505716109 10/09/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5762919

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
QIANG ZHU	07/24/2018
TAO TANG	07/24/2018
YING YING LESLEY LOW	07/24/2018
XIANG YUN DEBBIE SOO	07/24/2018
JIAN WEI XU	07/24/2018

RECEIVING PARTY DATA

Name:	AGENCY FOR SCIENCE, TECHNOLOGY AND RESEARCH
Street Address:	1 FUSIONOPOLIS WAY,
Internal Address:	#20-10 CONNEXIS
City:	SINGAPORE
State/Country:	SINGAPORE
Postal Code:	138632

PROPERTY NUMBERS Total: 1

Property Type	Number			
Application Number:	16496955			

CORRESPONDENCE DATA

Fax Number: (408)703-5399

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.

Phone: 408-341-3000

Email: Lester.Vincent@wbd-us.com

Correspondent Name: WOMBLE BOND DICKINSON (US) LLP

Address Line 1: P.O. BOX 7037

Address Line 4: ATLANTA, GEORGIA 30357-0037

ATTORNEY DOCKET NUMBER:	9322P168
NAME OF SUBMITTER:	LESTER J. VINCENT
SIGNATURE:	/LESTER J. VINCENT/
DATE SIGNED:	10/09/2019

Total Attachments: 10

PATENT REEL: 050672 FRAME: 0001

505716109



PATENT REEL: 050672 FRAME: 0002

DEED OF ASSIGNMENT

THIS DEED made the 24 day of ______ two thousand and eighteen (2018)

BETWEEN,

ZHU, Qiang

c/o Institute of Materials Research and Engineering,2 Fusionopolis Way,

#08-03,

Innovis,

Singapore 138634

TANG, Tao

c/o Institute of Materials Research and Engineering,

2 Fusionopolis Way,

#08-03,

Innovis,

Singapore 138634

LOW, Ying Ying Lesley

c/o Institute of Materials Research and Engineering,

2 Fusionopolis Way,

#08-03.

Innovis.

Singapore 138634

SOO, Xiang Yun Debbie

c/o Institute of Materials Research and Engineering,

2 Fusionopolis Way,

#08-03,

Innovis,

Singapore 138634

XU, Jian Wei

c/o Institute of Materials Research and Engineering,

2 Fusionopolis Way,

#08-03.

Innovis.

Singapore 138634

[hereinafter referred to as "the Assignors"]

AND

Agency for Science, Technology and Research

1 Fusionopolis Way,

#20-10,

Connexis North Tower,

Singapore 138632

[hereinafter referred to as "the Assignee"]

WHEREAS the Assignors warrant that the Assignors are the true inventors of an invention with the title "A Phase Change Material Composition and Method of Preparation Thereof" [hereinafter referred to as "the Invention"] the subject of the International Patent Application No. PCT/SG2018/050133 including the designation of the United States of America [hereinafter referred to as "the Application"]

<u>AND WHEREAS</u> the Assignors have agreed to assign to the Assignee and the Assignee desires to take assignment of all rights, title and interest of the Assignors in and to the Invention and the Application.

NOW THIS DEED WITNESSETH

- 1. In consideration of the sum of one dollar (\$1) and other good and valuable consideration receipt of which is hereby acknowledged by the Assignors, the Assignors hereby assign to the Assignee all of their rights, title and interest in and to the Invention and the Application including:
- (a) all rights and powers to make one or more applications for Letters Patent or other form of protection in the name of the Assignee in Singapore, the United States of America and in any other counties of the world in respect of the Invention, and all rights, title and interest in and to any Letters Patent or other form of protection to mature from any such application,

- * (b) the rights and powers to prosecute the Application and all rights, title and interest in and to any Patent or Patents granted thereon together with any extension of the term of any such Patent or Patents as may be granted, <u>SAVE THAT</u> nothing in this Deed shall prevent the filing or proceeding of an Application to which this Deed relates, in the name of the Assignors where such filing or proceeding of such Application is beneficial to the interests of the Assignee,
- (c) the rights and powers to seek protection in countries other than Singapore by way of Patent, Petty Patent, Utility Model, Design Patent or other appropriate form of protection for the Invention, by way of application(s) for such protection made to the appropriate authorities in such other country or countries as the Assignee in its complete discretion may elect, whether or not any such foreign application(s) be made claiming International Convention priority from the Application hereby assigned,
- (d) any Copyright owned by the Assignors in and to any drawings relating to the subject matter of the Invention together with the rights and powers such as subsist at the date of this Deed,
- (e) to apply for registration of Copyright, Design, Design-Patent or like protection in the name of the Assignee in Singapore and in any other countries of the world in respect of the subject matter of the said drawings and to any registration of Copyright, Design-Patent or like protection which matures from any such application, together with the rights to sue in respect of any infringement of that Copyright which may have occurred before the date of this Deed.
- 2. The Assignors agree, at the expense of the Assignee, to sign, execute and deliver all documents, forms and papers reasonably required to be produced or obtained by the Assignee in connection with any application for Letters Patent or other form of protection for the subject matter of the Invention, in Singapore or elsewhere.

<u>IN WITNESS WHEREOF</u> the Assignors and Assignee executed this Deed the day and year first hereinbefore written.

