to vest and confirm therein the legal title to all such patent rights. Assignee agrees to reimburse Assignor for reasonable, documented expenses associated with such assistance.

4. Notwithstanding any other provisions of this Assignment to the contrary, nothing contained in this Assignment shall in any way supersede, modify, replace, amend, change, rescind, waive, exceed, expand, enlarge, or in any way affect the provisions, including warranties, covenants, agreements, conditions, representations, or in general any of the rights and remedies, or any of the obligations and indemnifications of Assignor or Assignee set forth in the Purchase Agreement. This Assignment is intended only to effect the transfer of certain property transferred pursuant to the Purchase Agreement and shall be governed entirely in accordance with the terms and conditions of the Purchase Agreement.

5. This Assignment shall be binding on, and shall inure to the benefit of, Assignor, Assignee, and their respective successors and/or assigns, and all others acting by, through, with, or under their direction, and all those in privity therewith.

6. This Assignment may be executed in multiple counterparts and any Party may execute any such counterpart, each of which when executed and delivered shall be deemed to be an original and all of which counterparts taken together shall constitute but one and the same instrument. For purposes of this Assignment, facsimile signatures shall be deemed originals, and the Parties agree to exchange original signatures as promptly as possible.

7. This Assignment (and any claims or disputes arising out of or related hereto or the transactions contemplated hereby or to the inducement of any party to enter herein, whether for breach of contract, tortious conduct or otherwise and whether predicated on common law, statute or otherwise) shall be governed in all respects, including validity, interpretation, and effect, by and construed in accordance with the internal laws of the State of Minnesota (including in respect of the statute of limitations or other limitations period applicable to any claim, controversy or dispute) without giving effect to any choice or conflict of law provision or rule (whether of the State of Minnesota or any other jurisdiction) that would cause the application of laws of any jurisdictions other than those of the State of Minnesota.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, Assignor has caused this Assignment to be executed by its duly authorized representatives effective this 22nd day of August, 2023.

ASSIGNOR:

METAVENTION, INC.

By: Todd Berg
Name: Todd Berg
Title: Chief Executive Officer

ACCEPTED:

MEDTRONIC IRELAND
MANUFACTURING UNLIMITED
COMPANY

By: _____
Name: Thomas Gerard Shiel
Title: Director

[Signature Page to Patent Assignment]

PATENT
REEL: 064987 FRAME: 0165

IN WITNESS WHEREOF, Assignor has caused this Assignment to be executed by its duly authorized representatives effective this 22nd day of August, 2023.

ASSIGNOR:

METAVENTION, INC.

By: _____

Name: Todd Berg

Title: Chief Executive Officer

ACCEPTED:

MEDTRONIC IRELAND
MANUFACTURING UNLIMITED
COMPANY

By: Thomas Gerard Shiel

Name: Thomas Gerard Shiel

Title: Director

[Signature Page to Patent Assignment]

PATENT
REEL: 064987 FRAME: 0166

SCHEDULE A

Ref. No	Country	Application No.	Filing Date	Patent No.	Grant Date	Title	Assignee
METAV.001PR	US	61/568,843	December 9, 2011			THERAPEUTIC NEUROMODULATION OF THE HEPATIC SYSTEM	METAVENTION, INC.
METAV.001WO	WO	PCT/US2012/068630	December 7, 2012			THERAPEUTIC NEUROMODULATION OF THE HEPATIC SYSTEM	METAVENTION, INC.
METAV.001C1	US	13/789,521	March 7, 2013	8,568,399	October 29, 2013	METHODS FOR THERMALLY-INDUCED HEPATIC NEUROMODULATION	METAVENTION, INC.
METAV.001C2	US	13/789,509	March 7, 2013	8,579,891	November 12, 2013	DEVICES FOR THERMALLY-INDUCED HEPATIC NEUROMODULATION	METAVENTION, INC.
METAV.001C3	US	14/061,638	October 23, 2013	8,728,070	May 20, 2014	HEPATIC NEUROMODULATION METHODS	METAVENTION, INC.
METAV.001C4	US	14/061,462	October 23, 2013	8,728,069	May 20, 2014	MODULATION OF NERVES THAT INNERVATE THE LIVER	METAVENTION, INC.
METAV.001C5	US	14/069,744	November 1, 2013	8,758,334	June 24, 2014	HEPATIC NEUROMODULATION DEVICES	METAVENTION, INC.
METAV.001C6	US	14/075,949	November 8, 2013	9,060,784	June 23, 2015	HEPATIC DENERVATION SYSTEMS	METAVENTION, INC.
METAV.001C7	US	14/075,948	November 8, 2013	9,265,575	February 23, 2016	BALLOON CATHETER NEUROMODULATION SYSTEMS	METAVENTION, INC.
METAV.001C8	US	14/075,908	November 8, 2013	9,005,190	April 14, 2015	TREATMENT OF NON-ALCOHOLIC FATTY LIVER DISEASE	METAVENTION, INC.

