## 504101891 11/17/2016

# PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
WOON-JIN CHUNG	11/02/2016
HAN-SOL LEE	11/02/2016
JAE-KWUN CHO	11/02/2016
JAE-KWUN HWANG	11/02/2016

### **RECEIVING PARTY DATA**

Name:	ORION CO., LTD.
Street Address:	217, 1GONGDAN-RO
Internal Address:	GUMI-SI
City:	GYEONGSANGBUK-DO
State/Country:	KOREA, REPUBLIC OF
Postal Code:	730-704

## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15312142

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NAME OF SUBMITTER:	HAI HAN, PH.D.
SIGNATURE:	/Hai Han/
DATE SIGNED:	11/17/2016

**Total Attachments: 5** 

PATENT REEL: 040363 FRAME: 0974

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PATENT REEL: 040363 FRAME: 0975

#### ASSIGNMENT

WHEREAS, we, Woon-Jin Chung, Han-Sol Lee, Jae-Kwun Cho, and Jae-Kwun Hwang (hereinafter referred to as ASSIGNORS), having mailing addresses of #311-203, 73, Sicheong-ro, Seobuk-go, Cheonan-si, Chungcheongnam-do 331-739, Republic of Korea; #Na-301, 15-7, Gyeryong-ro 568beon-gil, Seo-gu, Daejeon 302-814, Republic of Korea; #C-511, 957, Seonsan-daero, Goa-eup, Gumi-si, Gyeongsangbuk-do 730-811, Republic of Korea; and #201-602, 15 Bonggongnam-ro 20-gil, Gumi-si, Gyeongsangbuk-do 730-744, Republic of Korea, respectively, are the joint inventors of an invention entitled "GLASS MATERIAL FOR SEALING LARGE-AREA DYE-SENSITIZED SOLAR CELL," as described and claimed in the specification of International Application No. PCT/KR2015/005044, accorded an International Filing Date of May 5, 2015, for which an application for United States letters patent is sought;

WHEREAS, Orion Co., Ltd. (hereinafter referred to as ASSIGNEE), having a usual place of business at 217, 1gongdan-ro, Gumi-si, Gyeongsangbuk-do 730-704, Republic of Korea, is desirous of acquiring the entire right, title and interest in and to the invention and in and to any letters patent that may be granted therefor in the United States;

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNORS hereby sell, assign and transfer unto said ASSIGNEE, the entire right, title and interest in and to said invention, said application and any and all letters patent which may be granted for said invention in the United States of America and its territorial possessions including any extensions or adjustments in term thereof, and in any and all divisions, reissues and continuations thereof, including the right to sue and collect damages for past and present infringement of said letters patent; said invention, application and all letters patent on said invention to be held and enjoyed by ASSIGNEE and its successors and assigns for their use and benefit and of their successors and assigns as fully and entirely as the same would have been held and enjoyed by ASSIGNORS had this assignment, transfer and sale not been made. ASSIGNORS hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNORS agree to execute all instruments and documents required for the making and prosecution of applications for United States letters patent on said invention, for litigation regarding said letters patent, or for the purpose of protecting title to said invention or letters patent therefor.

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Date	Woon-Jin Chung
•	or have satisfactory evidence that Woon-Jin Chung signed vill, as a voluntary act for the uses and purposes mentioned in
Date November 2, 2016 (Type or Print)	Signed at Seoul/Korea
Miae Kim (Type or Print Name of Witness)	(Signature of Witness)

November 2, 2016	Justine .		
Date	Han-Sol Lee		
	or have satisfactory evidence that Han-Sol Lee signed this as a voluntary act for the uses and purposes mentioned in the		
Date November 2, 2016 (Type or Print)	Signed at Seoul/Korea		
Miae Kim (Type or Print Name of Witness)	(Signature of Witness)		

November 2, 2016	ch	ork
Date	Jae-K	wun Cho
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Date November 2, 2016 (Type or Print)	Signed atS	Seoul/Korea
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Date		Ja	e-Kwun Hwang	
this instrui	nent of his/her own free wi		y evidence that Jae-Kwun Hwang act for the uses and purposes menti	_
Date _	November 2, 2016	Signed at	Seoul/Korea	
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