502331168 05/01/2013

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Henry Helvajian	04/25/2013

RECEIVING PARTY DATA

Name:	The Aerospace Corporation		
Street Address:	2310 East El Segundo Boulevard		
City:	El Segundo		
State/Country:	Country: CALIFORNIA		
Postal Code: 90245			

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13739879

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	12709-033-999/467972-033
NAME OF SUBMITTER:	Christina Quatrino
Signature:	/Christina Quatrino/
Date:	05/01/2013
	·

Total Attachments: 2

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PATENT REEL: 030326 FRAME: 0626

ASSIGNMENT

WHEREAS, I, Henry HELVAJIAN, citizen of the United States, having a mailing address of 1040 Nithsdale Rd., Pasadena, California, 91105, United States and residing at Pasadena, California, United States, ASSIGNOR, am the inventor of the invention in SYSTEMS AND METHODS FOR ENHANCING MOBILITY OF ATOMIC OR MOLECULAR SPECIES ON A SUBSTRATE AT REDUCED BULK TEMPERATURE USING ACOUSTIC WAVES, AND STRUCTURES FORMED USING SAME for which I have executed an application for a Patent of the United States

Ø	which is executed on	Ø	even date herewith or	
Ø	which is identified by Jone	s Day	docket no. 12709-033-999	
Ø	which was filed on January	11, 20	013, Application No. 13/73	9,879
	I hereby authorize and req) the	uest a filing	ttomey(s) at Jones Day, to date and application numb	insert here in parentheses (Application number, filed er of said application when known.

and WHEREAS, The Aerospace Corporation, a corporation organized and existing under the laws of the state of California, and having an office for the transaction of business at 2310 E. El Segundo Boulevard, El Segundo, California, 90245, ASSIGNEE, is desirous of obtaining my entire right, title and interest in, to and under the said invention and the said application:

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I, the ASSIGNOR, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, my entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof, and all right to sue for infringement including past infringement;

AND I HEREBY authorize and request the Commissioner for Patents and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND I HEREBY covenant and agree that I have full right to convey the entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

AND I HEREBY further covenant and agree that I will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

IN TESTIMONY WHEREOF, I hereunto set my hand and seal the day and year set opposite my signature.

Date 4/25/2017 ,2013

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ones Day Docket No.	12709-033-999		
STATE OF CALIFORNIA			
COUNTY OF			
exnowledged to me that he/sa	before me, Course And is of satisfactory evidence to be the perfect executed the same in his/he/th entity upon behalf of which the personn	crson(n) whose name(3) is/age subs fir authorized capacity(ide), and tha	cribed to the within instrument a
certify under PENALTY OF I	PERJURY under the laws of the State of	California that the foregoing agrees	
VITNESS my hand and officia	I seal.		CAROLE ANN MULCHINSKI Commission # 1929334
lignature Carle Ar	n In whaten the is	cal)	Notary Public Lincola Los Angeles Courty
			My Comm. Expires Apt 16, 201
CCEPTED AND AGREED T	O BY ASSIGNEE, THE AEROSPACE	CORPORATION:	
ignature Roberta)	mold Matthe	Date: A V	<u>(1) 2</u> 1, 2013
	DONALD Matth		
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			CARCAL AND SELECTIONS OF

RECORDED: 05/01/2013