PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3709169

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YI-REN WOO	12/02/2015
ONUR DUR	12/02/2015
STEVEN H. REICHENBACH	01/06/2016

RECEIVING PARTY DATA

Name:	THORATEC CORPORATION
Street Address:	6035 STONERIDGE DRIVE
City:	PLEASANTON
State/Country:	CALIFORNIA
Postal Code:	94588

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14952296

CORRESPONDENCE DATA

Fax Number: (415)576-0300

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.

(206) 467-9600 Phone:

Email: sreames@kilpatricktownsend.com

KILPATRICK TOWNSEND & STOCKTON LLP **Correspondent Name:**

Address Line 1: TWO EMBARCADERO CENTER

Address Line 2: **EIGHTH FLOOR**

Address Line 4: SAN FRANCISCO, CALIFORNIA 94111

ATTORNEY DOCKET NUMBER: 096205-0950898 (009710US) NAME OF SUBMITTER: SHELLEY REAMES SIGNATURE: /Shelley Reames/ **DATE SIGNED:** 01/25/2016

Total Attachments: 4 source=ASSIGN#page1.tif

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ASSIGNMENT (Patent Application)

We, the undersigned, have invented certain inventions and improvements disclosed in a utility non-provisional patent application entitled "PUMP AND METHOD FOR MIXED FLOW BLOOD PUMPING," filed with the U.S. Patent & Trademark Office on November 25, 2015, and assigned serial no. 14/952,296.

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

- Agree to assign, transfer, convey, and sell, hereby assign, transfer, convey, and sell and have assigned, transferred, conveyed, and sold to Thoratec Corporation, having a principal place of business at 6035 Stoneridge Drive, Pleasanton, California 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
 - (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.

ASSIGNMENT U.S. Serial No. 14/952,296 Page 2 of 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, as well as our heirs, legal representatives, and assigns.
- 5. Promise and affirm that we 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 signatures.

Signature:	Yi-Ren Woo	Date: 12/2/2015
Signature:	Onur Dur	Date:
Signature:	Steven H. Reichenbach	Date:

ASSIGNMENT U.S. Serial No. 14/952,296 Page 2 of 2

- 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.
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Signed on the dates indicated beside our signatures.

Signature:		Date:
	Yi-Ren Woo	
Signature:	Onur Dur	Date: <u>12/02/15</u>
Signature:	Steven H. Reichenbach	Date:

ASSIGNMENT U.S. Serial No. 14/952,296 Page 2 of 2

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Signed on the dates indicated beside our signatures.

RECORDED: 01/25/2016

Signature:		Date:
	Yi-Ren Woo	
Signature:	Onur Dur	Date:
Signature:	Steven H. Reichenbach	Date: - 6 - 16