504464687 07/19/2017 PATENT ASSIGNMENT COVER SHEET

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	SUBMISSION TYPE:		NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		ASSIGNMENT			
CONVEYING PARTY DA	ATA				
		Name	Execution Dat		
PAUL F. MULLER			10/27/2016		
KEIF M. FITZGERALD			10/27/2016		
MICHAEL R. BUTLER			10/28/2016		
TODD JENKINS			12/09/2016		
RECEIVING PARTY DA	ТА				
Name:		EC CORPORATION			
Street Address:	6035 ST	ONERIDGE DRIVE			
City:	PLEASA	NTON			
State/Country:	CALIFO	CALIFORNIA			
Postal Code:	94588				
Property Type		Number			
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	1	Number 5654451			
Application Number:					
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ASSIGNMENT

WHEREAS, Paul F. Muller, residing in San Carlos, CA, Keif M. Fitzgerald, residing in San Jose, CA, Michael R. Butler, residing in Dublin, CA, and Todd Jenkins, residing in San Jose, CA, (individuals hereinafter "ASSIGNOR") invented certain new and useful improvements, technology, inventions, developments, ideas, ornamental design or discoveries related to GAS-FILLED CHAMBER FOR CATHETER PUMP MOTOR ASSEMBLY (collectively hereinafter referred to as the "Work") for which an application for Letters Patent in the United States has been prepared for filing (identified above) with the United States Patent and Trademark Office (hereinafter the "Application");

AND WHEREAS, THORATEC CORPORATION, a California Corporation, having an address at 6101 Stoneridge Drive, Pleasanton, CA 94855 (hereinafter the "ASSIGNEE"), desires to acquire the entire right, title, and interest in and to the Application and the Work:

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR hereby acknowledges that ASSIGNOR has sold, assigned, transferred and set over, and by these presents does hereby sell, assign, transfer and set over, unto said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title, and interest throughout the world in the Application and the Work, including all provisional applications relating thereto (including but not limited to U.S. Provisional Application No(s). 62/365,258, filed July 21, 2016), and all nonprovisional applications claiming priority thereto, including, all divisions, continuations, continuations-in-part, reissues, and reexaminations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all rights of priority under International Conventions and any related Letters Patent which may hereafter be granted or filed in any country or countries foreign to the United States, all extensions, renewals and reissues thereof; and ASSIGNOR hereby authorizes and requests the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all related Letters Patent to the ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND ASSIGNOR DOES HEREBY sell, assign, transfer, and convey to ASSIGNEE, its successors, legal representatives, and assigns all claims for damages and all remedies arising out of any violation of the rights assigned hereby that may have accrued prior to the date of assignment to ASSIGNEE, or may accrue hereafter, including, but not limited to, the right to sue for, collect, and retain damages for past infringements of said Letters Patent before or after issuance.

AND ASSIGNOR DOES HEREBY covenant and agree that ASSIGNOR will communicate to said ASSIGNEE, its successors, legal representatives and assigns, any facts known to ASSIGNOR respecting the Work, and testify in any legal proceeding, assist in the preparation of any other provisional or non-provisional applications relating to the Application and the Work or any improvements made thereto, sign all lawful papers, authorize the filing of and execute and make all rightful oaths and/or declarations in connection with the Application and the Work including any improvements made thereto, any patent applications filed therefrom, and any continuing application filed from any of the aforementioned applications, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for the Work in all countries.

PATENT REEL: 043047 FRAME: 0956 Application No.: 62/365,258 Filing Date: July 21, 2016

Legal Name of Inventor	or: Paul F. Muller	Date: 14/27/16
	Witnessed by:	KI Th
	Witness Name (printed):	Kere Kriseanis
	Witnessed by: _ Witness Name (printed): _	Part F. C.a.

Legal Name of Inventor:	Keif M.	Fitzgerald
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Inventor Signature: Date: 10/22/16 Witnessed by: and the state Max / MA AL Witness Name (printed): _ Witnessed by: Witness Name (printed):

Application No.: 62/365,258	Docket Number: THOR.138PR
Filing Date: July 21, 2016	Page 4 of 5
Legal Name of inventor: Michael R. Butter	Date: 10/28/2016
Witnessed by: Witness Name (printed):	arah van Keulen
Witnessed by:	Paul F Gill
Witness Name (printed):	Paul F Gill

Application No.: 62/365,258 Filing Date: July 21, 2016

Legal Name of invento	or: Todd Jenkins	
Inventor Signature:	Jodd Ah	Date: 12/9/16
	Witnessed by:	$\Delta 2 = 2$
	Witness Name (printed):	-Ray Berelin
	Witnessed by:	
	Witness Name (printed):	Cumilo Peres

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