PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5711906

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
CHANG HYEONG LEE	09/04/2019
GYU HYEONG BAK	09/04/2019
YONG SEON SONG	09/03/2019
BYUNG YEON CHOI	09/02/2019
SUNG MIN HWANG	09/03/2019

RECEIVING PARTY DATA

Name:	LG INNOTEK CO., LTD.
Street Address:	98, HUAM-RO, JUNG-GU
City:	SEOUL
State/Country:	KOREA, REPUBLIC OF
Postal Code:	04637

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16492069

CORRESPONDENCE DATA

Fax Number: (703)205-8050

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: (703) 205-8000

Email:mailroom@bskb.com, anh-vu.dao@bskb.comCorrespondent Name:BIRCH, STEWART, KOLASCH & BIRCH, LLP.Address Line 1:8110 GATEHOUSE ROAD, SUITE 100E

Address Line 4: FALLS CHURCH, VIRGINIA 22042

ATTORNEY DOCKET NUMBER:	3449-3834PUS1
NAME OF SUBMITTER:	ANH-VU DAO
SIGNATURE:	/anh-vu dao/
DATE SIGNED:	09/10/2019

Total Attachments: 5

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PATENT REEL: 050333 FRAME: 0818 source=2019-09-06_DeclarationAndAssignment_3449-3834PUS1#page2.tif source=2019-09-06_DeclarationAndAssignment_3449-3834PUS1#page3.tif source=2019-09-06_DeclarationAndAssignment_3449-3834PUS1#page4.tif source=2019-09-06_DeclarationAndAssignment_3449-3834PUS1#page5.tif

PATENT REEL: 050333 FRAME: 0819 Application No. 16/492,069 filed on September 6, 2019 Attorney Docket No.: 3449-3834PUS1 Attorney Docket No. P2017-E0225US

BIRCH, STEWART, KOLASCH & BIRCH, LLP

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DECLARATION AND ASSIGNMENT FOR PATENT AND DESIGN APPLICATIONS

United States Patent Rights, or United States Plus all Foreign Patent Rights

Title of Invention SEMICONDUCTOR DEVICE AND SEMICONDUCTOR DEVICE PACKAGE

As a below named inventor (hereinafter designated as the undersigned), I hereby declare that:

Application not Attached This declaration is directed to the application attached hereto. If the application is not attached hereto, the application is as identified by the attorney docket number as set forth above and/or the following:

Enter Appln. No. ⇒

United States Application Number or PCT International Appln. No. PCT/KR2018/000839

Enter Filing Date ⇒

filed January 18, 2018

or

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 above-identified application, including the claims.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations § 1.56.

WHEREAS, the undersigned has invented certain new and useful improvements described in the application identified.

Insert Name of Assignee

⇒ WHEREAS, LG INNOTEK CO., LTD.

Insert Address of Assignee

98, Huam-ro, Jung-gu, Seoul, 04637, Republic of Korea

its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignee) is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent(s) that may be granted therefor in the United States of America and

Check Box if Appropriate

in any foreign countries.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, the undersigned has sold, assigned and transferred, and by these presents does (do) sell, assign and transfer unto said Assignee the full and exclusive right to the said invention in the United States of America, its territories, dependencies and possessions and the entire right, title and interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of America, its territories, dependencies and possessions, and if the box above is designated, in any and all foreign countries; and to any and all divisions, reissues, continuations, conversions and extensions thereof for the full term or terms for which the same may be granted.

BIRCH, STEWART, KOLASCH & BIRCH, LLP

BSKB-SUPPL-SIGANTURES(09-12)

Application No. 16/492,069 filed on September 6, 2019 Attorney Docket No.: 3449-3834PUS1

The undersigned agrees to execute all papers necessary in connection with this application and any continuing, divisional, conversion or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agrees to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division, conversion or reissue thereof or Letters Patent(s) or reissue patent issued thereon and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference.

The undersigned agrees to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

The undersigned agrees to perform all affirmative acts which may be necessary to obtain a grant of (a) valid United States of America and any foreign patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

The undersigned hereby authorizes and requests the Patent and Trademark Office Officials in the United States of America and in any foreign countries to issue any and all Letters Patent(s) resulting from said application or any continuing, divisional conversion or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has the full right to convey the entire interest herein assigned, and that he has not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grants the law firm of Birch, Stewart, Kolasch & Birch, LLP the power to insert any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office

The undersigned hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

The undersigned hereby acknowledges 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.

In witness whereof, executed by the undersigned on the date opposite the undersigned name.

