

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT5526667

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| SUBMISSION TYPE: | NEW ASSIGNMENT |
| NATURE OF CONVEYANCE: | CONVERSION / CHANGE OF NAME |
| CONVEYING PARTY DATA | |
| Name | Execution Date |
| THORATEC LLC | 12/20/2016 |
| RECEIVING PARTY DATA | |
| Name: | TC1 LLC |
| Street Address: | ONE ST. JUDE MEDICAL DRIVE |
| City: | ST. PAUL |
| State/Country: | MINNESOTA |
| Postal Code: | 55117 |
| PROPERTY NUMBERS Total: 1 | |
| Property Type | Number |
| Application Number: | 15972909 |
| CORRESPONDENCE DATA | |
| Fax Number: | (650)326-2422 |
| <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> | |
| Phone: | 6503262400 |
| Email: | omonteschavez@kilpatricktownsend.com |
| Correspondent Name: | NENA BAINS |
| Address Line 1: | KILPATRICK TOWNSEND & STOCKTON LLP |
| Address Line 2: | 1100 PEACHTREE STREET, SUITE 2800 |
| Address Line 4: | ATLANTA, GEORGIA 30309 |
| ATTORNEY DOCKET NUMBER: | 096205-014010US-1078322 |
| NAME OF SUBMITTER: | OMAR MONTES CHAVEZ |
| SIGNATURE: | /Omar Montes Chavez/ |
| DATE SIGNED: | 05/16/2019 |
| Total Attachments: 37 | |
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CONFIRMATORY ASSIGNMENT

WHEREAS, Thoratec Corporation was converted to Thoratec LLC pursuant to the Articles of Organization – Conversion, filed on November 12, 2015.

WHEREAS, Thoratec LLC, a Limited Liability Company of California, having its principal place of business at 6035 Stoneridge Drive, Pleasanton, California 94588 ("Assignor"), has heretofore sold, transferred, and conveyed to TC1 LLC, a Limited Liability Company having a principal place of business at One St. Jude Medical Drive, St. Paul, Minnesota 55117 ("Assignee"), all of its right, title, and interest, in and to certain inventions, patents, and patent applications as set forth in Exhibit A attached hereto, as part of an assignment agreement dated November 16, 2015.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is acknowledged, Assignor hereby confirms that Assignor did sell, transfer, and convey unto Assignee all right, title, and interest in and to the following:

- (a) all intellectual property (including, without limitation, any innovation, information, invention, discovery, product, process, work or design) disclosed, embodied, shown, or claimed in the below-referenced patent applications in Exhibit A, implicitly or explicitly;
- (b) the below-referenced patent applications in Exhibit A, the right to claim priority to the below-referenced patent applications in Exhibit A, all applications based in whole or in part upon the below-referenced patent applications in Exhibit A, including, without limitation, all applications that are a provisional, non-provisional, design, divisional, continuation, continuation-in-part, registration, utility model, industrial design, reissue, renewal, substitute, extension, reexamination, post-grant review, inter partes review, supplemental examination or non-U.S. patent applications or application for other rights based in whole or in part on the below-referenced patent applications in Exhibit A;
- (c) all patents (including, without limitation, all U.S. and non-U.S. patents, registrations, utility models, industrial designs, design patents, counterparts, continuations, continuations-in-part, divisionals, reissues, renewals, substitutes, extensions, reexaminations, post-grant reviews, inter partes reviews and supplemental examinations) that are granted or issued upon, or that claim priority to, any and all applications described in (b) of this paragraph or that disclose or claim intellectual property described in (a) of this paragraph, in whole or in part; and
- (d) all claims for damages by reason of past infringement of any rights under the applications or patents described in (a), (b) or (c) of this paragraph (including provisional rights to reasonable royalties pursuant to 35 U.S.C. §154(d)) and the right to sue for and collect such damages and royalties for Assignee's own use.

Assignor hereby authorizes and requests the U.S. Patent and Trademark Office or any other U.S. or non-U.S. agency to issue to the Assignee any and all patent(s), or other rights or

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documents, resulting from the intellectual property, patent application(s) and patents described in this Confirmatory Assignment.

Assignor hereby agrees to sign all papers and documents, including without limitation, applications, declarations, oaths and petitions, and, at the Assignee's expense, perform any other acts that are necessary in connection with prosecution of patent application(s) or intellectual property described in this Confirmatory Assignment and the enforcement of patent(s) or other rights resulting from such patent application(s) or intellectual property.

Assignor hereby agrees that the terms, covenants, and conditions of this Confirmatory Assignment shall be binding upon and inure to the benefit of the Assignee, its successors, assigns and other legal representative.

Assignor hereby promises and affirms that Assignor has not entered, and will not enter, into any assignment, contract, or understanding that conflicts with this Confirmatory Assignment.

In Witness Whereof, Assignor and Assignee have executed this Confirmatory Assignment on the dates indicated below.

Dated: 12/20/2014



Jason Zellers
Title: Secretary
TC1 LLC, Assignee

Dated: 12/20/2014

Jason Zellers
Title: Vice President & Secretary
Thoratec LLC, Assignor

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Exhibit A

| KTS Ref. No. | Thoratec Ref. No. | Country | Title | Application/Patent Serial No. | Filing/issue Date | Current Owner |
|------------------------------|-------------------|---------|--------------------------------------|-------------------------------|----------------------|----------------------|
| 096205-0896859 (000100AU) | THOR-PO1062AU | AU | MOBILITY-ENHANCING BLOOD PUMP SYSTEM | 2009357383 | 12/30/09 | Thoratec Corporation |
| 096205-0896860 (000100CA) | THOR-PO1062CA | CA | MOBILITY-ENHANCING BLOOD PUMP SYSTEM | 2,785,963 | 12/30/09 | Thoratec Corporation |
| 096205-1008284 (000100DE) | THOR-PO1062DE1 | DE | MOBILITY-ENHANCING BLOOD PUMP SYSTEM | 09809083.0 2519274 | 12/30/09 04/20/16 | Thoratec Corporation |
| 096205-0896861 (000100EP) | THOR-PO1062EP1 | EP | MOBILITY-ENHANCING BLOOD PUMP SYSTEM | 09809083.0 2519274 | 12/30/09 04/20/16 | Thoratec Corporation |
| 096205-1008285 (000100FR) | THOR-PO1062FR1 | FR | MOBILITY-ENHANCING BLOOD PUMP SYSTEM | 09809083.0 2519274 | 12/30/09 04/20/16 | Thoratec Corporation |
| 096205-1008286 (000100GB) | THOR-PO1062GB1 | UK | MOBILITY-ENHANCING BLOOD PUMP SYSTEM | 09809083.0 2519274 | 12/30/09 04/20/16 | Thoratec Corporation |
| 096205-0896858 (000100PC) | THOR-PO1062WD | PCT | MOBILITY-ENHANCING BLOOD PUMP SYSTEM | PCT/US2009/069811 | 12/30/09 | Thoratec Corporation |
| 096205-0891818 (000100US) | THOR-PO1062 | US | MOBILITY-ENHANCING BLOOD PUMP SYSTEM | 12/649,701 8,562,508 | 12/30/09 10/22/13 | Thoratec Corporation |
| 096205-0962266 (000110DE) | THOR-PO1062DE2 | DE | MOBILITY-ENHANCING BLOOD PUMP SYSTEM | 12181175.6 602009035 | 12/30/09 12/9/15 | Thoratec Corporation |
| 096205-0897067 (000110EP) | THOR-PO1062EP2 | EP | MOBILITY-ENHANCING BLOOD PUMP SYSTEM | 12181175.6 2530789 | 12/30/09 12/9/15 | Thoratec Corporation |
| 096205-0962268 (000110FR) | THOR-PO1062FR2 | FR | MOBILITY-ENHANCING BLOOD PUMP SYSTEM | 12181175.6 2530789 | 12/30/09 12/9/15 | Thoratec Corporation |
| 096205-0962267 (000110GB) | THOR-PO1062GB2 | UK | MOBILITY-ENHANCING BLOOD PUMP SYSTEM | 12181175.6 2530789 | 12/30/09 12/9/15 | Thoratec Corporation |
| 096205-0891819 (000110US) | THOR-PO1062C | US | MOBILITY-ENHANCING BLOOD PUMP SYSTEM | 14/057,519 | 10/18/13 | Thoratec Corporation |
| 096205-0892364 (000200US) | THOR-PO1077A1 | US | PUMPING BLOOD | 61/392,811 | 10/13/10 | Thoratec Corporation |
| 096205-0892366 (000210US) | THOR-PO1077A2 | US | PUMPING BLOOD | 61/393,241 | 10/14/10 | Thoratec Corporation |
| 096205-0892382 (000220AU) | THOR-PO1077AU | AU | PUMPING BLOOD | 2011315969 2011315969 | 10/13/11 1/21/16 | Thoratec Corporation |
| 096205-0892381 (000220CA) | THOR-PO1077CA | CA | PUMPING BLOOD | 2,814,122 | 10/13/11 | Thoratec Corporation |

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| 096205-1022260 (000220BE) | THOR- P01077DE | DE | PUMPING BLOOD | 11774158.8 2627366 | 10/13/11 8/31/16 | Thoratec Corporation |
| 096205-0892383 (000220EP) | THOR- P01077EP | EP | PUMPING BLOOD | 11774158.8 2627366 | 10/13/11 8/31/16 | Thoratec Corporation |
| 096205-1022262 (000220FR) | THOR- P01077FR | FR | PUMPING BLOOD | 11774158.8 2627366 | 10/13/11 8/31/16 | Thoratec Corporation |
| 096205-1022261 (000220GB) | THOR- P01077GB | UK | PUMPING BLOOD | 11774158.8 2627366 | 10/13/11 8/31/16 | Thoratec Corporation |
| 096205-0892384 (000220PC) | THOR- P01077WO | PCT | PUMPING BLOOD | PCT/US2011/056217 | 10/13/11 | Thoratec Corporation |
| 096205-0892380 (000220TW) | THOR- P01077TW | TW | PUMPING BLOOD | 100137160 | 10/13/11 | Thoratec Corporation |
| 096205-0892386 (000220US) | THOR- P01077 | US | PUMPING BLOOD | 13,273,185 9,265,870 | 10/13/11 7/23/16 | Thoratec Corporation |
| 096205-1003375 (000221EP) | THOR- P01077EP2 | EP | PUMPING BLOOD | 161628334 | 10/13/11 | Thoratec Corporation |
| 096205-0966603 (000221US) | THOR- P01077C | US | PUMPING BLOOD | 14,982,960 | 12/29/15 | Thoratec Corporation |
| 096205-0896116 (000300US) | THOR- P01054A | US | MEDICAL DEVICE CONTROLLER AND ACCESSORY CARRIER | 61,115,796 | 11/18/08 | Thoratec Corporation |
| 096205-0896122 (000310AU) | THOR- P01054AU | AU | MEDICAL DEVICE ACCESSORY CARRIER | 2009316729 | 11/17/09 | Thoratec Corporation |
| 096205-0896123 (000310CA) | THOR- P01054CA | CA | MEDICAL DEVICE ACCESSORY CARRIER | 2,744,0545 | 11/17/09 | Thoratec Corporation |
| 096205-0896124 (000310EP) | THOR- P01054EP | EP | MEDICAL DEVICE ACCESSORY CARRIER | 0982811199 2358288 | 11/17/09 8/24/11 | Thoratec Corporation |
| 096205-0896121 (000310HK) | THOR- P01054HK | HK | MEDICAL DEVICE ACCESSORY CARRIER | 1110954.7 | 11/17/09 | Thoratec Corporation |
| 096205-0896127 (000310JP) | THOR- P01054JP | JP | MEDICAL DEVICE ACCESSORY CARRIER | 2011536603 2012-509109 | 11/17/09 4/19/12 | Thoratec Corporation |
| 096205-0896128 (000310PC) | THOR- P01054WO | PCT | MEDICAL DEVICE ACCESSORY CARRIER | PCT/US2009/064835 | 11/17/09 | Thoratec Corporation |
| 096205-0896129 (000310US) | THOR- P01054 | US | MEDICAL DEVICE ACCESSORY CARRIER | 12,620,306 8,807,412 | 11/17/09 8/19/14 | Thoratec Corporation |
| 096205-0896837 (000400US) | THOR- P01029 | US | IMPLANTABLE ELECTRIC AXIAL-FLOW BLOOD PUMP | 08,424,165 5,558,812 | 04/19/95 12/31/96 | Thoratec Corporation |
| 096205-0896175 (000410CA) | THOR- P01029CA | CA | IMPLANTABLE ELECTRIC AXIAL-FLOW BLOOD PUMP WITH BLOOD COOLED | 2,265,612 2,265,612 | 12/27/98 03/13/07 | Thoratec Corporation |

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| 096205-0898500 (000410DE) | THOR- P01029DE | DE | IMPLANTABLE ELECTRIC AXIAL-FLOW BLOOD PUMP WITH BLOOD COOLED BEARING | 96944908.1 69630815 | 12/27/96 11/19/03 | Thoratec Corporation |
| 096205-0896170 (000410EP) | THOR- P01029EP | EP | IMPLANTABLE ELECTRIC AXIAL-FLOW BLOOD PUMP WITH BLOOD COOLED BEARING | 96944908.1 0825451 | 12/27/96 11/19/03 | Thoratec Corporation |
| 096205-0898501 (000410ES) | THOR- P01029ES | ES | IMPLANTABLE ELECTRIC AXIAL-FLOW BLOOD PUMP WITH BLOOD COOLED BEARING | 96944908.1 0925451 | 12/27/96 11/19/03 | Thoratec Corporation |
| 096205-0898502 (000410FR) | THOR- P01029FR | FR | IMPLANTABLE ELECTRIC AXIAL-FLOW BLOOD PUMP WITH BLOOD COOLED BEARING | 96944908.1 0925451 | 12/27/96 11/19/03 | Thoratec Corporation |
| 096205-0898503 (000410GB) | THOR- P01029GB | GB | IMPLANTABLE ELECTRIC AXIAL-FLOW BLOOD PUMP WITH BLOOD COOLED BEARING | 96944908.1 0925451 | 12/27/96 11/19/03 | Thoratec Corporation |
| 096205-0898504 (000410IT) | THOR- P01029IT | IT | IMPLANTABLE ELECTRIC AXIAL-FLOW BLOOD PUMP WITH BLOOD COOLED BEARING | 96944908.1 0925451 | 12/27/96 11/19/03 | Thoratec Corporation |
| 096205-0896164 (000410JP) | THOR- P01029JP1 | JP | IMPLANTABLE ELECTRIC AXIAL-FLOW BLOOD PUMP WITH BLOOD COOLED BEARING | 10-513607 | 12/27/96 | Thoratec Corporation |
| 096205-0898515 (000410PC) | THOR- P01029XWO | PCT | IMPLANTABLE ELECTRIC AXIAL-FLOW BLOOD PUMP WITH BLOOD COOLED BEARING | PCT/US1996/0202363 | 12/27/96 | Thoratec Corporation |
| 096205-0898518 (000410US) | THOR- P01029X | US | IMPLANTABLE ELECTRIC AXIAL-FLOW BLOOD PUMP WITH BLOOD COOLED BEARING | 08/710,211 5,707,218 | 08/13/96 01/13/98 | Thoratec Corporation |
| 096205-0898517 (000411US) | THOR- P01029XC | US | IMPLANTABLE ELECTRIC AXIAL-FLOW BLOOD PUMP WITH BLOOD COOLED BEARING | 08/972,317 5,951,263 | 11/18/97 09/14/99 | Thoratec Corporation |
| 096205-0896163 (000411JP) | THOR- P01029JP2 | JP | IMPLANTABLE ELECTRIC AXIAL-FLOW BLOOD PUMP WITH BLOOD COOLED BEARING | 2008-034326 | 12/27/96 | Thoratec Corporation |
| 096205-0896126 (000412JP) | THOR- P01029JP3 | JP | IMPLANTABLE ELECTRIC AXIAL-FLOW BLOOD PUMP WITH BLOOD COOLED BEARING | 11793033.9 | 06/07/11 | Thoratec Corporation |
| 096205-0897282 (000500US) | THOR- P01075A | US | BI-VENTRICULAR PERCUTANEOUS CABLE | 61/352,087 | 6/7/10 | Thoratec Corporation |
| 096205-0897286 (000510AU) | THOR- P01075AU | AU | BI-VENTRICULAR PERCUTANEOUS CABLE | 2011265023 | 06/07/11 | Thoratec Corporation |
| 096205- | THOR- | CA | BI-VENTRICULAR | 2,801,719 | 06/07/11 | Thoratec Corporation |

