

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT8016727

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
W. L. GORE & ASSOCIATES, INC.	03/08/2023
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	EDWARDS LIFESCIENCES CORPORATION
<b>Street Address:</b>	ONE EDWARDS WAY
<b>City:</b>	IRVINE
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	92614
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16846822
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	
<i>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.</i>	
<b>Phone:</b>	9492507377
<b>Email:</b>	mariel_sandoval@edwards.com
<b>Correspondent Name:</b>	MARIEL SANDOVAL
<b>Address Line 1:</b>	ONE EDWARDS WAY
<b>Address Line 4:</b>	IRVINE, CALIFORNIA 92614
<b>ATTORNEY DOCKET NUMBER:</b>	THVVA-23290US03
<b>NAME OF SUBMITTER:</b>	MARIEL SANDOVAL
<b>SIGNATURE:</b>	/Mariel Sandoval/
<b>DATE SIGNED:</b>	06/20/2023
<b>Total Attachments: 23</b>	
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## SCHEDULE B

### PATENT ASSIGNMENT

W. L. Gore & Associates, Inc., a Delaware corporation, having an address at 555 Paper Mill Road, Newark, Delaware 19711 (hereafter, "Assignor"), owns the entire right, title and interest, in, to and under the patents and/or applications for patent listed on Exhibit A attached hereto.

1. Assignment. In exchange for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor hereby irrevocably conveys, transfers and assigns to Edwards Lifesciences Corporation, a Delaware corporation ("Assignee"), and Assignee hereby accepts from Assignor the conveyance, transfer and assignment of, all worldwide right, title and interest in and to the patents and patent applications listed above and all inventions, improvements and discoveries disclosed in such patents and patent applications, as well as in and to any and all issuances, substitutions, divisions, continuations, continuations-in-part, reissues, extensions, reexaminations, renewals, extensions, or applications which claim common priority to or with, one or more patents or patent applications listed above or patents issued thereon, and any patents of confirmation, registration and importation of the same (e.g., whether or not specifically identified above, collectively, "Patents"). Such assignment includes (a) all rights of any kind whatsoever accruing under any of the foregoing provided by applicable law of any jurisdiction, by international treaties and conventions and otherwise throughout the world, relating to any of and all of the Patents, (b) all rights to claim priority in or to, any of the applications or patents identified above, (c) any and all royalties, fees, income, payments and other proceeds now or hereafter due or payable with respect to any and all of the Patents, (d) the full and complete right to file patent applications in the name of Assignee or Assignor, at Assignee's or its designee's election, on the aforesaid inventions, improvements, discoveries and applications in all countries of the world, and (e) any and all choses in action, demands, claims and causes of action, with respect to any of the foregoing, whether accruing before, on and/or after the date hereof, including all rights to and claims for damages, restitution and injunctive and other legal and equitable relief for past, present and future infringement, with the right but no obligation to sue for such legal and equitable relief and to collect, or otherwise recover, any such damages.

2. Recordation and Further Actions. Assignor authorizes the Commissioner for Patents, the Commissioner for Trademarks and any other governmental officials to record and register this Assignment upon request by Assignee. Assignor shall take such steps and actions following the date hereof, including the execution of any documents, files, registrations, or other similar items, to ensure that the Patents is properly assigned to Assignee, or any assignee or successor thereto, at Assignee's expense.

3. Counterparts. This Assignment may be executed in counterparts, each of which shall be deemed an original, but all of which together shall be deemed to be one and the same agreement. A signed copy of this Assignment delivered by facsimile, e-mail, JPEG, PDF or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original signed copy of this Patent Assignment.

4. Successors and Assigns. This Assignment shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors and assigns.

5. Governing Law. This Assignment and any claim, controversy, dispute or cause of action (whether in contract, tort or otherwise) based upon, arising out of or relating to this Assignment and the transactions contemplated hereby shall be governed by, and construed in accordance with, the laws of the United States and the State of Delaware, without giving effect to any choice or conflict of law provision or rule (whether of the State of Delaware or any other jurisdiction).

IN WITNESS WHEREOF, Each of Assignor and Assignee have duly executed and delivered this Assignment as of the date indicated below.

"Assignor"

W. L. GORE & ASSOCIATES, INC.

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

"Assignee"

EDWARDS LIFESCIENCES CORPORATION

By:  \_\_\_\_\_

Name: Scott Ullem

Title: Chief Financial Officer

Date: 8 March 2023

5. Governing Law. This Assignment and any claim, controversy, dispute or cause of action (whether in contract, tort or otherwise) based upon, arising out of or relating to this Assignment and the transactions contemplated hereby shall be governed by, and construed in accordance with, the laws of the United States and the State of Delaware, without giving effect to any choice or conflict of law provision or rule (whether of the State of Delaware or any other jurisdiction).

IN WITNESS WHEREOF, Each of Assignor and Assignee have duly executed and delivered this Assignment as of the date indicated below.

“Assignor”

“Assignee”

W. L. GORE & ASSOCIATES, INC.

EDWARDS LIFESCIENCES CORPORATION

By: Bret A. Snyder

By: \_\_\_\_\_

Name: Bret A. Snyder

Name: \_\_\_\_\_

Title: CEO

Title: \_\_\_\_\_

Date: March 8, 2023

Date: \_\_\_\_\_

# EXHIBIT A PATENTS AND PATENT APPLICATIONS

Patent Reference	Country	Patent Application Title	Status	Application Number	Priority Date	Filed Date	Publication Number	Publication Date	Patent No.	Grant Date
954AU01	Australia	Leather Support Devices and Methods of Making and Using The Same	Granted	2016336369	2015-10-06	2016-10-06			2016336369	2019-11-21
954AU02	Australia	Leather Support Devices and Methods of Making and Using The Same	Granted	2019206121	2015-10-06	2016-10-06			2019206121	2020-10-29
954CA01	Canada	Leather Support Devices and Methods of Making and Using The Same	Granted	3001191	2015-10-06	2016-10-06			3001191	2020-05-05
954CN01	China	Leather Support Devices and Methods of Making and Using The Same	Granted	201660071197.5	2015-10-06	2016-10-06	108289739	2018-07-17	108289739	2020-06-26
954EP01	European Patent	Leather Support Devices and Methods of Making and Using The Same	Published	16787617.6	2015-10-06	2016-10-06	3359091	2018-08-15		
954HK01	Hong Kong	Leather Support Devices and Methods of Making and Using The Same	Abandoned	19100207.8	2015-10-06	2016-10-06	1257850	2019-11-01		
954JP01	Japan	Leather Support Devices and Methods of Making and Using The Same	Granted	2018-517776	2015-10-06	2016-10-06	2018-529476	2018-10-11	6751140	2020-08-17
954US01	United States of America	Leather Support Devices and Methods of Making and Using The Same	Expired	62237856		2015-10-06				
954US02	United States of America	Leather Support Devices and Methods of Making and Using The Same	Granted	152286031	2015-10-06	2016-10-05	2017-0085332	2017-04-06	10022223	2018-07-17
954US03	United States of America	Leather Support Devices and Methods of Making and Using The Same	Granted	161024252	2015-10-06	2018-06-29	2018-0303811	2018-10-25	10806576	2020-10-20
954US04	United States of America	Leather Support Devices and Methods of Making and Using The Same	Published	171038022	2015-10-06	2018-06-29	2021-0059817	2021-03-04		
954WCO1	Patent Cooperation Treaty	Leather Support Devices and Methods of Making and Using The Same	Expired	US2016/055644	2016-10-05	2016-10-06	2017/062548	2017-04-13		
1506AU01	Australia	LEAFLET FRAME ATTACHMENT FOR PROSTHETIC VALVES	Granted	2018334191	2017-09-12	2018-09-12			2018334191	2021-07-22
1506AU02	Australia	LEAFLET FRAME ATTACHMENT FOR PROSTHETIC VALVES	Abandoned	2021204801	2017-09-12	2018-09-12				
1506CA01	Canada	LEAFLET FRAME ATTACHMENT FOR PROSTHETIC VALVES	Allowed	3071133	2017-09-12	2018-09-12				
1506CA02	Canada	LEAFLET FRAME ATTACHMENT FOR PROSTHETIC VALVES	Patent Application	3182971	2017-09-12	2018-09-12				
1506CN01	China	LEAFLET FRAME ATTACHMENT FOR PROSTHETIC VALVES	Granted	201860058419.9	2017-09-12	2018-09-12	111182856	2020-05-19	201860058419.9	2022-04-29
1506CN02	China	LEAFLET FRAME ATTACHMENT FOR PROSTHETIC VALVES	Published	202210398162.1	2017-09-12	2018-09-12	115568980	2023-01-06		
1506EP01	European Patent	LEAFLET FRAME ATTACHMENT FOR PROSTHETIC VALVES	Published	18779540.6	2017-09-12	2018-09-12	3681440	2020-07-22		
1506JP01	Japan	LEAFLET FRAME ATTACHMENT FOR PROSTHETIC VALVES	Granted	2020-514720	2017-09-12	2018-09-12	2020-533113	2020-11-19	6974601	2021-11-08
1506US01	United States of America	LEAFLET FRAME ATTACHMENT FOR PROSTHETIC VALVES	Expired	621557586		2017-09-12				
1506US02	United States of America	LEAFLET FRAME ATTACHMENT FOR PROSTHETIC VALVES	Granted	161129651	2017-09-12	2018-09-12	US-2019-0076245-A1	2019-03-14	10959842	2021-03-30
1506US03	United States of America	LEAFLET FRAME ATTACHMENT FOR PROSTHETIC VALVES	Published	17183014	2017-09-12	2018-09-12	2021-0177589	2021-06-17		
1506WCO1	Patent Cooperation Treaty	LEAFLET FRAME ATTACHMENT FOR PROSTHETIC VALVES	Expired	US2018/050764	2017-09-12	2018-09-12	WO 2019/055577	2019-03-21		
1534AU01	Australia	MEDICAL VALVE AND LEAFLET PROMOTING TISSUE INGROWTH	Granted	2018362079	2017-10-31	2018-09-12			2018362079	2022-01-06
1534AU02	Australia	MEDICAL VALVE AND LEAFLET PROMOTING TISSUE INGROWTH	Patent Application	2021286397	2017-10-31	2018-09-12				
1534CA01	Canada	MEDICAL VALVE AND LEAFLET PROMOTING TISSUE INGROWTH	Patent Application	3078606	2017-10-31	2018-09-12				
1534CN01	China	MEDICAL VALVE AND LEAFLET PROMOTING TISSUE INGROWTH	Published	201860070794.5	2017-10-31	2018-09-12	111295158	2020-06-16		