	LEGAL NAME OF INVENTOR		
Inventor's Name 🔝	Inventor: LEE, Chang Hyeong	Date: 2019, 9, 4	
Inventor's Signature 🌼	Signature: Jake		
An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. Use a separate form for each inventor, or check the box below and complete the attached page(s) to list additional inventors. Additional inventors are being named on the 1 supplemental sheet(s) attached hereto.			

PSKB-DECASSION\(09-12)

Application No. 16/492,069 filed on September 6, 2019

Attorney Docket No.: 3449-3834PUS1

SUPPLEMENTAL SHEET FOR DECLARATION AND ASSIGNMENT

ADDITIONAL INVENTOR(S) Supplemental Sheet Page 1 of 1

	LEGAL N	AME OF JOINT INVENTOR, IF ANY		
Inventor's Name	⇒ Inventor:	BAK, Gyu Hyeong	Date: 20/9.	09,04
Inventor's Signature	⇒ Signature:			'
	LEGAL N	AME OF JOINT-INVENTOR, IF ANY		
Inventor's Name	□ Inventor:	SONG, Yong Seon	Date:	
Inventor's Signature	⇒ Signature:			
	LEGAL N	AME OF JOINT INVENTOR, IF ANY		
Inventor's Name	⇒Inventor:	CHOI, Byung Yeon	Date:	
Inventor's Signature	⇒Signature:			
	LEGAL N.	AME OF JOINT INVENTOR, IF ANY		
Inventor's Name	⇔Inventor:	HWANG, Sung Min	Date:	
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	LEGAL N	AME OF JOINT INVENTOR, IF ANY		
Inventor's Name	⇔Inventor:		Date:	
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Inventor's Signature	⇔Signature:			
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Inventor's Name	⇔Inventor:		Date:	
Inventor's Signature	⇔Signature:			
	LEGAL N	AME OF JOINT INVENTOR, IF ANY		
Inventor's Name	⇔Inventor:		Date:	
Inventor's Signature	⇔Signature:			

BSKB-DECASSIGN\(09-12)

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LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name	⇒ Inventor:	BAK, Gyu Hyeong	Date:
Inventor's Signature	⇒ Signature:		
	LEGAL NA	AME OF JOINT INVENTOR, IF ANY	
Inventor's Name	⇒ Inventor;	SONG, Yong Seon	Date: 20/9. 9.3
Inventor's Signature	⇒ Signature:	- FM	
	LEGAL NA	AME OF JOINT INVENTOR, IF ANY	
Inventor's Name	⇔Inventor:	CHOI, Byung Yeon	Date:
Inventor's Signature	⇒Signature:		· · · · · · · · · · · · · · · · · · ·
	LEGAL NA	AME OF JOINT INVENTOR, IF ANY	
Inventor's Name	⇔Inventor;	HWANG, Sung Min	Date:
Inventor's Signature	⇔Signature:		
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Inventor's Signature	⇔Signature:		
	LEGAL NA	AME OF JOINT INVENTOR, IF ANY	
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Inventor's Signature	⇔Signature:		
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Inventor's Signature	⇒Signature:		
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Inventor's Name	⇒Inventor:		Date:
Inventor's Signature	⇔Signature:		

BSKB-DECASSIGN\(09-12)

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ADDITIONAL INVENTOR(S) Supplemental Sheet Page 1 of 1

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Inventor's Name	⇔ Inventor:	BAK, Gyu Hyeong	Date:
Inventor's Signature			
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	LEGAL NA	AME OF JOINT INVENTOR, IF ANY	
Inventor's Name	⇒ Inventor:	SONG, Yong Seon	Date:
Inventor's Signature	⇒ Signature:		
-	LEGAL NA	AME OF JOINT INVENTOR, IF ANY	
Inventor's Name	⇒Inventor:	CHOI, Byung Yeon	Date: 2019/09/02
Inventor's Signature	⇔Signature:	27/11	, all war
	LEGAL NA	AME OF JOINT INVENTOR, IF ANY	·
Inventor's Name;	⇒Inventor:	HWANG, Sung Min	Date: September 03, 2019
Inventor's Signature	^{,⇔} Signature:	AATT	/
	LEGAL NA	AME OF JOINT INVENTOR, IF ANY	
Inventor's Name	⇔Inventor:	-	Date:
Inventor's Signature	⇔Signature:		
•	LEGAL NA	AME OF JOINT INVENTOR, IF ANY	
Inventor's Name	⇔Inventor;		Date:
Inventor's Signature	⇒Signature:		
	LEGAL NA	AME OF JOINT INVENTOR, IF ANY	
Inventor's Name	⇒Inventor:		Date:
Inventor's Signature	⇔Signature:		
	LEGAL NA	AME OF JOINT INVENTOR, IF ANY	
Inventor's Name	⇔Inventor:		Date:
Inventor's Signature	⇔Signature:		-

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