504658710 11/28/2017 PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:		NEW ASSIGNMENT	NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		ASSIGNMENT	ASSIGNMENT		
CONVEYING PARTY	DATA				
		Name		Execution Date	
Shoji AKIYAMA					
lakoto KAWAI				11/14/2017	
RECEIVING PARTY	DATA				
Name:	Shin-et	su Chemical Co., Ltd.			
Street Address:	6-1, Oł	itemachi 2-chome, Chiyoda-ku			
City:	Tokyo				
State/Country:	Japan				
Postal Code:	100-00	04			
Property Typ Application Number		Number 15577405			
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Total Attachments: 2

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ASSIGNMENT (BEING FILED FOR DUAL PURPOSE UNDER 37 CFR 1.63(c)) For Application with Filing Date on or after September 16, 2012

ASSIGNMENT

Name(s) entor(s) Name of aec Address of ace	In com	tersigned, the receipt and sufficiency and hereby does assign, transfer and SHIN-ETSU CHEMICAL CO., LI	1.00) and other of which are he set over to TD.	good and valuable consideration paid to each of reby acknowledged, each undersigned agrees to		
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dentification	invention, and in all applications for patent including any and all provisional, non-provisional, divisional, continuation, international, substitute and reissue application(s), and all Letters Patent, extensions, reissues and reexamination certificates that may be granted on the invention known as METHOD FOR PRODUCING COMPOSITE WAFER HAVING OXIDE SINGLE-CRYSTAL					
such as Tille, Case Number, or Foreign Application Number	(11)	FILM				
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	Title, Case , or Foreign tion Number tive cation for plications undersigned agree e sectomments in c	contin and ros dentification Title, Case (11) r, or Forcign thon Number (Attor tive (12) cation for plications filed undersigned agrees to exect a sestemments in connection	continuation, international, substitute and re- and reexamination certificates that may be a dentification Title, Case (11) METHOD FOR PRODUCING CO FILM (Attorney Docket No. (Attorney Docket No. (12) U.S. Application Number cation for plications filed undersigned agrees to execute all papers necessary in connection c assignments in connection with such amplications and patents	continuation, international, substitute and reissue applicatio and reexamination certificates that may be granted on the in dentification Title, Case (1) METHOD FOR PRODUCING COMPOSITE WA r, ar Foreign thon Number (Attorney Docket No.), fil tive (12) U.S. Application Number cation for		

declared concerning any application or patent for the invention and to cooperate with the Assignce in every way possible in obtaining evidence and going forward with such interference or post-grant proceeding.

3) Each undersigned agrees to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.
4) Each undersigned agrees to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue or reveninging a constraint of a latter agreement.

reexamination a grant of a valid United States patent to the Assignce.

5) Each undersigned authorizes and requests the Commissioner of the U.S. Patent and Trademark Office to issue any and all patents resulting from said application(s) to the said Assignce, as Assignce of the entire interest, and covenants that he or she has full right to convey the entire interest herein assigned, and that he or she has not executed, and will not execute, any agreement(s) in conflict herewith, and agrees that this assignment is binding on Assignor and Assignor's heirs, successors, assigns and legal representatives.

6) Each undersigned hereby grants the firm of OLEFF FLC the power to insert on this assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

(13) Declaration

As an above named inventor, I hereby declare that:

I believe I am the original inventor or an original joint inventor of a claimed invention (or claimed design) in the above-identified application for which this declaration is being submitted.

The application was made or authorized to be made by me.

I have reviewed and understand the contents of the above-identified application, including the claims, and am aware of the duty to disclose to the Office all information known to me to be material to patentability as defined in 37 CFR §1.56.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

PATENT REEL: 044233 FRAME: 0205

Duic	November 14, 2017	layentar Signature	Shop Abugana (SEAL)
Date	<u>November 14, 2017</u>	luyontor Signature	Shaji AKIYAMA <u>Makata Kan</u> (SEAL) Makota KAWAI
Date		Inventor Signature	(SEAL)
Date		inventor Signature	
Date		Inventor Signature	(SBAL)
Date		Inventor Signature	(3BAL)
Bate		investor Signature	(SEAL)
Date		inventor Signaturs	(SBAL)

This resignment should preferably be signed before: (a) a Notary Public If within the U.S.A. (b) a U.S. Consul If ontside the U.S.A. If neither, then it should be signed before at least two witnesses who also sign here:

Date November 14, 2017 Witness And Mather

PATENT REEL: 044233 FRAME: 0206

RECORDED: 11/28/2017