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| 0897286 (000510CA) | PO1075CA | | PERCUTANEOUS CABLE | | | |
| 096205- 0897288 (000510EP) | THOR- PO1075EP | EP | BI-VENTRICULAR PERCUTANEOUS CABLE | 11793033.9 | 06/07/11 | Thoratec Corporation |
| 096205- 0897283 (000510US) | THOR- PO1075 | US | BI-VENTRICULAR PERCUTANEOUS CABLE | 13/155,009 8,388,384 | 06/07/11 03/05/13 | Thoratec Corporation |
| 096205- 0897291 (000510PC) | THOR- PO1075WQ | PCT | BI-VENTRICULAR PERCUTANEOUS CABLE | PCT/US2011/039466 | 06/07/11 | Thoratec Corporation |
| 096205- 0897290 (000510TW) | THOR- PO1075TW | TW | BI-VENTRICULAR PERCUTANEOUS CABLE | 100119848 | 06/07/11 | Thoratec Corporation |
| 096205- 0898292 (000511US) | THOR- PO1075C1 | US | BI-VENTRICULAR PERCUTANEOUS CABLE | 13/784,107 8,668,526 | 03/04/13 03/11/14 | Thoratec Corporation |
| 096205- 0897352 (000512US) | THOR- PO1075C2 | US | BI-VENTRICULAR PERCUTANEOUS CABLE | 14/153,802 | 1/13/14 | Thoratec Corporation |
| 096205- 0898664 (000600US) | THOR- PO1073A | US | CONTROLLING IMPLANTED BLOOD PUMPS | 61/366,757 | 7/22/10 | Thoratec Corporation |
| 096205- 0898661 (000610PC) | THOR- PO1073WO | PCT | CONTROLLING IMPLANTED BLOOD PUMPS | PCT/US2011/044707 | 07/20/11 | Thoratec Corporation |
| 096205- 0898665 (000610TW) | THOR- PO1073TW | TW | CONTROLLING IMPLANTED BLOOD PUMPS | 1001255856 | 07/21/11 | Thoratec Corporation |
| 096205- 0896943 (000610US) | THOR- PO1073 | US | CONTROLLING IMPLANTED BLOOD PUMPS | 13/188,510 8,721,719 | 07/22/11 08/13/14 | Thoratec Corporation |
| 096205- 0903712 (000611US) | THOR- PO1073C | US | CONTROLLING IMPLANTED BLOOD PUMPS | 14/223,029 | 03/24/14 | Thoratec Corporation |
| 096205- 0896942 (000700US) | THOR- PO1127 | US | VENTRICULAR CUFF | 13/842,578 9,199,019 | 03/15/13 12/01/15 | Thoratec Corporation |
| 096205- 0903018 (000710US) | THOR- PO1135A | US | VENTRICULAR CUFF | 61/949,113 | 3/8/14 | Thoratec Corporation |
| 096205- 0962290 (000710US) | THOR- PO1127D | US | VENTRICULAR CUFF | 14/932,699 | 11/04/15 | Thoratec Corporation |
| 096205- 0903132 (000710PC) | THOR- PO1127WO | PCT | VENTRICULAR CUFF | PCT/US2014/021389 | 3/6/14 | Thoratec Corporation |
| 096205- 0937632 (000720US) | THOR- PO1151A | US | VENTRICULAR CUFF | 62/127,262 | 3/2/15 | Thoratec Corporation |
| 096205- 1012828 (000730EP) | THOR- PO1135EP | EP | VENTRICULAR CUFF | 15757834.5 | 03/06/15 | Thoratec Corporation |
| 096205- 0938328 (000730PC) | THOR- PO1135WO | PCT | VENTRICULAR CUFF | PCT/US2015/019308 | 03/06/15 | Thoratec Corporation |
| 096205- | THOR- | US | VENTRICULAR CUFF | 14/641,164 | 03/06/15 | Thoratec Corporation |

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| 0938254 (000730US) | P01135 | | | | | |
| 096205- 0898019 (000800US) | THOR- P01060 | US | MULTI-LUMEN CANNULA | 12/469,328 8,231,519 | 5/20/09 7/31/12 | Thoratec Corporation |
| 096205- 0898008 (000810CA) | THOR- P01060CA | CA | MULTI-LUMEN CANNULA | 2,762,569 | 5/10/10 | Thoratec Corporation |
| 096205- 0896941 (000810US) | THOR- P01060C | US | MULTI-LUMEN CANNULA | 13/561,197 | 7/30/12 | Thoratec Corporation |
| 096205- 0898649 (000900US) | THOR- P01059 | US | BLOOD FLOW METER | 12/394,244 8,448,444 | 02/27/09 05/28/13 | Thoratec Corporation |
| 096205- 0898654 (000910PC) | THOR- P01059WO | PCT | BLOOD FLOW METER | PCT/US2010/025376 | 02/25/10 | Thoratec Corporation |
| 096205- 0896932 (000910US) | THOR- P01059C | US | BLOOD FLOW METER | 13/866,740 8,715,151 | 04/19/13 05/06/14 | Thoratec Corporation |
| 096205- 0898662 (001010AU) | THOR- P01061AU | AU | MONITORING OF REDUNDANT CONDUCTORS | 2010253836 2010253836 | 05/27/10 10/24/13 | Thoratec Corporation |
| 096205- 0898007 (001010CA) | THOR- P01061CA | CA | MONITORING OF REDUNDANT CONDUCTORS | 2,763,029 2,763,029 | 05/27/10 11/18/14 | Thoratec Corporation |
| 096205- 0898671 (001010DE) | THOR- P01061DE | DE | MONITORING OF REDUNDANT CONDUCTORS | 10728950.6 602010006413.1 | 05/27/10 04/17/13 | Thoratec Corporation |
| 096205- 0898667 (001010EP) | THOR- P01061EP1 | EP | MONITORING OF REDUNDANT CONDUCTORS | 10728950.6 2435105 | 05/27/10 04/17/13 | Thoratec Corporation |
| 096205- 0898670 (001010FR) | THOR- P01061FR | FR | MONITORING OF REDUNDANT CONDUCTORS | 10728950.6 2435105 | 05/27/10 04/17/13 | Thoratec Corporation |
| 096205- 0898669 (001010GB) | THOR- P01061GB | GB | MONITORING OF REDUNDANT CONDUCTORS | 10728950.6 2435105 | 05/27/10 04/17/13 | Thoratec Corporation |
| 096205- 0898666 (001010HK) | THOR- P01061HK | HK | MONITORING OF REDUNDANT CONDUCTORS | 12104857.0 HK1164180 | 05/27/10 08/16/13 | Thoratec Corporation |
| 096205- 0898674 (001010IE) | THOR- P01061IE | IE | MONITORING OF REDUNDANT CONDUCTORS | 10728950.6 2435105 | 05/27/10 04/17/13 | Thoratec Corporation |
| 096205- 0896963 (001010JP) | THOR- P01061JP1 | JP | MONITORING OF REDUNDANT CONDUCTORS | 2012-513263 5580885 | 05/27/10 07/18/14 | Thoratec Corporation |
| 096205- 0898673 (001010NL) | THOR- P01061NL | NL | MONITORING OF REDUNDANT CONDUCTORS | 10728950.6 2435105 | 05/27/10 04/17/13 | Thoratec Corporation |
| 096205- 0896672 (001010PC) | THOR- P01061WO | PCT | MONITORING OF REDUNDANT CONDUCTORS | PCT/US2010/036439 | 05/27/10 | Thoratec Corporation |
| 096205- 0898669 (001010US) | THOR- P01061 | US | MONITORING OF REDUNDANT CONDUCTORS | 12/472,812 | 05/27/09 | Thoratec Corporation |

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| 096205-0898020 (001011EP) | THOR- PO1061EP2 | EP | MONITORING OF REDUNDANT CONDUCTORS | 13157207.5 | 05/27/10 | Thoratec Corporation |
| 096205-0900089 (001011JP) | THOR- PO1061JP2 | JP | ADAPTIVE CONTROL ALGORITHMS, FLOW ESTIMATION, AND FAILURE DETECTION | 2014-034767 5833156 | 05/27/10 11/06/15 | Thoratec Corporation |
| 096205-0933523 (001011US) | THOR- PO1061C1 | US | MONITORING OF REDUNDANT CONDUCTORS | 14/719,045 | 05/21/15 | Thoratec Corporation |
| 096205-0897277 (001100US) | THOR- PO1000 | US | BLOOD PUMP AND METHOD OF PUMPING BLOOD | 05/912,033 4,222,127 | 06/02/78 09/16/80 | Thoratec Corporation |
| 096205-0897278 (001200US) | THOR- PO1001 | US | INTRA-AORTIC BALLOON | 06/128,580 4,311,133 | 03/10/80 01/19/82 | Thoratec Corporation |
| 096205-0897280 (001300CA) | THOR- PO1002CA | CA | DEVICE AND METHOD FOR FABRICATING MULTI-LAYER TUBING | 396,208 1181813 | 2/12/82 2/5/85 | Thoratec Laboratories Corporation |
| 096205-0897381 (001300DE) | THOR- PO1002DE | DE | DEVICE AND METHOD FOR FABRICATING MULTI-LAYER TUBING | P32047207 | 2/11/82 | Thoratec Corporation |
| 096205-0897335 (001300FR) | THOR- PO1002FR | FR | DEVICE AND METHOD FOR FABRICATING MULTI-LAYER TUBING | 82/02306 2499901 | 2/12/82 7/28/86 | Thoratec Corporation |
| 096205-0897334 (001300GB) | THOR- PO1002GB | GB | DEVICE AND METHOD FOR FABRICATING MULTI-LAYER TUBING | 8203811 2092944 | 2/10/82 8/21/85 | Thoratec Corporation |
| 096205-0897330 (001300JP) | THOR- PO1002JP1 | JP | DEVICE AND METHOD FOR FABRICATING MULTI-LAYER TUBING | 57-021008 1564455 | 2/12/82 6/12/90 | Thoratec Corporation |
| 096205-0897333 (001310JP) | THOR- PO1002JP2 | JP | DEVICE AND METHOD FOR FABRICATING MULTI-LAYER TUBING | 21008/1982 1564453 | 2/12/82 6/12/90 | Thoratec Corporation |
| 096205-0897279 (001300US) | THOR- PO1002 | US | DEVICE AND METHOD FOR FABRICATING MULTI-LAYER TUBING | 06/234,120 4409172 | 2/13/81 4409172 | Thoratec Corporation |
| 096205-0897341 (001400CA) | THOR- PO1003CA | CA | ARTERIAL GRAFT PROSTHESIS | 396,176 1287105 | 2/12/82 7/8/86 | Thoratec Corporation Thoratec Laboratories Corporation |
| 096205-0897437 (001400DE) | THOR- PO1003DE | DE | ARTERIAL GRAFT PROSTHESIS | P3204719.3 | 2/11/82 | Thoratec Corporation |
| 096205-0897436 (001400FR) | THOR- PO1003FR | FR | ARTERIAL GRAFT PROSTHESIS | 8202307 | 2/12/82 | Thoratec Corporation |
| 096205-0897435 (001400GB) | THOR- PO1003GB | GB | ARTERIAL GRAFT PROSTHESIS | 8202810 2092894 | 2/10/82 3/13/85 | Thoratec Corporation |
| 096205-0897434 (001400JP) | THOR- PO1003JP | JP | ARTERIAL GRAFT PROSTHESIS | 57-21007 | 2/12/82 | Thoratec Corporation |
| 096205- | THOR- | US | ARTERIAL GRAFT | 06/234,116 | 2/13/81 | Thoratec Corporation |

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| 0897344 (001400US) | PO1003 | | PROSTHESIS | 4,604,762 | 8/13/86 | |
| 096205- 0897438 (001410US) | THOR- PO1003D | US | ARTERIAL GRAFT PROSTHESIS | 06/612,997 4,731,073 | 5/21/84 3/15/88 | Thoratec Corporation |
| 096205- 0897456 (001500GB) | THOR- PO1004GB | GB | METHOD OF FORMING POLYMER MIXTURE OF LOW SURFACE FREE ENERGY | 8105685.5 GB2073219 | 2/23/81 2/27/85 | Thoratec Corporation |
| 096205- 0897452 (001600GB) | THOR- PO1005GB | GB | BLOOD COMPATIBLE POLYMER MIXTURE | 8407416 2140438 | 2/23/81 6/5/85 | Thoratec Corporation |
| 096205- 0897455 (001700GB) | THOR- PO1006GB | GB | BIOMEDICAL DEVICE WITH BLOOD- COMPATIBLE SURFACE | 8407415.2 GB2140437 | 2/23/81 6/5/85 | Thoratec Corporation |
| 096205- 0897464 (001800CA) | THOR- PO1007CA | CA | COMBINATION MEMBRANING TOOL, PACKAGE AND CALIBRATION UNIT FOR EYELID SENSOR OR THE LIKE | 401,211 1196177 | 4/19/82 11/5/85 | Thoratec Laboratories Corporation |
| 096205- 0897463 (001800DE) | THOR- PO1007DE | DE | COMBINATION MEMBRANING TOOL, PACKAGE AND CALIBRATION UNIT FOR EYELID SENSOR OR THE LIKE | P3214527.6 3214527 | 4/20/82 11/7/84 | Thoratec Corporation |
| 096205- 0897462 (001800FR) | THOR- PO1007FR | FR | COMBINATION MEMBRANING TOOL, PACKAGE AND CALIBRATION UNIT FOR EYELID SENSOR OR THE LIKE | 82/06688 8206688 | 4/19/82 12/2/85 | Thoratec Corporation |
| 096205- 0897465 (001800GB) | THOR- PO1007GB | UK | COMBINATION MEMBRANING TOOL, PACKAGE AND CALIBRATION UNIT FOR EYELID SENSOR OR THE LIKE | 8211374 2099586 | 4/20/82 7/24/85 | Thoratec Corporation |
| 096205- 0897466 (001800JP) | THOR- PO1007JP | JP | COMBINATION MEMBRANING TOOL, PACKAGE AND CALIBRATION UNIT FOR EYELID SENSOR OR THE LIKE | 66207/82 | 4/20/82 | Thoratec Corporation |
| 096205- 0897457 (001800US) | THOR- PO1007 | US | COMBINATION MEMBRANING TOOL, PACKAGE AND CALIBRATION UNIT FOR EYELID SENSOR OR THE LIKE | 06/255,682 4,454,643 | 4/20/81 6/19/84 | Thoratec Corporation |
| 096205- 0897470 (001900GB) | THOR- PO1008GB | UK | BLOCK POLYMER OF POLYALKYLSILOXANE, HARD BLOCK POLYMER AND POLYETHYLENE OXIDE POLYMER | 8407417 2140444 | 2/23/81 6/5/85 | Thoratec Corporation |
| 096205- 0897469 (002000GB) | THOR- PO1009GB | UK | FABRICATION OF TUBING | 08/203811 2092944 | 2/10/82 2/10/82 | Thoratec Corporation |
| 096205- 0900475 (002100CA) | THOR- PO1010CA | CA | PRESSURE REGULATOR | 450,186 | 3/23/84 | Thoratec Corporation |
| 096205- 0900533 (002100DE) | THOR- PO1010DE | DE | PRESSURE REGULATOR | P3411625.7 | 3/29/84 | Thoratec Corporation |
| 096205- 0900534 | THOR- PO1010FR | FR | PRESSURE REGULATOR | 846840 | 5/2/84 | Thoratec Corporation |