1534EP01	European Patent	MEDICAL VALVE AND LEAFLET PROMOTING TISSUE INGROWTH	Published	18779916.8	2017-10-31	2018-09-12	3703616	2020-09-09	
1534JP01	Japan	MEDICAL VALVE AND LEAFLET PROMOTING TISSUE INGROWTH	Granted	2020-524014	2017-10-31	2018-09-12	2021-500973	2021-01-14	7052032
1534JP02	Japan	MEDICAL VALVE AND LEAFLET PROMOTING TISSUE INGROWTH	Published	2022-055446	2017-10-31	2018-09-12	2022-084899	2022-06-07	
1534US01	United States of America	MEDICAL VALVE AND LEAFLET PROMOTING TISSUE INGROWTH	Expired	62/579760		2017-10-31			
1534US02	United States of America	MEDICAL VALVE AND LEAFLET PROMOTING TISSUE INGROWTH	Granted	16/129671	2017-10-31	2018-09-12	20190125528	2019-05-02	11439502
1534US03	United States of America	MEDICAL VALVE AND LEAFLET PROMOTING TISSUE INGROWTH	Published	17/884749	2017-10-31	2022-08-10	2022-0378575	2022-12-01	
1534WCO1	Patent Cooperation Treaty	MEDICAL VALVE AND LEAFLET PROMOTING TISSUE INGROWTH	Expired	US2018/050799	2017-10-31	2018-09-12	WO 2019/089136	2019-05-09	
1567AU01	Australia	SUTURE GUARD FOR A Prosthetic Valve	Granted	2018362341	2017-10-31	2018-10-26			2018362341
1567AU02	Australia	SUTURE GUARD FOR A Prosthetic Valve	Patent Application	2021218214	2017-10-31	2018-10-26			
1567CA01	Canada	Suture Guard for a Prosthetic Valve	Allowed	3084382	2017-10-31	2018-10-26			
1567CA02	Canada	Suture Guard for a Prosthetic Valve	Patent Application	3188833	2017-10-31	2018-10-26			
1567CN01	China	Suture Guard for a Prosthetic Valve	Granted	201880070706.1	2017-10-31	2018-10-25			ZL201880070706.1
1567CN02	China	Suture Guard for a Prosthetic Valve	Published	115670745	2017-10-31	2018-10-26	111293157	2020-06-16	
1567EP01	European Patent	Suture Guard for a Prosthetic Valve	Published	18801184.5	2017-10-31	2018-10-26	3703620	2020-09-09	
1567JP01	Japan	Suture Guard for a Prosthetic Valve	Granted	2020-524084	2017-10-31	2018-10-26	2021-500992	2021-01-14	7179843
1567JP02	Japan	Suture Guard for a Prosthetic Valve	Published	2022-130913	2017-10-31	2018-10-26	2022-164729	2022-10-27	
1567US01	United States of America	Suture Guard for a Prosthetic Valve	Expired	62/579761		2017-10-31			
1567US02	United States of America	SUTURE GUARD FOR A PROSTHETIC VALVE	Granted	16/170795	2017-10-31	2018-10-25	20190125525	2019-05-02	10959838
1567US03	United States of America	SUTURE GUARD FOR A PROSTHETIC VALVE	Published	17/181747	2017-10-31	2018-10-25	2021-0169642	2021-06-17	
1567WCO1	Patent Cooperation Treaty	SUTURE GUARD FOR A Prosthetic Valve	Expired	US2018/057796	2017-10-31	2018-10-26	WO 2019/089387	2019-05-09	
1685AU01	Australia	Prosthetic Valve With Improved Washout	Abandoned	2018280242	2017-06-07	2018-06-07			
1685AU02	Australia	Prosthetic Valve With Improved Washout	Patent Application	2021201696	2017-06-07	2018-06-07			
1685CA01	Canada	Prosthetic Valve With Improved Washout	Granted	3063917	2017-06-07	2018-06-07			3063917
1685CA02	Canada	Prosthetic Valve With Improved Washout	Patent Application	3170293	2017-06-07	2018-06-07			
1685CN01	China	Prosthetic Valve With Improved Washout	Granted	201880038123.0	2017-06-07	2018-06-07	110719763	2020-01-21	201880038123.0
1685CN02	China	Prosthetic Valve With Improved Washout	Published	202210124159.9	2017-06-07	2018-06-07	114432007	2022-05-06	
1685EP01	European Patent	Prosthetic Valve With Improved Washout	Published	18735072.3	2017-06-07	2018-06-07	3634312	2020-04-15	
1685HK01	Hong Kong	Prosthetic Valve With Improved Washout	Abandoned	62020009915.3	2017-06-07	2020-06-24			
1685JP01	Japan	Prosthetic Valve With Improved Washout	Granted	2019-567712	2017-06-07	2018-06-07	2020-523101	2020-08-06	7060627
1685JP02	Japan	Prosthetic Valve With Improved Washout	Published	2022-017979	2017-06-07	2018-06-07	2022-060307	2022-04-14	
1685US01	United States of America	Prosthetic Valve With Improved Washout	Expired	62/515668		2017-06-07			
1685US02	United States of America	Prosthetic Valve With Improved Washout	Granted	16/001866	2017-06-07	2018-06-06	2018-0353283	2018-12-13	10952842
1685US03	United States of America	Prosthetic Valve With Improved Washout	Published	17/1718802	2017-06-07	2021-02-18	2021-0177583	2021-06-17	
1685WCO1	Patent Cooperation Treaty	Prosthetic Valve With Improved Washout	Expired	US2018/036520	2017-06-07	2018-06-07	20181228997	2018-12-13	
1761AU01	Australia	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Granted	2018342223	2017-09-27	2018-09-12			2018342223
1761AU02	Australia	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Patent Application	2021204634	2017-09-27	2018-09-12			
1761CA01	Canada	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Granted	3072781	2017-09-27	2018-09-12			3072781
1761CA02	Canada	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Patent Application	3155761	2017-09-27	2018-09-12			
1761CN01	China	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Granted	201880061216.5	2017-09-27	2018-09-12	111163728	2020-05-15	201880061216.5
1761CN02	China	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Published	202210456118.X	2017-09-27	2018-09-12	115024861	2022-09-09	
1761EP01	European Patent	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Published	18779921.8	2017-09-27	2018-09-12	3687452	2020-08-05	
1761JP01	Japan	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Granted	2020-517555	2017-09-27	2018-09-12	2020-534938	2020-12-03	6675601
1761US01	United States of America	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Expired	62/572274		2017-10-13			





1817AU01	Australia	PROSTHETIC VALVE WITH EXPANDABLE FRAME AND ASSOCIATED SYSTEMS AND METHODS	Granted	2018342222	2017-09-27	2018-09-12		2018342222	2021-09-02
1817AU02	Australia	PROSTHETIC VALVE WITH EXPANDABLE FRAME AND ASSOCIATED SYSTEMS AND METHODS	Patent Application	2021212156	2017-09-27	2018-09-12			
1817CA01	Canada	PROSTHETIC VALVE WITH EXPANDABLE FRAME AND ASSOCIATED SYSTEMS AND METHODS	Allowed	3072814	2017-09-27	2018-09-12			
1817CA02	Canada	PROSTHETIC VALVE WITH EXPANDABLE FRAME AND ASSOCIATED SYSTEMS AND METHODS	Patent Application	3178271	2017-09-27	2018-09-12			
1817CN01	China	PROSTHETIC VALVE WITH EXPANDABLE FRAME AND ASSOCIATED SYSTEMS AND METHODS	Granted	201880062648 8	2017-09-27	2018-09-12	111132636	2020-05-08	201880062648 8
1817CN02	China	PROSTHETIC VALVE WITH EXPANDABLE FRAME AND ASSOCIATED SYSTEMS AND METHODS	Granted	2022102776986 6	2017-09-27	2018-09-12	115177403	2022-10-14	
1817EP01	European Patent	PROSTHETIC VALVE WITH EXPANDABLE FRAME AND ASSOCIATED SYSTEMS AND METHODS	Published	18778542.2	2017-09-27	2018-09-12	3687451	2020-08-05	
1817JP01	Japan	PROSTHETIC VALVE WITH EXPANDABLE FRAME AND ASSOCIATED SYSTEMS AND METHODS	Granted	2020-517594	2017-09-27	2018-09-12	2020-534944	2020-12-03	7068444
1817JP02	Japan	PROSTHETIC VALVE WITH EXPANDABLE FRAME AND ASSOCIATED SYSTEMS AND METHODS	Published	2021-206225	2017-09-27	2018-09-12	2022-033193	2022-02-28	
1817US01	United States of America	PROSTHETIC VALVE WITH EXPANDABLE FRAME AND ASSOCIATED SYSTEMS AND METHODS	Expired	62/579759		2017-10-31			
1817US02	United States of America	PROSTHETIC VALVE WITH EXPANDABLE FRAME AND ASSOCIATED SYSTEMS AND METHODS	Expired	62/662895		2018-06-08			
1817US03	United States of America	PROSTHETIC VALVE WITH EXPANDABLE FRAME AND ASSOCIATED SYSTEMS AND METHODS	Granted	16/129647	2017-09-27	2018-09-12	US-2019-0091014-A1	2019-03-28	11020221
1817US04	United States of America	PROSTHETIC VALVE WITH EXPANDABLE FRAME AND ASSOCIATED SYSTEMS AND METHODS	Published	17/333620	2017-09-27	2021-05-28	2021-0393399	2021-12-23	
1817W001	Patent Cooperation Treaty	PROSTHETIC VALVE WITH EXPANDABLE FRAME AND ASSOCIATED SYSTEMS AND METHODS	Expired	US2018050766	2017-09-27	2018-09-12	WO2019067219	2019-04-04	
1818AU01	Australia	PROSTHETIC HEART VALVE	Granted	2018362081	2017-10-31	2018-09-12		2018362081	2021-08-26
1818AU02	Australia	PROSTHETIC HEART VALVE	Patent Application	2021212123	2017-10-31	2018-09-12			
1818CA01	Canada	PROSTHETIC HEART VALVE	Allowed	3078608	2017-10-31	2018-09-12			
1818CA02	Canada	PROSTHETIC HEART VALVE	Patent Application	3187189	2017-10-31	2018-09-12			
1818CN01	China	PROSTHETIC HEART VALVE	Granted	201880070541 8	2017-10-31	2018-09-12	111295156	2020-06-16	201880070541 8
1818CN02	China	PROSTHETIC HEART VALVE	Published	202210476736 4	2017-10-31	2018-09-12	114831777	2022-08-02	2022-05-27
1818EP01	European Patent	PROSTHETIC HEART VALVE	Published	18779922.6	2017-10-31	2018-09-12	3703618	2020-09-09	
1818JP01	Japan	PROSTHETIC HEART VALVE	Allowed	2020-523988	2017-10-31	2018-09-12	2021-500968	2021-01-14	
1818JP02	Japan	PROSTHETIC HEART VALVE	Published	2022-103382	2017-10-31	2018-09-12	2022-128834	2022-08-30	
1818US01	United States of America	PROSTHETIC HEART VALVE	Expired	62/579763		2017-10-31			
1818US02	United States of America	PROSTHETIC HEART VALVE	Granted	16/129685	2017-10-31	2018-09-12	20190125531	2019-05-02	11123183
1818US03	United States of America	PROSTHETIC HEART VALVE	Published	17/393539	2017-10-31	2018-09-12	2021-0361420	2021-11-25	
1818W001	Patent Cooperation Treaty	PROSTHETIC HEART VALVE	Expired	US2018050779	2017-10-31	2018-09-12	WO 2019/089138	2019-05-09	

1847US01 United States of America TISSUE CUTTING ELEMENTS AND RETENTION FEATURES FOR IMPLANTS, AND ASSOCIATED SYSTEMS AND METHODS Expired

62/984564

2020-03-03

1847US02	United States of America	TISSUE CUTTING ELEMENTS AND RETENTION FEATURES FOR IMPLANTS, AND ASSOCIATED SYSTEMS AND METHODS	Patent Application	17/909591	2020-03-03	2021-03-02					
1847WO01	Patent Cooperation Treaty	TISSUE CUTTING ELEMENTS AND RETENTION FEATURES FOR IMPLANTS, AND ASSOCIATED SYSTEMS AND METHODS	Expired	US2021/0220446	2020-03-03	2021-03-02	WO2021/178394	2021-09-10			
1897EP01	European Patent	DIAMETRIC EXPANSION FEATURES FOR PROSTHETIC VALVES	Published	18714072.6	2018-03-16	2019-03-16	3764949	2021-01-20			
1897JP01	Japan	DIAMETRIC EXPANSION FEATURES FOR PROSTHETIC VALVES	Granted	2020-549573	2018-03-16	2019-03-16	2021-515669	2021-06-24	7096899		2022-06-28
1897JP02	Japan	DIAMETRIC EXPANSION FEATURES FOR PROSTHETIC VALVES	Published	2022-101876	2018-03-16	2019-03-16	2022-118237	2022-08-12			
1897US01	United States of America	DIAMETRIC EXPANSION FEATURES FOR PROSTHETIC VALVES	Expired	62/644156		2018-03-16					
1897US02	United States of America	DIAMETRIC EXPANSION FEATURES FOR PROSTHETIC VALVES	Granted	16/355515	2018-03-16	2019-03-15	2019-0282360	2019-09-19	11071626		2021-07-27
1897US03	United States of America	DIAMETRIC EXPANSION FEATURES FOR PROSTHETIC VALVES	Published	17/371915	2018-03-16	2021-07-09	2021-0330457	2021-10-28			
1897WO01	Patent Cooperation Treaty	DIAMETRIC EXPANSION FEATURES FOR PROSTHETIC VALVES	Expired	US2019/0222646	2018-03-16	2019-03-16	WO2019/178581	2019-09-19			
1948EP01	European Patent	TRANSCATHETER PROSTHETIC VALVE WITH MULTIPART FRAME SUBCOMPONENT	Published	20757765.1	2019-08-01	2020-07-31	4007545	2022-06-08			
1948JP01	Japan	TRANSCATHETER PROSTHETIC VALVE WITH MULTIPART FRAME SUBCOMPONENT	Patent Application	2022-506532	2019-08-01	2020-07-31					
1948US01	United States of America	TRANSCATHETER PROSTHETIC VALVE WITH MULTIPART FRAME SUBCOMPONENT	Expired	62/681428		2019-08-01					
1948US02	United States of America	TRANSCATHETER PROSTHETIC VALVE WITH MULTIPART FRAME SUBCOMPONENT	Published	17/632120	2019-08-01	2020-07-31	2022-0273426	2022-09-01			
1948WO01	Patent Cooperation Treaty	TRANSCATHETER PROSTHETIC VALVE WITH MULTIPART FRAME SUBCOMPONENT	Expired	US2020/044603	2019-08-01	2020-07-31	2021/022211	2021-02-04			
1968US01	United States of America	TRANSCATHETER TISSUE CUTTING SYSTEM	Expired	62/984554		2020-03-03					
1968US02	United States of America	TRANSCATHETER TISSUE CUTTING SYSTEM	Patent Application	17/809608	2020-03-03	2021-02-17					
1968WO01	Patent Cooperation Treaty	TRANSCATHETER TISSUE CUTTING SYSTEM	Expired	US2021/018363	2020-03-03	2021-02-17	WO2021/178135	2021-09-10			
2026AU01	Australia	TELESCOPING PROSTHETIC VALVE WITH RETENTION ELEMENT	Allowed	2020232237	2019-03-01	2020-02-29					
2026AU02	Australia	TELESCOPING PROSTHETIC VALVE WITH RETENTION ELEMENT	To be filed								
2026CA01	Canada	TELESCOPING PROSTHETIC VALVE WITH RETENTION ELEMENT	Patent Application	3128855	2019-03-01	2020-02-29					
2026CN01	China	TELESCOPING PROSTHETIC VALVE WITH RETENTION ELEMENT	Published	202080032797.7	2019-03-01	2020-02-29	113891694	2022-01-04			
2026EP01	European Patent	TELESCOPING PROSTHETIC VALVE WITH RETENTION ELEMENT	Published	20717360.0	2019-03-01	2020-02-29	3830631	2022-01-05			
2026JP01	Japan	TELESCOPING PROSTHETIC VALVE WITH RETENTION ELEMENT	Published	2021-551814	2019-03-01	2020-02-29	2022-522792	2022-04-20			
2026US01	United States of America	TELESCOPING PROSTHETIC VALVE WITH RETENTION ELEMENT	Expired	62/612782		2019-03-01					
2026US02	United States of America	TELESCOPING PROSTHETIC VALVE WITH RETENTION ELEMENT	Expired	62/633086		2019-03-01					
2026US03	United States of America	TELESCOPING PROSTHETIC VALVE WITH RETENTION ELEMENT	Granted	16/805181	2019-03-01	2020-02-28	2020-0276014	2020-09-03	11497601		2022-11-15

