505598484 07/31/2019

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
XUDONG ZHAO	07/30/2019
PENG XU	04/12/2019
XIAOLI MA	07/22/2019
KEVIN FANCEY	07/19/2019
JUNMING LI	07/25/2019

RECEIVING PARTY DATA

Name:	UNIVERSITY OF HULL
Street Address:	THE KNOWLEDGE EXCHANGE COTTINGHAM ROAD
City:	HULL
State/Country:	GREAT BRITAIN
Postal Code:	HU6 7RX

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16342144

CORRESPONDENCE DATA

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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.

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ATTORNEY DOCKET NUMBER:	010155-19001A
NAME OF SUBMITTER:	BRYAN J. LEMPIA
SIGNATURE:	/Bryan J. Lempia/
DATE SIGNED:	07/31/2019

Total Attachments: 6

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PATENT REEL: 049915 FRAME: 0554

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PATENT REEL: 049915 FRAME: 0555

U.S. Application Serial No.: 16/342,144 Appl. Filing Date: April 15, 2019

ASSIGNMENT

WHEREAS, Xudong ZHAO, Peng XU, Xiaoli MA, Kevin FANCEY, and Junming LI, hereinafter called the "Assignors", have made the invention described in the United States patent application entitled HEAT EXCHANGER APPARATUS, executed by Assignors on the same date as, or on a date prior to, this Assignment;

WHEREAS, UNIVERSITY OF HULL, hereinafter called the "Assignee", desire to acquire the entire right, title and interest in and to the invention(s) and the patent application identified above, and all patents which may be obtained for said invention(s), as set forth below. The Assignors acknowledge that the above Case No., Docket No., Serial No., and/or filing date of the patent application may be added after execution of this Assignment, as needed and when said information becomes known or available;

NOW, THEREFORE, for what is mutually agreeable to be valuable and legally sufficient consideration, the receipt of which by the Assignors from the Assignee is hereby acknowledged, the Assignors have sold, assigned and transferred, and by these presents do sell, assign and transfer to the Assignee, the entire right, title and interest for the United States in and to the invention(s) and the patent application identified above, and any patents that may issue for said invention(s) in the United States; together with the entire right, title and interest in and to said invention(s) and all patent applications and patents issuing therefrom in all countries foreign to the United States, including the full right to claim for any such application all benefits and priority rights under any applicable convention; together with the entire right, title and interest in and to all continuations, divisions, renewals and extensions of any of the patent applications and patents defined above; together with the right to recover all damages, including, but not limited to, a reasonable royalty, by reason of past, present, or future infringement or any other violation of patent or patent application rights; to have and to hold for the sole and exclusive use and benefit of the Assignee, their successors and assigns, to the full end of the term or terms for all such patents.

-1-

PATENT REEL: 049915 FRAME: 0556

U.S. Application Serial No.: 16/342,144 Appl. Filing Date: April 15, 2019

THE ASSIGNORS HEREBY COVENANT AND AGREE, for both the Assignors and the Assignors' legal representatives, that the Assignors will assist the Assignee in the prosecution of the patent application identified above; in the making and prosecution of any other patent applications that the Assignee may elect to make covering the invention(s) identified above; in vesting in the Assignee like exclusive title in and to all such other patent applications and patents; and in the prosecution of any interference, reissue, reexamination, opposition, or other such proceeding before the U.S Patent and Trademark Office which may arise involving said invention(s), or any such patent application or patent; and that the Assignors will execute and deliver to the Assignee any and all additional papers which may be requested by the Assignee to carry out the terms of this Assignment. The Commissioner of Patents and Trademarks is hereby authorized and requested to issue patents to the Assignee in accordance with the terms of this Assignment.

IN TESTIMONY WHEREOF, the Assignors have executed this Assignment.

2	30/7/1
	(Date)
Witness to Signature	of First Assignor
WYATT	
_	Witness to Signature

U.S. Application Serial No.: 16/342,144 Appl. Filing Date: April 15, 2019 (Second Assignor Signature) (Date) Peng XU (Second Assignor Name) Witness to Signature of Second Assignor Yaxuan XIONG (Witness Name) Miong famuar (Witness Signature) (Third Assignor Signature) (Date) Xiaoli MA (Third Assignor Name) Witness to Signature of Third Assignor (Witness Name) (Witness Signature)

Atty. Docket No.: 010155-19001A

U.S. Application Serial No.: 16/342,144 Appl. Filing Date: April 15, 2019

(Second Assignor Signature)		(Date)
Peng XU		
(Second Assignor Name)		
	Witness to Signature of Second	Assignor
(Witness Name)		
(Witness Signature)		
Xiaoli Ma		
(Third Assignor Signature)		(Date) 22/07/2019
Xiaoli MA		
(Third Assignor Name)		reman)
	Witness to Signature of Third A	ssignor
Zishang ZHU		

U.S. Application Serial No.: 16/342,	144		Appl.	Filing Date:	April 15, 2019
K.S. Farego		19	JULY	2019	
(Fourth Assignor Signature)		(Date			
Kevin FANCEY					
(Fourth Assignor Name)					
	Witness to Signature of Fourth	ı Assigno)r		
David WEGHT					
(Witness Name)					
I Wright.					
(Witness Signature)					
(Fifth Assignor Signature)		(Date)		
Junming LI					
(Fifth Assignor Name)		си мін м.ж.»			
	Witness to Signature of Fifth	Assignoi	i [,]		
(Witness Name)					

(Witness Signature)

Atty. Docket No.: 010155-19001A

Appl. Filing Date: April 15, 2019

(Fourth Assignor Signature)		(Date)
Kevin FANCEY		
(Fourth Assignor Name)		**************************************
	Witness to Signature of	Fourth Assignor
(Witness Name)		
***************************************		AND THE PARTY OF T
(Witness Signature)		
(Witness Signature)		
(Witness Signature)	Junin a Li	
(Witness Signature) (Fifth Assignor Signature)	Juning J.C.	(Date) 25/07/2019
	Junin 9 1 1	(Date) 25/07/2019
(Fifth Assignor Signature) (Fifth Assignor Name)	Junnin 2 1 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2	

U.S. Application Serial No.: 16/342,144

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