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| (002100FR) | | | | | | |
| 096205-0900535 (002100GB) | THOR- P01010GB | UK | PRESSURE REGULATOR | 8410063 | 4/18/84 | Thoratec Corporation |
| 096205-0900536 (002100JP) | THOR- P01010JP | JP | PRESSURE REGULATOR | 88243/84 | 5/1/84 | Thoratec Corporation |
| 096205-0897468 (002100US) | THOR- P01010 | US | PRESSURE REGULATOR | 06/490,674 | 5/3/83 | Thoratec Corporation |
| 096205-0900537 (002200US) | THOR- P01011 | US | SPLIT CARRIER FOR EYELID SENSOR AND THE LIKE | 06/454,908 4,524,776 | 10/27/83 6/25/85 | Thoratec Corporation |
| 096205-0900538 (002300FR) | THOR- P01012FR | FR | SAFETY CONTROL VALVE FOR AN ARTIFICIAL HEART | 84/10333 | 6/29/84 | Thoratec Corporation |
| 096205-0900539 (002300GB) | THOR- P01012GB | UK | SAFETY CONTROL VALVE FOR AN ARTIFICIAL HEART | 8416666 2153016 | 6/29/84 4/29/87 | Thoratec Corporation |
| 096205-0900540 (002300JP) | THOR- P01012JP | JP | SAFETY CONTROL VALVE FOR AN ARTIFICIAL HEART | 135026/84 | 6/29/84 | Thoratec Corporation |
| 096205-0900541 (002400GB) | THOR- P01013GB | UK | SEALING ARRANGEMENT FOR PISTON AND CYLINDER | 8417257 | 7/6/84 | Thoratec Corporation |
| 096205-0900543 (002500FR) | THOR- P01014FR | FR | DEVICE TO SEAL A PNEUMATIC OR HYDRAULIC PISTON | 84/10826 | 7/6/84 | Thoratec Corporation |
| 096205-0900544 (002500JP) | THOR- P01014JP | JP | DEVICE TO SEAL A PNEUMATIC OR HYDRAULIC PISTON | 104431/84 | 7/6/84 | Thoratec Corporation |
| 096205-0900542 (002500US) | THOR- P01014 | US | DEVICE TO SEAL A PNEUMATIC OR HYDRAULIC PISTON | 06/628,236 | 7/6/84 | Thoratec Corporation |
| 096205-0900545 (002600CA) | THOR- P01015CA | CA | IMPROVED SPLIT CARRIER FOR EYELID SENSOR AND THE LIKE | 466,377 | 10/26/84 | Thoratec Corporation |
| 096205-0900546 (002600DE) | THOR- P01015DE | DE | IMPROVED SPLIT CARRIER FOR EYELID SENSOR AND THE LIKE | P3439357.9 3439357 | 10/26/84 4/16/87 | Thoratec Corporation |
| 096205-0900557 (002600GB) | THOR- P01015GB | UK | IMPROVED SPLIT CARRIER FOR EYELID SENSOR AND THE LIKE | 8426456 2148718 | 10/19/84 3/11/87 | Thoratec Corporation |
| 096205-0900556 (002600JP) | THOR- P01015JP | JP | IMPROVED SPLIT CARRIER FOR EYELID SENSOR AND THE LIKE | 59-226629 1449435 | 10/27/84 7/11/88 | Thoratec Corporation |
| 096205-0900554 (002700AT) | THOR- P01016AT | AT | POLYSILOXANE-POLYLACTONE BLOCK COPOLYMERS | 86900643.7 208734 | 1/6/86 6/10/91 | Thoratec Corporation |
| 096205-0900553 (002700BE) | THOR- P01016BE | BE | POLYSILOXANE-POLYLACTONE BLOCK COPOLYMERS | 86900643.7 208734 | 1/6/86 6/10/91 | Thoratec Corporation |
| 096205-0900551 | THOR- P01016CH | CH | POLYSILOXANE-POLYLACTONE BLOCK | 86900643.7 208734 | 1/6/86 6/10/91 | Thoratec Corporation |

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| (002700CH) | | | COPOLYMERS | | | |
| 096205-0900690 (002700DE) | THOR- PD1016DE | DE | POLYSILOXANE- POLYLACTONE BLOCK COPOLYMERS | 86900643.7 208734 | 1/6/86 6/10/91 | Thoratec Corporation |
| 096205-0900689 (002700EP) | THOR- PD1016EP | EPO | POLYSILOXANE- POLYLACTONE BLOCK COPOLYMERS | 86900643.7 208734 | 1/6/86 8/10/91 | Thoratec Corporation |
| 096205-0900688 (002700FR) | THOR- PD1016FR | FR | POLYSILOXANE- POLYLACTONE BLOCK COPOLYMERS | 86900643.7 208734 | 1/6/86 6/10/91 | Thoratec Corporation |
| 096205-0900688 (002700GB) | THOR- PD1016GB | UK | POLYSILOXANE- POLYLACTONE BLOCK COPOLYMERS | 86900643.7 208734 | 1/6/86 6/10/91 | Thoratec Corporation |
| 096205-0900692 (002700IT) | THOR- PD1016IT | IT | POLYSILOXANE- POLYLACTONE BLOCK COPOLYMERS | 86900643.7 208734 | 1/6/86 6/10/91 | Thoratec Corporation |
| 096205-0900693 (002700LU) | THOR- PD1016LU | LU | POLYSILOXANE- POLYLACTONE BLOCK COPOLYMERS | 86900643.7 208734 | 1/6/86 6/10/91 | Thoratec Corporation |
| 096205-0900694 (002700NL) | THOR- PD1016NL | NL | POLYSILOXANE- POLYLACTONE BLOCK COPOLYMERS | 86900643.7 208734 | 1/6/86 6/10/91 | Thoratec Corporation |
| 096205-0900474 (002700SE) | THOR- PD1016SE | SE | POLYSILOXANE- POLYLACTONE BLOCK COPOLYMERS | 86900643.7 208734 | 1/6/86 6/10/91 | Thoratec Corporation |
| 096205-0900555 (002700US) | THOR- PD1016 | US | POLYSILOXANE- POLYLACTONE BLOCK COPOLYMERS | 06/688,788 4,663,413 | 1/4/85 5/5/87 | Thoratec Corporation |
| 096205-0900562 (002710US) | THOR- PD1016C | US | POLYSILOXANE- POLYLACTONE BLOCK COPOLYMERS | 07/290,822 4,963,595 | 12/22/88 10/16/90 | Thoratec Corporation |
| 096205-0900550 (002720US) | THOR- PD1016D | US | POLYSILOXANE- POLYLACTONE BLOCK COPOLYMERS | 07/575,961 5,235,003 | 8/31/90 8/10/93 | Thoratec Corporation |
| 096205-0900476 (002800EP) | THOR- PD1017EP | EPO | METHOD FOR MAKING AN ARTICLE WITH SHAPE-MEMORY PROPERTIES AND SOME OF THE THUS OBTAINED ARTICLES | 90123938.4 422693 | 1/8/85 | Thoratec Corporation |
| 096205-0900507 (002900US) | THOR- PD1018 | US | POLYSILOXANE/POLY (OXAZOLINE) COPOLYMERS | 06/802,753 4,659,777 | 11/27/85 4/21/87 | Thoratec Corporation |
| 096205-0900504 (003000AU) | THOR- PD1018AU1 | AU | POLYMER SURFACES FOR BLOOD-CONTACTING SURFACES OF A BIOMEDICAL DEVICE, AND METHODS FOR FORMING | 67551/81 548194 | 2/23/81 1/4/86 | Thoratec Corporation |
| 096205-0900514 (003000CA) | THOR- PD1019CA1 | CA | POLYMER SURFACES FOR BLOOD-CONTACTING SURFACES OF A BIOMEDICAL DEVICE, AND METHODS FOR FORMING | 371,214 1206668 | 2/18/81 6/24/86 | Thoratec Corporation |
| 096205-0900520 | THOR- PD1019DE1 | DE | POLYMER SURFACES FOR BLOOD-CONTACTING | P3153664.6 3153664 | 2/27/81 10/25/86 | Thoratec Corporation |

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| (003000DE) | | | SURFACES OF A BIOMEDICAL DEVICE, AND METHODS FOR FORMING | | | |
| 096205-0900522 (003000FR) | THOR- PD1019FR1 | FR | POLYMER SURFACES FOR BLOOD-CONTACTING SURFACES OF A BIOMEDICAL DEVICE, AND METHODS FOR FORMING | 81/03961 2491838 | 2/25/81 12/27/90 | Thoratec Corporation |
| 096205-0900524 (003000JP) | THOR- PD1019JP | JP | POLYMER SURFACES FOR BLOOD-CONTACTING SURFACES OF A BIOMEDICAL DEVICE, AND METHODS FOR FORMING | 26707/81 1595456 | 2/25/81 12/27/90 | Thoratec Corporation |
| 096205-0900506 (003000US) | THOR- PD1019 | US | POLYMER SURFACES FOR BLOOD-CONTACTING SURFACES OF A BIOMEDICAL DEVICE, AND METHODS FOR FORMING | 06/125,845 | 2/23/80 | Thoratec Corporation |
| 096205-0900499 (003010AU) | THOR- PD1019AU2 | AU | POLYMER SURFACES FOR BLOOD-CONTACTING SURFACES OF A BIOMEDICAL DEVICE, AND METHODS FOR FORMING | 47454/85 | 9/13/85 | Thoratec Corporation |
| 096205-0900518 (003010CA) | THOR- PD1019CA2 | CA | POLYMER SURFACES FOR BLOOD-CONTACTING SURFACES OF A BIOMEDICAL DEVICE, AND METHODS FOR FORMING | 473726 1213878 | 2/7/85 9/23/86 | Thoratec Corporation |
| 096205-0900521 (003010DE) | THOR- PD1019DE2 | DE | POLYMER SURFACES FOR BLOOD-CONTACTING SURFACES OF A BIOMEDICAL DEVICE, AND METHODS FOR FORMING | P3107542.8 3107542 | 2/27/81 3/7/96 | Thoratec Corporation |
| 096205-0900523 (003010FR) | THOR- PD1019FR2 | FR | POLYMER SURFACES FOR BLOOD-CONTACTING SURFACES OF A BIOMEDICAL DEVICE, AND METHODS FOR FORMING | 82/10981 2487317 | 2/27/81 5/23/86 | Thoratec Corporation |
| 096205-0900512 (003010US) | THOR- PD1019C1 | US | POLYMER SURFACES FOR BLOOD-CONTACTING SURFACES OF A BIOMEDICAL DEVICE, AND METHODS FOR FORMING | 06/278,664 | 6/29/81 | Thoratec Corporation |
| 096205-0900513 (003011US) | THOR- PD1019C2 | US | POLYMER SURFACES FOR BLOOD-CONTACTING SURFACES OF A BIOMEDICAL DEVICE, AND METHODS FOR FORMING | 06/385,813 | 6/7/82 | Thoratec Corporation |

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| 096205-0900526 (003012US) | THOR- P01019X1 | US | POLYMER SURFACES FOR BLOOD-CONTACTING SURFACES OF A BIOMEDICAL DEVICE, AND METHODS FOR FORMING | 06/472,189 | 3/4/83 | Thoratec Corporation |
| 096205-0900527 (003013US) | THOR- P01019X2 | US | POLYMER SYSTEMS SUITABLE FOR BLOOD-CONTACTING SURFACES OF A BIOMEDICAL DEVICE AND METHODS FOR FORMING | 06/507,517 4,675,361 | 6/24/83 6/23/87 | Thoratec Corporation |
| 096205-0900502 (003014US) | THOR- P01019C | US | POLYMER SYSTEMS SUITABLE FOR BLOOD-CONTACTING SURFACES OF A BIOMEDICAL DEVICE AND METHODS FOR FORMING | 07/065,418 4,861,830 | 6/22/87 8/29/87 | Thoratec Corporation |
| 096205-0900519 (003020CA) | THOR- P01019CA3 | CA | POLYMER SYSTEMS SUITABLE FOR BLOOD-CONTACTING SURFACES OF A BIOMEDICAL DEVICE AND METHODS FOR FORMING | 473,993 1,361,987 | 2/11/85 9/26/89 | Thoratec Corporation |
| 096205-0900649 (003100AT) | THOR- P01020AT | AT | HYDROXYL-FUNCTIONAL DISILOXANES AND POLYSILOXANE OLIGOMERS | 87305103.1 294525 | 6/9/87 2/17/93 | Thoratec Corporation |
| 096205-0900650 (003100BE) | THOR- P01020BE | BE | HYDROXYL-FUNCTIONAL DISILOXANES AND POLYSILOXANE OLIGOMERS | 87305103.1 294525 | 6/9/87 2/17/93 | Thoratec Corporation |
| 096205-0900615 (003100CA) | THOR- P01020CA | CA | HYDROXYL-FUNCTIONAL DISILOXANES AND POLYSILOXANE OLIGOMERS | 538,942 1337908 | 1/5/87 1/9/96 | Thoratec Corporation |
| 096205-0900652 (003100CH) | THOR- P01020CH | CH | HYDROXYL-FUNCTIONAL DISILOXANES AND POLYSILOXANE OLIGOMERS | 87305103.1 294525 | 6/9/87 2/17/93 | Thoratec Corporation |
| 096205-0900653 (003100DE) | THOR- P01020DE | DE | HYDROXYL-FUNCTIONAL DISILOXANES AND POLYSILOXANE OLIGOMERS | 87305103.1 294525 | 6/9/87 2/17/93 | Thoratec Corporation |
| 096205-0900695 (003100EP) | THOR- P01020EP | EP | HYDROXYL-FUNCTIONAL DISILOXANES AND POLYSILOXANE OLIGOMERS | 87305103.1 294525 | 6/9/87 2/17/93 | Thoratec Corporation |
| 096205-0900660 (003100ES) | THOR- P01020ES | ES | HYDROXYL-FUNCTIONAL DISILOXANES AND POLYSILOXANE OLIGOMERS | 87305103.1 294525 | 6/9/87 2/17/93 | Thoratec Corporation |
| 096205-0900658 (003100FR) | THOR- P01020FR | FR | HYDROXYL-FUNCTIONAL DISILOXANES AND POLYSILOXANE OLIGOMERS | 87305103.1 294525 | 6/9/87 2/17/93 | Thoratec Corporation |
| 096205-0900659 | THOR- P01020GB | GB | HYDROXYL-FUNCTIONAL DISILOXANES AND | 87305103.1 294525 | 6/9/87 2/17/93 | Thoratec Corporation |

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| (093100GB) | | | POLYSILOXANE OLIGOMERS | | | |
| 096205-0900662 (003100GR) | THOR-PO1020GR | GR | HYDROXYL-FUNCTIONAL DISILOXANES AND POLYSILOXANE OLIGOMERS | 87305103.1 294525 | 6/9/87 2/17/93 | Thoratec Corporation |
| 096205-0900683 (003100IT) | THOR-PO1020IT | IT | HYDROXYL-FUNCTIONAL DISILOXANES AND POLYSILOXANE OLIGOMERS | 87305103.1 294525 | 6/9/87 2/17/93 | Thoratec Corporation |
| 096205-0900684 (003100LU) | THOR-PO1020LU | LU | HYDROXYL-FUNCTIONAL DISILOXANES AND POLYSILOXANE OLIGOMERS | 87305103.1 294525 | 6/9/87 2/17/93 | Thoratec Corporation |
| 096205-0900685 (003100NL) | THOR-PO1020NL | NL | HYDROXYL-FUNCTIONAL DISILOXANES AND POLYSILOXANE OLIGOMERS | 87305103.1 294525 | 6/9/87 2/17/93 | Thoratec Corporation |
| 096205-0900686 (003100SE) | THOR-PO1020SE | SE | HYDROXYL-FUNCTIONAL DISILOXANES AND POLYSILOXANE OLIGOMERS | 87305103.1 294525 | 6/9/87 2/17/93 | Thoratec Corporation |
| 096205-0900529 (003100US) | THOR-PO1020 | US | HYDROXYL-FUNCTIONAL DISILOXANES AND POLYSILOXANE OLIGOMERS | 06/840,843 4,689,383 | 3/18/86 8/25/87 | Thoratec Corporation |
| 096205-0900713 (003300CA) | THOR-PO1023CA | CA | MOISTURE VAPOR PERMEABLE MATERIALS | 4781,762 1,257,425 | 5/17/85 7/11/89 | Thoratec Corporation |
| 096205-0900719 (003300CH) | THOR-PO1022CH | CH | MOISTURE VAPOR PERMEABLE MATERIALS CONTAINING SEGMENTED BLOCK MULTIPOLYMER | 85902854 183790 | 5/21/85 9/11/91 | Thoratec Corporation |
| 096205-0900717 (003300DE) | THOR-PO1022DE | DE | MOISTURE VAPOR PERMEABLE MATERIALS CONTAINING SEGMENTED BLOCK MULTIPOLYMER | 85902854 183790 | 5/21/85 9/11/91 | Thoratec Corporation |
| 096205-0900718 (003300EP) | THOR-PO1022EP | EPO | MOISTURE VAPOR PERMEABLE MATERIALS CONTAINING SEGMENTED BLOCK MULTIPOLYMER | 85902854 183790 | 5/21/85 9/11/91 | Thoratec Corporation |
| 096205-0900723 (003300FR) | THOR-PO1023FR | FR | MOISTURE VAPOR PERMEABLE MATERIALS CONTAINING SEGMENTED BLOCK MULTIPOLYMER | 85902854 183790 | 5/21/85 9/11/91 | Thoratec Corporation |
| 096205-0900721 (003300GB) | THOR-PO1022GB | GB | MOISTURE VAPOR PERMEABLE MATERIALS CONTAINING SEGMENTED BLOCK MULTIPOLYMER | 85902854 183790 | 5/21/85 9/11/91 | Thoratec Corporation |
| 096205-0900722 (003300IT) | THOR-PO1022IT | IT | MOISTURE VAPOR PERMEABLE MATERIALS CONTAINING SEGMENTED BLOCK | 85902854 183790 | 5/21/85 9/11/91 | Thoratec Corporation |