2026US04	United States of America	TELESCOPING PROSTHETIC VALVE WITH RETENTION ELEMENT	Published	177736704	2019-03-01	2020-02-28	2022-0257369	2022-08-18
2026WCO1	Patent Cooperation Treaty	TELESCOPING PROSTHETIC VALVE WITH RETENTION ELEMENT	Expired	US2020/020550	2019-03-01	2020-02-29	2020180748	2020-09-10
2051AU02	Australia	Prosthetic Valve with Asymmetric Leaflets	Patent Application	2020324465	2019-08-08	2020-08-10		
2051CA02	Canada	Prosthetic Valve with Asymmetric Leaflets	Patent Application	3143781	2019-08-08	2020-08-10		
2051CN02	China	Prosthetic Valve with Asymmetric Leaflets	Published	202080562464	2019-08-08	2020-08-10	114206267	2022-03-18
2051EP02	European Patent	Prosthetic Valve with Asymmetric Leaflets	Published	20761423.1	2019-08-08	2020-08-10	4009909	2022-06-15
2051JP02	Japan	Prosthetic Valve with Asymmetric Leaflets	Published	2022-507657	2019-08-08	2020-08-10	2022-543850	2022-10-14
2051US01	United States of America	Prosthetic Valve with Asymmetric Leaflets	Expired	62/684559	2019-08-08	2019-08-08		
2051US02	United States of America	Prosthetic Valve with Asymmetric Leaflets	Published	17/632948	2019-08-08	2020-08-10	2022-0338980	2022-10-27
2051WCO1	Patent Cooperation Treaty	Prosthetic Valve with Asymmetric Leaflets	Expired	US2020/045614	2019-08-08	2020-08-10	WO 2021/026531	2021-02-11
2133AU01	Australia	Valve with Multi-Part Frame and Associated Resilient Bridging Features	Patent Application	2020270993	2019-04-12	2020-04-13		
2133CA01	Canada	Valve with Multi-Part Frame and Associated Resilient Bridging Features	Patent Application	3131177	2019-04-12	2020-04-13		
2133CN01	China	Valve with Multi-Part Frame and Associated Resilient Bridging Features	Published	202080043443.2	2019-04-12	2020-04-13	114007546	2022-02-01
2133EP01	European Patent	Valve with Multi-Part Frame and Associated Resilient Bridging Features	Published	20722947.7	2019-04-12	2020-04-13	39652790	2022-02-16
2133JP01	Japan	Valve with Multi-Part Frame and Associated Resilient Bridging Features	Published	2021-560035	2019-04-12	2020-04-13	2022-526188	2022-05-23
2133US01	United States of America	ASSOCIATED RESILIENT BRIDGING FEATURES	Expired	62/633176		2019-04-12		
2133US02	United States of America	VALVE WITH MULTI-PART FRAME AND ASSOCIATED RESILIENT BRIDGING FEATURES	Published	17/603256	2019-04-12	2020-04-13	2022-0183831	2022-06-16
2133WCO1	Patent Cooperation Treaty	Valve with Multi-Part Frame and Associated Resilient Bridging Features	Expired	US2020/027921	2019-04-12	2020-04-13	WO2020/210794	2020-10-15
2144US01	United States of America	LEAFLET ATTACHMENT MECHANISM AND STRAIGHT ATTACHMENT STRUTS	Expired	62/684600		2020-03-03		
2144US02	United States of America	LEAFLET ATTACHMENT MECHANISM AND STRAIGHT ATTACHMENT STRUTS	Patent Application	17/909501	2020-03-03	2021-03-02		
2144WCO1	Patent Cooperation Treaty	LEAFLET ATTACHMENT MECHANISM AND STRAIGHT ATTACHMENT STRUTS	Expired	US2021/020455	2020-03-03	2021-03-02	WO2021/178400	2021-09-10
2154AU02	Australia	VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE	Patent Application	2020267416	2019-05-06	2020-05-06		
2154CA02	Canada	VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE	Patent Application	3134267	2019-05-06	2020-05-06		
2154CN02	China	VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE	Patent Application	202080033575.7	2019-05-06	2020-05-06		
2154EP02	European Patent	VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE	Published	20728853.1	2019-05-06	2020-05-06	3965694	2022-03-16
2154JP02	Japan	VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE	Published	2021-566995	2019-05-06	2020-05-06	2022-531488	2022-07-08
2154US01	United States of America	VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE	Expired	62/643911	2019-05-06	2019-05-06		
2154US02	United States of America	VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE	Patent Application	17/609176	2019-05-06	2020-05-06		
2154WCO1	Patent Cooperation Treaty	VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE VALVED CONDUIT WITH EXPANDABLE	Expired	US2020/031597	2019-05-06	2020-05-06	2020227359	2020-11-12
2398AU03	Australia	Valved Conduit Prostheses	Patent Application	2021259619	2020-04-23	2021-04-23		
2398CA03	Canada	Valved Conduit Prostheses	Patent Application	3174105	2020-04-23	2021-04-23		
2398CN03	China	Valved Conduit Prostheses	Published	202180030316.3	2020-04-23	2021-04-23	115515530	2022-12-23
2398EP03	European Patent	Valved Conduit Prostheses	Published	21725334.3	2020-04-23	2021-04-23	4136728	2023-03-01
2398JP03	Japan	Valved Conduit Prostheses	Patent Application	2022-564569	2020-04-23	2021-04-23		
2398US01	United States of America	Valved Conduit Prostheses	Expired	63/014124	2020-04-23	2020-04-23		
2398US02	United States of America	Valved Conduit Prostheses	Expired	63/014573	2020-04-24	2020-04-24		
2398US03	United States of America	Valved Conduit Prostheses	Patent Application	17/921008	2020-04-23	2021-04-23		
2398WCO3	Patent Cooperation Treaty	Valved Conduit Prostheses	Expired	US2021/028814	2020-04-23	2021-04-23	US2021/216982	2021-10-28

2528US01 2528WO01	United States of America Patent Cooperation Treaty	VALVED CONDUIT IN A CONDUIT VALVED CONDUIT IN A CONDUIT	Expired Published	63/169576 US2022/022554	2021-04-01 2022-03-30	2021-04-01 2022-03-30	WO 2022/212509	2022-10-06					
MP/415AU	Australia	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	2013293455	2012-07-25	2014-12-18	2013293455	2016-09-15	2013293455	2017-01-05			
MP/415AU02	Australia	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	2016273906	2012-07-25	2014-12-18			2016273906	2019-08-28			
MP/415AU03	Australia	EVERTING TRANSCATHETER VALVE AND METHODS	Abandoned	2019216680	2012-07-25	2019-08-15							
MP/415BR	Brazil	EVERTING TRANSCATHETER VALVE AND METHODS	Abandoned	112015001626-0	2012-07-25	2015-01-23	112015001626-0	2017-07-04					
MP/415CA	Canada	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	2878180	2012-07-25	2014-12-30			2878180	2017-05-02			
MP/415CA02	Canada	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	2963234	2012-07-25	2014-12-30			2963234	2018-11-27			
MP/415CA03	Canada	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	3020935	2012-07-25	2013-06-18			3020935	2020-12-15			
MP/415CA04	Canada	EVERTING TRANSCATHETER VALVE AND METHODS	Allowed	3098032	2012-07-25	2013-06-18							
MP/415CA05	Canada	EVERTING TRANSCATHETER VALVE AND METHODS	Patent Application	Awaiting app. no.	2012-07-25	2013-06-18							
MP/415CN	China	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	201380039305.7	2012-07-25	2015-02-09	104487023	2015-04-01	201380039305.7	2017-03-08			
MP/415CN02	China	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	201611145583.2	2012-07-25	2013-06-18	106726007	2017-05-31	201611145583.2	2018-11-09			
MP/415CN03	China	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	201811169010.2	2012-07-25	2013-06-18	109936803	2019-02-22	201811169010.2	2021-11-26			
MP/415DE01	Germany (Federal Republic of)	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	13735108.6	2012-07-25	2013-06-18			2877122	2016-11-23			
MP/415DE02	Germany (Federal Republic of)	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	15186981.5	2012-07-25	2013-06-18			3001979	2017-04-26			
MP/415DE03	Germany (Federal Republic of)	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	17167842.8	2012-07-25	2013-06-18			3216424	2018-11-21			
MP/415DE04	Germany (Federal Republic of)	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	18204192.1	2012-07-25	2013-06-18			3501454	2020-07-29			
MP/415EP	European Patent	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	13735108.6	2012-07-25	2013-06-18	2877122	2015-06-03	2877122	2016-11-23			
MP/415EP03	European Patent	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	15186981.5	2012-07-25	2013-06-18	3001979	2016-04-06	3001979	2017-04-26			
MP/415EP04	European Patent	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	17167842.8	2012-07-25	2013-06-18	3216424	2017-09-13	3216424	2018-11-21			
MP/415EP05	European Patent	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	18204192.1	2012-07-25	2013-06-18	3501454	2019-06-26	3501454	2020-07-29			
MP/415EP06	European Patent	EVERTING TRANSCATHETER VALVE AND METHODS	Published	20179778.4	2012-07-25	2013-06-18	3733131	2020-11-04					
MP/415ES01	Spain	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	18204192.1	2012-07-25	2013-06-18			3501454	2020-07-29			
MP/415FR01	France	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	13735108.6	2012-07-25	2013-06-18			2877122	2016-11-23			
MP/415FR02	France	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	15186981.5	2012-07-25	2013-06-18			3001979	2017-04-26			
MP/415FR03	France	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	17167842.8	2012-07-25	2013-06-18			3216424	2018-11-21			
MP/415FR04	France	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	18204192.1	2012-07-25	2013-06-18			3501454	2020-07-29			
MP/415GB01	United Kingdom	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	13735108.6	2012-07-25	2013-06-18			2877122	2016-11-23			
MP/415GB02	United Kingdom	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	15186981.5	2012-07-25	2013-06-18			3001979	2017-04-26			
MP/415GB03	United Kingdom	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	17167842.8	2012-07-25	2013-06-18			3216424	2018-11-21			
MP/415GB04	United Kingdom	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	18204192.1	2012-07-25	2013-06-18			3501454	2020-07-29			

MP/415HK	Hong Kong	EVERTING TRANSCATHETER VALVE AND METHODS	Abandoned	151066128	2012-07-25	2013-06-18	1205918A	2015-12-31	1205918	2018-01-19
MP/415HK3	Hong Kong	EVERTING TRANSCATHETER VALVE AND METHODS	Abandoned	161047322.7	2012-07-25	2013-06-18	1216603	2016-11-25	1216603	2018-04-20
MP/415HK4	Hong Kong	EVERTING TRANSCATHETER VALVE AND METHODS	Abandoned	18101892.7	2012-07-25	2013-06-18	1242552	2018-06-29	1242552	2019-11-29
MP/415HK5	Hong Kong	EVERTING TRANSCATHETER VALVE AND METHODS	Abandoned	19132259.3	2013-03-12	2013-06-18				
MP/415IE01	Ireland (Republic of)	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	13735108.6	2012-07-25	2013-06-18			2877122	2016-11-23
MP/415IE02	Ireland (Republic of)	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	15186981.5	2012-07-25	2013-06-18			3001979	2017-04-26
MP/415IE03	Ireland (Republic of)	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	17167842.8	2012-07-25	2013-06-18			3216424	2018-11-21
MP/415IE04	Ireland (Republic of)	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	18204192.1	2012-07-25	2013-06-18			3501454	2020-07-29
MP/415IT01	Italy	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	13735108.6	2012-07-25	2013-06-18			502017000020005	2016-11-23
MP/415IT02	Italy	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	15186981.5	2012-07-25	2013-06-18			502017000078929	2017-04-26
MP/415IT03	Italy	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	17167842.8	2012-07-25	2013-06-18			502019000015415	2018-11-21
MP/415IT04	Italy	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	18204192.1	2012-07-25	2013-06-18			50202000096973	2020-07-29
MP/415JP	Japan	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	2015-524278	2012-07-25	2013-06-18	2015-522396	2015-08-06	6382808	2018-08-10
MP/415JP2	Japan	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	2018-143821	2012-07-25	2013-06-18	2018-187430	2018-11-29	6659195	2021-10-11
MP/415JP3	Japan	EVERTING TRANSCATHETER VALVE AND METHODS	Allowed	2020-070179	2012-07-25	2013-06-18	2020-114486	2020-07-30		
MP/415JP4	Japan	EVERTING TRANSCATHETER VALVE AND METHODS	Published	2022-007912	2012-07-25	2013-06-18	2022-058718	2022-04-12		
MP/415KR	Korea, Republic of (KR)	EVERTING TRANSCATHETER VALVE AND METHODS	Abandoned	10-2015-7004610	2012-07-25	2013-06-18			2151603	2020-08-28
MP/415KR02	Korea, Republic of (KR)	EVERTING TRANSCATHETER VALVE AND METHODS	Abandoned	10-2020-7024692	2012-07-25					
MP/415RU	Russian Federation	EVERTING TRANSCATHETER VALVE AND METHODS	Abandoned	2015106127	2012-07-25	2015-02-24				
MP/415US	United States of America	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	13/797633	2012-07-25	2013-03-12	20140031924	2014-01-30	9283072	2016-03-15
MP/415US02	United States of America	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	15/042351	2012-07-25	2016-02-12	2016-0157998	2016-06-09	10285808	2019-05-14
MP/415US03	United States of America	EVERTING TRANSCATHETER VALVE AND METHODS	Granted	16/359650	2012-07-25	2019-03-20	2019-0209292	2019-07-11	11166809	2021-11-09
MP/415US04	United States of America	EVERTING TRANSCATHETER VALVE AND METHODS	Published	17/495042	2012-07-25	2019-03-20	2022-0023032	2022-01-27		
MP/415WO	Patent Cooperation Treaty	EVERTING TRANSCATHETER VALVE AND METHODS	Expired	2013/046389	2012-07-25	2013-06-18	2014/018189	2014-01-30		
PMP/415US	United States of America	EVERTING TRANSCATHETER VALVE AND METHODS	Expired	61/675744		2012-07-25				
MP/416AU	Australia	MULTI-FRAME PROSTHETIC VALVE APPARATUS AND METHODS	Granted	2013298212	2012-07-27	2015-01-06	2013298212	2016-08-25	2013298212	2016-12-08
MP/416AU02	Australia	MULTI-FRAME PROSTHETIC VALVE APPARATUS AND METHODS	Granted	2016262761	2012-07-27	2015-01-06			2016262761	2019-11-14
MP/416AU03	Australia	MULTI-FRAME PROSTHETIC VALVE APPARATUS AND METHODS	Granted	2019257469	2012-07-27	2019-10-31			2019257469	2022-02-10
MP/416AU04	Australia	MULTI-FRAME PROSTHETIC VALVE APPARATUS AND METHODS	Patent Application	2022200466	2012-07-27	2019-10-31				
MP/416BR	Brazil	MULTI-FRAME PROSTHETIC VALVE APPARATUS AND METHODS	Abandoned	112015001756-8	2012-07-27	2015-01-26				
MP/416CA	Canada	MULTI-FRAME PROSTHETIC VALVE APPARATUS AND METHODS	Granted	2878691	2012-07-27	2013-07-22			2878691	2017-06-06



