504727272 01/12/2018

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
HD BRANCH ACQUISITION, LLC	04/07/2017

RECEIVING PARTY DATA

Name:	THERMAL SOLUTIONS MANUFACTURING, INC.
Street Address:	15 CENTURY BLVD.
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City:	NASHVILLE
State/Country:	TENNESSEE
Postal Code:	37214

PROPERTY NUMBERS Total: 8

Property Type	Number
Patent Number:	6951240
Patent Number:	7178579
Patent Number:	7290593
Patent Number:	7228885
Patent Number:	7347248
Application Number:	13250076
Patent Number:	7464700
Patent Number:	8037685

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NAME OF SUBMITTER:	NATHAN J. BAILEY

504727272 REEL: 044608 FRAME: 0110

SIGNATURE:	/Nathan J. Bailey, Reg. #70905/	
DATE SIGNED: 01/12/2018		
Total Attachments: 2		
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source=Patent Assignment from HD Branch to Thermal Solutions#page2.tif		

PATENT REEL: 044608 FRAME: 0111

ASSIGNMENT

In consideration of the payment of one (\$1.00) dollar, and for other good and valuable consideration, the receipt of which is hereby acknowledged, HD Branch Acquisition, LLC ("Assignor"), a limited liability company duly organized and existing under the laws of the state of Delaware, hereby assigns to Thermal Solutions Manufacturing, Inc. ("Assignee"), a corporation duly organized and existing under the laws of the state of Delaware, their entire right, title, and interest in and to the following, including all continuations, continuations in part, divisionals, corresponding foreign applications, national stage entries, registrations, patents that issue therefrom in the U.S. and in foreign jurisdictions, and the right to claim priority to (the "Inventions"):

U.S. Patent / App. No.	<u>Title</u>
6,951,240	Heat Exchanger Package
7,178,579	Heat Exchanger Package With Split Charge Air Cooler
7,290,593	Heat Exchanger Package With Split Charge Air Cooler
7,228,885	Heat Exchanger Package With Split Radiator and Split Charge Air Cooler
7,347,248	Heat Exchanger Package With Split Radiator and Split Charge Air Cooler
13/250,076	Method for Cooling an Internal Combustion Engine Having Exhaust Gas Recirculation and Charge Air Cooling
7,464,700	Method for Cooling an Internal Combustion Engine Having Exhaust Gas Recirculation and Charge Air Cooling
8,037,685	Method for Cooling an Internal Combustion Engine Having Exhaust Gas Recirculation and Charge Air Cooling

Assignor represents and warrants that it has not transferred, licensed, and/or assigned any interest in the Inventions or the Assets identified above to anyone other than Assignee, and that it has not entered into any contract, assignment, or license conveying any right granted to Assignee hereunder, or that would otherwise conflict with this Assignment.

Assignor will cooperate with and assist Assignee such that Assignee may realize and fully enjoy all the rights assigned hereunder, including the preparation and execution of all papers needed by Assignee, and providing such information and assistance as may reasonably be required by Assignee in any administrative or legal proceeding to obtain or protect such rights.

This Assignment and each of its terms shall be binding on the Assignor, and their representatives, heirs and assigns, and shall inure to the benefit of Assignee, its successors, and assigns.

ASSIGN	OR, HD BRAN	NCH ACQUISITION	l, LL
By (sign	ature):	·伊拉	
Name:	Donald	Keerer	
Title:	010		
Date:	4/7/17		