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| 096205-0900729 (003300JP) | THOR- PO1022JP | JP | MULTIPOLYMER MOISTURE VAPOR PERMEABLE MATERIALS CONTAINING SEGMENTED BLOCK MULTIPOLYMER | 60-52262 1801722 183790 | 5/21/85 11/13/93 | Thoratec Corporation |
| 096205-0900728 (003300LU) | THOR- PO1022LU | LU | MULTIPOLYMER MOISTURE VAPOR PERMEABLE MATERIALS CONTAINING SEGMENTED BLOCK MULTIPOLYMER | 85902854 183790 | 5/21/85 9/11/91 | Thoratec Corporation |
| 096205-0900727 (003300NL) | THOR- PO1022NL | NL | MULTIPOLYMER MOISTURE VAPOR PERMEABLE MATERIALS CONTAINING SEGMENTED BLOCK MULTIPOLYMER | 85902854 183790 | 5/21/85 9/11/91 | Thoratec Corporation |
| 096205-0900726 (003300SE) | THOR- PO1022SE | SE | MULTIPOLYMER MOISTURE VAPOR PERMEABLE MATERIALS CONTAINING SEGMENTED BLOCK MULTIPOLYMER | 85902854 183790 | 5/21/85 9/11/91 | Thoratec Corporation |
| 096205-0900712 (003310US) | THOR- PO1022C1 | US | MULTIPOLYMER MOISTURE VAPOR PERMEABLE MATERIALS CONTAINING SEGMENTED BLOCK MULTIPOLYMER | 07/040,557 4,686,137 | 4/17/87 8/11/87 | Thoratec Laboratories Corp. |
| 096205-0900699 (003400CA) | THOR- PO1023CA | CA | MAGNETICALLY SUSPENDED ROTOR AXIAL FLOW BLOOD PUMP | 563,754 1323467 | 4/11/88 10/26/93 | Thoratec Corporation |
| 096205-0900697 (003400US) | THOR- PO1023 | US | MAGNETICALLY SUSPENDED ROTOR AXIAL FLOW BLOOD PUMP | 07/036,304 4,779,614 | 4/5/87 10/25/88 | Thoratec Corporation |
| 096205-0900707 (003500AU) | THOR- PO1024AU | AU | METHOD FOR MODIFYING POLYMER SURFACES WITH SURFACE-ACTIVE POLYMER BLOCKS TETHERED TO NON- SURFACE-ACTIVE COMPONENTS | 73870/87 | 6/5/87 | Thoratec Corporation |
| 096205-0900704 (003500CA) | THOR- PO1024CA | CA | METHOD FOR MODIFYING POLYMER SURFACES WITH SURFACE-ACTIVE POLYMER BLOCKS TETHERED TO NON- SURFACE-ACTIVE COMPONENTS | 538,945 | 6/5/87 | Thoratec Corporation |
| 096205-0900702 (003500EP) | THOR- PO1024EP | EPO | METHOD FOR MODIFYING POLYMER SURFACES WITH SURFACE-ACTIVE POLYMER BLOCKS TETHERED TO NON- SURFACE-ACTIVE COMPONENTS | 87305012.4 | 6/5/87 | Thoratec Corporation |

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| 096205-0900706 (003500JP) | THOR- P01024JP | JP | METHOD FOR MODIFYING POLYMER SURFACES WITH SURFACE-ACTIVE POLYMER BLOCKS TETHERED TO NON-SURFACE-ACTIVE COMPONENTS | 141291/87 | 6/5/87 | Thoratec Corporation |
| 096205-0900705 (003500US) | THOR- P01024C | US | METHOD FOR MODIFYING POLYMER SURFACES WITH SURFACE-ACTIVE POLYMER BLOCKS TETHERED TO NON-SURFACE-ACTIVE COMPONENTS | 07/357,672 | 5/25/89 | Thoratec Corporation |
| 096205-0900710 (003600US) | THOR- P01026 | US | CHRONIC VENTRICULAR ASSIST SYSTEM | 07/229,624 4,908,012 | 8/8/88 3/13/90 | Thoratec Corporation |
| 096205-0900709 (003700US) | THOR- P01027 | US | BRaille MOUSE | 07/701,458 5,195,894 | 5/15/91 3/23/93 | Thoratec Corporation |
| 096205-0900778 (003800CA) | THOR- P01030CA1 | CA | SURFACE-MODIFYING COPOLYMERS HAVING CELL ADHESION PROPERTIES | 2,197,000 2,197,000 | 5/22/96 10/21/03 | Thoratec Corporation |
| 096205-0900800 (003800DE) | THOR- P01030DE | DE | SURFACE-MODIFYING COPOLYMERS HAVING CELL ADHESION PROPERTIES | 96914755.2 69612267.7 | 5/22/96 3/28/01 | Thoratec Corporation |
| 096205-0900800 (003800EP) | THOR- P01030EP1 | EPO | SURFACE-MODIFYING COPOLYMERS HAVING CELL ADHESION PROPERTIES | 96914755.2 | 2/1/97 | Thoratec Corporation |
| 096205-0900796 (003800ES) | THOR- P01030ES | ES | SURFACE-MODIFYING COPOLYMERS HAVING CELL ADHESION PROPERTIES | 96914755.2 779815 | 5/22/96 3/28/01 | Thoratec Corporation |
| 096205-09007967 (003800FR) | THOR- P01030FR | FR | SURFACE-MODIFYING COPOLYMERS HAVING CELL ADHESION PROPERTIES | 96914755.2 779815 | 5/22/96 3/28/01 | Thoratec Corporation |
| 096205-0900799 (003800GB) | THOR- P01030GB | UK | SURFACE-MODIFYING COPOLYMERS HAVING CELL ADHESION PROPERTIES | 96914755.2 779815 | 5/22/96 3/28/01 | Thoratec Corporation |
| 096205-0900798 (003800IT) | THOR- P01030IT | IT | SURFACE-MODIFYING COPOLYMERS HAVING CELL ADHESION PROPERTIES | 96914755.2 779815 | 5/22/96 3/28/01 | Thoratec Corporation |
| 096205-0900802 (003800JP) | THOR- P01030JP | JP | SURFACE-MODIFYING COPOLYMERS HAVING CELL ADHESION PROPERTIES | 9-500687 | 5/22/96 | Thoratec Corporation |
| 096205-0900801 (003800PC) | THOR- P01030WO | PCT | SURFACE-MODIFYING COPOLYMERS HAVING CELL ADHESION PROPERTIES | PCT/US96/007500 | 5/22/96 | Thoratec Corporation |

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| 096205-0900781 (003800U5) | THOR-PO1030 | US | SURFACE-MODIFYING COPOLYMERS HAVING CELL ADHESION PROPERTIES | 08/467,604 5,733,538 | 6/7/95 3/31/98 | Thoratec Corporation |
| 096205-0900810 (003900AT) | THOR-PO1032AT | AT | SPEED CONTROL SYSTEM FOR IMPLANTED BLOOD PUMPS | 97912412 877633 | 10/31/97 07/20/05 | Thoratec Corporation |
| 096205-0900815 (003900AU) | THOR-PO1032AU | AU | SPEED CONTROL SYSTEM FOR IMPLANTED BLOOD PUMPS | 49631/97 713592 | 10/31/97 3/23/00 | Thoratec Corporation |
| 1096205-0900839 (003900BE) | THOR-PO1032BE | BE | SPEED CONTROL SYSTEM FOR IMPLANTED BLOOD PUMPS | 97912412 877633 | 10/31/97 07/20/05 | Thoratec Corporation |
| 096205-0900842 (003900CA) | THOR-PO1032CA | CA | SPEED CONTROL SYSTEM FOR IMPLANTED BLOOD PUMPS | 2,241,888 2241888 | 10/31/97 9/11/01 | Thoratec Corporation |
| 096205-0900838 (003900CH) | THOR-PO1032CH | CH | SPEED CONTROL SYSTEM FOR IMPLANTED BLOOD PUMPS | 97912412 0877633 | 10/31/97 07/20/05 | Thoratec Corporation |
| 096205-0900842 (003900DE) | THOR-PO1032DE | DE | SPEED CONTROL SYSTEM FOR IMPLANTED BLOOD PUMPS | 97912412 0877633 | 10/31/97 07/20/05 | Thoratec Corporation |
| 096205-0900843 (003900DK) | THOR-PO1032DK | DK | SPEED CONTROL SYSTEM FOR IMPLANTED BLOOD PUMPS | 97912412 0877633 | 10/31/97 07/20/05 | Thoratec Corporation |
| 096205-0900844 (003900EP) | THOR-PO1032EP | EP | SPEED CONTROL SYSTEM FOR IMPLANTED BLOOD PUMPS | 97912412 0877633 | 10/31/97 07/20/05 | Thoratec Corporation |
| 096205-0900845 (003900ES) | THOR-PO1032ES | ES | SPEED CONTROL SYSTEM FOR IMPLANTED BLOOD PUMPS | 97912412.0 0877633 | 10/31/97 07/20/05 | Thoratec Corporation |
| 096205-0900846 (003900FI) | THOR-PO1032FI | FI | SPEED CONTROL SYSTEM FOR IMPLANTED BLOOD PUMPS | 97912412.0 0877633 | 10/31/97 07/20/05 | Thoratec Corporation |
| 096205-0900848 (003900FR) | THOR-PO1032FR | FR | SPEED CONTROL SYSTEM FOR IMPLANTED BLOOD PUMPS | 97912412.0 0877633 | 10/31/97 07/20/05 | Thoratec Corporation |
| 096205-0900847 (003900GB) | THOR-PO1032GB | GB | SPEED CONTROL SYSTEM FOR IMPLANTED BLOOD PUMPS | 97912412.0 0877633 | 10/31/97 07/20/05 | Thoratec Corporation |
| 096205-0900849 (003900GR) | THOR-PO1032GR | GR | SPEED CONTROL SYSTEM FOR IMPLANTED BLOOD PUMPS | 97912412.0 0877633 | 10/31/97 07/20/05 | Thoratec Corporation |
| 096205-0900850 (003900IE) | THOR-PO1032IE | IE | SPEED CONTROL SYSTEM FOR IMPLANTED BLOOD PUMPS | 97912412.0 0877633 | 10/31/97 07/20/05 | Thoratec Corporation |
| 096205-0900851 (003900IT) | THOR-PO1032IT | IT | SPEED CONTROL SYSTEM FOR IMPLANTED BLOOD PUMPS | 97912412.0 0877633 | 10/31/97 07/20/05 | Thoratec Corporation |
| 096205-0900852 (003900JP) | THOR-PO1032JP | JP | SPEED CONTROL SYSTEM FOR IMPLANTED BLOOD PUMPS | 97912412.0 0877633 | 10/31/97 07/20/05 | Thoratec Corporation |
| 096205-0900853 (003900NL) | THOR-PO1032NL | NL | SPEED CONTROL SYSTEM FOR IMPLANTED BLOOD PUMPS | 97912412.0 0877633 | 10/31/97 07/20/05 | Thoratec Corporation |
| 096205-0900856 | THOR-PO1032PT | PT | SPEED CONTROL SYSTEM FOR IMPLANTED BLOOD | 97912412.0 0877633 | 10/31/97 07/20/05 | Thoratec Corporation |

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| (003900PT) | | | PUMPS | | | | |
| 096205-0900857 (003900SE) | THOR- P01032SE | SE | SPEED CONTROL SYSTEM FOR IMPLANTED BLOOD PUMPS | 97912412.0 0877633 | 10/31/97 07/20/05 | Thoratec Corporation | |
| 096205-0900809 (003900US) | THOR- P01032 | US | SPEED CONTROL SYSTEM FOR IMPLANTED BLOOD PUMPS | 08/740,749 5,888,242 | 11/01/96 03/30/99 | Thoratec Corporation | |
| 096205-0900858 (003910US) | THOR- P01032X | US | SPEED CONTROL SYSTEM FOR IMPLANTED BLOOD PUMPS | 09/034,674 6,066,086 | 03/04/98 05/23/00 | Thoratec Corporation | |
| 096205-0900918 (004100PC) | THOR- P01034WO | PCT | SEALED MOTOR STATOR ASSEMBLY FOR IMPLANTABLE BLOOD PUMP | PCT/US99/008122 | 3/26/99 | Thoratec Corporation | |
| 096205-0900919 (004100US) | THOR- P01034 | US | SEALED MOTOR STATOR ASSEMBLY FOR IMPLANTABLE BLOOD PUMP | 09/050,782 | 3/30/98 | Thoratec Corporation | |
| 096205-0900923 (004200PC) | THOR- P01035 | US | MOTOR ROTOR BEARING ASSEMBLY FOR A BLOOD PUMP | 09/237,721 6,186,665 | 01/26/99 02/13/01 | Thoratec Corporation | |
| 096205-0900920 (004200US) | THOR- P01035WO | PCT | MOTOR ROTOR BEARING ASSEMBLY FOR A BLOOD PUMP | PCT/US00/001658 | 1/24/00 | Thoratec Corporation | |
| 096205-0900920 (004300PC) | THOR- P01036WO | PCT | BLOOD PUMP WITH PROFILED OUTFLOW REGION | PCT/US00/001660 | 1/24/00 | Thoratec Corporation | |
| 096205-0900935 (004300US) | THOR- P01036 | US | BLOOD PUMP WITH PROFILED OUTFLOW REGION | 09/237,724 6,123,659 | 1/26/99 9/26/00 | Thoratec Corporation | |
| 096205-0900938 (004400CA) | THOR- P01037CA | CA | ARTICULATED MOTOR STATOR ASSEMBLY FOR A PUMP | 2,361,347 | 1/24/00 | Thoratec Corporation | |
| 096205-0900939 (004400EP) | THOR- P01037EP | EPD | ARTICULATED MOTOR STATOR ASSEMBLY FOR A PUMP | 0968365.0 2,361,347 | 1/24/00 | Thoratec Corporation | |
| 096205-0900941 (004400JP) | THOR- P01037JP | JP | ARTICULATED MOTOR STATOR ASSEMBLY FOR A PUMP | 2000-595061 | 1/24/00 | Thoratec Corporation | |
| 096205-0900937 (004400US) | THOR- P01037 | US | ARTICULATED MOTOR STATOR ASSEMBLY FOR A PUMP | 09/237,731 6,018,208 | 1/26/99 1/25/00 | Thoratec Corporation | |
| 096205-0900942 (004500US) | THOR- P01038 | US | INLINE CABLE CONNECTOR | 09/250,130 6,305,962 | 02/16/99 10/23/01 | Thoratec Corporation | |
| 096205-0900951 (004800DE) | THOR- P01041DE | DE | TRANSCUTANEOUS ENERGY TRANSFER WITH CIRCUITRY ARRANGED TO AVOID OVERHEATING | 01935288.9 60143519.2 | 05/10/01 11/24/10 | Thoratec Corporation | |
| 096205-0900950 (004800EP) | THOR- P01041EP | EP | TRANSCUTANEOUS ENERGY TRANSFER WITH CIRCUITRY ARRANGED TO AVOID OVERHEATING | 01935288.9 1280581 | 05/10/01 11/24/10 | Thoratec Corporation | |
| 096205-0900952 (004800FR) | THOR- P01041FR | FR | TRANSCUTANEOUS ENERGY TRANSFER WITH CIRCUITRY ARRANGED TO AVOID OVERHEATING | 01935288.9 1280581 | 05/10/01 11/24/10 | Thoratec Corporation | |

