504661195 11/29/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4707917

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date	
SHAILESH N. JOSHI	11/29/2017	

RECEIVING PARTY DATA

Name:	TOYOTA MOTOR ENGINEERING & MANUFACTURING NORTH AMERICA, INC.
Street Address:	25 ATLANTIC AVENUE
City:	ERLANGER
State/Country:	KENTUCKY
Postal Code:	41018

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	15824573	

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	22562-2515 / 2016-637
NAME OF SUBMITTER:	MARK A. HARPER, PH. D.
SIGNATURE:	/Mark A. Harper/
DATE SIGNED:	11/29/2017

Total Attachments: 2

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> **PATENT REEL: 044245 FRAME: 0373** 504661195

ASSIGNMENT

WHEREAS, I, Shailesh N. Joshi of 2035 Churchill, Ann Arbor, Michigan 48103, hereinafter the ASSIGNOR(S), invented certain new and useful MULTILAYER COMPOSITE BONDING MATERIALS AND POWER ELECTRONICS ASSEMBLIES INCORPORATING THE SAME for which I executed an application for a United States Patent and for which said application for United States Patent was filed on November 28, 2017, under

Patent	Application	Serial	No		~~~~	
Attorn	ey Docket N	lo. <u>22</u>	562-2515	5 / 2016	<u>-637;</u>	

WHEREAS, the ASSIGNOR(S) hereby authorize(s) and request(s) the attorney(s) and/or agent(s) empowered to act on **Toyota Motor Engineering & Manufacturing North America, Inc.'s** behalf in the aforementioned application, to insert above the filing date and application number of said application, when known:

WHEREAS, Toyota Motor Engineering & Manufacturing North America, Inc., a corporation of the State of Kentucky, with a place of business at 25 Atlantic Avenue, Erlanger, KY 41018, hereinafter called the ASSIGNEE, is desirous of acquiring the entire right, title and interest in and to said application and the inventions therein disclosed and any Letters Patent that may issue thereon;

AND, WHEREAS, it is the intent of the ASSIGNOR(S) to assign all rights to the above referenced application to the ASSIGNEE, including, but not limited to, all substantive rights in the above-referenced application as well as the right to claim priority, the right to be granted a patent in any and all countries and Regional Patent Offices, including, without limitation, the PCT Contracting States;

NOW, THEREFORE, for good and valuable consideration, receipt whereof is hereby acknowledged, ASSIGNOR(S) hereby sell, assign and transfer unto said ASSIGNEE, its successors and assigns, the entire right, title and interest, including the right to claim priority in and to said application, the inventions therein disclosed, and any improvements thereon, and in any and all Letters Patent that may be granted therefor in the United States and its territorial possessions and in any and all countries and Regional Patent Offices, including, without limitation, the PCT Contracting States, and in and to any and all divisions, continuations, substitutions, renewals, re-examinations, extensions and reissues thereof;

ASSIGNOR(S) hereby authorize and request the Patent Office Officials in the United States and its territorial possessions, and in any and all countries and Regional Patent Offices, including, without limitation, the PCT Contracting States, to issue, when granted, any Letters Patent thereon, and any and all divisions, continuations, substitutions, renewals, re-examinations, extensions and reissues thereof, to said ASSIGNEE, its successors and assigns, as the assignee of the entire right title and interest in and to the same, for the sole use and behalf of the ASSIGNEE and the ASSIGNEE's successors and assigns, to the full end of the term for which the Letters Patent may be granted, including the term of any and all divisions, continuations, substitutions, renewals, re-examinations, extensions and reissues thereof, as fully and entirely as the same would have been held by the ASSIGNOR(S) had this assignment not been made;

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PÄTENT, November 28, 2017

REEL: 044245 FRAME: 0374

ASSIGNOR(S) hereby authorize said ASSIGNEE, its successors and assigns, to file in its own name applications for patent in foreign countries in connection with the inventions hereby transferred, under the International Convention claiming the priority of said United States application or otherwise, and to secure in its own name the Letters Patent issued thereon, including any and all divisions, continuations, substitutions, renewals, re-examinations, extensions and reissues thereof; and

ASSIGNOR(S) hereby agree that, upon request, ASSIGNOR(S) will sign all papers, and make all rightful oaths, and do all acts which said ASSIGNEE, its successors or assigns, may consider necessary in connection with said United States application, and in connection with any other United States application or foreign applications that may be filed in connection with said inventions, and with any improvements thereon, and in connection with any Letters Patent issued thereon, including any and all divisions, continuations, substitutions, renewals, re-examinations, extensions and reissues thereof.

ASSIGNOR(S):

By:

Shailesh N. Joshi

Date: 4//24/24/2

RECORDED: 11/29/2017