

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5287446

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
STEVEN H. REICHENBACH	12/13/2012
PIETER W.C.J. LE BLANC	11/29/2012
YI-REN WOO	11/20/2012
DAVID GARY ELDRIDGE	11/20/2012
STEPHEN G. BRIANA	11/26/2012
WILLIAM V. HODGES	11/21/2012
ETHAN PETERSEN	11/21/2012
PETER ANDRIOLA	11/29/2012
ONUR DUR	12/13/2012
ERIC LEE	04/08/2014
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	THORATEC CORPORATION
<b>Street Address:</b>	6035 STONERIDGE DRIVE
<b>City:</b>	PLEASANTON
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	94588
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15359231
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(415)576-0300
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
<b>Phone:</b>	650-326-2400
<b>Email:</b>	kmak@kilpatricktownsend.com
<b>Correspondent Name:</b>	KILPATRICK TOWNSEND & STOCKTON LLP
<b>Address Line 1:</b>	TWO EMBARCADERO CENTER, SUITE 1900
<b>Address Line 4:</b>	SAN FRANCISCO, CALIFORNIA 94111
<b>ATTORNEY DOCKET NUMBER:</b>	096205-1025788(006412US)

<b>NAME OF SUBMITTER:</b>	KELLY MAK
<b>SIGNATURE:</b>	/Kelly Mak/
<b>DATE SIGNED:</b>	12/17/2018
<b>Total Attachments: 12</b> source=ASSIGNMENT_1#page1.tif source=ASSIGNMENT_1#page2.tif source=ASSIGNMENT_1#page3.tif source=ASSIGNMENT_1#page4.tif source=ASSIGNMENT_1#page5.tif source=ASSIGNMENT_1#page6.tif source=ASSIGNMENT_1#page7.tif source=ASSIGNMENT_1#page8.tif source=ASSIGNMENT_1#page9.tif source=ASSIGNMENT_1#page10.tif source=ASSIGNMENT_1#page11.tif source=ASSIGNMENT_1#page12.tif	

ASSIGNMENT

For valuable consideration, we, STEVEN H. REICHENBACH of 3620 Florian Street, Pleasanton, CA 94588, PIETER W.C.J. LE BLANC of 11078 Roanoke River Court, Rancho Cordova, CA 95670, YI-REN WOO of 62 Terra Way, Livermore, CA 94550, DAVID GARY ELDRIDGE of 7172 Regional Street, #429, Dublin, CA 94568, STEPHEN G. BRIANA of 254A Ray Street, Pleasanton, CA 94566, WILLIAM V. HODGES of 2621 Shofield Court, Tracy, CA 95377, ETHAN PETERSEN of 659 Aileen Street, Oakland, CA 94609, and PETER ANDRIOLA of 204 Carol Court, Alamo, CA 94507, hereby assign to Thoratec Corporation, a corporation of California having a place of business at 6035 Stoneridge Drive, Pleasanton, CA 94588; and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by us, entitled PUMP AND METHOD FOR MIXED FLOW BLOOD PUMPING, filed 10/12/2012, and assigned U.S. Serial Number 13/650,874, and United States Provisional Patent Application entitled PUMP AND METHOD FOR MIXED FLOW BLOOD PUMPING, filed 10/13/2011, and assigned U.S. Serial Number 61/547,032, this assignment including said applications, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said applications under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

Date: 12-13-12

  
STEVEN H. REICHENBACH

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

PIETER W.C.J. LE BLANC

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

YI-REN WOO

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

DAVID GARY ELDRIDGE

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STEPHEN G. BRIANA

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WILLIAM V. HODGES

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

ETHAN PETERSEN

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

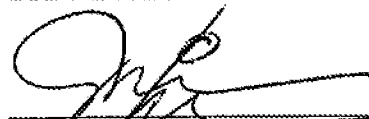
PETER ANDRIOLA

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

STEVEN H. REICHENBACH

Date: 11/29/2012



PIETER W.C.J. LE BLANC

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

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DAVID GARY ELDRIDGE

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PIETER W.C.J. LE BLANC

Date: 11/20/2012

Yi-Ren Woo  
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DAVID GARY ELDRIDGE

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STEVEN H. REICHENBACH

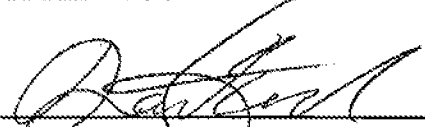
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YI-REN WOO