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| 096205-0900953 (004800GB) | THOR- PD1041GB | GB | TRANSCUTANEOUS ENERGY TRANSFER WITH CIRCUITRY ARRANGED TO AVOID OVERHEATING | 01935288.9 1280581 | 05/10/01 11/24/10 | Thoratec Corporation |
| 096205-0900954 (004800IT) | THOR- PD1041IT | IT | TRANSCUTANEOUS ENERGY TRANSFER WITH CIRCUITRY ARRANGED TO AVOID OVERHEATING | 01935288.9 1280581 | 05/10/01 11/24/10 | Thoratec Corporation |
| 096205-0900949 (004800PC) | THOR- PD1041WQ | PCT | TRANSCUTANEOUS ENERGY TRANSFER WITH CIRCUITRY ARRANGED TO AVOID OVERHEATING | PCT/US2001/015152 | 05/10/01 | Thoratec Corporation |
| 096205-0900945 (004800US) | THOR- PD1041 | US | TRANSCUTANEOUS ENERGY TRANSFER WITH CIRCUITRY ARRANGED TO AVOID OVERHEATING | 09/567,942 6,327,504 | 05/10/00 12/04/01 | Thoratec Corporation |
| 096205-0900946 (004810US) | THOR- PD1041C | US | TRANSCUTANEOUS ENERGY TRANSFER WITH CIRCUITRY ARRANGED TO AVOID OVERHEATING | 10/004,731 | 12/4/01 | Thoratec Corporation |
| 096205-0900957 (004900DE) | THOR- PD1047DE | DE | ADAPTIVE SPEED CONTROL FOR BLOOD PUMP | 03008903.1 60306012.8 | 04/16/03 06/14/06 | Thoratec Corporation |
| 096205-0900956 (004900EP) | THOR- PD1047EP | EP | ADAPTIVE SPEED CONTROL FOR BLOOD PUMP | 03008903.1 1354606 | 04/16/03 06/14/06 | Thoratec Corporation |
| 096205-0900958 (004900ES) | THOR- PD1047ES | ES | ADAPTIVE SPEED CONTROL FOR BLOOD PUMP | 03008903.1 1354606 | 04/16/03 06/14/06 | Thoratec Corporation |
| 096205-0900959 (004900FR) | THOR- PD1047FR | FR | ADAPTIVE SPEED CONTROL FOR BLOOD PUMP | 03008903.1 1354606 | 04/16/03 06/14/06 | Thoratec Corporation |
| 096205-0900960 (004900GB) | THOR- PD1047GB | GB | ADAPTIVE SPEED CONTROL FOR BLOOD PUMP | 03008903.1 1354606 | 04/16/03 06/14/06 | Thoratec Corporation |
| 096205-0900961 (004900IT) | THOR- PD1047IT | IT | ADAPTIVE SPEED CONTROL FOR BLOOD PUMP | 03008903.1 1354606 | 04/16/03 06/14/06 | Thoratec Corporation |
| 096205-0900955 (004900US) | THOR- PD1047 | US | ADAPTIVE SPEED CONTROL FOR BLOOD PUMP | 10/125,943 6,991,595 | 04/19/02 01/31/06 | Thoratec Corporation |
| 096205-0898545 (005000US) | THOR- PD1048A | US | UNIVERSAL PUMP CONNECTOR | 60/396,630 | 7/19/02 | Thoratec Corporation |
| 096205-0898547 (005100AU) | THOR- PD1049AU | AU | TRANSMISSION OF INFORMATION FROM AN IMPLANTED MEDICAL DEVICE | 2003265530 2003265530 | 08/19/03 02/29/08 | Thoratec Corporation |
| 096205-0898548 (005100CA) | THOR- PD1049CA1 | CA | TRANSMISSION OF INFORMATION FROM AN IMPLANTED MEDICAL DEVICE | 2,495,819 2,495,819 | 08/19/03 08/13/13 | Thoratec Corporation |
| 096205-0898018 (005100EP) | THOR- PD1049EP | EP | TRANSMISSION OF INFORMATION FROM AN IMPLANTED MEDICAL DEVICE | 03793176.3 | 08/19/03 | Thoratec Corporation |
| 096205- | THOR- | JP | TRANSMISSION OF | 2004-531136 | 08/19/03 | Thoratec Corporation |

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| 0898550 (005100JP) | PO1049JP | | INFORMATION FROM AN IMPLANTED MEDICAL DEVICE | 4689270 | 02/25/11 | |
| 096205-0898551 (005100PC) | THOR-PO1049WO | PCT | TRANSMISSION OF INFORMATION FROM AN IMPLANTED MEDICAL DEVICE | PCT/US2003/026086 | 8/19/03 | Thoratec Corporation |
| 096205-0898546 (005100US) | THOR-PO1049 | US | TRANSMISSION OF INFORMATION FROM AN IMPLANTED MEDICAL DEVICE | 10/224,118 6,772,011 | 08/20/02 08/03/04 | Thoratec Corporation |
| 096205-0898549 (005110CA) | THOR-PO1049CA2 | CA | TRANSMISSION OF INFORMATION FROM AN IMPLANTED MEDICAL DEVICE | 2,817,934 | 08/19/03 | Thoratec Corporation |
| 096205-0897412 (005200CA) | THOR-PO1052CA | CA | HEART PUMP CONNECTOR | 2,574,840 | 7/12/05 | Thoratec Corporation |
| 096205-0897411 (005200EP) | THOR-PO1052EP | EP | HEART PUMP CONNECTOR | 05771142.6 | 7/12/05 | Thoratec Corporation |
| 096205-0897415 (005200PC) | THOR-PO1052WO | PCT | HEART PUMP CONNECTOR | PCT/US2005/024751 | 07/12/05 | Thoratec Corporation |
| 096205-0897408 (005200US) | THOR-PO1052 | US | HEART PUMP CONNECTOR | 10/897,311 7,824,358 | 07/22/04 11/02/10 | Thoratec Corporation |
| 096205-0898553 (005300AU) | THOR-PO1055AU | AU | PREVENTION OF AORTIC VALVE FUSION | 2010217864 2010217864 | 02/26/10 10/03/13 | Thoratec Corporation |
| 096205-0898022 (005300CA) | THOR-PO1055CA | CA | PREVENTION OF AORTIC VALVE FUSION | 2,753,728 | 2/26/10 | Thoratec Corporation |
| 096205-0898554 (005300CN) | THOR-PO1055CN | CN | PREVENTION OF AORTIC VALVE FUSION | 201080015093.5 | 2/26/10 | Thoratec Corporation |
| 096205-0903065 (005300DE) | THOR-PO1055DE | DE | PREVENTION OF AORTIC VALVE FUSION | 10706119.4 2401002 | 02/26/10 04/09/14 | Thoratec Corporation |
| 096205-0898005 (005300EP) | THOR-PO1055EP | EP | PREVENTION OF AORTIC VALVE FUSION | 10706119.4 2401002 | 02/26/10 04/09/14 | Thoratec Corporation |
| 096205-0903066 (005300FR) | THOR-PO1055FR | FR | PREVENTION OF AORTIC VALVE FUSION | 10706119.4 2401002 | 02/26/10 04/09/14 | Thoratec Corporation |
| 096205-0903067 (005300GB) | THOR-PO1055GB | GB | PREVENTION OF AORTIC VALVE FUSION | 10706119.4 2401002 | 02/26/10 04/09/14 | Thoratec Corporation |
| 096205-0898555 (005300HK) | THOR-PO1055HK | HK | PREVENTION OF AORTIC VALVE FUSION | 12105727.5 | 2/26/10 | Thoratec Corporation |
| 096205-0898568 (005300IN) | THOR-PO1055IN | IN | PREVENTION OF AORTIC VALVE FUSION | 6836/DELNPO/2011 | 2/26/10 | Thoratec Corporation |
| 096205-0898569 (005300JP) | THOR-PO1055JP | JP | PREVENTION OF AORTIC VALVE FUSION | 2011-552184 | 2/26/10 | Thoratec Corporation |

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| 096205-0898552 (005300PC) | THOR- P01055WO | PCT | PREVENTION OF AORTIC VALVE FUSION | PCT/US2010/025539 | 2/26/10 | Thoratec Corporation |
| 096205-0898017 (005300US) | THOR- P01055 | US | PREVENTION OF AORTIC VALVE FUSION | 12/394,185 8,562,507 | 02/27/09 10/22/13 | Thoratec Corporation |
| 096205-0898021 (005310US) | THOR- P01055C | US | PREVENTION OF AORTIC VALVE FUSION | 14/022,312 | 09/10/13 | Thoratec Corporation |
| 096205-0898571 (005400PC) | THOR- P01056WO | PCT | MAXIMIZING BLOOD PUMP FLOW WHILE AVOIDING LEFT VENTRICLE COLLAPSE | PCT/US2010/025358 | 2/25/10 | Thoratec Corporation |
| 096205-0898570 (005400US) | THOR- P01056 | US | MAXIMIZING BLOOD PUMP FLOW WHILE AVOIDING LEFT VENTRICLE COLLAPSE | 12/394,264 | 2/27/09 | Thoratec Corporation |
| 096205-0898536 (005500AU) | THOR- P01057AU | AU | BLOOD PUMP SYSTEM WITH CONTROLLED WEANING | 2010217856 | 02/26/10 | Thoratec Corporation |
| 096205-0898572 (005500CA) | THOR- P01057CA | CA | BLOOD PUMP SYSTEM WITH CONTROLLED WEANING | 2,753,966 | 02/26/10 | Thoratec Corporation |
| 096205-0898573 (005500CN) | THOR- P01057CN | CN | BLOOD PUMP SYSTEM WITH CONTROLLED WEANING | 201080015018.9 | 02/26/10 | Thoratec Corporation |
| 096205-0898578 (005500DE) | THOR- P01057DE | DE | BLOOD PUMP SYSTEM WITH CONTROLLED WEANING | 10707734.9 602010011319.1 | 02/26/10 10/30/13 | Thoratec Corporation |
| 096205-0898004 (005500EP) | THOR- P01057EP1 | EP | BLOOD PUMP SYSTEM WITH CONTROLLED WEANING | 10707734.9 2401003 | 02/26/10 10/30/13 | Thoratec Corporation |
| 096205-0898534 (005510EP) | THOR- P01057EP2 | EP | BLOOD PUMP SYSTEM WITH CONTROLLED WEANING | 12177683.7 | 2/26/10 | Thoratec Corporation |
| 096205-0898579 (005500FR) | THOR- P01057FR | FR | BLOOD PUMP SYSTEM WITH CONTROLLED WEANING | 10707734.9 2401003 | 02/26/10 10/30/13 | Thoratec Corporation |
| 096205-0898537 (005500GB) | THOR- P01057GB | GB | BLOOD PUMP SYSTEM WITH CONTROLLED WEANING | 10707734.9 2401003 | 02/26/10 10/30/13 | Thoratec Corporation |
| 096205-0898574 (005500HK) | THOR- P01057HK | HK | BLOOD PUMP SYSTEM WITH CONTROLLED WEANING | 12105728.4 | 2/26/10 | Thoratec Corporation |
| 096205-0898535 (005500IE) | THOR- P01057IE | IE | BLOOD PUMP SYSTEM WITH CONTROLLED WEANING | 10707734.9 2401003 | 02/26/10 10/30/13 | Thoratec Corporation |
| 096205-0898575 (005500IN) | THOR- P01057IN | IN | BLOOD PUMP SYSTEM WITH CONTROLLED WEANING | 6833/DELNP/2011 | 02/26/10 | Thoratec Corporation |
| 096205-0898576 (005500JP) | THOR- P01057JP | JP | BLOOD PUMP SYSTEM WITH CONTROLLED WEANING | 2011-552182 | 02/26/10 | Thoratec Corporation |
| 096205-0898577 (005500PC) | THOR- P01057WO | PCT | BLOOD PUMP SYSTEM WITH CONTROLLED WEANING | PCT/US10/025531 | 02/26/10 | Thoratec Corporation |
| 096205- | THOR- | US | BLOOD PUMP SYSTEM | 12/394,205 | 2/27/09 | Thoratec Corporation |

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| 0900963 (005510US) | PO1057 | | WITH CONTROLLED WEANING | | | |
| 096205-0898630 (005600PC) | THOR-PO1058WO | PCT | BLOOD PUMP SYSTEM WITH ARTERIAL PRESSURE MONITORING | PCT/US10/025363 | 02/25/10 | Thoratec Corporation |
| 096205-0898651 (005600US) | THOR-PO1058 | US | BLOOD PUMP SYSTEM WITH ARTERIAL PRESSURE MONITORING | 12/394,317 | 2/27/09 | Thoratec Corporation |
| 096205-0897110 (005700AU) | THOR-PO1063AU | AU | BLOOD PUMP SYSTEM WITH MOUNTING CUFF | 2009357586 2009357586 | 10/30/09 10/3/13 | Thoratec Corporation |
| 096205-0897121 (005700CA) | THOR-PO1063CA | CA | BLOOD PUMP SYSTEM WITH MOUNTING CUFF | 2,785,784 | 12/30/09 | Thoratec Corporation |
| 096205-0940093 (005700DE) | THOR-PO1063DE | DE | BLOOD PUMP SYSTEM WITH MOUNTING CUFF | 09796283.1 DE 60 2009 032 705.4 | 12/30/09 08/05/15 | Thoratec Corporation |
| 096205-0897124 (005700EP) | THOR-PO1063EP | EP | BLOOD PUMP SYSTEM WITH MOUNTING CUFF | 09796283.1 2519273 | 12/30/09 08/06/15 | Thoratec Corporation |
| 096205-0940091 (005700FR) | THOR-PO1063FR | FR | BLOOD PUMP SYSTEM WITH MOUNTING CUFF | 09796283.1 2519273 | 12/30/09 08/05/15 | Thoratec Corporation |
| 096205-0940092 (005700GB) | THOR-PO1063GB | GB | BLOOD PUMP SYSTEM WITH MOUNTING CUFF | 09796283.1 2519273 | 12/30/09 08/05/15 | Thoratec Corporation |
| 096205-0897126 (005700PC) | THOR-PO1063WO | PCT | BLOOD PUMP SYSTEM WITH MOUNTING CUFF | PCT/US2009/069836 | 12/30/09 | Thoratec Corporation |
| 096205-0897107 (005700US) | THOR-PO1063 | US | BLOOD PUMP SYSTEM WITH MOUNTING CUFF | 12/650,017 8,152,845 | 12/30/09 04/10/12 | Thoratec Corporation |
| 096205-0897111 (005710AU) | THOR-PO1063AU2 | AU | BLOOD PUMP SYSTEM WITH MOUNTING CUFF | 2013231115 2013231115 | 12/30/09 01/22/15 | Thoratec Corporation |
| 096205-0897123 (005710US) | THOR-PO1063D | US | METHOD OF IMPLANTING A BLOOD PUMP SYSTEM | 13/414,041 8,679,177 | 03/07/12 03/25/14 | Thoratec Corporation |
| 096205-0897146 (005800US) | THOR-PO1070A | US | IMPLANTABLE BLOOD PUMP | 61/375,504 | 8/20/10 | Thoratec Corporation |
| 096205-0897153 (005810AU) | THOR-PO1070AU | AU | IMPLANTABLE BLOOD PUMP | 2011291984 2011291984 | 08/18/11 12/11/14 | Thoratec Corporation |
| 096205-0897154 (005810CA) | THOR-PO1070CA | CA | IMPLANTABLE BLOOD PUMP | 2,808,658 | 08/18/11 | Thoratec Corporation |
| 096205-0897157 (005810EP) | THOR-PO1070EP | EP | IMPLANTABLE BLOOD PUMP | 11750037.1 | 08/18/11 | Thoratec Corporation |
| 096205-0897158 (005810JP) | THOR-PO1070JP | JP | IMPLANTABLE BLOOD PUMP | 2013-524979 5977237 | 08/18/11 07/29/16 | Thoratec Corporation |
| 096205-0897163 (005810PC) | THOR-PO1070WO | PCT | IMPLANTABLE BLOOD PUMP | PCT/US2011/048259 | 08/18/11 | Thoratec Corporation |
| 096205- | THOR- | TW | IMPLANTABLE BLOOD | 100129901 | 08/19/11 | Thoratec Corporation |

