503615717 12/17/2015

PATENT ASSIGNMENT COVER SHEET

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| SUBMISSION TYPE: | NEW ASSIGNMENT |
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| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------------|----------------|
| ROBERTO SCALA | 11/23/2015 |
| LUIGI BONANNO | 11/27/2015 |
| STEPHAN HARINGER | 11/27/2015 |
| ARMANDO GIANNATTASIO | 11/27/2015 |
| VALENTINO MOSER | 11/27/2015 |
| JESSE SAMSONOV APPEL | 11/05/2015 |
| MARTIN JEFFREY BINNS | 11/30/2015 |

RECEIVING PARTY DATA

| Name: | MEMC ELECTRONIC MATERIALS S.P.A. | |
|-----------------|----------------------------------|--|
| Street Address: | VIALE GHERZI, 31 | |
| City: | NOVARA | |
| State/Country: | ITALY | |
| Postal Code: | 28100 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 14758471 |

CORRESPONDENCE DATA

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| ATTORNEY DOCKET NUMBER: | 29981-311 (130048.5) |
|-------------------------|----------------------|
| NAME OF SUBMITTER: | MICHAEL G. MUNSELL |
| SIGNATURE: | /Michael G. Munsell/ |
| DATE SIGNED: | 12/17/2015 |

503615717 REEL: 037312 FRAME: 0301

Total Attachments: 8source=130048.5 - Executed Assignment-21919017#page1.tif source=130048.5 - Executed Assignment-21919017#page2.tif source=130048.5 - Executed Assignment-21919017#page3.tif source=130048.5 - Executed Assignment-21919017#page4.tif source=130048.5 - Executed Assignment-21919017#page5.tif

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PATENT REEL: 037312 FRAME: 0302

<u>ASSIGNMENT</u>

WHEREAS, We Roberto Scala of Novara, Italy, Luigi Bonanno of Novara, Italy, Stephan Haringer of Novara, Italy, Armando Giannatasio of Novara, Italy, Valentino Moser of Novara, Italy, Jesse Samsonov Appel of O'Fallon, Missouri, and Martin Jeffrey Binns of Gresham, Oregon, have invented an improvement in FABRICATION OF INDIUM-DOPED SILICON BY THE CZOCHRALSKI METHOD described in a non-provisional application for a United States patent assigned Serial No. 14/758,471, filed June 29, 2015;

AND, WHEREAS, MEMC Electronic Materials S.p.A. of Viale Gherzi 31, 28100 Novara, Italy, an Italian corporation, (hereinafter referred to as "ASSIGNEE"), is desirous of acquiring certain rights thereunder;

NOW, THEREFORE, for one dollar and other good and valuable consideration, receipt of all of which is hereby acknowledged, we have agreed to and do hereby sell, assign and transfer unto said ASSIGNEE the entire right, title and interest in and throughout the United States of America (including its territories and dependencies) and all countries foreign thereto in and to said invention, said United States application, any other United States applications (including provisional, non-provisional, divisional, continuing, or reissue applications) based in whole or in part on said United States application or in whole or in part on said invention, any foreign applications based in whole or in part on any of the aforesaid United States applications or in whole or in part on said invention, and any and all patents (including extensions thereof) of any country which have been or may be granted on any of the aforesaid applications or on said invention or any part thereof;

TO BE HELD AND ENJOYED by said ASSIGNEE, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by us had no sale and assignment of said interest been made;

AND We hereby authorize and request the Commissioner of Patents of the United States of America to issue any and all United States patents which may be granted upon said United States applications or any of them, or upon said invention or any part thereof, to said ASSIGNEE;

AND We hereby jointly and severally agree for ourselves and for our respective heirs, executors and administrators, to execute without further consideration any further lawful documents and any further assurances, and any provisional, non-provisional, divisional, continuing, reissue, or other applications for patents of any country, that may be deemed

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necessary by said ASSIGNEE fully to secure to said ASSIGNEE its interest as aforesaid in and to said invention or any part thereof, and in and to said several patents or any of them;

AND We hereby jointly and severally covenant for ourselves and our respective legal representatives that we have granted no right or license to make, use or sell said invention, to anyone except said ASSIGNEE, that prior to the execution of this deed our right, title and interest in said invention had not been otherwise encumbered, and that we have not executed and will not execute any instrument in conflict herewith.

IN WITNESS WHEREOF, I have hereunto set my hand.

23/11/8015 Data

Roberto Scala

Mitness

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27-/M/2015

Luigi Bonanno

Witness

27. M. ZONS

Date

Stephan Haringer

Mitnass

Milnoee

27/11/2015

Armando Giagnattasio

Witness

Mitnoss

24. U. 2015

Date

Valentino Moser

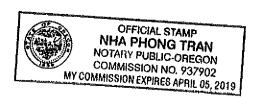
Witness

Wifness

| IN WITNESS WHEREOF, I have hereunto set my hand. | |
|---|------------------|
| 11/5/20/5 Date Jesse Samsonov Appel Jesse Samsonov Appel | |
| STATE OF // 2001/20 | |
| COUNTY OF Of (March) | |
| On this | executed same as |
| Notary Public | |
| My Commission Expires: Notery Public · Notery Seet Comm. Number 1350973s STATE OF MISSOURI St. Charles County My Commission Expires: July 31, 2017 | |

| $\frac{11/30/2015}{\text{Date}}$ | M. JUSUMS, |
|--|--|
| Date | Martin Jeffrey Binns |
| | |
| STATE OF Oregon |) |
| STATE OF Oregon COUNTY OF Multhamah |) .) |
| On this 30 day of No personally appeared Martin Jeffr who executed the foregoing assign free act and deed. | , 2015, before me, a Notary Public, ey Binns to me known to be the person described in and ament and acknowledged that he executed same as his |
| IN TESTIMONY WHEREON | F, I have hereunto set my hand and seal the date and year |

My Commission Expires: 4/5/2019



RECORDED: 12/17/2015