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ETHAN PETERSEN

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PETER ANDRIOLA

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Date: _____	_____ STEVEN H. REICHENBACH
Date: _____	_____ PIETER W.C.J. LE BLANC
Date: _____	_____ YI-REN WOO
Date: _____	_____ DAVID GARY ELDRIDGE
Date: <u>11/26/2012</u>	<u>Stephen G. Briana</u> STEPHEN G. BRIANA
Date: _____	_____ WILLIAM V. HODGES
Date: _____	_____ ETHAN PETERSEN
Date: _____	_____ PETER ANDRIOLA

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Date: \_\_\_\_\_ STEVEN H. REICHENBACH

Date: \_\_\_\_\_ PIETER W.C.J. LE BLANC

Date: \_\_\_\_\_ YI-REN WOO

Date: \_\_\_\_\_ DAVID GARY ELDRIDGE

Date: \_\_\_\_\_ STEPHEN G. BRIANA

Date: 21 Nov 2012   
WILLIAM V. HODGES

Date: \_\_\_\_\_ ETHAN PETERSEN

Date: \_\_\_\_\_ PETER ANDRIOLA

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

STEVEN H. REICHENBACH

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

PIETER W.C.J. LE BLANC

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

YI-REN WOO

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DAVID GARY ELDRIDGE

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STEPHEN G. BRIANA

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WILLIAM V. HODGES

Date: 11/21/2012

  
ETHAN PETERSEN

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PETER ANDRIOLA

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STEVEN H. REICHENBACH

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STEPHEN G. BRIANA

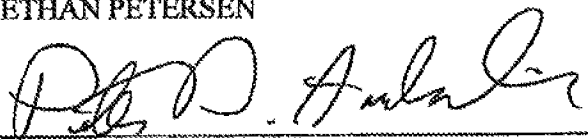
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WILLIAM V. HODGES

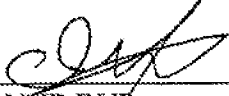
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ETHAN PETERSEN

Date: 11/29/12

  
PETER ANDRIOLA

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Date: _____	_____ STEVEN H. REICHENBACH
Date: _____	_____ PIETER W.C.J. LE BLANC
Date: _____	_____ YI-REN WOO
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Date: _____	_____ STEPHEN G. BRIANA
Date: _____	_____ WILLIAM V. HODGES
Date: _____	_____ ETHAN PETERSEN
Date: _____	_____ PETER ANDRIOLA
Date: <u>12/13/12</u>	 ONUR DUR

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**ASSIGNMENT**  
(Patent Application)

We [I], the undersigned, have invented certain inventions and improvements disclosed in a utility (provisional or non-provisional) or design patent application entitled

“PUMP AND METHOD FOR MIXED FLOW BLOOD PUMPING,”

filed with the U.S. Patent & Trademark Office on October 12, 2012

and assigned serial no. 13/650,874.

For good and valuable consideration, the receipt and sufficiency of which we [I] acknowledge, we [I]:

1. Agree to assign, transfer, convey, and sell, hereby assign, transfer, convey, and sell and have assigned, transferred, conveyed, and sold to Thoratec Corporation, a corporation having a principal place of business at 6035 Stoneridge Drive, Pleasanton, CA 94588 (“Assignee”), the entire right, title, and interest in and to:
  - (a) all intellectual property (including, without limitation, any innovation, information, invention, discovery, product, process, work or design) disclosed, embodied, shown, or claimed in the above-referenced patent application, implicitly or explicitly;
  - (b) the above-referenced patent application, the right to claim priority to the above-referenced patent application, all applications based in whole or in part upon the above-referenced patent application, 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 application or application for other rights based in whole or in part on the above-referenced patent application;
  - (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

ASSIGNMENT

U.S. Serial No. 13/650,874

Attorney Docket No. 96205-006410US-898013

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- (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.
2. Authorize and request 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 documents, resulting from the intellectual property, patent application(s) and patents described in paragraph 1 of this Assignment.
  3. Agree 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 paragraph 1 of this Assignment and the enforcement of patent(s) or other rights resulting from such patent application(s) or intellectual property.
  4. Agree that the terms, covenants, and conditions of this Assignment shall inure to the benefit of the Assignee, its successors, assigns and other legal representative, and shall be binding upon us [me], as well as our [my] heirs, legal representatives, and assigns.
  5. Promise and affirm that we [I] have not entered, and will not enter, into any assignment, contract, or understanding that conflicts with this Assignment.

Signed on the dates indicated beside our [my] signatures [signature].

Signature: \_\_\_\_\_

Eric Lee

Date: 8/2/2014

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