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| 0897159 (005810TW) | PO1070TW | | PUMP | | | |
| 096205- 0897144 (005810US) | THOR- PO1070 | US | IMPLANTABLE BLOOD PUMP | 13/212,813 9,091,271 | 06/18/11 07/28/15 | Thoratec Corporation |
| 096205- 0941116 (005811US) | THOR- PO1070C | US | IMPLANTABLE BLOOD PUMP | 14/735,990 | 06/10/15 | Thoratec Corporation |
| 096205- 0897189 (005900US) | THOR- PO1074A | US | GENERATING ARTIFICIAL PULSE | 61/386,018 | 9/24/10 | Thoratec Corporation |
| 096205- 0897184 (005910AU) | THOR- PO1074AU | AU | GENERATING ARTIFICIAL PULSE | 2011305250 2011305250 | 09/23/11 01/15/15 | Thoratec Corporation |
| 096205- 0897230 (005910CA) | THOR- PO1074CA | CA | GENERATING ARTIFICIAL PULSE | 2,811,606 | 09/23/11 | Thoratec Corporation |
| 096205- 0897235 (005910EP) | THOR- PO1074EP1 | EP | GENERATING ARTIFICIAL PULSE | 11769980.1 2618863 | 09/23/11 11/09/16 | Thoratec Corporation |
| 096205- 0897234 (005910JP) | THOR- PO1074JP1 | JP | GENERATING ARTIFICIAL PULSE | 2013-530346 5818897 | 09/23/11 10/09/15 | Thoratec Corporation |
| 096205- 0897240 (005910PC) | THOR- PO1074WC | PCT | GENERATING ARTIFICIAL PULSE | PCT/US2011/052912 | 09/23/11 | Thoratec Corporation |
| 096205- 0897232 (005910TW) | THOR- PO1074TW | TW | GENERATING ARTIFICIAL PULSE | 100134486 | 09/23/11 | Thoratec Corporation |
| 096205- 0897188 (005910US) | THOR- PO1074 | US | GENERATING ARTIFICIAL PULSE | 13/241,891 8,506,471 | 09/23/11 08/13/13 | Thoratec Corporation |
| 096205- 0966747 (005911EP) | THOR- PO1074EP2 | EP | GENERATING ARTIFICIAL PULSE | 15202427.9 | 09/23/11 | Thoratec Corporation |
| 096205- 0958148 (005911JP) | THOR- PO1074JP2 | JP | GENERATING ARTIFICIAL PULSE | 2015-191126 | 09/23/11 | Thoratec Corporation |
| 096205- 0897190 (005911US) | THOR- PO1074D | US | GENERATING ARTIFICIAL PULSE | 13/926,044 9,011,312 | 06/25/13 04/21/15 | Thoratec Corporation |
| 096205- 1019045 (005912EP) | THOR- PO1074EP3 | EP | GENERATING ARTIFICIAL PULSE | 16186781.7 | 09/23/11 | Thoratec Corporation |
| 096205- 0906172 (005912US) | THOR- PO1074C | US | GENERATING ARTIFICIAL PULSE | 14/261,817 8,961,388 | 04/25/14 02/24/15 | Thoratec Corporation |
| 096205- 0928147 (005913US) | THOR- PO1074C2 | US | GENERATING ARTIFICIAL PULSE | 14/592,630 9,433,717 | 01/08/15 09/06/16 | Thoratec Corporation |
| 096205- 1003736 (005914US) | THOR- PO1074C3 | US | GENERATING ARTIFICIAL PULSE | 15/221,456 | 07/27/16 | Thoratec Corporation |
| 096205- 0897309 (006000US) | THOR- PO1076A | US | MODULAR DRIVELINE | 61/420,908 | 12/8/10 | Thoratec Corporation |
| 096205- | THOR- | AU | MODULAR DRIVELINE | 2011338380 | 12/9/11 | Thoratec Corporation |

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| 0897307 (006010AU) | PO1076AU | | | | | |
| 096205- 0897306 (006010CA) | THOR- PO1076CA | CA | MODULAR DRIVELINE | 2,820,886 | 12/8/11 | Thoratec Corporation |
| 096205- 0897305 (006010EP) | THOR- PO1076EP | EP | MODULAR DRIVELINE | 11802998.2 | 12/08/11 | Thoratec Corporation |
| 096205- 0897310 (006010PC) | THOR- PO1076WQ | PCT | MODULAR DRIVELINE | PCT/US2011/063932 | 12/8/11 | Thoratec Corporation |
| 096205- 0897308 (006010US) | THOR- PO1076 | US | MODULAR DRIVELINE | 13/316,806 8,794,989 | 12/08/11 08/05/14 | Thoratec Corporation |
| 096205- 0911015 (006011US) | THOR- PO1076C1 | US | MODULAR DRIVELINE | 14/316,277 8,452,249 | 06/26/14 09/27/16 | Thoratec Corporation |
| 096205- 0897269 (006100US) | THOR- PO1079A | US | VENTRICULAR CUFF | 61/448,434 | 3/2/13 | Thoratec Corporation |
| 096205- 0897271 (006110AU) | THOR- PO1079AU | AU | VENTRICULAR CUFF | 2012223166 | 03/02/12 | Thoratec Corporation |
| 096205- 0897272 (006110CA) | THOR- PO1079CA | CA | VENTRICULAR CUFF | 2,828,885 | 03/02/12 | Thoratec Corporation |
| 096205- 0897274 (006110DE) | THOR- PO1079DE1 | DE | VENTRICULAR CUFF | 127100121 60 2012 013 873.4 | 03/02/12 01/13/16 | Thoratec Corporation |
| 096205- 0897274 (006110EP) | THOR- PO1079EP1 | EP | VENTRICULAR CUFF | 127100121 2680896 | 03/02/12 01/13/16 | Thoratec Corporation |
| 096205- 0897274 (006110FR) | THOR- PO1079FR1 | FR | VENTRICULAR CUFF | 127100121 2680896 | 03/02/12 01/13/16 | Thoratec Corporation |
| 096205- 0897274 (006110GB) | THOR- PO1079GB1 | GB | VENTRICULAR CUFF | 127100121 2680896 | 03/02/12 01/13/16 | Thoratec Corporation |
| 096205- 0897275 (006110JP) | THOR- PO1079JP | JP | VENTRICULAR CUFF | 2013-556900 | 03/02/12 | Thoratec Corporation |
| 096205- 0897276 (006110PC) | THOR- PO1079WQ | PCT | VENTRICULAR CUFF | PCT/US2012/027481 | 03/02/12 | Thoratec Corporation |
| 096205- 0897270 (006110US) | THOR- PO1079 | US | VENTRICULAR CUFF | 13/410,670 9,144,637 | 03/02/12 09/29/15 | Thoratec Corporation |
| 096205- 0958420 (006111EP) | THOR- PO1079EP2 | EP | VENTRICULAR CUFF | 15190712.8 | 03/02/12 | Thoratec Corporation |
| 096205- 0952027 (006111US) | THOR- PO1079D | US | VENTRICULAR CUFF | 14/817,819 | 08/04/15 | Thoratec Corporation |
| 096205- 0897359 (006200US) | THOR- PO1082A | US | CONTROL OF CIRCULATORY ASSIST SYSTEMS | 61/472,243 | 4/6/11 | Thoratec Corporation |
| 096205- | THOR- | AU | CONTROL OF | 2011305243 | 09/23/11 | Thoratec Corporation |

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| 0897361 (006210AU) | PO1082AU | | CIRCULATORY ASSIST SYSTEMS | | | |
| 096205-0897363 (006210CA) | THOR-PO1082CA | CA | CONTROL OF CIRCULATORY ASSIST SYSTEMS | 2,811,604 | 09/23/11 | Thoratec Corporation |
| 096205-1006502 (006210DE) | THOR-PO1082DE | DE | CONTROL OF CIRCULATORY ASSIST SYSTEMS | 11768210.4 60 2011 028 596.3 | 09/23/11 07/27/16 | Thoratec Corporation |
| 096205-0897370 (006210EP) | THOR-PO1082EP | EPO | CONTROL OF CIRCULATORY ASSIST SYSTEMS | 11768210.4 2618862 | 09/23/11 07/27/16 | Thoratec Corporation |
| 096205-1006504 (006210FR) | THOR-PO1082FR | FR | CONTROL OF CIRCULATORY ASSIST SYSTEMS | 11768210.4 2618862 | 09/23/11 07/27/16 | Thoratec Corporation |
| 096205-1006503 (006210GB) | THOR-PO1082GB | GB | CONTROL OF CIRCULATORY ASSIST SYSTEMS | 11768210.4 2618862 | 09/23/11 07/27/16 | Thoratec Corporation |
| 096205-0897364 (006210JP) | THOR-PO1082JP1 | JP | CONTROL OF CIRCULATORY ASSIST SYSTEMS | 2013-530341 5852122 | 09/23/11 12/11/15 | Thoratec Corporation |
| 096205-0897372 (006210PC) | THOR-PO1082WO | PCT | CONTROL OF CIRCULATORY ASSIST SYSTEMS | PCT/US2011/052897 | 09/23/11 | Thoratec Corporation |
| 096205-0897371 (006210TW) | THOR-PO1082TW | TW | CONTROL OF CIRCULATORY ASSIST SYSTEMS | 100134484 | 09/23/11 | Thoratec Corporation |
| 096205-0897360 (006210US) | THOR-PO1082 | US | CONTROL OF CIRCULATORY ASSIST SYSTEMS | 13742,248 | 09/23/11 | Thoratec Corporation |
| 096205-0898465 (006300US) | THOR-PO1085A | US | MODULAR IMPLANTABLE MEDICAL PUMP | 61/606,767 | 3/5/12 | Thoratec Corporation |
| 096205-1023493 (006310DE) | THOR-PO1085DE | DE | MODULAR IMPLANTABLE MEDICAL PUMP | 13758005.6 | 03/05/13 | Thoratec Corporation |
| 096205-0916887 (006310EP) | THOR-PO1085EP | EP | MODULAR IMPLANTABLE MEDICAL PUMP | 13758005.6 | 03/05/13 | Thoratec Corporation |
| 096205-1023495 (006310FR) | THOR-PO1085FR | FR | MODULAR IMPLANTABLE MEDICAL PUMP | 13758005.6 | 03/05/13 | Thoratec Corporation |
| 096205-1023494 (006310GB) | THOR-PO1085GB | UK | MODULAR IMPLANTABLE MEDICAL PUMP | 13758005.6 | 03/05/13 | Thoratec Corporation |
| 096205-0916888 (006310JP) | THOR-PO1085JP | JP | MODULAR IMPLANTABLE MEDICAL PUMP | 2014-561058 | 03/05/13 | Thoratec Corporation |
| 096205-0898023 (006310PC) | THOR-PO1085WO | PCT | MODULAR IMPLANTABLE MEDICAL PUMP | PCT/US2013/029209 | 03/05/13 | Thoratec Corporation |
| 096205-0898024 (006310US) | THOR-PO1085 | US | MODULAR IMPLANTABLE MEDICAL PUMP | 13/786,336 8,894,561 | 03/05/13 11/25/14 | Thoratec Corporation |
| 096205-0914916 (006320US) | THOR-PO1085D | US | MODULAR IMPLANTABLE MEDICAL PUMP | 14/536,358 9,186,447 | 11/07/14 11/17/15 | Thoratec Corporation |
| 096205- | THOR- | US | MODULAR | 14/885,947 | 10/16/15 | Thoratec Corporation |

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| 0957349 (006330US) | PO1085DC | | IMPLANTABLE MEDICAL PUMP | 9,387,285 | 07/13/16 | |
| 096205- 0898464 (006400US) | THOR- PO1086A | US | PUMP AND METHOD FOR MIXED FLOW BLOOD PUMPING | 61/547,032 | 10/13/11 | Thoratec Corporation |
| 096205- 0903415 (006410DE) | THOR- PO1086DE | DE | PUMP AND METHOD FOR MIXED FLOW BLOOD PUMPING | 11 2012 004 282.4 | 10/12/12 | Thoratec Corporation |
| 096205- 0898463 (006410PC) | THOR- PO1086WO | PCT | PUMP AND METHOD FOR MIXED FLOW BLOOD PUMPING | PCT/US2013/060071 | 10/12/12 | Thoratec Corporation |
| 096205- 0898013 (006410US) | THOR-PO108 6 | US | PUMP AND METHOD FOR MIXED FLOW BLOOD PUMPING | 13/630,874 8,864,643 | 10/12/12 10/21/14 | Thoratec Corporation |
| 096205- 0913333 (006411US) | THOR- PO1086C | US | PUMP AND METHOD FOR MIXED FLOW BLOOD PUMPING | 14/489,041 | 09/17/14 | Thoratec Corporation |
| 096205- 0897417 (006500US) | THOR- PO1089A | US | DRIVELINE CABLE ASSEMBLY | 61/589,929 | 1/24/12 | Thoratec Corporation |
| 096205- 0913309 (006510EP) | THOR- PO1089EP | EP | DRIVELINE CABLE ASSEMBLY | 13741521.2 | 01/23/13 | Thoratec Corporation |
| 096205- 0897416 (006510PC) | THOR- PO1089WO | PCT | DRIVELINE CABLE ASSEMBLY | PCT/US2013/022698 | 01/23/13 | Thoratec Corporation |
| 096205- 0897418 (006510US) | THOR- PO1089 | US | DRIVELINE CABLE ASSEMBLY | 13/747,741 8,682,431 | 01/23/13 03/25/14 | Thoratec Corporation |
| 096205- 0898344 (006511US) | THOR- PO1089C | US | DRIVELINE CABLE ASSEMBLY | 14/171,948 8,939,883 | 02/04/14 01/27/15 | Thoratec Corporation |
| 096205- 0898461 (006600US) | THOR- PO1112A | US | VENTRICULAR CUFF | 61/695,925 | 8/31/12 | Thoratec Corporation |
| 096205- 0934783 (006610EP) | THOR- PO1112EP | EP | VENTRICULAR CUFF | 13833715.9 | 08/28/13 | Thoratec Corporation |
| 096205- 0898459 (006610PC) | THOR- PO1112WO | PCT | VENTRICULAR CUFF | PCT/US2013/056952 | 08/28/13 | Thoratec Corporation |
| 096205- 0898460 (006610US) | THOR- PO1112 | US | VENTRICULAR CUFF | 13/832,657 | 3/15/13 | Thoratec Corporation |
| 096205- 0898088 (006700US) | THOR- PO1113A | US | START-UP ALGORITHM FOR AN IMPLANTABLE BLOOD PUMP | 61/695,469 | 8/31/12 | Thoratec Corporation |
| 096205- 0934791 (006710EP) | THOR- PO1113EP | EP | START-UP ALGORITHM FOR AN IMPLANTABLE BLOOD PUMP | 13832449.6 | 08/30/13 | Thoratec Corporation |
| 096205- 0898025 (006710PC) | THOR- PO1113WO | PCT | START-UP ALGORITHM FOR AN IMPLANTABLE BLOOD PUMP | PCT/US2013/057540 | 08/30/13 | Thoratec Corporation |
| 096205- 0898009 (006710US) | THOR- PO1113 | US | START-UP ALGORITHM FOR AN IMPLANTABLE BLOOD PUMP | 14/014,957 9,427,510 | 08/30/13 08/30/16 | Thoratec Corporation |
| 096205- | THOR- | US | START-UP ALGORITHM | 15/219,578 | 07/26/16 | Thoratec Corporation |

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| 1011805 (006711US) | PO1113D | | FOR AN IMPLANTABLE BLOOD PUMP | | | |
| 096205-0898014 (006800PC) | THOR-PO1114WO | PCT | INSTABILITY DETECTION ALGORITHM FOR AN IMPLANTABLE BLOOD PUMP | PCT/US2013/057548 | 8/30/13 | Thoratec Corporation |
| 096205-0898089 (006800US) | THOR-PO1114A | US | INSTABILITY DETECTION ALGORITHM FOR AN IMPLANTABLE BLOOD PUMP | 61/695,476 | 8/31/12 | Thoratec Corporation |
| 096205-0935481 (006810EP) | THOR-PO1114EP | EPO | INSTABILITY DETECTION ALGORITHM FOR AN IMPLANTABLE BLOOD PUMP | 13832809.1 2890420 | 8/30/13 7/8/15 | Thoratec Corporation |
| 096205-0898010 (006810US) | THOR-PO1114 | US | INSTABILITY DETECTION ALGORITHM FOR AN IMPLANTABLE BLOOD PUMP | 14/015,469 | 8/30/13 | Thoratec Corporation |
| 096205-0898098 (006900US) | THOR-PO1115A | US | HALL SENSOR MOUNTING IN AN IMPLANTABLE BLOOD PUMP | 61/695,624 | 8/31/12 | Thoratec Corporation |
| 096205-0935488 (006910EP) | THOR-PO1115EP | EPO | HALL SENSOR MOUNTING IN AN IMPLANTABLE BLOOD PUMP | 13832936.2 2890417 | 8/30/13 7/8/15 | Thoratec Corporation |
| 096205-0898015 (006910PC) | THOR-PO1115WO | PCT | HALL SENSOR MOUNTING IN AN IMPLANTABLE BLOOD PUMP | PCT/US2013/057553 | 8/30/13 | Thoratec Corporation |
| 096205-0898011 (006910US) | THOR-PO1115US1 | US | HALL SENSOR MOUNTING IN AN IMPLANTABLE BLOOD PUMP | 14/015,542 9,492,599 | 8/30/13 11/15/16 | Thoratec Corporation |
| 096205-1021589 (006911US) | THOR-PO1115C1 | US | SENSOR MOUNTING IN AN IMPLANTABLE BLOOD PUMP | 15/286,449 | 8/30/13 | Thoratec Corporation |
| 096205-0898012 (006920US) | THOR-PO1115US2 | US | HALL SENSOR MOUNTING IN AN IMPLANTABLE BLOOD PUMP | 14/015,630 | 10/5/16 | Thoratec Corporation |
| 096205-0898006 (007000US) | THOR-PO1117 | US | BLOOD PUMP ROTOR BEARINGS | 13/804,983 9,144,638 | 03/14/13 09/29/15 | Thoratec Corporation |
| 096205-0950829 (007010US) | THOR-PO1117C | US | BLOOD PUMP ROTOR BEARINGS | 14/835,572 | 08/25/15 | Thoratec Corporation |
| 096205-089816 (007300DE) | THOR-PO5020DE | DE | AN INTEGRATED CENTRIFUGAL BLOOD PUMP-OXYGENATOR, AN EXTRACORPOREAL LIFE SUPPORT SYSTEM AND A METHOD OF DE-BUBBLING AND PRIMING AN EXTRACORPOREAL LIFE SUPPORT SYSTEM | 07106451.3 602007026649.1 | 04/18/07 11/14/12 | Thoratec Corporation University of Maryland Baltimore |
| 096205- | THOR- | EP | AN INTEGRATED | 07106451.3 | 04/18/07 | Thoratec Corporation |