ASSIGNORS

SIGNED, SEALED and DELIVERED By the said ZHU, Qiang

in the presence of:

(Witness) Soo Xiong Yun Desbie

SIGNED, SEALED and DELIVERED By the said **TANG**, **Tao**

in the presence of:

(Witness) Zhu Qiang

SIGNED, SEALED and DELIVERED By the said LOW, Ying Ying Lesley

in the presence of:

(Witness)

Zhu Qiang

Tang Taw

Lesleylon

* SIGNED, SEALED and DELIVERED By the said SOO, Xiang Yun Debbie	
in the presence of:	Valarteiva ako istrokare istokiska terri
(Witness) Zhu Qiang	
SIGNED, SEALED and DELIVERED By the said XU , Jian Wei	
	,
	Vud-
in the presence of:	
Mu Chaf	
(Witness) Zhu Oiang	
ASSIGNEE	
FOR AND ON BEHALF OF By the said	
Agency for Science, Technology and Research	

(4108429_1):NSR

(Witness)

in the presence of:

THIS DEED	88	ASSIGNMENT	fisan :	thousand ar	nd eighteen
(2018)	11000 010 00 J			arousanu ai	ia eigneen
(20.0)					
BETWEEN,					

	ZHU, Qiang				
	c/o Institute of Materials Res	earch and Engin	eering,		
	2 Fusionopolis Way,				
	#08-03,				
	Innovis,				
	Singapore 138634				
	TANG, Tao				
	c/o Institute of Materials Res	earch and Engine	eering,		
	2 Fusionopolis Way,				
	#08-03,			•	
	Innovis,				
	Singapore 138634				
	LOW, Ying Ying Lesley				
	c/o Institute of Materials Res	earch and Engine	ering,		
	2 Fusionopolis Way,				
	#08-03,				
	Innovis,				
	Singapore 138634				
	SOO, Xiang Yun Debbie				
	c/o Institute of Materials Rese	arch and Engine	ering,		
	2 Fusionopolis Way,				
	#08-03,				
	Innovis,				
	Singapore 138634				

(4108429_1):NSR

PATENT REEL: 050672 FRAME: 0008 XU, Jian Wei

Singapore 138634

c/o Institute of Materials Research and Engineering, 2 Fusionopolis Way, #08-03, Innovis,

[hereinafter referred to as "the Assignors"]

AND

Agency for Science, Technology and Research

1 Fusionopolis Way, #20-10, Connexis North Tower, Singapore 138632

[hereinafter referred to as "the Assignee"]

WHEREAS the Assignors warrant that the Assignors are the true inventors of an invention with the title "A Phase Change Material Composition and Method of Preparation Thereof" [hereinafter referred to as "the Invention"] the subject of the International Patent Application No. PCT/SG2018/050133 including the designation of the United States of America [hereinafter referred to as "the Application"]

AND WHEREAS the Assignors have agreed to assign to the Assignee and the Assignee desires to take assignment of all rights, title and interest of the Assignors in and to the Invention and the Application,

NOW THIS DEED WITNESSETH

- 1. In consideration of the sum of one dollar (\$1) and other good and valuable consideration receipt of which is hereby acknowledged by the Assignors, the Assignors hereby assign to the Assignee all of their rights, title and interest in and to the Invention and the Application including:
- (a) all rights and powers to make one or more applications for Letters Patent or other form of protection in the name of the Assignee in Singapore, the United States of America and in any other counties of the world in respect of the Invention, and all rights, title and interest in and to any Letters Patent or other form of protection to mature from any such application,

- (b) the rights and powers to prosecute the Application and all rights, title and interest in and to any Patent or Patents granted thereon together with any extension of the term of any such Patent or Patents as may be granted, <u>SAVE THAT</u> nothing in this Deed shall prevent the filing or proceeding of an Application to which this Deed relates, in the name of the Assignors where such filing or proceeding of such Application is beneficial to the interests of the Assignee,
- (c) the rights and powers to seek protection in countries other than Singapore by way of Patent, Petty Patent, Utility Model, Design Patent or other appropriate form of protection for the Invention, by way of application(s) for such protection made to the appropriate authorities in such other country or countries as the Assignee in its complete discretion may elect, whether or not any such foreign application(s) be made claiming International Convention priority from the Application hereby assigned,
- (d) any Copyright owned by the Assignors in and to any drawings relating to the subject matter of the Invention together with the rights and powers such as subsist at the date of this Deed,
- (e) to apply for registration of Copyright, Design, Design-Patent or like protection in the name of the Assignee in Singapore and in any other countries of the world in respect of the subject matter of the said drawings and to any registration of Copyright, Design-Patent or like protection which matures from any such application, together with the rights to sue in respect of any infringement of that Copyright which may have occurred before the date of this Deed.
- 2. The Assignors agree, at the expense of the Assignee, to sign, execute and deliver all documents, forms and papers reasonably required to be produced or obtained by the Assignee in connection with any application for Letters Patent or other form of protection for the subject matter of the Invention, in Singapore or elsewhere.

<u>IN WITNESS WHEREOF</u> the Assignors and Assignee executed this Deed the day and year first hereinbefore written.

<u>ASSIGNORS</u>

SIGNED, SEALED and DELIVERED By the said **ZHU**, **Qiang**

n the presence of:		•••		
Witness)				
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			*******	**************************************
the presence of:				
Vitness)				
IGNED, SEALED and DELIV y the said LOW, Ying Ying L	/ERED _esley			
the presence of:		•		
Witness)				

SIGNED, SEALED and DELIVERED By the said **SOO**, **Xiang Yun Debbie**

(4108429_1):MSR

RECORDED: 10/09/2019

in the presence	of:							

(Witness)								
,								
SIGNED, SEALI	ED and DELIVE	RED						
By the said XU ,	Jian Wei							
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in the presence	of:							
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