MP/476CA04	Canada	PROSTHETIC VALVES, FRAMES AND LEAFLETS AND METHODS THEREOF	Patent Application	3182781	2012-12-19	2013-12-19														
MP/476CN	China	PROSTHETIC VALVES, FRAMES AND LEAFLETS AND METHODS THEREOF	Granted	201380065833.X	2013-03-15	2013-12-19	104883999	2015-09-02	201380065833.X	2017-09-05										
MP/476CN02	China	PROSTHETIC VALVES, FRAMES AND LEAFLETS AND METHODS THEREOF	Granted	201710667323.X	2013-03-15	2013-12-19	107307924	2017-11-03	201710667323.X	2020-04-10										
MP/476DE01	Germany (Federal Republic of)	PROSTHETIC VALVES, FRAMES AND LEAFLETS AND METHODS THEREOF	Granted	13824700.2	2013-03-15	2013-12-19														
MP/476DE02	Germany (Federal Republic of)	PROSTHETIC VALVES, FRAMES AND LEAFLETS AND METHODS THEREOF	Granted	17194473.9	2013-03-15	2013-12-19	3298988	2022-06-29	17194473.9	2022-06-29										
MP/476EP	European Patent	PROSTHETIC VALVES, FRAMES AND LEAFLETS AND METHODS THEREOF	Granted	13824700.2	2013-03-15	2013-12-19	2934392	2015-10-28	13824700.2	2018-02-07										
MP/476EP02	European Patent	PROSTHETIC VALVES, FRAMES AND LEAFLETS AND METHODS THEREOF	Granted	17194473.9	2013-03-15	2013-12-19	3298988	2018-03-28	17194473.9	2022-06-29										
MP/476EP03	European Patent	PROSTHETIC VALVES, FRAMES AND LEAFLETS AND METHODS THEREOF	Published	22177518.2	2013-03-15	2013-12-19	4082483	2022-11-02	22177518.2											
MP/476ES01	Spain	PROSTHETIC VALVES, FRAMES AND LEAFLETS AND METHODS THEREOF	Granted	13824700.2	2013-03-15	2013-12-19	2934392	2018-02-07	13824700.2	2018-02-07										
MP/476ES02	Spain	PROSTHETIC VALVES, FRAMES AND LEAFLETS AND METHODS THEREOF	Granted	17194473.9	2013-03-15	2013-12-19	3298988	2022-06-29	17194473.9	2022-06-29										
MP/476FR01	France	PROSTHETIC VALVES, FRAMES AND LEAFLETS AND METHODS THEREOF	Granted	13824700.2	2013-03-15	2013-12-19	2934392	2018-02-07	13824700.2	2018-02-07										
MP/476FR02	France	PROSTHETIC VALVES, FRAMES AND LEAFLETS AND METHODS THEREOF	Granted	17194473.9	2013-03-15	2013-12-19	3298988	2022-06-29	17194473.9	2022-06-29										
MP/476GB01	United Kingdom	PROSTHETIC VALVES, FRAMES AND LEAFLETS AND METHODS THEREOF	Granted	13824700.2	2013-03-15	2013-12-19	2934392	2018-02-07	13824700.2	2018-02-07										
MP/476GB02	United Kingdom	PROSTHETIC VALVES, FRAMES AND LEAFLETS AND METHODS THEREOF	Granted	17194473.9	2013-03-15	2013-12-19	3298988	2022-06-29	17194473.9	2022-06-29										
MP/476HK01	Hong Kong	PROSTHETIC VALVES, FRAMES AND LEAFLETS AND METHODS THEREOF	Abandoned	16103105.8	2012-12-19	2013-12-19	1215145	2016-08-19	16103105.8	2019-01-18										
MP/476HK02	Hong Kong	PROSTHETIC VALVES, FRAMES AND LEAFLETS AND METHODS THEREOF	Abandoned	18110220.1	2013-12-18	2013-12-19	12500620	2019-01-11	18110220.1											
MP/476IE01	Ireland (Republic of)	PROSTHETIC VALVES, FRAMES AND LEAFLETS AND METHODS THEREOF	Granted	13824700.2	2013-03-15	2013-12-19	2934392	2018-02-07	13824700.2	2018-02-07										
MP/476IE02	Ireland (Republic of)	PROSTHETIC VALVES, FRAMES AND LEAFLETS AND METHODS THEREOF	Granted	17194473.9	2013-03-15	2013-12-19	3298988	2022-06-29	17194473.9	2022-06-29										
MP/476IT01	Italy	PROSTHETIC VALVES, FRAMES AND LEAFLETS AND METHODS THEREOF	Granted	13824700.2	2013-03-15	2013-12-19	502018000012575	2018-02-07	13824700.2	2018-02-07										
MP/476IT02	Italy	PROSTHETIC VALVES, FRAMES AND LEAFLETS AND METHODS THEREOF	Granted	5020220000057768	2013-03-15	2013-12-19	3298988	2022-06-29	5020220000057768	2022-06-29										
MP/476JP	Japan	PROSTHETIC VALVES, FRAMES AND LEAFLETS AND METHODS THEREOF	Granted	2015-549734	2013-03-15	2013-12-19	2016-501115	2016-01-18	2015-549734	2020-12-14										
MP/476JP02	Japan	PROSTHETIC VALVES, FRAMES AND LEAFLETS AND METHODS THEREOF	Granted	2019-011185	2013-03-15	2013-12-19	6809788	2021-04-12	2019-011185	2021-04-12										
MP/476JP03	Japan	PROSTHETIC VALVES, FRAMES AND LEAFLETS AND METHODS THEREOF	Published	2021-065569	2013-03-15	2013-12-19	2019-103821	2019-06-27	2021-065569											
MP/476KR	Korea, Republic of (KR)	PROSTHETIC VALVES, FRAMES AND LEAFLETS AND METHODS THEREOF	Abandoned	10-2015-7019556	2013-03-15	2013-12-19			10-2015-7019556											
MP/476NL01	Netherlands	PROSTHETIC VALVES, FRAMES AND LEAFLETS AND METHODS THEREOF	Granted	13824700.2	2013-03-15	2013-12-19	2934392	2018-02-07	13824700.2	2018-02-07										
MP/476US	United States of America	PROSTHETIC VALVES, FRAMES AND LEAFLETS AND METHODS THEREOF	Granted	14/133563	2012-12-19	2013-12-18	20140180400	2014-06-26	14/133563	2017-08-22										
MP/476US02	United States of America	PROSTHETIC VALVES, FRAMES AND LEAFLETS AND METHODS THEREOF	Granted	15/662571	2012-12-19	2017-07-28	US-2018-0125646-A1	2018-05-10	15/662571	2021-01-05										
MP/476US03	United States of America	PROSTHETIC VALVES, FRAMES AND LEAFLETS AND METHODS THEREOF	Published	17/140366	2012-12-19	2017-07-28	2021-0121289	2021-04-29	17/140366	2021-04-29										
MP/476WO	Patent Cooperation Treaty	PROSTHETIC VALVES, FRAMES AND LEAFLETS AND METHODS THEREOF	Expired	2013/076688	2013-03-15	2013-12-19	2014/100476	2014-06-26	2013/076688											
PMP/476US	United States of America	PROSTHETIC VALVES, FRAMES AND LEAFLETS AND METHODS THEREOF	Expired	61/802116		2013-03-15			61/802116											
MP/477AU	Australia	MULTI-FRAME PROSTHETIC HEART VALVE	Granted	2013363289	2012-12-19	2013-12-13	2013363289	2017-04-27	2013363289	2017-08-10										
MP/477AU02	Australia	MULTI-FRAME PROSTHETIC HEART VALVE	Granted	2017202405	2012-12-19	2015-05-01	2017202405	2019-09-05	2017202405	2019-09-05										
MP/477AU03	Australia	MULTI-FRAME PROSTHETIC HEART VALVE	Granted	2019219832	2012-12-19	2019-08-23	2019219832	2021-10-07	2019219832	2021-10-07										

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MP477GA	Canada	MULTI-FRAME PROSTHETIC HEART VALVE	Granted	2890227	2012-12-19	2015-05-05		2890227	2018-03-27
MP477CA02	Canada	MULTI-FRAME PROSTHETIC HEART VALVE	Granted	2895038	2012-12-19	2013-12-13		2895038	2021-05-18
MP477CN	China	MULTI-FRAME PROSTHETIC HEART VALVE	Granted	201380065852.2	2012-12-19	2013-12-13	104853897	201380065852.2	2017-10-24
MP477EN02	China	MULTI-FRAME PROSTHETIC HEART VALVE	Granted	20171070570.6	2012-12-19	2013-12-13	107296667	20171070570.6	2020-06-19
MP477DE01	Germany (Federal Republic of)	MULTI-FRAME PROSTHETIC HEART VALVE	Granted	13818082.3	2012-12-19	2013-12-13		13818082.3	2017-09-13
MP477DE02	Germany (Federal Republic of)	MULTI-FRAME PROSTHETIC HEART VALVE	Granted	17187601.4	2012-12-19	2013-12-13		17187601.4	2022-08-03
MP477EP	European Patent	MULTI-FRAME PROSTHETIC HEART VALVE	Granted	13818082.3	2012-12-19	2013-12-13	2894389	2894389	2017-09-13
MP477EP02	European Patent	MULTI-FRAME PROSTHETIC HEART VALVE	Granted	17187601.4	2012-12-19	2013-12-13	3266417	3266417	2017-09-13
MP477FR01	France	MULTI-FRAME PROSTHETIC HEART VALVE	Granted	13818082.3	2012-12-19	2013-12-13	2894389	2894389	2017-09-13
MP477FR02	France	MULTI-FRAME PROSTHETIC HEART VALVE	Granted	17187601.4	2012-12-19	2013-12-13	3266417	3266417	2017-09-13
MP477GB01	United Kingdom	MULTI-FRAME PROSTHETIC HEART VALVE	Granted	13818082.3	2012-12-19	2013-12-13	2894389	2894389	2017-09-13
MP477GB02	United Kingdom	MULTI-FRAME PROSTHETIC HEART VALVE	Granted	17187601.4	2012-12-19	2013-12-13	3266417	3266417	2017-09-13
MP477HK01	Hong Kong	MULTI-FRAME PROSTHETIC HEART VALVE	Abandoned	16103104.9	2013-12-13	2013-12-13	1215144	1215144	2016-08-19
MP477HK02	Hong Kong	MULTI-FRAME PROSTHETIC HEART VALVE	Abandoned	18107409.0	2013-03-15	2013-12-13	1247810	1247810	2018-10-05
MP477IE01	Ireland (Republic of)	MULTI-FRAME PROSTHETIC HEART VALVE	Granted	13818082.3	2012-12-19	2013-12-13		13818082.3	2017-09-13
MP477IE02	Ireland (Republic of)	MULTI-FRAME PROSTHETIC HEART VALVE	Granted	17187601.4	2012-12-19	2013-12-13		17187601.4	2017-09-13
MP477IT01	Italy	MULTI-FRAME PROSTHETIC HEART VALVE	Granted	13818082.3	2012-12-19	2013-12-13		13818082.3	2022-08-03
MP477JP	Japan	MULTI-FRAME PROSTHETIC HEART VALVE	Granted	17187601.4	2012-12-19	2013-12-13		17187601.4	2016-01-18
MP477JP02	Japan	MULTI-FRAME PROSTHETIC HEART VALVE	Abandoned	2015-5489510	2012-12-19	2013-12-13	2015-501104	2015-501104	2019-03-14
MP477JP03	Japan	MULTI-FRAME PROSTHETIC HEART VALVE	Abandoned	2018-1938555	2012-12-19	2013-12-13	2018-037796	2018-037796	2019-09-05
MP477JP04	Japan	MULTI-FRAME PROSTHETIC HEART VALVE	Published	2021-005268	2012-12-19	2013-12-13	2021-072903	2021-072903	2021-05-13
MP477KR	Korea, Republic of (KR)	MULTI-FRAME PROSTHETIC HEART VALVE	Patent Application	2023-004094	2012-12-19	2013-12-13		2023-004094	2021-05-13
MP477US	United States of America	MULTI-FRAME PROSTHETIC HEART VALVE	Granted	10-2015-7019553	2012-12-19	2013-12-13	20140172077	20140172077	2014-06-19
MP477US02	United States of America	MULTI-FRAME PROSTHETIC HEART VALVE	Granted	13/633650	2012-12-19	2013-03-15	2019-0269505	2019-0269505	2019-09-05
MP477WO	Patent Cooperation Treaty	MULTI-FRAME PROSTHETIC HEART VALVE	Published	16/409101	2012-12-19	2013-03-15	2019-0269505	2019-0269505	2019-09-05
MP477WO	Patent Cooperation Treaty	MULTI-FRAME PROSTHETIC HEART VALVE	Expired	2013074962	2013-03-15	2013-12-13	2014099655	2014099655	2014-06-26