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| 0898499 (007300EP) | POS020EP | | CENTRIFUGAL BLOOD PUMP-OXYGENATOR, AN EXTRACORPOREAL LIFE SUPPORT SYSTEM AND A METHOD OF DE-BUBBLING AND PRIMING AN EXTRACORPOREAL LIFE SUPPORT SYSTEM | 1930034 | 11/14/12 | University of Maryland Baltimore |
| 096205-0899819 (007300FR) | THOR-POS020FR | FR | AN INTEGRATED CENTRIFUGAL BLOOD PUMP-OXYGENATOR, AN EXTRACORPOREAL LIFE SUPPORT SYSTEM AND A METHOD OF DE-BUBBLING AND PRIMING AN EXTRACORPOREAL LIFE SUPPORT SYSTEM | 07106451.3 1930034 | 04/18/07 11/14/12 | Thoratec Corporation University of Maryland Baltimore |
| 096205-0899820 (007300GB) | THOR-POS020GB | GB | AN INTEGRATED CENTRIFUGAL BLOOD PUMP-OXYGENATOR, AN EXTRACORPOREAL LIFE SUPPORT SYSTEM AND A METHOD OF DE-BUBBLING AND PRIMING AN EXTRACORPOREAL LIFE SUPPORT SYSTEM | 07106451.3 1930034 | 04/18/07 11/14/12 | Thoratec Corporation University of Maryland Baltimore |
| 096205-0899821 (007300IE) | THOR-POS020IE | IE | AN INTEGRATED CENTRIFUGAL BLOOD PUMP-OXYGENATOR, AN EXTRACORPOREAL LIFE SUPPORT SYSTEM AND A METHOD OF DE-BUBBLING AND PRIMING AN EXTRACORPOREAL LIFE SUPPORT SYSTEM | 07106451.3 1930034 | 04/18/07 11/14/12 | Thoratec Corporation University of Maryland Baltimore |
| 096205-0899822 (007300IT) | THOR-POS020IT | IT | AN INTEGRATED CENTRIFUGAL BLOOD PUMP-OXYGENATOR, AN EXTRACORPOREAL LIFE SUPPORT SYSTEM AND A METHOD OF DE-BUBBLING AND PRIMING AN EXTRACORPOREAL LIFE SUPPORT SYSTEM | 07106451.3 1930034 | 04/18/07 11/14/12 | Thoratec Corporation University of Maryland Baltimore |
| 096205-0899823 (007300NL) | THOR-POS020NL | NL | AN INTEGRATED CENTRIFUGAL BLOOD PUMP-OXYGENATOR, AN EXTRACORPOREAL LIFE SUPPORT SYSTEM AND A METHOD OF DE-BUBBLING AND PRIMING AN EXTRACORPOREAL LIFE SUPPORT SYSTEM | 07106451.3 1930034 | 04/18/07 11/14/12 | Thoratec Corporation University of Maryland Baltimore |
| 096205-0900094 (007600AU) | THOR-D01071AU1 | AU | IMPLANTABLE BLOOD PUMP | 14690/2010 | 10/29/10 | Thoratec Corporation |
| 096205-0900101 | THOR-D01071AU2 | AU | IMPLANTABLE BLOOD PUMP | 15731/2010 | 10/29/10 | Thoratec Corporation |

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| {007610AU} | | | | | | |
| 096205-0900122 {007620AU} | THOR- D01071AU3 | AU | IMPLANTABLE BLOOD PUMP | 25733/2010 | 10/29/10 | Thoratec Corporation |
| 096205-0900121 {007600CA} | THOR- D01071CA1 | CA | IMPLANTABLE BLOOD PUMP | 137,675 | 10/27/10 | Thoratec Corporation |
| 096205-0900120 {007610CA} | THOR- D01071CA2 | CA | IMPLANTABLE BLOOD PUMP | 138,550 | 10/27/10 | Thoratec Corporation |
| 096205-0900119 {007600CN} | THOR- D01071CN | CN | IMPLANTABLE BLOOD PUMP | 201030590013.1 | 10/29/10 | Thoratec Corporation |
| 096205-0900118 {007600EP} | THOR- D01071EP1 | EU | IMPLANTABLE BLOOD PUMP | 001773581-0001 | 10/29/10 | Thoratec Corporation |
| 096205-0900263 {007610EP} | THOR- D01071EP2 | EU | IMPLANTABLE BLOOD PUMP | 001883581-0002 | 10/27/10 | |
| 096205-0900366 {007620EP} | THOR- D01071EP3 | EU | IMPLANTABLE BLOOD PUMP | 001773581-0003 | 10/27/10 | |
| 096205-0900370 {007630EP} | THOR- D01071EP4 | EU | IMPLANTABLE BLOOD PUMP | 001773581-0004 | 10/27/10 | |
| 096205-0900371 {007640EP} | THOR- D01071EP5 | EU | IMPLANTABLE BLOOD PUMP | 001773581-0005 | 10/27/10 | |
| 096205-0900374 {007650EP} | THOR- D01071EP6 | EU | IMPLANTABLE BLOOD PUMP | 001773581-0006 | 10/27/10 | |
| 096205-0900375 {007660EP} | THOR- D01071EP7 | EU | IMPLANTABLE BLOOD PUMP | 001773581-0007 | 10/27/10 | |
| 096205-0900377 {007670EP} | THOR- D01071EP8 | EU | IMPLANTABLE BLOOD PUMP | 001773581-0008 | 10/27/10 | |
| 096205-0900378 {007680EP} | THOR- D01071EP9 | EU | IMPLANTABLE BLOOD PUMP | 001773581-0009 | 10/27/10 | |
| 096205-0900383 {007600JP} | THOR- D01071JP1 | JP | IMPLANTABLE BLOOD PUMP | 1431977 | 12/16/11 | |
| 096205-0900385 {007610JP} | THOR- D01071JP2 | JP | IMPLANTABLE BLOOD PUMP | 1423744 | 8/26/11 | |
| 096205-0900396 {007620JP} | THOR- D01071JP3 | JP | IMPLANTABLE BLOOD PUMP | 1432240 | 12/18/11 | |
| 096205-0900397 {007600SG} | THOR- D01071SG | SG | IMPLANTABLE BLOOD PUMP | D2010/1019/T | 12/15/10 | |
| 096205-0900398 {007600TW} | THOR- D01071TW | TW | IMPLANTABLE BLOOD PUMP | 099305977 | 11/22/10 | Thoratec Corporation |
| 096205-0900095 | THOR- D01071 | US | IMPLANTABLE BLOOD PUMP | 29/368,272 0669,585 | 8/20/10 10/23/12 | |

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|------------|------------------------------|-------------------------|----|------------------------|----------------|----------|----------------------|
| (007600US) | 096205-0901859 (007700AU) | THOR- D01081AU | AU | IMPLANTABLE BLOOD PUMP | 13874/2011 | 9/2/11 | Thoratec Corporation |
| | 096205-0901878 (007710AU) | THOR- D01080AU | AU | IMPLANTABLE BLOOD PUMP | 1478/2011 | 10/21/11 | Thoratec Corporation |
| | 096205-0901879 (007720AU) | THOR- D01080XAU | AU | IMPLANTABLE BLOOD PUMP | 15164/2011 | 11/10/11 | Thoratec Corporation |
| | 096205-0901880 (007730AU) | THOR- D01080XCA U | AU | IMPLANTABLE BLOOD PUMP | 10421/2012 | 11/10/11 | Thoratec Corporation |
| | 096205-0901850 (007700CA) | THOR- D01081CA | CA | IMPLANTABLE BLOOD PUMP | 142,111 | 9/2/11 | Thoratec Corporation |
| | 096205-0901863 (007710CA) | THOR- D01080CA | CA | IMPLANTABLE BLOOD PUMP | 142,806 | 10/21/11 | Thoratec Corporation |
| | 096205-0901872 (007720CA) | THOR- D01080XCA | CA | IMPLANTABLE BLOOD PUMP | 142,805 | 10/21/11 | Thoratec Corporation |
| | 096205-0901861 (007700CN) | THOR- D01081CN | CN | IMPLANTABLE BLOOD PUMP | 201130306307.1 | 9/2/11 | Thoratec Corporation |
| | 096205-0901871 (007720CN) | THOR- D01080CN | CN | IMPLANTABLE BLOOD PUMP | 201130375208.X | 10/21/11 | Thoratec Corporation |
| | 096205-0900400 (007700EP) | THOR- D01081EU | EU | IMPLANTABLE BLOOD PUMP | 001911629-0001 | 9/2/11 | |
| | 096205-0900406 (007710EP) | THOR- D01080EU | EU | IMPLANTABLE BLOOD PUMP | 001936014-0001 | 10/21/11 | |
| | 096205-0900405 (007720EP) | THOR- D01080CEP | EU | IMPLANTABLE BLOOD PUMP | 001936550-0001 | 10/21/11 | |
| | 096205-0900404 (007730EP) | THOR- D01080C2EP | EU | IMPLANTABLE BLOOD PUMP | 001936014-0002 | 10/21/11 | |
| | 096205-0900403 (007740EP) | THOR- D01080XCE U | EU | IMPLANTABLE BLOOD PUMP | 001936014-0003 | 10/21/11 | |
| | 096205-0900402 (007750EP) | THOR- D01071EU | EU | IMPLANTABLE BLOOD PUMP | 001936014-0004 | 10/21/11 | |
| | 096205-0900401 (007760EP) | THOR- D01071CEU | EU | IMPLANTABLE BLOOD PUMP | 001936014-0005 | 10/21/11 | |
| | 096205-0901866 (007700IL) | THOR- D01081IL | IL | IMPLANTABLE BLOOD PUMP | 51502 | 9/4/11 | Thoratec Corporation |
| | 096205-0901862 (007700IN) | THOR- D01081IN | IN | IMPLANTABLE BLOOD PUMP | 239134 | 9/2/11 | Thoratec Corporation |
| | 096205-0901869 | THOR- D01081JP | JP | IMPLANTABLE BLOOD PUMP | 2011-020023 | 9/2/11 | Thoratec Corporation |

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| (007700JP) | | | | | | |
| 096205-0901874 (007710JP) | THOR- D01080XP | JP | IMPLANTABLE BLOOD PUMP | 2011-024252 | 10/21/11 | Thoratec Corporation |
| 096205-0901875 (007720JP) | THOR- D01080XP2 | JP | IMPLANTABLE BLOOD PUMP | 2011-024528 | 10/25/11 | Thoratec Corporation |
| 096205-0902638 (007730JP) | THOR- D01080XP3 | JP | IMPLANTABLE BLOOD PUMP | 2012-018030 | 10/25/11 | Thoratec Corporation |
| 096205-0901868 (007700SG) | THOR- D01081SG | SG | IMPLANTABLE BLOOD PUMP | D2011/947/G | 9/2/11 | Thoratec Corporation |
| 096205-0901867 (007700TW) | THOR- D01081TW | TW | IMPLANTABLE BLOOD PUMP | 100304583 | 9/2/11 | Thoratec Corporation |
| 096205-0901876 (007710TW) | THOR- D01080XTW | TW | IMPLANTABLE BLOOD PUMP | 100305741 | 10/21/11 | Thoratec Corporation |
| 096205-0901877 (007720TW) | THOR- D1080XCTW | TW | IMPLANTABLE BLOOD PUMP | 100305741 | 10/24/11 | Thoratec Corporation |
| 096205-0901857 (007700US) | THOR- D01081 | US | IMPLANTABLE BLOOD PUMP | 29/386,544 | 3/2/11 | Thoratec Corporation |
| 096205-0901865 (007710US) | THOR- D01080 | US | IMPLANTABLE BLOOD PUMP | 29/390,200 D671646 | 3/2/11 1/27/12 | Thoratec Corporation |
| 096205-0901864 (007720US) | THOR- D01080C | US | IMPLANTABLE BLOOD PUMP | 29/407,916 | 12/5/11 | Thoratec Corporation |
| 096205-0901873 (007730US) | THOR- D01080X | US | IMPLANTABLE BLOOD PUMP | 29/391,080 | 5/3/11 | Thoratec Corporation |
| 096205-0901870 (007740US) | THOR- D01080XC | US | IMPLANTABLE BLOOD PUMP | 29/407,914 | 12/5/11 | Thoratec Corporation |
| 096205-0902639 (008000US) | THOR- P01042 | US | COATED VASCULAR GRAFTS AND METHODS OF USE | 09/933,256 6,939,377 | 08/20/01 09/06/05 | Thoratec Corporation |
| 096205-0902640 (008100US) | THOR- P01028D2 | US | STEP-DOWN SKELETAL MUSCLE ENERGY CONVERSION METHOD | 08/483,420 5,653,676 | 06/07/95 08/05/97 | Thoratec Corporation |
| 096205-0902641 (008200US) | THOR- P01028D1 | US | STEP-DOWN SKELETAL MUSCLE ENERGY CONVERSION SYSTEM | 08/474,018 5,701,819 | 06/07/95 12/30/97 | Thoratec Corporation |
| 096205-0903399 (008300US) | THOR- P01136A | US | TRIPLE HELIX DRIVELINE CABLE AND METHODS OF ASSEMBLY AND USE | 62/045,365 | 9/3/14 | Thoratec Corporation |
| 096205-0909956 (008310PC) | THOR- P01136WO | PCT | TRIPLE HELIX DRIVELINE CABLE AND METHODS OF ASSEMBLY AND USE | PCT/US2015/048384 | 09/03/15 | |
| 096205-0909908 (008310US) | THOR- P01136 | US | TRIPLE HELIX DRIVELINE CABLE AND METHODS OF ASSEMBLY AND USE | 14/844,567 | 09/03/15 | Thoratec Corporation |
| 096205-0903925 | THOR- P01138A1 | US | PROTECTIVE CAP FOR DRIVELINE CABLE | 61/980,034 | 4/15/14 | Thoratec Corporation |