Schedule A-1

Ref. No.	Country	Application No.	Filing Date	Patent No.	Grant Date	Title	Assignee
METAV.001C9	US	14/075,941	November 8, 2013	9,033,969	May 19, 2015	NERVE MODULATION TO TREAT DIABETES	METAVENTION, INC.
METAV.001C10	US	14/075,976	November 8, 2013	9,089,541	July 28, 2015	GASTRODUODENAL ARTERY NEUROMODULATION	METAVENTION, INC.
METAV.001C11	US	14/076,011	November 8, 2013	9,005,191	April 14, 2015	NEUROMODULATION METHODS USING BALLOON CATHETER	METAVENTION, INC.
METAV.001C12	US	14/076,008	November 8, 2013	9,149,329	October 6, 2015	GLUCOSE ALTERATION METHODS	METAVENTION, INC.
METAV.001C13	US	14/279,740	May 16, 2014	8,894,639	November 25, 2014	HEPATIC ARTERY NERVE MODULATION METHODS	METAVENTION, INC.
METAV.001C14	US	14/302,262	June 11, 2014	8,876,815	November 4, 2014	ENERGY DELIVERY DEVICES FOR HEPATIC NEUROMODULATION	METAVENTION, INC.
METAV.001C15	US	14/497,153	September 25, 2014	9,011,422	April 21, 2015	HEPATIC NEUROMODULATION TO TREAT FATTY LIVER CONDITIONS	METAVENTION, INC.
METAV.001C16	US	14/497,144	September 25, 2014	9,089,542	July 28, 2015	HEPATIC NEUROMODULATION USING MICROWAVE ENERGY	METAVENTION, INC.
METAV.001C17	US	14/530,408	October 31, 2014	9,114,123	August 25, 2015	HEPATIC NEUROMODULATION USING FLUIDS OR CHEMICAL AGENTS	METAVENTION, INC.
METAV.001C18	US	14/583,365	December 26, 2014	9,114,124	August 25, 2015	MODULATION OF NERVES INNERVATING THE LIVER	METAVENTION, INC.

Schedule A-2

Ref. No.	Country	Application No.	Filing Date	Patent No.	Grant Date	Title	Assignee
METAV.001C19	US	14/832,302	August 21, 2015	10,064,674	September 4, 2018	CHEMICAL NEUROMODULATION OF NERVES INNERVATING THE LIVER	METAVENTION, INC.
METAV.001C20	US	14/870,861	September 30, 2015	9,999,461	June 19, 2018	THERAPEUTIC DENERVATION OF NERVES SURROUNDING A HEPATIC VESSEL	METAVENTION, INC.
METAV.001C21	US	15/159,616	May 19, 2016	10,070,911	September 11, 2018	NEUROMODULATION METHODS TO ALTER GLUCOSE LEVELS	METAVENTION, INC.
METAV.001C22	US	16/119,090	August 31, 2018	10,543,034	January 28, 2020	MODULATION OF NERVES INNERVATING THE LIVER	METAVENTION, INC.
METAV.001C23	US	16/123,308	September 6, 2018	10,856,926	December 8, 2020	NEUROMODULATION FOR METABOLIC CONDITIONS OR SYNDROMES	METAVENTION, INC.
METAV.001C24	US	16/563,128	September 6, 2019	10,617,460	April 14, 2020	NEUROMODULATION FOR METABOLIC CONDITIONS OR SYNDROMES	METAVENTION, INC.
METAV.001C25	US	17/108,351	December 1, 2020			NEUROMODULATION FOR METABOLIC CONDITIONS OR SYNDROMES	METAVENTION, INC.
METAV.001AU	AU	2012347470	December 7, 2012	2012347470	May 18, 2017	THERAPEUTIC NEUROMODULATION OF THE HEPATIC SYSTEM	METAVENTION, INC.
METAV.001AUD1	AU	2017202821	December 7, 2012	2017202821	March 28, 2019	THERAPEUTIC NEUROMODULATION OF THE HEPATIC SYSTEM	METAVENTION, INC.