MP478AU	Australia	GEOMETRIC CONTROL OF BENDING CHARACTER IN PROSTHETIC HEART VALVE LEAFLETS	Abandoned	2013364188	2013-03-15	2013-11-05			
MP478AU01	Australia	CHARACTER IN PROSTHETIC HEART VALVE LEAFLETS	Granted	2017200967	2013-03-15	2013-11-05		2017200967	2019-08-15
MP478AU02	Australia	GEOMETRIC CONTROL OF BENDING CHARACTER IN PROSTHETIC HEART VALVE LEAFLETS	Granted	2019210640	2013-03-15	2013-11-05		2019210640	2021-05-06
MP478CA	Canada	GEOMETRIC CONTROL OF BENDING CHARACTER IN PROSTHETIC HEART VALVE LEAFLETS	Granted	2891825	2013-03-15	2013-11-05		2891825	2018-12-04
MP478CN	China	GEOMETRIC CONTROL OF BENDING CHARACTER IN PROSTHETIC HEART VALVE LEAFLETS	Granted	201380066483.9	2013-03-15	2013-11-05	104884000	201380066483.9	2017-07-11
MP478DE01	Germany (Federal Republic of)	GEOMETRIC CONTROL OF BENDING CHARACTER IN PROSTHETIC HEART VALVE LEAFLETS	Granted	13799419.0	2013-03-15	2013-11-05		2894386	2017-07-26
MP478DE02	Germany (Federal Republic of)	CHARACTER IN PROSTHETIC HEART VALVE LEAFLETS	Granted	17176507.6	2013-03-15	2013-11-05		3241526	2018-08-29
MP478EP	European Patent	GEOMETRIC CONTROL OF BENDING CHARACTER IN PROSTHETIC HEART VALVE LEAFLETS	Granted	13799419.0	2013-03-15	2013-11-05	2894386	2894386	2017-07-26
MP478EP01	European Patent	CHARACTER IN PROSTHETIC HEART VALVE LEAFLETS	Granted	17176507.6	2013-03-15	2013-11-05	3241526	3241526	2018-08-29
MP478ES01	Spain	GEOMETRIC CONTROL OF BENDING CHARACTER IN PROSTHETIC HEART VALVE LEAFLETS	Granted	13799419.0	2013-03-15	2013-11-05	2894386	2894386	2017-07-26
MP478ES02	Spain	CHARACTER IN PROSTHETIC HEART VALVE LEAFLETS	Granted	17176507.6	2013-03-15	2013-11-05	3241526	3241526	2018-08-29
MP478FR01	France	GEOMETRIC CONTROL OF BENDING CHARACTER IN PROSTHETIC HEART VALVE LEAFLETS	Granted	13799419.0	2013-03-15	2013-11-05	2894386	2894386	2017-07-26

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MP/478FR02	France	GEOMETRIC CONTROL OF BENDING CHARACTER IN PROSTHETIC HEART VALVE LEAFLETS	Granted	17176507.6	2013-03-15	2013-11-05	3241526	2018-08-29
MP/478GB01	United Kingdom	GEOMETRIC CONTROL OF BENDING CHARACTER IN PROSTHETIC HEART VALVE LEAFLETS	Granted	13799419.0	2013-03-15	2013-11-05	2934386	2017-07-26
MP/478GB02	United Kingdom	CHARACTER IN PROSTHETIC HEART VALVE LEAFLETS	Granted	17176507.6	2013-03-15	2013-11-05	3241526	2018-08-29
MP/478HK	Hong Kong	GEOMETRIC CONTROL OF BENDING CHARACTER IN PROSTHETIC HEART VALVE LEAFLETS	Abandoned	16103226.2	2013-03-15	2013-11-05	1215151	2018-06-01
MP/478HK01	Hong Kong	GEOMETRIC CONTROL OF BENDING CHARACTER IN PROSTHETIC HEART VALVE LEAFLETS	Abandoned	18104390.8	2012-12-19	2013-11-05	1245064	2018-08-24
MP/478IE01	Ireland (Republic of)	CHARACTER IN PROSTHETIC HEART VALVE LEAFLETS	Granted	13799419.0	2013-03-15	2013-11-05	2934386	2017-07-26
MP/478IE02	Ireland (Republic of)	GEOMETRIC CONTROL OF BENDING CHARACTER IN PROSTHETIC HEART VALVE LEAFLETS	Granted	17176507.6	2013-03-15	2013-11-05	3241526	2018-08-29
MP/478IT01	Italy	CHARACTER IN PROSTHETIC HEART VALVE LEAFLETS	Granted	13799419.0	2013-03-15	2013-11-05	502017000115739	2017-07-26
MP/478IT02	Italy	GEOMETRIC CONTROL OF BENDING CHARACTER IN PROSTHETIC HEART VALVE LEAFLETS	Granted	17176507.6	2013-03-15	2013-11-05	3241526	2018-08-29
MP/478JP	Japan	CHARACTER IN PROSTHETIC HEART VALVE LEAFLETS	Granted	2015-549384	2013-03-15	2013-11-05	6392778	2018-08-31
MP/478JP02	Japan	GEOMETRIC CONTROL OF BENDING CHARACTER IN PROSTHETIC HEART VALVE LEAFLETS	Granted	2018-156551	2013-03-15	2013-11-05	6756785	2020-08-31
MP/478KR	Korea, Republic of (KR)	GEOMETRIC CONTROL OF BENDING CHARACTER IN PROSTHETIC HEART VALVE LEAFLETS	Granted	10-2015-7019565	2013-03-15	2013-11-05	2138396	2020-07-21
MP/478NL01	Netherlands	CHARACTER IN PROSTHETIC HEART VALVE LEAFLETS	Granted	13799419.0	2013-03-15	2013-11-05	2934386	2017-07-26
MP/478NL02	Netherlands	GEOMETRIC CONTROL OF BENDING CHARACTER IN PROSTHETIC HEART VALVE LEAFLETS	Granted	17176507.6	2013-03-15	2013-11-05	3241526	2018-08-29
MP/478US	United States of America	CHARACTER IN PROSTHETIC HEART VALVE LEAFLETS	Granted	13835988	2012-12-19	2013-03-15	10956820	2021-04-06
MP/478US02	United States of America	GEOMETRIC CONTROL OF BENDING CHARACTER IN PROSTHETIC HEART VALVE LEAFLETS	Published	171188333	2012-12-19	2021-03-01	2021-0205074	2021-07-08
MP/478WO	Patent Cooperation Treaty	GEOMETRIC CONTROL OF BENDING CHARACTER IN PROSTHETIC HEART VALVE LEAFLETS	Expired	2013/068390	2013-03-15	2013-11-05	2014/099150	2014-06-26
MP/479AU	Australia	GEOMETRIC PROSTHETIC HEART VALVES	Granted	2013361283	2013-03-15	2013-12-19	2013361283	2017-08-10
MP/479AU02	Australia	GEOMETRIC PROSTHETIC HEART VALVES	Abandoned	2017208257	2013-03-15	2013-12-19		
MP/479CA	Canada	GEOMETRIC PROSTHETIC HEART VALVES	Granted	2891968	2013-03-15	2013-12-19	2891968	2018-09-11
MP/479SE01	Germany (Federal Republic of)	GEOMETRIC PROSTHETIC HEART VALVES	Granted	201380065834.4	2013-03-15	2013-12-19	201380065834.4	2017-07-21
MP/479SE01	Germany (Federal Republic of)	GEOMETRIC PROSTHETIC HEART VALVES	Granted	13818926.1	2013-03-15	2013-12-19	2834391	2017-03-08
MP/479SP	Spain	GEOMETRIC PROSTHETIC HEART VALVES	Granted	13818926.1	2013-03-15	2013-12-19	2834391	2017-03-08
MP/479SU01	France	GEOMETRIC PROSTHETIC HEART VALVES	Granted	13818926.1	2013-03-15	2013-12-19	2834391	2017-03-08
MP/479SU01	United Kingdom	GEOMETRIC PROSTHETIC HEART VALVES	Granted	13818926.1	2013-03-15	2013-12-19	2834391	2017-03-08
MP/479SU01	Hong Kong	GEOMETRIC PROSTHETIC HEART VALVES	Abandoned	16103175.3	2013-12-19	2013-12-19	1215148	2018-03-29
MP/479SU01	Ireland (Republic of)	GEOMETRIC PROSTHETIC HEART VALVES	Granted	13818926.1	2013-03-15	2013-12-19	2834391	2017-03-08
MP/479IT01	Italy	GEOMETRIC PROSTHETIC HEART VALVES	Granted	13818926.1	2013-03-15	2013-12-19	502017000054629	2017-03-08

MP/479JP	Japan	GEOMETRIC PROSTHETIC HEART VALVES	Granted	2015-549695	2013-03-15	2013-12-19		2016-01-18	6463693	2019-01-11
MP/479KR	Korea, Republic of (KR)	GEOMETRIC PROSTHETIC HEART VALVES	Abandoned	10-2015-7019566	2013-03-15	2013-12-19	2016-501113	2016-01-18		
MP/479NL01	Netherlands	GEOMETRIC PROSTHETIC HEART VALVES	Granted	13618926.1	2013-03-15	2013-12-19			2934391	2017-03-08
MP/479US	United States of America	GEOMETRIC PROSTHETIC HEART VALVES	Granted	14/133491	2012-12-19	2013-12-18	2014-0172083	2014-06-19	10039638	2018-08-07
MP/479US02	United States of America	GEOMETRIC PROSTHETIC HEART VALVES	Granted	16/040139	2012-12-19	2018-07-19	US-2018-0318070-A1	2018-11-08	11039917	2021-06-22
MP/479VCO	Patent Cooperation Treaty	GEOMETRIC PROSTHETIC HEART VALVES	Expired	2013/076504	2013-03-15	2013-12-19	2014/100394	2014-06-26		
PMP/479US	United States of America	GEOMETRIC HEART VALVE FRAME	Expired	61/802128						
MP/480AU	Australia	PLANAR ZONE IN PROSTHETIC HEART VALVE LEAFLET	Abandoned	2013363614	2013-03-15	2015-05-21				
MP/480AU01	Australia	PLANAR ZONE IN PROSTHETIC HEART VALVE LEAFLET	Granted	2017201199	2013-03-15	2013-11-25			2017201199	2019-04-04
MP/480AU02	Australia	PLANAR ZONE IN PROSTHETIC HEART VALVE LEAFLET	Granted	2019201907	2013-03-15	2013-11-25			2019201907	2021-07-22
MP/480CA	Canada	PLANAR ZONE IN PROSTHETIC HEART VALVE LEAFLET	Granted	2892139	2013-03-15	2013-11-25			2892139	2017-07-25
MP/480CN	China	PLANAR ZONE IN PROSTHETIC HEART VALVE LEAFLET	Granted	201380065837.8	2013-03-15	2013-11-25	104918582	2015-09-16	201380065837.8	2017-11-17
MP/480DE01	Germany (Federal Republic of)	PLANAR ZONE IN PROSTHETIC HEART VALVE LEAFLET	Granted	13811289.1	2013-03-15	2013-11-25			2934387	2016-10-12
MP/480EP	European Patent	VALVE LEAFLET	Granted	13811289.1	2013-03-15	2013-11-25	2934387	2015-10-28	2934387	2016-10-12
MP/480ES01	Spain	PLANAR ZONE IN PROSTHETIC HEART VALVE LEAFLET	Granted	13811289.1	2013-03-15	2013-11-25			2934387	2016-10-12
MP/480FR01	France	PLANAR ZONE IN PROSTHETIC HEART VALVE LEAFLET	Granted	13811289.1	2013-03-15	2013-11-25			2934387	2016-10-12
MP/480GB01	United Kingdom	PLANAR ZONE IN PROSTHETIC HEART VALVE LEAFLET	Granted	13811289.1	2013-03-15	2013-11-25			2934387	2016-10-12
MP/480HK01	Hong Kong	PLANAR ZONE IN PROSTHETIC HEART VALVE LEAFLET	Abandoned	16103177.1	2013-03-15	2013-11-25	1215149	2016-08-19	1215149	2017-12-22
MP/480IE01	Ireland (Republic of)	PLANAR ZONE IN PROSTHETIC HEART VALVE LEAFLET	Granted	13811289.1	2013-03-15	2013-11-25			2934387	2016-10-12
MP/480IT01	Italy	PLANAR ZONE IN PROSTHETIC HEART VALVE LEAFLET	Granted	13811289.1	2013-03-15	2013-11-25			502016000131076	2016-10-12
MP/480JP	Japan	PLANAR ZONE IN PROSTHETIC HEART VALVE LEAFLET	Granted	2015-549413	2013-03-15	2013-11-25	2016-501102	2016-01-18	6491107	2019-03-08
MP/480JP02	Japan	PLANAR ZONE IN PROSTHETIC HEART VALVE LEAFLET	Granted	2019-036198	2013-03-15	2013-11-25	2019-103840	2019-06-27	6770120	2020-09-28
MP/480KR	Korea, Republic of (KR)	PLANAR ZONE IN PROSTHETIC HEART VALVE LEAFLET	Abandoned	10-2015-7019569	2013-03-15	2013-11-25				
MP/480NL01	Netherlands	PLANAR ZONE IN PROSTHETIC HEART VALVE LEAFLET	Granted	13811289.1	2013-03-15	2013-11-25			2934387	2016-10-12
MP/480US	United States of America	PLANAR ZONE IN PROSTHETIC HEART VALVE LEAFLET	Granted	13/841334	2012-12-19	2013-03-15	2014/0172079	2014-06-19	9398952	2016-07-26
MP/480WCO	Patent Cooperation Treaty	PLANAR ZONE IN PROSTHETIC HEART VALVE LEAFLET	Expired	2013/071632	2013-03-15	2013-11-25	2014/099282	2014-06-26		
MP/481AU	Australia	TRUNCATED LEAFLET FOR HEART VALVES	Granted	2013363172	2013-03-15	2013-12-16	2013363172	2017-06-29	2013363172	2017-10-12
MP/481AU02	Australia	TRUNCATED LEAFLET FOR HEART VALVES	Granted	2017235949	2013-03-15	2013-12-16			2017235949	2019-09-26
MP/481AU03	Australia	TRUNCATED LEAFLET FOR HEART VALVES	Granted	2019229440	2013-03-15	2019-09-13			2019229440	2021-04-08
MP/481CA	Canada	TRUNCATED LEAFLET FOR HEART VALVES	Granted	2893098	2013-03-15	2013-12-16			2893098	2018-02-20
MP/481CA02	Canada	TRUNCATED LEAFLET FOR HEART VALVES	Granted	2990642	2013-03-15	2013-12-16			2990642	2019-09-17
MP/481CN	China	TRUNCATED LEAFLET FOR HEART VALVES	Granted	201380065949.3	2013-12-16	2013-12-16	105050541	2015-11-11	201380065949.3	2017-07-18
MP/481DE01	Germany (Federal Republic of)	TRUNCATED LEAFLET FOR HEART VALVES	Granted	13815646.8	2012-12-19	2013-12-16			2934388	2017-08-30
MP/481DE02	Germany (Federal Republic of)	TRUNCATED LEAFLET FOR HEART VALVES	Granted	17187595.8	2012-12-19	2013-12-16			3266416	2018-12-12

