10/31/2018 505168795

PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT5215563

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KENJI TAKAI	06/25/2018
SANG EUI LEE	06/25/2018
DAIKI MINAMI	06/25/2018

RECEIVING PARTY DATA

Name:	SAMSUNG ELECTRONICS CO., LTD.
Street Address:	129, SAMSUNG-RO, YEONGTONG-GU
City:	SUWON-SI, GYEONGGI-DO
State/Country:	KOREA, REPUBLIC OF
Postal Code:	16677

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16176332

CORRESPONDENCE DATA

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using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

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CANTOR COLBURN LLP **Correspondent Name:** Address Line 1: 20 CHURCH STREET

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ATTORNEY DOCKET NUMBER:	PNK1777US
NAME OF SUBMITTER:	ASAF BATELMAN
SIGNATURE:	/Asaf Batelman/
DATE SIGNED:	10/31/2018

Total Attachments: 4

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> **PATENT REEL: 047370 FRAME: 0354** 505168795

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PATENT REEL: 047370 FRAME: 0355 **Docket Number: PNK1777US** OPP20170854US RK-201702-006-1-US0

As a below named inventor, I hereby declare that:

DECLARATION AND ASSIGNMENT

Title of Invention: PLATING SOLUTION AND METAL COMPOSITE AND METHOD OF MANUFACTURING THE SAME

This declaration is directed to:

[X] the attached application (Attorney Docket Number PNK1777US or

[] United States application or PCT international application number

filed on ____

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I have reviewed and understand the contents of the application, including the claims.

I am aware of the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR Section 1.56.

Whereas, each undersigned inventor has made certain inventions, improvements, and discoveries (herein referred to as the "INVENTION") disclosed in the above-identified patent application (herein referred to as the ("APPLICATION");

Whereas, **SAMSUNG ELECTRONICS CO., LTD.,** a corporation of Country of Korea having a place of business at 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Republic of Korea (herein referred to as "ASSIGNEE"), desires to acquire, and each undersigned inventor desires to grant to ASSIGNEE, the entire worldwide right, title, and interest in and to the INVENTION and in and to any and all patent applications and patents directed thereto;

Now, therefore, for good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, each undersigned inventor (herein referred to ASSIGNOR") hereby sells or has sold, assigns or has assigned, and otherwise transfers or has transferred to the ASSIGNEE, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the INVENTION, the APPLICATION, and any and all other patent applications and patents for the INVENTION which may be applied for or granted therefor in the United States and in all foreign countries and jurisdictions, including all divisions, continuations, continuations-in-part, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents. In addition, each undersigned inventor hereby authorizes and requests the Director of the United States Patent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for the INVENTION, to ASSIGNEE, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the same to be held and enjoyed by ASSIGNEE, its successors, legal representatives, and all such

Docket Number: PNK1777US

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patents may be granted, as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made; and each undersigned inventor agrees to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the INVENTION, the APPLICATION, and all related patents and applications, in ASSIGNEE, its successors, legal representatives, and assigns, whenever requested by ASSIGNEE, its successors, legal representatives, and assigns.

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.

The undersigned hereby grant(s) the law firm of Cantor Colburn LLP the power to insert on this Declaration and Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

Legal Name of Inventor: Kenji Takai Signature: Kenjû Takaù	Date: 25,06,2018
Legal Name of Inventor: Sang Eui LEE	Lee F 2018. 45
Signature:	
Legal Name of Inventor - Daiki MINAMI	
Signature:	Date:

Docket Number: PNK1777US OPP20170854US RK-201702-006-1-US0

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[X] the attached application (Attorney Docket Number PNK1777US or

[] United States application or PCT international application number
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Now, therefore, for good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, each undersigned inventor (herein referred to ASSIGNOR") hereby sells or has sold, assigns or has assigned, and otherwise transfers or has transferred to the ASSIGNEE, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the INVENTION, the APPLICATION, and any and all other patent applications and patents for the INVENTION which may be applied for or granted therefor in the United States and in all foreign countries and jurisdictions, including all divisions, continuations, continuations-in-part, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents. In addition, each undersigned inventor hereby authorizes and requests the Director of the United States Patent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for the INVENTION, to ASSIGNEE, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the same to be held and enjoyed by ASSIGNEE, its successors, legal representatives, and all such

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Legal Name of Inventor:	Kenji TAKAI	
Signature:		Date)
Legal Name of Inventor:	Sang Eul LEE	
Signature:		Date:
Legal Name of Inventor:	Daiki MINAMI	
Signatures:	长线	Date: June 25,20/8