Ref. No.	Country	Application No.	Filing Date	Patent No.	Grant Date	Title	Assignee
METAV.001AUD2	AU	2019201729	December 7, 2012	2019201729	May 20, 2021	THERAPEUTIC NEUROMODULATION OF THE HEPATIC SYSTEM	METAVENTION, INC.
METAV.001CA	CA	2856732	December 7, 2012			THERAPEUTIC NEUROMODULATION OF THE HEPATIC SYSTEM	METAVENTION, INC.
METAV.001CN	CN	201280069253.3	December 7, 2012	104254366	March 8, 2017	DEVICE, SYSTEM AND METHOD FOR NEUROMODULATION	METAVENTION, INC.
METAV.001CND1	CN	201710065391.9	February 6, 2017	107080561	September 11, 2020	THERAPEUTIC NEUROMODULATION OF THE HEPATIC SYSTEM	METAVENTION, INC.
METAV.001EP	EP	12855872.3	December 7, 2012	2788078	September 2, 2020	THERAPEUTIC NEUROMODULATION OF THE HEPATIC SYSTEM	METAVENTION, INC.
METAV.001IL	IL	232808	December 7, 2012	232808	February 1, 2020	THERAPEUTIC NEUROMODULATION OF THE HEPATIC SYSTEM	METAVENTION, INC.
METAV.001IN	IN	5493/DELNP/2014	December 7, 2012	405214	August 30, 2022	THERAPEUTIC NEUROMODULATION OF THE HEPATIC SYSTEM	METAVENTION, INC.
METAV.001JP	JP	2014-546157	December 7, 2012	6441679	November 30, 2018	THERAPEUTIC NEUROMODULATION OF THE HEPATIC SYSTEM	METAVENTION, INC.
METAV.001KR	KR	10-2014-7019043	December 7, 2012	10-2067583	January 13, 2020	THERAPEUTIC NEUROMODULATION OF THE HEPATIC SYSTEM	METAVENTION, INC.
METAV.001NZ	NZ	625695	December 7, 2012	625695	February 2, 2016	THERAPEUTIC NEUROMODULATION OF THE HEPATIC SYSTEM	METAVENTION, INC.

Schedule A-4

Ref. No.	Country	Application No.	Filing Date	Patent No.	Grant Date	Title	Assignee
METAV.001NZ D1	NZ	706087	December 7, 2012				
METAV.001SG	SG	11201402610Q	December 7, 2012	11201402610Q	October 11, 2016	THERAPEUTIC NEUROMODULATION OF THE HEPATIC SYSTEM	METAVENTION, INC.
METAV.003PR	US	61/831,507	June 5, 2013			MODULATION OF TARGETED NERVE FIBERS	METAVENTION, INC.
METAV.003PR2	US	61/906,830	November 20, 2013			MODULATION OF TARGETED NERVE FIBERS	METAVENTION, INC.
METAV.003WO	WO	PCT/US2014/040949	June 4, 2014			MODULATION OF TARGETED NERVE FIBERS	METAVENTION, INC.
METAV.003NP	US	14/896,063	December 4, 2015			MODULATION OF TARGETED NERVE FIBERS	none
METAV.003C1	US	16/706,468	December 6, 2019			MODULATION OF TARGETED NERVE FIBERS	METAVENTION, INC.
METAV.003EP	EP	14808314.0	June 4, 2014			MODULATION OF TARGETED NERVE FIBERS	METAVENTION, INC.
METAV.003IN	IN	11317/DELNP/2015	June 4, 2014			MODULATION OF TARGETED NERVE FIBERS	METAVENTION, INC.
METAV.003IL	IL	242866	June 4, 2014				
METAV.003CA	CA	2913346	June 4, 2014			MODULATION OF TARGETED NERVE FIBERS	METAVENTION, INC.
MEAV.003CN	CN	201480044419.5	June 4, 2014			MODULATION OF TARGETED NERVE FIBERS	METAVENTION, INC.
METAV.003AU	AU	2014274903	June 4, 2014	2014274903	June 20, 2019	MODULATION OF TARGETED NERVE FIBERS	METAVENTION, INC.
METAV.003JP	JP	2016-517972	June 4, 2014	6580034	September 6, 2019	MODULATION OF TARGETED NERVE FIBERS	METAVENTION, INC.