MP/481DE03	Germany (Federal Republic of)	TRUNCATED LEAFLET FOR HEART VALVES	Granted	18205790.1	2012-12-19	2013-12-16		3479797	2022-03-16
MP/481EP	European Patent	TRUNCATED LEAFLET FOR HEART VALVES	Granted	13815646.8	2012-12-19	2013-12-16	2934388	2934388	2017-08-30
MP/481EP02	European Patent	TRUNCATED LEAFLET FOR HEART VALVES	Granted	17187595.8	2012-12-19	2013-12-16	3266416	3266416	2018-12-12
MP/481EP03	European Patent	TRUNCATED LEAFLET FOR HEART VALVES	Granted	18205790.1	2012-12-19	2013-12-16	3479797	3479797	2022-03-16
MP/481ES01	Spain	TRUNCATED LEAFLET FOR HEART VALVES	Granted	13815646.8	2012-12-19	2013-12-16	2934388	2934388	2017-08-30
MP/481ES02	Spain	TRUNCATED LEAFLET FOR HEART VALVES	Granted	17187595.8	2012-12-19	2013-12-16	3266416	3266416	2018-12-12
MP/481ES03	Spain	TRUNCATED LEAFLET FOR HEART VALVES	Granted	18205790.1	2012-12-19	2013-12-16	3479797	3479797	2022-03-16
MP/481FR01	France	TRUNCATED LEAFLET FOR HEART VALVES	Granted	13815646.8	2012-12-19	2013-12-16	2934388	2934388	2017-08-30
MP/481FR02	France	TRUNCATED LEAFLET FOR HEART VALVES	Granted	17187595.8	2012-12-19	2013-12-16	3266416	3266416	2018-12-12
MP/481FR03	France	TRUNCATED LEAFLET FOR HEART VALVES	Granted	18205790.1	2012-12-19	2013-12-16	3479797	3479797	2022-03-16
MP/481GB01	United Kingdom	TRUNCATED LEAFLET FOR HEART VALVES	Granted	13815646.8	2012-12-19	2013-12-16	2934388	2934388	2017-08-30
MP/481GB02	United Kingdom	TRUNCATED LEAFLET FOR HEART VALVES	Granted	17187595.8	2012-12-19	2013-12-16	3266416	3266416	2018-12-12
MP/481GB03	United Kingdom	TRUNCATED LEAFLET FOR HEART VALVES	Granted	18205790.1	2012-12-19	2013-12-16	3479797	3479797	2022-03-16
MP/481HK01	Hong Kong	TRUNCATED LEAFLET FOR HEART VALVES	Abandoned	16103178.0	2013-12-16	2013-12-16	1215150	1215150	2018-08-19
MP/481HK02	Hong Kong	TRUNCATED LEAFLET FOR HEART VALVES	Abandoned	18107485.7	2013-03-15	2013-12-16	1248092	1248092	2020-01-03
MP/481HK03	Hong Kong	TRUNCATED LEAFLET FOR HEART VALVES	Abandoned	19130917.8	2013-03-15	2013-12-16			
MP/481IE01	Ireland (Republic of)	TRUNCATED LEAFLET FOR HEART VALVES	Granted	13815646.8	2012-12-19	2013-12-16	2934388	2934388	2017-08-30
MP/481IE02	Ireland (Republic of)	TRUNCATED LEAFLET FOR HEART VALVES	Granted	17187595.8	2012-12-19	2013-12-16	3266416	3266416	2018-12-12
MP/481IE03	Ireland (Republic of)	TRUNCATED LEAFLET FOR HEART VALVES	Granted	18205790.1	2012-12-19	2013-12-16	3479797	3479797	2022-03-16
MP/481IT01	Italy	TRUNCATED LEAFLET FOR HEART VALVES	Granted	13815646.8	2012-12-19	2013-12-16	502017000132823	502017000132823	2017-08-30
MP/481IT02	Italy	TRUNCATED LEAFLET FOR HEART VALVES	Granted	17187595.8	2012-12-19	2013-12-16	3266416	3266416	2018-12-12
MP/481IT03	Italy	TRUNCATED LEAFLET FOR HEART VALVES	Granted	18205790.1	2012-12-19	2013-12-16	502022000039020	502022000039020	2022-03-16
MP/481JP	Japan	TRUNCATED LEAFLET FOR HEART VALVES	Granted	2015-549523	2013-03-15	2013-12-16	2016-501105	2016-01-18	2020-01-07
MP/481JP02	Japan	TRUNCATED LEAFLET FOR HEART VALVES	Granted	2019-230319	2013-03-15	2013-12-16	2020-049275	2020-04-02	2022-04-25
MP/481KR	Korea, Republic of (KR)	TRUNCATED LEAFLET FOR HEART VALVES	Abandoned	10-2015-7019572	2013-03-15	2013-12-16			
MP/481NL01	Netherlands	TRUNCATED LEAFLET FOR HEART VALVES	Granted	13815646.8	2012-12-19	2013-12-16	2934388	2934388	2017-08-30
MP/481NL02	Netherlands	TRUNCATED LEAFLET FOR HEART VALVES	Granted	17187595.8	2012-12-19	2013-12-16	3266416	3266416	2018-12-12
MP/481US	United States of America	TRUNCATED LEAFLET FOR HEART VALVES	Granted	13/843196	2012-12-19	2013-03-15	20140172080	2014-06-19	2015-09-29
MP/481US03	United States of America	TRUNCATED LEAFLET FOR PROSTHETIC HEART VALVES	Granted	14/839334	2013-03-15	2015-08-28	2015-0366663	2015-12-14	2019-11-05
MP/481US04	United States of America	TRUNCATED LEAFLET FOR PROSTHETIC HEART VALVES	Published	16/440340	2015-08-28	2019-06-13	US-2020-0000578-A1	2020-01-02	
MP/481WO	Patent Cooperation Treaty	TRUNCATED LEAFLET FOR HEART VALVES	Expired	2013/075274	2012-12-19	2013-12-16	2014/099722	2014-06-26	

MP/485AU	Australia	VERTICAL COAPTATION ZONE IN A PLANAR PORTION OF PROSTHETIC HEART VALVE LEAFLET	Abandoned	2013063132	2013-04-24	2013-12-16														
MP/485AU01	Australia	VERTICAL COAPTATION ZONE IN A PLANAR PORTION OF PROSTHETIC HEART VALVE LEAFLET	Granted	2017201165	2013-04-24	2013-12-16	2017201165	2018-10-18	2017201165	2019-01-31										
MP/485CA	Canada	VERTICAL COAPTATION ZONE IN A PLANAR PORTION OF PROSTHETIC HEART VALVE LEAFLET	Granted	2892247	2013-04-24	2013-12-16														
MP/485CA02	Canada	VERTICAL COAPTATION ZONE IN A PLANAR PORTION OF PROSTHETIC HEART VALVE LEAFLET	Granted	2974879	2013-04-24	2013-12-16														
MP/485CN	China	VERTICAL COAPTATION ZONE IN A PLANAR PORTION OF PROSTHETIC HEART VALVE LEAFLET	Granted	201380065930.9	2013-04-24	2013-12-16	104853698	2015-08-19	201380065930.9	2017-05-31										
MP/485CN02	China	VERTICAL COAPTATION ZONE IN A PLANAR PORTION OF PROSTHETIC HEART VALVE LEAFLET	Granted	201710311301.X	2013-04-24	2013-12-16	107198594	2017-09-26		2021-04-16										
MP/485DE01	Germany (Federal Republic of)	VERTICAL COAPTATION ZONE IN A PLANAR PORTION OF PROSTHETIC HEART VALVE LEAFLET	Granted	13818099.7	2013-04-24	2013-12-16														
MP/485EP	European Patent	PORTION OF PROSTHETIC HEART VALVE LEAFLET	Granted	13818099.7	2013-04-24	2013-12-16	2934390	2015-10-28		2017-03-15										
MP/485ES01	Spain	VERTICAL COAPTATION ZONE IN A PLANAR PORTION OF PROSTHETIC HEART VALVE LEAFLET	Granted	13818099.7	2013-04-24	2013-12-16														
MP/485FR01	France	VERTICAL COAPTATION ZONE IN A PLANAR PORTION OF PROSTHETIC HEART VALVE LEAFLET	Granted	13818099.7	2013-04-24	2013-12-16	2934390	2017-03-15		2017-03-15										
MP/485GB01	United Kingdom	VERTICAL COAPTATION ZONE IN A PLANAR PORTION OF PROSTHETIC HEART VALVE LEAFLET	Granted	13818099.7	2013-04-24	2013-12-16	2934390	2017-03-15		2017-03-15										
MP/485HK01	Hong Kong	VERTICAL COAPTATION ZONE IN A PLANAR PORTION OF PROSTHETIC HEART VALVE LEAFLET	Abandoned	16103295.8	2013-12-16	2013-12-16	1215370	2016-08-26		2018-03-29										
MP/485HK02	Hong Kong	VERTICAL COAPTATION ZONE IN A PLANAR PORTION OF PROSTHETIC HEART VALVE LEAFLET	Abandoned	16104136.7	2013-04-24	2013-12-16	1244659	2018-08-17		2022-01-21										
MP/485IE01	Ireland (Republic of)	VERTICAL COAPTATION ZONE IN A PLANAR PORTION OF PROSTHETIC HEART VALVE LEAFLET	Granted	13818099.7	2013-04-24	2013-12-16	2934390	2017-03-15		2017-03-15										
MP/485IT01	Italy	VERTICAL COAPTATION ZONE IN A PLANAR PORTION OF PROSTHETIC HEART VALVE LEAFLET	Granted	13818099.7	2013-04-24	2013-12-16	502017000064713	2017-03-15		2017-03-15										
MP/485JP	Japan	VERTICAL COAPTATION ZONE IN A PLANAR PORTION OF PROSTHETIC HEART VALVE LEAFLET	Granted	2015-549534	2013-04-24	2013-12-16	2016-501106	2016-01-18		2019-01-18										
MP/485JP02	Japan	VERTICAL COAPTATION ZONE IN A PLANAR PORTION OF PROSTHETIC HEART VALVE LEAFLET	Granted	2019-002799	2013-04-24	2013-12-16	2019-088818	2019-06-13		2020-11-30										
MP/485JP03	Japan	VERTICAL COAPTATION ZONE IN A PLANAR PORTION OF PROSTHETIC HEART VALVE LEAFLET	Granted	2020-195106	2013-04-24	2013-12-16	2021-041210	2021-03-18		2022-03-28										
MP/485KR	Korea, Republic of (KR)	VERTICAL COAPTATION ZONE IN A PLANAR PORTION OF PROSTHETIC HEART VALVE LEAFLET	Granted	10-2015-7019570	2013-04-24	2013-12-16														
MP/485NL01	Netherlands	VERTICAL COAPTATION ZONE IN A PLANAR PORTION OF PROSTHETIC HEART VALVE LEAFLET	Granted	13818099.7	2013-04-24	2013-12-16														
MP/485US	United States of America	VERTICAL COAPTATION ZONE IN A PLANAR PORTION OF PROSTHETIC HEART VALVE LEAFLET	Granted	13/669524	2012-12-19	2013-04-24	20140172081	2014-06-19		2018-05-15										