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| (008500US) | | | CONNECTOR | | | |
| 096205-0911855 (008510US) | THOR-PO1138A2 | US | PROTECTIVE CAP FOR DRIVELINE CABLE CONNECTOR | 62/044,809 | 9/2/14 | Thoratec Corporation |
| 096205-0935566 (008520US) | THOR-PO1138 | US | PROTECTIVE CAP FOR DRIVELINE CABLE CONNECTOR | 14/687,809 | 04/15/15 | Thoratec Corporation |
| 096205-0904931 (008600US) | THOR-PO1139A | US | METHODS AND SYSTEMS FOR POWER SAVING AND DISABLING PULSATILITY | 61/979,840 | 4/14/14 | Thoratec Corporation |
| 096205-1012819 (008610CN) | THOR-PO1139CN | CN | METHODS AND SYSTEMS FOR POWER SAVING AND DISABLING PULSATILITY | 201580008732.8 | 4/15/15 | Thoratec Corporation |
| 096205-1012830 (008610EP) | PO1139EP | EP | METHODS AND SYSTEMS FOR POWER SAVING AND DISABLING PULSATILITY | 15779274.8 | 4/15/15 | Thoratec Corporation |
| 096205-0938325 (008610PC) | THOR-PO1139WO | PCT | METHODS AND SYSTEMS FOR POWER SAVING AND DISABLING PULSATILITY | PCT/US2015/026026 | 4/15/15 | Thoratec Corporation |
| 096205-0936249 (008610US) | THOR-PO1139 | US | METHODS AND SYSTEMS FOR CONTROLLING A BLOOD PUMP | 14/687,643 | 4/15/15 | Thoratec Corporation |
| 096205-0904933 (008700US) | THOR-PO1140A | US | METHODS AND SYSTEMS FOR UPGRADING VENTRICLE ASSIST DEVICES | 61/979,843 | April 15, 2014 | Thoratec Corporation |
| 096205-1012831 (008710CN) | PO1140CN | CN | METHODS AND SYSTEMS FOR UPGRADING VENTRICLE ASSIST DEVICES | 201580008726.2 | 4/15/15 | Thoratec Corporation |
| 096205-1012832 (008710EP) | THOR-PO1140EP | EP | METHODS AND SYSTEMS FOR UPGRADING VENTRICLE ASSIST DEVICES | 15780085.5 | 04/15/15 | Thoratec Corporation |
| 096205-0940900 (008710PC) | THOR-PO1140WO | PCT | METHODS AND SYSTEMS FOR UPGRADING VENTRICLE ASSIST DEVICES | PCT/US2015/028030 | 4/15/15 | Thoratec Corporation |
| 096205-0940899 (008710US) | THOR-PO1140 | US | METHODS AND SYSTEMS FOR UPGRADING VENTRICLE ASSIST DEVICES | 14/687,824 | 4/15/15 | Thoratec Corporation |
| 096205-0904934 (008800US) | THOR-PO1141A | US | METHODS AND SYSTEMS FOR STORING PATIENT SPECIFIC SETTINGS ON VENTRICLE ASSIST DEVICES | 61/979,811 | 4/15/14 | Thoratec Corporation |
| 096205-0910830 (008810US) | THOR-PO1141A2 | US | VENTRICULAR ASSIST DEVICES | 62/025,414 | 7/16/14 | Thoratec Corporation |
| 096205-1012833 (008820EP) | THOR-PO1141EP | EP | VENTRICULAR ASSIST DEVICES | 15780982.4 | 04/15/15 | Thoratec Corporation |

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| 096205-0939695 (008820PC) | THOR-P01141WO | PCT | VENTRICULAR ASSIST DEVICES | PCT/US2015/026031 | 04/15/15 | |
| 096205-0939690 (008820US) | THOR-P01141 | US | VENTRICULAR ASSIST DEVICES | 14/687,653 | 04/15/15 | Thoratec Corporation |
| 096205-0904935 (008900US) | THOR-P01142A | US | METHODS AND SYSTEMS FOR PROVIDING BATTERY FEEDBACK TO PATIENT | 61/979,845 | 4/15/14 | Thoratec Corporation |
| 096205-1012835 (008910EP) | THOR-P01142EP | EP | METHODS AND SYSTEMS FOR PROVIDING BATTERY FEEDBACK TO PATIENT | 15780616.7 | 04/15/15 | Thoratec Corporation |
| 096205-0939715 (008910PC) | THOR-P01142WO | PCT | METHODS AND SYSTEMS FOR PROVIDING BATTERY FEEDBACK TO PATIENT | PCT/US2015/026029 | 04/15/15 | |
| 096205-0939714 (008910US) | THOR-P01142 | US | METHODS AND SYSTEMS FOR PROVIDING BATTERY FEEDBACK TO PATIENT | 14/687,746 | 04/15/15 | Thoratec Corporation |
| 096205-0904996 (009100US) | THOR-P03012 | US | CONTROL SYSTEMS FOR ROTARY BLOOD PUMPS | 11/592,354 | 11/3/06 | Thoratec Corporation |
| 096205-0904995 (009110US) | THOR-P03012C1 | US | CONTROL SYSTEMS FOR ROTARY BLOOD PUMPS | 12/468,953 8,657,733 | 11/3/06 | Thoratec Corporation |
| 096205-0904993 (009120US) | THOR-P03012C2 | US | CONTROL SYSTEMS FOR ROTARY BLOOD PUMPS | 14/162,599 9,039,595 | 1/23/14 5/26/15 | Thoratec Corporation |
| 096205-0905782 (009200US) | THOR-P01145A | US | METHODS AND SYSTEMS FOR LVAD OPERATION DURING COMMUNICATION LOSSES | 61/979,803 | 04/15/14 | Thoratec Corporation |
| 096205-1012834 (009210EP) | THOR-P01145EP | EPO | METHODS AND SYSTEMS FOR LVAD OPERATION DURING COMMUNICATION LOSSES | 15779178.1 | 4/15/15 | Thoratec Corporation |
| 096205-0940907 (009210PC) | THOR-P01145WO | PCT | METHODS AND SYSTEMS FOR LVAD OPERATION DURING COMMUNICATION LOSSES | PCT/US2015/026027 | 5/20/09 2/25/14 | |
| 096205-0940904 (009210US) | THOR-P01145 | US | METHODS AND SYSTEMS FOR LVAD OPERATION DURING COMMUNICATION LOSSES | 14/687,817 | 04/15/15 | Thoratec Corporation |
| 096205-0915777 (009400US) | THOR-P01067A | US | APPARATUS AND METHOD FOR MODIFYING PRESSURE-FLOW CHARACTERISTICS OF A PUMP | 61/357,440 | 6/22/10 | |
| 096205- | THOR- | AU | APPARATUS AND | 2011270999 | 06/22/11 | Thoratec Corporation |

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| 0915966 (009410AU) | PO1067AU | | METHOD FOR MODIFYING PRESSURE- FLOW CHARACTERISTICS OF A PUMP | 2011270999 | 02/25/16 | |
| 096205- 0915967 (009410CA) | THOR- PO1067CA | CA | APPARATUS AND METHOD FOR MODIFYING PRESSURE- FLOW CHARACTERISTICS OF A PUMP | 2,802,215 | 6/22/11 | Thoratec Corporation |
| 096205- 0915968 (009410EP) | THOR- PO1067EP | EP | APPARATUS AND METHOD FOR MODIFYING PRESSURE- FLOW CHARACTERISTICS OF A PUMP | 11729848.9 | 06/22/11 | Thoratec Corporation |
| 096205- 0915969 (009410JP) | THOR- PO1067JP | JP | APPARATUS AND METHOD FOR MODIFYING PRESSURE- FLOW CHARACTERISTICS OF A PUMP | 2013-516734 5540153 | 06/22/11 05/08/14 | Thoratec Corporation |
| 096205- 0915954 (009410PC) | THOR- PO1067WO | PCT | APPARATUS AND METHOD FOR MODIFYING PRESSURE- FLOW CHARACTERISTICS OF A PUMP | PCT/US2011/041449 | 6/22/11 | Thoratec Corporation |
| 096205- 0915958 (009410TW) | THOR- PO1067TW | TW | APPARATUS AND METHOD FOR MODIFYING PRESSURE- FLOW CHARACTERISTICS OF A PUMP | 100121834 | 6/22/11 | Thoratec Corporation |
| 096205- 0915953 (009410US) | THOR- PO1067 | US | APPARATUS AND METHOD FOR MODIFYING PRESSURE- FLOW CHARACTERISTICS OF A PUMP | 13/166,680 9,089,635 | 06/22/11 07/28/15 | Thoratec Corporation |
| 096205- 0934568 (009411US) | THOR- PO1067C | US | APPARATUS AND METHOD FOR MODIFYING PRESSURE- FLOW CHARACTERISTICS OF A PUMP | 14/746,527 | 06/22/15 | Thoratec Corporation |
| 096205- 0915970 (009500US) | THOR- PO1069A | US | FLUID DELIVERY SYSTEM AND METHOD FOR MONITORING FLUID DELIVERY SYSTEM | 61/357,439 | 6/22/10 | Thoratec Corporation |
| 096205- 0915984 (009500CA) | THOR- PO1069CA | CA | FLUID DELIVERY SYSTEM AND METHOD FOR MONITORING FLUID DELIVERY SYSTEM | 2,802,217 | 06/22/11 | Thoratec Corporation |
| 096205- 0915985 (009500EP) | THOR- PO1069EP | EP | FLUID DELIVERY SYSTEM AND METHOD FOR MONITORING FLUID DELIVERY SYSTEM | 11729852.1 | 06/22/11 | Thoratec Corporation |
| 096205- 0915982 (009500TW) | THOR- PO1069TW | TW | FLUID DELIVERY SYSTEM AND METHOD FOR MONITORING FLUID DELIVERY SYSTEM | 100121835 | 06/22/11 | Thoratec Corporation |
| 096205- 0915980 (009500US) | THOR- PO1069 | US | FLUID DELIVERY SYSTEM AND METHOD FOR MONITORING FLUID | 13/166,771 8,905,910 | 06/22/11 12/09/14 | Thoratec Corporation |

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| 096205-0915963 (009510AU) | THOR- PO1068AU | AU | DELIVERY SYSTEM FLUID DELIVERY SYSTEM AND METHOD FOR MONITORING FLUID DELIVERY SYSTEM | 2011270881 2011270881 | 06/22/11 02/11/16 | Thoratec Corporation |
| 096205-0915986 (009510IP) | THOR- PO1068JP | JP | FLUID DELIVERY SYSTEM AND METHOD FOR MONITORING FLUID DELIVERY SYSTEM | 2013-516752 5898190 | 06/22/11 03/11/16 | Thoratec Corporation |
| 096205-0915981 (009510PC) | THOR- PO1068WO | PCT | FLUID DELIVERY SYSTEM AND METHOD FOR MONITORING FLUID DELIVERY SYSTEM | PCT/US2011/041534 | 06/22/11 | Thoratec Corporation |
| 096205-0921015 (009600US) | THOR- PO1158A | US | AXIAL FLOW BLOOD PUMP | 62/162,205 | 5/15/15 | Thoratec Corporation |
| 096205-1009157 (009610PC) | THOR- PO1158WO | PCT | IMPROVED AXIAL FLOW BLOOD PUMP | PCT/US2016/032516 | 5/13/16 | Thoratec Corporation |
| 096205-0925992 (009700US) | THOR- PO1119A | US | PUMP AND METHOD FOR MIXED FLOW BLOOD PUMPING | 62/084,946 | 11/26/14 | Thoratec Corporation |
| 096205-0950898 (009710US) | THOR- PO1119 | US | PUMP AND METHOD FOR MIXED FLOW BLOOD PUMPING | 14/952,296 | 11/25/15 | Thoratec Corporation |
| 096205-0950896 (009710PC) | THOR- PO1119WO | US | PUMP AND METHOD FOR MIXED FLOW BLOOD PUMPING | PCT/US2015/062689 | 11/25/15 | Thoratec Corporation |
| 096205-0941716 (009800US) | THOR- PO1153A | US | BLOOD PUMP CONTROLLERS AND METHODS OF USE FOR IMPROVED ENERGY EFFICIENCY | 62/211,618 | 8/28/15 | Thoratec Corporation |
| 096205-1013243 (009800PC) | THOR- PO1153WO | PCT | BLOOD PUMP CONTROLLERS AND METHODS OF USE FOR IMPROVED ENERGY EFFICIENCY | PCT/US2016/049674 | 8/26/16 | Thoratec Corporation |
| 096205-0941717 (009900US) | THOR- PO1151A | US | CANTILEVERED ROTOR PUMP AND METHODS FOR AXIAL FLOW BLOOD PUMPING | 62/195,258 | 07/21/15 | Thoratec Corporation |
| 096205-1012843 (009910PC) | THOR- PO1151WO | PCT | CANTILEVERED ROTOR PUMP AND METHODS FOR AXIAL FLOW BLOOD PUMPING | PCT/US2016/043366 | 07/21/16 | Thoratec Corporation |
| 096205-1012840 (009910US) | THOR- PO1151 | US | CANTILEVERED ROTOR PUMP AND METHODS FOR AXIAL FLOW BLOOD PUMPING | 15/216,528 | 07/21/16 | Thoratec Corporation |
| 096205-0941718 (010000US) | THOR- PO1152A | US | VENTRICULAR ASSIST DEVICES HAVING A HOLLOW ROTOR AND METHODS OF USE | 62/186,202 | 6/29/15 | Thoratec Corporation |
| 096205-1013100 (010010PC) | THOR- PO1152WO | PCT | VENTRICULAR ASSIST DEVICES HAVING A HOLLOW ROTOR AND METHODS OF USE | PCT/US2016/040053 | 6/29/16 | Thoratec Corporation |

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| 096205-1013096 (010010US) | THOR- P01152 | US | VENTRICULAR ASSIST DEVICES HAVING A HOLLOW ROTOR AND METHODS OF USE | 15/196,436 | 6/29/16 | Thoratec Corporation |
| 096205-0941719 (011000US) | THOR- P01155A | US | FLOW ESTIMATION USING HALL-EFFECT SENSORS | 62/194,608 | 7/20/15 | Thoratec Corporation |
| 096205-1015559 (011010PC) | THOR- P01155WO | PCT | FLOW ESTIMATION USING HALL-EFFECT SENSORS | PCT/US2016/042922 | 07/19/16 | Thoratec Corporation |
| 096205-1015557 (011010US) | THOR- P01155 | US | FLOW ESTIMATION USING HALL-EFFECT SENSORS | 15/214,089 | 07/19/16 | Thoratec Corporation |
| 096205-0941720 (012000US) | THOR- P01154A | US | STRAIN GAUGE FOR FLOW ESTIMATION | 62/194,700 | 07/20/15 | Thoratec Corporation |
| 096205-1015564 (012010PC) | THOR- P01154WO | PCT | STRAIN GAUGE FOR FLOW ESTIMATION | PCT/US2016/042795 | 07/18/16 | Thoratec Corporation |
| 096205-1015561 (012010US) | THOR- P01154 | US | STRAIN GAUGE FOR FLOW ESTIMATION | 15/212,721 | 07/18/16 | Thoratec Corporation |
| 096205-0949898 (013000US) | THOR- P01159A | US | BLOOD PUMP CONTROLLERS HAVING DAISY-CHAINED BATTERIES | 62/258,205 | 11/20/15 | Thoratec Corporation |
| 096205-0957254 (014000US) | THOR- P01160A | US | ENERGY MANAGEMENT OF BLOOD PUMP CONTROLLERS | 62/257,894 | 11/20/15 | Thoratec Corporation |
| 096205-0957255 (015000US) | THOR- P01161A | US | SYSTEM ARCHITECTURE THAT ALLOWS PATIENT REPLACEMENT OF VAD CONTROLLER/INTERFACE MODULE WITHOUT DISCONNECTION OF OLD MODULE | 62/258,035 | 11/20/15 | Thoratec Corporation |
| 096205-0958725 (016000US) | THOR- P01165A1 | US | CONNECTORS AND CABLES FOR USE WITH VENTRICLE ASSIST SYSTEMS | 62/258,292 | 11/20/15 | Thoratec Corporation |
| 096205-0970848 (017000US) | THOR- P01167A | US | COMPLIANT IMPLANTABLE CONNECTOR AND METHODS OF USE AND MANUFACTURE | 62/332,987 | 05/06/16 | Thoratec Corporation |
| 096205-1009146 (023000US) | THOR- P01178A | US | HEART PUMP DRIVE LINE POWER MODULATION | 62/399,639 | 09/28/16 | Thoratec Corporation |
| 096205-1011952 (025000US) | THOR- P01157A | US | DEVICES AND METHODS FOR MONITORING BEARING AND SEAL PERFORMANCE | 62/374,726 | 08/12/16 | Thoratec Corporation |
| 093790-0580345 (033800US) | THOR- P05029 He/ph | US | MAGNETICALLY JOURNALLED ROTATIONAL ARRANGMENT | 09/128,047 6,181,040 | 08/03/98 01/30/01 | Thoratec Corporation |
| 093790-0600200 | THOR- P05033US | US | METHOD AND ARRANGEMENT FOR THE | 09/381,775 6,236,130 | 11/12/99 05/22/01 | Thoratec Corporation |

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| (042100US) | | | EXCITATION OF THE JOURNALLING WINDING AND THE DRIVE WINDING SYSTEMS IN ELECTRICAL MACHINES WITH MAGNETIC JOURNALLING, AND AN ELECTRICAL DRIVE | | | |
| 093790-0604058 (042800US) | THOR-POS036US | US | MAGNETICALLY JOURNALLED ELECTRICAL DRIVE | 09/446,157 6,268,675 | 12/16/99 07/21/01 | |
| 093790-0827911 (066720US) | THOR-POS015D | US | PUMP-INFLOW-CANNULA, A PUMP-OUTFLOW-CANNULA AND A BLOOD MANAGING SYSTEM | 13/349,462 | 01/12/12 | Thoratec Corporation |

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