503075640 11/25/2014

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3122244

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
BEN E. CRUZ	06/14/2010
GEORGE E. GRADDY, JR.	06/14/2010
AZIZ S. SHAIKH	06/14/2010

RECEIVING PARTY DATA

Name:	FERRO CORPORATION	
Street Address:	1000 LAKESIDE AVENUE	
City:	CLEVELAND	
State/Country:	ОНЮ	
Postal Code:	44114	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12682040

CORRESPONDENCE DATA

Fax Number: (202)772-5858

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: 202-772-5800

Email: mlewis@blankrome.com

Correspondent Name: BLANK ROME LLP

Address Line 1: 600 NEW HAMPSHIRE AVENUE, N.W.

Address Line 4: WASHINGTON, D.C. 20037

ATTORNEY DOCKET NUMBER:	136617.04205
NAME OF SUBMITTER:	JAMIE L. BERTHA
SIGNATURE:	/Jamie L. Bertha/
DATE SIGNED:	11/25/2014

Total Attachments: 2

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PATENT 503075640 REEL: 034260 FRAME: 0185

ASSIGNMENT

For good and valuable consideration received of the hereinafter named assignee, receipt of which is hereby acknowledged, we the undersigned, Ben E. Cruz, George E. Graddy, Jr., Aziz S. Shaikh and Jalal Salami, hereby sell and assign to Ferro Corporation, a corporation of the State of Ohio, having a place of business at 1000 Lakeside Avenue, Cleveland, Ohio 44114, its successors and assigns, the entire right, title and interest, so far as concerns the United States and the Territories and Possessions thereof and all foreign countries, in and to the inventions in

Dielectric Coating For Single Sided Back Contact Solar Cells

set forth in application for United States Letters Patent filed 8 April 2010, Serial No. 12/682040 said application for United States Letters Patent, any and all other applications for Letters Patent on said inventions in countries foreign to the United States, including all divisional, renewal, substitute, continuation and Convention applications based in whole or in part upon said inventions or upon said applications, and any and all Letters Patent and reissues and extension of Letters Patent granted for said inventions or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said applications and said Letters Patent; said assignee being hereby authorized to file patent applications in any or all countries on any or all said inventions in the name of the undersigned or in the name of said assignee or otherwise as said assignee may deem advisable, under the International Convention or otherwise; the Commissioner of Patents of the United States of America and the empowered officials of all other governments being hereby authorized to issue or transfer all said Letters Patent to said assignee in accordance herewith; this assignment being under covenant, not only that full power to make the same is had by the undersigned, but also that such assigned right is not encumbered by any grant, license, or other right heretofore given, and that the undersigned will do all acts reasonably serving to assure that the said inventions, patent applications and Letters Patent shall be held and enjoyed by said assignee as fully and entirely as the same could have been held and enjoyed by the undersigned if this assignment had not been made, and particularly to execute and deliver to said assignee all lawful documents including petitions, specifications, oaths, assignments, invention disclaimers, and lawful affidavits in form and substance which may be requested by said assignee, to furnish said assignee with all facts relating to said inventions or the history thereof and any and all documents, photographs, models, samples or other physical exhibits which may be useful for establishing the facts of conception, disclosure and reduction to practice of said inventions, and to testify in any proceedings relating to said inventions, patent applications and Letters Patent.

Signed:	Dated:
X X E Cruz	6/14/10
George E. Graddy, Jr.	6/14/10
X Mailey Aziz S. Shaikh	6/14/10
X Jalal Salami	
: : SS. :	
the above-named Ben E. Cruz who acknow	wledged the execution of the foregoing
LYCUTHE Mon v 1790e71 Abbo - Colitoria a Mais A. Notary Public	Quiru
	Ben E. Cruz A Conge E. Graddy, Jr. X Marley Aziz S. Shaikh X Jalal Salami SS. SS. the above-named Ben E. Cruz who acknown 1790671 Abbo - Colimpina Mars S.

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STATE OF CALIFORNIA COUNTY OF San Diego	; : SS.
-	-named George E. Graddy, Jr. who acknowledged the execution of the
foregoing instrument as his free act and deed.	
<u>6/14/2018</u> Date	Chart. aguire
	THAIS L. AGUIRRE Commission # 1790671 Notary Public - California San Diego County My Comm. Expires Mar 2, 2012
STATE OF CALIFORNIA	:
COUNTY OF San Diego	: SS. :
Before me personally appeared the above- instrument as his free act and deed.	named Aziz S. Shaikh who acknowledged the execution of the foregoing
4/14/2010 Date	Mars X. Aguirre Notary Public
	THAIS L. AGUIRRE Commission # 1790671 Notary Public - California San Diego County My Comm. Expires Mar 2, 2012
STATE OF CALIFORNIA	
COUNTY OF	: SS. :
Before me personally appeared the above-	named Jalal Salami who acknowledged the execution of the foregoing
instrument as his free act and deed.	
Date	Notary Public
Lace	14Otaly 1 done

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RECORDED: 11/25/2014