MP/485US02	United States of America	VERTICAL COAPTATION ZONE IN A PLANAR PORTION OF PROSTHETIC HEART VALVE LEAFLET	Granted	15/947967	2012-12-19	2018-04-09	US-2018-0221144-A1	2018-08-09	10639144	2020-05-05
MP/485US03	United States of America	VERTICAL COAPTATION ZONE IN A PLANAR PORTION OF PROSTHETIC HEART VALVE LEAFLET	Published	16/846822	2012-12-19	2018-04-09	20200237505	2020-07-30		
MP/485WO	Patent Cooperation Treaty	VERTICAL COAPTATION ZONE IN A PLANAR PORTION OF PROSTHETIC HEART VALVE LEAFLET	Expired	2013/075380	2013-04-24	2013-12-16	2014/099774	2014-06-26		
MP/486AU	Australia	IMPROVED PROSTHETIC HEART VALVE WITH LEAFLET SHELVING	Abandoned	2013364201	2013-04-24	2013-11-06				
MP/486AU01	Australia	IMPROVED PROSTHETIC HEART VALVE WITH LEAFLET SHELVING	Granted	2017200748	2013-04-24	2013-11-06	2017200748	2018-10-11	2017200748	2019-01-24
MP/486AUS	United States of America	METHODS FOR IMPROVED PROSTHETIC HEART VALVE WITH LEAFLET SHELVING	Granted	14/792390	2013-04-24	2015-07-06	2015-0305862	2015-10-29	9827089	2017-11-28
MP/486AUS02	United States of America	METHODS FOR IMPROVED PROSTHETIC HEART VALVE WITH LEAFLET SHELVING	Granted	15/720441	2015-07-06	2017-09-29	2018-0021128	2018-01-25	10650745	2020-05-26
MP/486AUS03	United States of America	METHODS FOR IMPROVED PROSTHETIC HEART VALVE WITH LEAFLET SHELVING	Published	16/852825	2017-09-29	2020-04-20	2020-0246137	2020-08-06		
MP/486CA	Canada	LEAFLET SHELVING	Granted	2891614	2013-04-24	2013-11-06			2891614	2017-11-28
MP/486CN	China	IMPROVED PROSTHETIC HEART VALVE WITH LEAFLET SHELVING	Granted	201380065820.2	2013-04-24	2013-11-06	104869948	2015-08-26	201380065820.2	2018-02-13
MP/486DE01	Germany (Federal Republic of)	LEAFLET SHELVING	Granted	137984316	2013-04-24	2013-11-06			2934385	2017-01-04
MP/486DE02	Germany (Federal Republic of)	IMPROVED PROSTHETIC HEART VALVE WITH LEAFLET SHELVING	Granted	161966874	2013-04-24	2013-11-06			3278768	2019-03-13
MP/486EP	European Patent	IMPROVED PROSTHETIC HEART VALVE WITH LEAFLET SHELVING	Granted	137984316	2013-04-24	2013-11-06	2934385	2015-10-28	2934385	2017-01-04
MP/486EP01	European Patent	IMPROVED PROSTHETIC HEART VALVE WITH LEAFLET SHELVING	Granted	161966874	2013-04-24	2013-11-06	3278768	2018-02-07	3278768	2019-03-13
MP/486ES01	Spain	LEAFLET SHELVING	Granted	137984316	2013-04-24	2013-11-06			2934385	2017-01-04
MP/486ES02	Spain	IMPROVED PROSTHETIC HEART VALVE WITH LEAFLET SHELVING	Granted	161966874	2013-04-24	2013-11-06			3278768	2019-03-13
MP/486FR01	France	LEAFLET SHELVING	Granted	137984316	2013-04-24	2013-11-06			2934385	2017-01-04
MP/486FR02	France	IMPROVED PROSTHETIC HEART VALVE WITH LEAFLET SHELVING	Granted	161966874	2013-04-24	2013-11-06			3278768	2019-03-13
MP/486GB01	United Kingdom	LEAFLET SHELVING	Granted	137984316	2013-04-24	2013-11-06			2934385	2017-01-04
MP/486GB02	United Kingdom	IMPROVED PROSTHETIC HEART VALVE WITH LEAFLET SHELVING	Granted	161966874	2013-04-24	2013-11-06			3278768	2019-03-13
MP/486HK01	Hong Kong	IMPROVED PROSTHETIC HEART VALVE WITH LEAFLET SHELVING	Abandoned	161032967	2013-11-06	2013-11-06	1215371	2016-08-26	1215371	2018-03-02
MP/486HK02	Hong Kong	IMPROVED PROSTHETIC HEART VALVE WITH LEAFLET SHELVING	Abandoned	181086862	2013-04-24	2013-11-06	1248002	2018-10-26	1248002	2020-04-09
MP/486IE01	Ireland (Republic of)	LEAFLET SHELVING	Granted	137984316	2013-04-24	2013-11-06			2934385	2017-01-04
MP/486IE02	Ireland (Republic of)	IMPROVED PROSTHETIC HEART VALVE WITH LEAFLET SHELVING	Granted	161966874	2013-04-24	2013-11-06			3278768	2019-03-13
MP/486IT01	Italy	IMPROVED PROSTHETIC HEART VALVE WITH LEAFLET SHELVING	Granted	137984316	2013-04-24	2013-11-06			2934385	2017-01-04
MP/486IT02	Italy	IMPROVED PROSTHETIC HEART VALVE WITH LEAFLET SHELVING	Granted	161966874	2013-04-24	2013-11-06			3278768	2019-03-13
MP/486JP	Japan	IMPROVED PROSTHETIC HEART VALVE WITH LEAFLET SHELVING	Granted	2015-549387	2013-04-24	2013-11-06	2016-501101	2016-01-18	6416780	2018-10-12
MP/486JP02	Japan	IMPROVED PROSTHETIC HEART VALVE WITH LEAFLET SHELVING	Granted	2018-189134	2013-04-24	2013-11-06	2018-202295	2018-12-27	7004631	2022-01-06
MP/486KR	Korea, Republic of (KR)	LEAFLET SHELVING	Abandoned	10-2015-7019560	2013-04-24	2013-11-06			2137853	2020-07-20
MP/486NL01	Netherlands	IMPROVED PROSTHETIC HEART VALVE WITH LEAFLET SHELVING	Granted	137984316	2013-04-24	2013-11-06			2934385	2017-01-04

MP/486NL02	Netherlands	IMPROVED PROSTHETIC HEART VALVE WITH LEAFLET SHELVING	Granted	16196867.4	2013-04-24	2013-11-06					3278768	2019-03-13
MP/486US	United States of America	IMPROVED PROSTHETIC HEART VALVE WITH LEAFLET SHELVING	Granted	13669878	2012-12-19	2013-04-24	20140172082	2014-06-19			9101469	2015-08-11
MP/486WO	Patent Cooperation Treaty	IMPROVED PROSTHETIC HEART VALVE WITH LEAFLET SHELVING	Expired	2013068780	2013-04-24	2013-11-06	2014099163	2014-06-26				
MP/500AU	Australia	ASYMMETRIC OPENING AND CLOSING PROSTHETIC VALVE LEAFLET	Granted	2014360294	2013-12-06	2014-12-05	2014360294	2017-10-26			2014360294	2018-02-08
MP/500AU2	Australia	ASYMMETRIC OPENING AND CLOSING PROSTHETIC VALVE LEAFLET	Granted	2018200631	2013-12-06	2014-12-05					2018200631	2020-06-11
MP/500AU3	Australia	ASYMMETRIC OPENING AND CLOSING PROSTHETIC VALVE LEAFLET	Abandoned	2020203433	2013-12-06	2014-12-05						
MP/500BR	Brazil	ASYMMETRIC OPENING AND CLOSING PROSTHETIC VALVE LEAFLET	Abandoned	112016012836-2	2013-12-06	2014-12-05	112016012836-2	2017-08-08				
MP/500CA	Canada	PROSTHETIC VALVE LEAFLET	Granted	2932760	2013-12-06	2014-12-05					2932760	2020-03-10
MP/500CA02	Canada	ASYMMETRIC OPENING AND CLOSING PROSTHETIC VALVE LEAFLET	Abandoned	3065734	2013-12-06	2014-12-05						
MP/500CN	China	ASYMMETRIC OPENING AND CLOSING PROSTHETIC VALVE LEAFLET	Granted	201480074823.7	2013-12-06	2014-12-05	105960220	2016-09-21			201480074823.7	2019-10-01
MP/500CN02	China	ASYMMETRIC OPENING AND CLOSING PROSTHETIC VALVE LEAFLET	Published	201910841260.4	2013-12-06	2014-12-05	110478084	2019-11-22				
MP/500DE01	Germany (Federal Republic of)	ASYMMETRIC OPENING AND CLOSING PROSTHETIC VALVE LEAFLET	Granted	14821950.4	2013-12-06	2014-12-05					3076900	2019-11-06
MP/500EP	European Patent	ASYMMETRIC OPENING AND CLOSING PROSTHETIC VALVE LEAFLET	Granted	14821950.4	2013-12-06	2014-12-05	3076900	2016-10-12			3076900	2019-11-06
MP/500EP02	European Patent	ASYMMETRIC OPENING AND CLOSING PROSTHETIC VALVE LEAFLET	Published	19202204.4	2013-12-06	2014-12-05	3613394	2020-02-26				
MP/500ES01	Spain	ASYMMETRIC OPENING AND CLOSING PROSTHETIC VALVE LEAFLET	Granted	14821950.4	2013-12-06	2014-12-05					3076900	2019-11-06
MP/500FR01	France	PROSTHETIC VALVE LEAFLET	Granted	14821950.4	2013-12-06	2014-12-05					3076900	2019-11-06
MP/500GB01	United Kingdom	ASYMMETRIC OPENING AND CLOSING PROSTHETIC VALVE LEAFLET	Granted	14821950.4	2013-12-06	2014-12-05					3076900	2019-11-06
MP/500HK	Hong Kong	ASYMMETRIC OPENING AND CLOSING PROSTHETIC VALVE LEAFLET	Abandoned	17102437.8	2013-12-06	2014-12-05	1228722	2017-11-10				
MP/500HK01	Hong Kong	ASYMMETRIC OPENING AND CLOSING PROSTHETIC VALVE LEAFLET	Abandoned	42020009180.9	2013-12-06	2014-12-05						
MP/500IE01	Ireland (Republic of)	ASYMMETRIC OPENING AND CLOSING PROSTHETIC VALVE LEAFLET	Granted	14821950.4	2013-12-06	2014-12-05					3076900	2019-11-06
MP/500IT01	Italy	ASYMMETRIC OPENING AND CLOSING PROSTHETIC VALVE LEAFLET	Granted	14821950.4	2013-12-06	2014-12-05					3076900	2019-11-06
MP/500JP	Japan	ASYMMETRIC OPENING AND CLOSING PROSTHETIC VALVE LEAFLET	Granted	2016-536697	2013-12-06	2014-12-05	2016-536695	2016-12-15			6599330	2019-10-11
MP/500JP02	Japan	ASYMMETRIC OPENING AND CLOSING PROSTHETIC VALVE LEAFLET	Granted	2019-178911	2013-12-06	2014-12-05	2020-014884	2020-01-30			6923613	2021-08-02
MP/500US	United States of America	ASYMMETRIC OPENING AND CLOSING PROSTHETIC VALVE LEAFLET	Granted	14561148	2013-12-06	2014-12-04	2015-0157456	2015-06-11			9504565	2016-11-29
MP/500US02	United States of America	ASYMMETRIC OPENING AND CLOSING PROSTHETIC VALVE LEAFLET	Granted	15333749	2013-12-06	2016-10-25	2017-0042674	2017-02-16			10368984	2019-08-06
MP/500US03	United States of America	ASYMMETRIC OPENING AND CLOSING PROSTHETIC VALVE LEAFLET	Published	16454928	2013-12-06	2019-06-27	20190314154	2019-10-17				
MP/500WO	Patent Cooperation Treaty	ASYMMETRIC OPENING AND CLOSING PROSTHETIC VALVE LEAFLET	Expired	US2014/068727	2013-12-06	2014-12-05	2015-085138	2015-06-11				
PMP/500S1US	United States of America	ASYMMETRIC OPENING AND CLOSING PROSTHETIC VALVE LEAFLET	Expired	61974653	2014-04-03	2014-04-03						
PMP/500US	United States of America	ASYMMETRIC OPENING AND CLOSING PROSTHETIC VALVE LEAFLET	Expired	619192335	2013-12-06	2013-12-06						
PMP/619AU01	Australia	FRAME WITH INTEGRAL SEWING CUFF FOR PROSTHETIC VALVES	Granted	2015305868	2014-06-18	2015-08-13	2015305868	2018-09-20			2015305868	2019-01-03