Schedule A-5

Ref. No.	Country	Application No.	Filing Date	Patent No.	Grant Date	Title	Assignee
METAV.017PR	US	62/087,179	December 3, 2014			SYSTEMS AND METHODS FOR THE MODULATION OF TARGETED NERVE FIBERS	METAVENTION, INC.
METAV.019PR	US	62/130,469	March 9, 2015			HEPATIC NEUROMODULATION USING ULTRASOUND	METAVENTION, INC.
METAV.017WO	WO	PCT/US2015/063807	December 3, 2015			SYSTEMS AND METHODS FOR MODULATING NERVES OR OTHER TISSUE	METAVENTION, INC.
METAB.017IL	IL	252573	December 3, 2015				
METAV.017NP	US	15/532,650	June 2, 2017			SYSTEMS AND METHODS FOR MODULATING NERVES OR OTHER TISSUE	none
METAV.017C1	US	16/874,467	May 14, 2020			SYSTEMS AND METHODS FOR MODULATING NERVES OR OTHER TISSUE	METAVENTION, INC.
METAV.017AU	AU	2015358385	December 3, 2015	2015358385	December 17, 2020	SYSTEMS AND METHODS FOR MODULATING NERVES OR OTHER TISSUE	METAVENTION, INC.
METAV.017CA	CA	2969129	December 3, 2015			SYSTEMS AND METHODS FOR MODULATING NERVES OR OTHER TISSUE	METAVENTION, INC.
METAV.017JP	JP	2017528956	December 3, 2015			SYSTEMS FOR MODULATING NERVES OR OTHER TISSUE	METAVENTION, INC.

Ref. No.	Country	Application No.	Filing Date	Patent No.	Grant Date	Title	Assignee
METAV.017EP	EP	15866276.7	December 3, 2015	3226795	August 26, 2020	SYSTEMS FOR MODULATING NERVES OR OTHER TISSUE	METAVENTION, INC.
METAV.025PR	US	62/346,990	June 7, 2016			SYSTEMS AND METHODS FOR COOLING ENERGY DELIVERY MEMBERS	METAVENTION, INC.
METAV.025PR2	US	62/458,990	February 14, 2017			THERAPEUTIC TISSUE MODULATION DEVICES AND METHODS	METAVENTION, INC.
METAV.025A	US	15/614,460	June 5, 2017	10,524,859	January 7, 2020	THERAPEUTIC TISSUE MODULATION DEVICES AND METHODS	METAVENTION, INC.
METAV.025C1	US	16/727,264	December 26, 2019			THERAPEUTIC TISSUE MODULATION DEVICES AND METHODS	METAVENTION, INC.
METAV.025WO	WO	PCT/US2017/036201	June 6, 2017			THERAPEUTIC TISSUE MODULATION DEVICES AND METHODS	METAVENTION, INC.
METAV.025EP	EP	17810880.9	June 6, 2017			INTRALUMINAL ABLATION CATHETER	METAVENTION, INC.
METAV.025CN	CN	201780048254.2	June 6, 2017	109843201B	May 13, 2022	THERAPEUTIC TISSUE MODULATION DEVICES AND METHODS	METAVENTION, INC.
METAV.025CND1	CN	202210443126.0	June 6, 2017			THERAPEUTIC TISSUE MODULATION DEVICES AND METHODS	METAVENTION, INC.
META.037PR	US	63/377,908	September 30, 2022			INTRAVASCULAR DENERVATION SYSTEMS, DEVICES AND METHODS	METAVENTION, INC.

Schedule A-7

Ref. No.	Country	Application No.	Filing Date	Patent No.	Grant Date	Title	Assignee
METAV.034PR	US	62/723,901	August 28, 2018			LAPAROSCOPIC HEPATIC DENERVATION	METAVENTION, INC.
METAV.034WO	WO	PCT/US2019/048190	August 26, 2019			LAPAROSCOPIC HEPATIC DENERVATION	METAVENTION, INC.
METAV.032PR	US	62/680,984	6/5/2018			METHODS OF FACILITATING AND CONFIRMING EFFICACY OF HEPATIC NEUROMODULATION	METAVENTION, INC.
METAV.036PR	US	62/786,026	12/28/2018			ABLATION CATHETER WITH EXPANDABLE OUTER ELECTRODE ASSEMBLY FORMED FROM FLAT PANEL AND METHOD OF MANUFACTURING SAME	METAVENTION, INC.