PMP/519AU02	Australia	FRAME WITH INTEGRAL SEWING CUFF FOR PROSTHETIC VALVES	Granted	2018282323	2014-08-18	2015-08-13		2018282323	2020-11-19
PMP/519BR01	Brazil	FRAME WITH INTEGRAL SEWING CUFF FOR PROSTHETIC VALVES	Abandoned	112017003339-9	2014-08-18	2015-08-13	112017003339-9	2017-11-28	
PMP/519CA01	Canada	FRAME WITH INTEGRAL SEWING CUFF FOR PROSTHETIC VALVES	Granted	2956402	2014-08-18	2015-08-13		2956402	2020-08-25
PMP/519CN01	China	FRAME WITH INTEGRAL SEWING CUFF FOR PROSTHETIC VALVES	Granted	201580043605.1	2014-08-18	2015-08-13	1066596567	2017-05-10	201580043605.1
PMP/519EP01	European Patent	FRAME WITH INTEGRAL SEWING CUFF FOR PROSTHETIC VALVES	Allowed	15754090.7	2014-08-18	2015-08-13	3182929	2017-06-28	
PMP/519HK01	Hong Kong	FRAME WITH INTEGRAL SEWING CUFF FOR PROSTHETIC VALVES	Abandoned	17112288.7	2014-08-18	2015-08-13	1238123	2018-04-27	
PMP/519JP01	Japan	FRAME WITH INTEGRAL SEWING CUFF FOR PROSTHETIC VALVES	Granted	2017-509681	2014-08-18	2015-08-13	2017-528205	2017-09-28	6445683
PMP/519JP02	Japan	FRAME WITH INTEGRAL SEWING CUFF FOR PROSTHETIC VALVES	Granted	2018-223801	2014-08-18	2015-08-13	2019-048166	2019-03-28	6773750
PMP/519US	United States of America	PROSTHETIC VALVES	Expired	62/038727		2014-08-18			
PMP/519US02	United States of America	FRAME WITH INTEGRAL SEWING CUFF FOR PROSTHETIC VALVES	Granted	15/502871	2014-08-18	2015-08-13	2017-0231757	2017-08-17	10314697
PMP/519US03	United States of America	FRAME WITH INTEGRAL SEWING CUFF FOR PROSTHETIC VALVES	Granted	16/394149	2014-08-18	2019-04-25	20190247185	2019-08-15	11065112
PMP/519WCO1	Patent Cooperation Treaty	FRAME WITH INTEGRAL SEWING CUFF FOR PROSTHETIC VALVES	Expired	2015/045002	2014-08-18	2015-08-13	WO2016028591	2016-02-25	
PMP/523AU01	Australia	PROSTHETIC HEART VALVE WITH RETENTION ELEMENTS	Granted	2015318007	2014-09-15	2015-09-15	2015318007	2018-09-27	2015318007
PMP/523AU02	Australia	RETENTION ELEMENTS	Granted	2018286581	2014-09-15	2015-09-15		2018286581	2020-12-03
PMP/523AU03	Australia	PROSTHETIC HEART VALVE WITH RETENTION ELEMENTS	Granted	2020273333	2014-09-15	2015-09-15		2020273333	2022-12-22
PMP/523AU04	Australia	PROSTHETIC HEART VALVE WITH RETENTION ELEMENTS	Patent Application	2022283738	2014-09-15	2015-09-15			
PMP/523BR01	Brazil	PROSTHETIC HEART VALVE WITH RETENTION ELEMENTS	Abandoned	112017005029-3	2014-09-15	2015-09-15			
PMP/523CA01	Canada	PROSTHETIC HEART VALVE WITH RETENTION ELEMENTS	Granted	2960034	2014-09-15	2015-09-15		2960034	2019-06-25
PMP/523CA02	Canada	PROSTHETIC HEART VALVE WITH RETENTION ELEMENTS	Granted	3042418	2014-09-15	2015-09-15		3042418	2022-04-12
PMP/523CA03	Canada	PROSTHETIC HEART VALVE WITH RETENTION ELEMENTS	Patent Application	3147802	2014-09-15	2015-09-15			
PMP/523CN01	China	PROSTHETIC HEART VALVE WITH RETENTION ELEMENTS	Granted	201580049409.5	2014-09-15	2015-09-15	106714733	2017-05-24	201580049409.5
PMP/523CN02	China	PROSTHETIC HEART VALVE WITH RETENTION ELEMENTS	Granted	201910059247.3	2014-09-15	2015-09-15	109589188	2019-04-09	201910059247.3
PMP/523CR01	Costa Rica	PROSTHETIC HEART VALVE WITH RETENTION ELEMENTS	Abandoned	2017-0144	2014-09-15	2015-09-15			
PMP/523DE01	Germany (Federal Republic of)	PROSTHETIC HEART VALVE WITH RETENTION ELEMENTS	Granted	15771385.0	2014-09-15	2015-09-15	3193783		2020-10-28
PMP/523EP01	European Patent	PROSTHETIC HEART VALVE WITH RETENTION ELEMENTS	Granted	15771385.0	2014-09-15	2015-09-15	3193783	2017-07-26	2020-10-28
PMP/523EP02	European Patent	PROSTHETIC HEART VALVE WITH RETENTION ELEMENTS	Published	20204061.4	2014-09-15	2015-09-15	3804659	2021-04-14	
PMP/523ES01	Spain	PROSTHETIC HEART VALVE WITH RETENTION ELEMENTS	Granted	15771385.0	2014-09-15	2015-09-15	3193783		2020-10-28
PMP/523FR01	France	PROSTHETIC HEART VALVE WITH RETENTION ELEMENTS	Granted	15771385.0	2014-09-15	2015-09-15	3193783		2020-10-28
PMP/523GB01	United Kingdom	PROSTHETIC HEART VALVE WITH RETENTION ELEMENTS	Granted	15771385.0	2014-09-15	2015-09-15	3193783		2020-10-28
PMP/523HK01	Hong Kong	PROSTHETIC HEART VALVE WITH RETENTION ELEMENTS	Abandoned	17113011.9	2014-09-15	2015-09-15	1239502	2018-05-11	
PMP/523IT01	Italy	RETENTION ELEMENTS	Granted	15771385.0	2014-09-15	2015-09-15			502020000121241

PMP/623JP01	Japan	PROSTHETIC HEART VALVE WITH RETENTION ELEMENTS	Granted	2017-5/4/18	2014-09-15	2015-09-15	2017-5/27/397	2017-09-21	6571763	2019-08-16
PMP/623JP02	Japan	PROSTHETIC HEART VALVE WITH RETENTION ELEMENTS	Granted	2019-1/4/6550	2014-09-15	2015-09-15	2019-1/8/245	2019-10-31	6602335	2020-11-30
PMP/623JP03	Japan	PROSTHETIC HEART VALVE WITH RETENTION ELEMENTS	Granted	2020-1/9/6031	2014-09-15	2015-09-15	2021-02/8032	2021-02-25	7091424	2022-06-17
PMP/623US	United States of America	PROSTHETIC HEART VALVE WITH RETENTION ELEMENTS	Expired	62/050628		2014-09-15				
PMP/623USD2	United States of America	PROSTHETIC HEART VALVE WITH RETENTION ELEMENTS	Granted	14/653654	2014-09-15	2015-09-14	US-2016-0074161-A1	2016-03-17	9827094	2017-11-28
PMP/623US03	United States of America	PROSTHETIC HEART VALVE WITH RETENTION ELEMENTS	Granted	15/791562	2014-09-15	2017-10-24	2018-0049872	2018-02-22	10342659	2019-07-09
PMP/623US04	United States of America	PROSTHETIC HEART VALVE WITH RETENTION ELEMENTS	Granted	16/446343	2014-09-15	2019-06-19	US-2019-0374339-A1	2019-12-12	11471276	2022-10-18
PMP/623US05	United States of America	PROSTHETIC HEART VALVE WITH RETENTION ELEMENTS	Published	17/941538	2014-09-15	2022-09-09	2023-0000623	2023-01-05		
PMP/623W001	Patent Cooperation Treaty	RETENTION ELEMENTS	Expired	2015/050113	2014-09-15	2015-09-15	2016/044223	2016-03-24		
PMP/629AU01	Australia	VALVED CONDUIT	Granted	2015/336568	2014-10-13	2015-10-13			2015333658	2019-03-14
PMP/629AU02	Australia	VALVED CONDUIT	Granted	2019/201417	2014-10-13	2015-10-13			2019201417	2020-11-05
PMP/629AU03	Australia	VALVED CONDUIT	Granted	2020/204617	2014-10-13	2015-10-13			2020204617	2022-01-06
PMP/629AU04	Australia	VALVED CONDUIT	Patent Application	2021290335	2014-10-13	2015-10-13				
PMP/629BR01	Brazil	VALVED CONDUIT	Abandoned	112017007670-5	2014-10-13	2015-10-13	112017007670-5	2017-04-25		
PMP/629CA01	Canada	VALVED CONDUIT	Granted	2962144	2014-10-13	2015-10-13			2962144	2020-05-12
PMP/629CA02	Canada	VALVED CONDUIT	Granted	3077818	2014-10-13	2015-10-13			3077818	2023-02-07
PMP/629CA03	Canada	VALVED CONDUIT	Patent Application	3183955	2014-10-13	2015-10-13				
PMP/629CN01	China	VALVED CONDUIT	Granted	201580055420.2	2014-10-13	2015-10-13	106794065	2017-05-31	201580055420.2	2019-11-05
PMP/629CN02	China	VALVED CONDUIT	Allowed	2017-000201	2015-10-13	2015-10-13				
PMP/629EP01	European Patent	VALVED CONDUIT	Published	15787803.4	2014-10-13	2015-10-13	3206630	2017-08-23		
PMP/629HK01	Hong Kong	VALVED CONDUIT	Abandoned	18100060.7	2014-10-13	2015-10-13	1240484	2018-05-25		
PMP/629JP01	Japan	VALVED CONDUIT	Granted	2017-538931	2014-10-13	2015-10-13	2017-538950	2017-12-14	6717837	2020-06-15
PMP/629JP02	Japan	VALVED CONDUIT	Abandoned	2020-024509	2014-10-13	2015-10-13				
PMP/629US	United States of America	VALVED CONDUIT	Expired	62/063353	2015-10-13	2015-10-13				
PMP/629US02	United States of America	VALVED CONDUIT	Granted	14/881124	2014-10-13	2015-10-12	2016-0100939	2016-04-14	10507101	2019-12-17
PMP/629US03	United States of America	PROSTHETIC VALVED CONDUIT	Allowed	16/714055	2014-10-13	2019-12-13	2020-0113681	2020-04-16		
PMP/629US04	United States of America	PROSTHETIC VALVED CONDUIT	Patent Application	18115219	2014-10-13	2023-02-28				
PMP/629W001	Patent Cooperation Treaty	VALVED CONDUIT	Expired	2015-095348	2014-10-13	2015-10-13	2016/061113	2016-04-21		
PMP/632AU01	Australia	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Granted	2015364334	2014-12-18	2015-12-18	2015364334	2019-02-14		
PMP/632AU02	Australia	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Abandoned	2019200712	2014-12-18	2015-12-18				
PMP/632AU03	Australia	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Granted	2020210253	2014-12-18	2015-12-18	2020210253	2022-05-12		
PMP/632AU04	Australia	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Patent Application	2022202794	2014-12-18	2015-12-18				
PMP/632CA01	Canada	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Granted	2967866	2014-12-18	2015-12-18	2967866	2019-10-22		
PMP/632CN01	China	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Granted	201568068028.3	2014-12-18	2015-12-18	107106294	2017-08-29	201568068028.3	2019-02-19
PMP/632CN02	China	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Granted	201910040212.5	2014-12-18	2015-12-18	109756266	2019-05-17	201910040212.5	2021-01-01
PMP/632CR01	Costa Rica	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Granted	2017-000313	2014-12-18	2015-12-18			4162	2021-12-18
PMP/632DE01	Germany (Federal Republic of)	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Granted	15823105.0	2014-12-18	2015-12-18			60 2015 052 432.2	2020-05-06
PMP/632EP01	European Patent	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Granted	15823105.0	2014-12-18	2015-12-18	3232989	2017-10-25	3232989	2020-05-06
PMP/632EP02	European Patent	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Published	20172817.7	2014-12-18	2015-12-18	3718510	2020-10-07		
PMP/632FR01	France	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Granted	15823105.0	2014-12-18	2015-12-18			3232989	2020-05-06

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PMP/632GB01	United Kingdom	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Granted	15823105.0	2014-12-18	2015-12-18			3232989	2020-05-06
PMP/632HK01	Hong Kong	PROSTHETIC VALVES WITH NON-SEWN, MECHANICALLY COUPLED LEAFLETS	Abandoned	18103216.2	2014-12-18	2015-12-18	1244421	2018-08-10		
PMP/632IE01	Ireland (Republic of)	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Granted	15823105.0	2014-12-18	2015-12-18			3232989	2020-05-06
PMP/632IT01	Italy	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Granted	15823105.0	2014-12-18	2015-12-18			3232989	2020-05-06
PMP/632JP01	Japan	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Granted	2017-532947	2014-12-18	2015-12-18	2017-538518	2017-12-28	6616418	2019-11-15
PMP/632JP02	Japan	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Granted	2018-228319	2014-12-18	2015-12-18	2019-069166	2019-05-09	6608704	2020-12-11
PMP/632JP03	Japan	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Allowed	2020-203248	2014-12-18	2015-12-18				
PMP/632JP04	Japan	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Patent Application	Awaiting app. no.	2014-12-18	2015-12-18				
PMP/632US	United States of America	MECHANICALLY COUPLED LEAFLETS	Expired	62/089930		2014-12-18				
PMP/632US02	United States of America	PROSTHETIC VALVED CONDUITS WITH MECHANICALLY COUPLED LEAFLETS	Granted	14/973515	2014-12-18	2015-12-17	2016-0175095	2016-06-23	9937037	2018-04-10
PMP/632US03	United States of America	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Granted	14/973599	2014-12-18	2015-12-17	2016-0175096	2016-06-23	9855141	2018-01-02
PMP/632US04	United States of America	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Granted	15/629695	2015-12-17	2017-12-01	2018-0110619	2018-04-26	10653521	2020-05-19
PMP/632US05	United States of America	PROSTHETIC VALVED CONDUITS WITH MECHANICALLY COUPLED LEAFLETS	Granted	15/927370	2014-12-18	2018-03-21	2018-0206987	2018-07-26		
PMP/632US06	United States of America	PROSTHETIC VALVED CONDUITS WITH MECHANICALLY COUPLED LEAFLETS	Published	17/227205	2014-12-18	2021-04-09	2021-0228350	2021-07-29		
PMP/632WCO01	Patent Cooperation Treaty	PROSTHETIC VALVES WITH MECHANICALLY COUPLED LEAFLETS	Expired	2015/066865	2014-12-18	2015-12-18	2016/100913	2016-06-23		
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