504819740 03/14/2018

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:			NEW ASSIGNMENT					
NATURE OF CONVEYANCE:			ASSIGNMENT					
CONVEYING PARTY	DATA	·						
		Ν	Name			Execution Date		
HO MIN LEE						03/06/2018		
DONG MUG SEONG						02/27/2018		
EUN JUNG JEON						02/22/2018		
RECEIVING PARTY	DATA							
Name:	LG INN	IOTEK	CO., LTD.					
Street Address:	98, HU	AM-RC	D, JUNG-GU					
City:	SEOU	_						
State/Country:	KORE	A, REP	PUBLIC OF					
Postal Code:	04637							
PROPERTY NUMBERS Total: 1 Property Type			Number					
Application Number: 1576			0114					
CORRESPONDENCE								
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•			& ASSOCIATES, LLP					
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ATTORNEY DOCKET NUMBER:			KPH-0068					
NAME OF SUBMITTER:			FEI J. BERKELEY					
SIGNATURE:			/Fei J. Berkeley/					
DATE SIGNED:			03/14/2018					
Total Attachments: 3								
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Docker No.: KPH-0068

ASSIGNMENT

In consideration of the premises and other good and valuable consideration in hand psid, the receipt and sufficiency of which is hereby acknowledged, the undersigned,

(1)	Lee, Ho Min	(4)	
(2)	Seeng. Dong Mug	(5)	
(3)	Jeon, Eun Jung	(6)	

who have made a cermin new and useful invention, hereby sell, assign and transfer unto

LG INNOTEK CO., LTD. 98, Huam-ro, Jung-gu, Seoul 04637 Republic of Korea

its successors and using theminather designated "ASSIGNEE") the entire right, title and interest for the United States of America as defined in 35 U.S.C. 100 in the investion entitled

PARTICLE SENSING DEVICE

(a) for which an application for United States Letters Pasent was filed on ______, and identified by United States Seriel No. ______ or _____ or ____ or _____ or ____ or _____ or _____ or _____ or ____ or _____ or ____ or _____ or ____ or _____ or _____ or ____ or _____ or _____ or _____ or _____ or ____ or _____ or ____ or _____ or _____ or _____ or ____ or _____ or ____ or _____ or ____ or _____ or ____ or _____ or _____ or ____ or _____ or _____ or _____ or _____ or ____ or _____ or ____ or _____ or _____ or _____ or _____ or _____ or _____ or ____ or _____ or ____ or _____ or ____ or _____ or ____ or _____ or ___

(b) for which an application for United Stores Letters Patent was executed on February 22, 2018; February 27, 2018; March 6, 2018

and the undersigned hereby authorize and request the United States Commissioner of Patents and Trademarks to issue any and all United States Letters Patent which may be granted therefor and/or that claim priority thereto and any and all extensions, divisions, reissues, substitutes, renewals, continuations, or continuations-in-part thereof and/or that claim priority thereto, and the right to all benefits under the International Convention for the Protection of Industrial Property to the said ASSIGNIES, for its interest as ASSIGNIES; improvention(ext, the undersigned agree that the atomics of record is said application shall hereafter act on behalf of said ASSIGNIES;

AND the undersigned hereby agree to banasies a lake interest, and to render all necessary assistance in making application for and obtaining original, divisional, related or sounded Letters Patent of the United States, upon request of the said ASSIGNEE, its successors, assigns and legal representatives, and output of the calculation of the United States, upon request of the said ASSIGNEE, its successors, assigns and legal representatives, growing out of or related to the said division of the calculation of the calculation of the said assistance in making application of the calculation of the said states, upon request of the said assistance in making application for said theread, growing out of or related to the said invention and the calculation of the invention of the said assistance assigns and legal representatives, decread essential to ASSIGNEE's full provides and link in and to the invention for the patient of the said states of the said to the sa

AND the undersigned hereby grants the firm of KED & ASSOCIATES, LLP the power to insert on this assignment my further identification that may be necessary or destable in order to comply with the mice of any issuing authority, including the United States Parent and Trademark Office, for recordstion of this document.

SIGNED on the dates indicated aside our signatures:

INVENTOR

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Name: Lee, Ho Min

Z)

Name: Seong, Dong Mug

3)

Name: Jeon, Eun Jung

DATE SIGNED

2018.3.6

PATENT

REEL: 045599 FRAME: 0527

Docket No. PH-0068

ASSIGNMENT

In consideration of the previous and other good and valuable consideration in hand paid, the receipt and sufficiency of which is hereby acknowledged, the undersigned,

$\langle 0 \rangle$	Lee. Ho Min	(4)	
(2)	Seong. Dong Mug	(5)	
(3)	Jeon. Eun Jung	(6)	

who have made a certain new and useful invention, hereby sell, assign and transfer unto

LG INNOTEK CO., LTD.

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

its successors and assigns (hereinafter designated "ASSIGNEE") the entire sight, fitle and interest for the United States of America as defined in 35 U.S.C. 100 in the invention entitled

PARTICLE SENSING DEVICE

(a) for which an application for United States Letters Patent was filed on ______, and identified by United States Secial No. _______, and identified by United States

(b) for which an application for United States Letters Patent was executed on February 22, 2018; February 27, 2018; March 6, 2018

and the undersigned hereby authorize and request the United States Commissioner of Patents and Trademarks to issue any and all United States Letters Patent which may be granted therefor and/or that claim priority thereto, and any and all extensions, divisions, relaxes, substitutes, renewals, continuations, or continuations in part thereof and/or that claim priority thereto, and the sight to all benefits under the International Convention for the Protection of Industrial Property to the soid ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legal representatives; the undersigned agree that the anomers of record in said application shall hereafter act on behalf of said ASSIGNEE;

AND the undersigned hereby sgme to transfer a like interest, and to sender all necessary assistance in making application for and obtaining original, divisional, reissued or extended Letters Parent of the United States, upon request of the said ASSIGNEE, in successors, assigns and legal representatives, and without further meanneration, in and to say improvements, and applications for parent based thereon, growing out of or related to the said investion, and to execute any papers by the said ASSIGNEE, is successors, assigns and legal representatives, deemed essential to ASSIGNEE's full protection and title is and to the investion hereby transferred.

AND the undersigned hereby grants the first of KED & ASSOCIATES, LLP the power to insert on this assignment any further identification that may be necessary or desirable in order to comply with the rules of any issuing authority, including the United States Patent and Tindemark Office, for recordation of this document.

SIGNED on the dates indicated aside our signatures:

INVENTOR

DATE SIGNED

Name: Lee, Ho Min

2)

1)

Name: Seong, Dong Mug

3)

Name: Jeon, Eun Jung

Feb. 27. 20/8,

PATENT REEL: 045599 FRAME: 0528

ASSIGNMENT

In consideration of the premises and other good and valuable consideration in hand paid, the mesipt and sufficiency of which is hearby acknowledged, the undersigned,

(1)	Lee. Ho Min	(4)	
(2)	Seong. Dong Mug	(5)	
(\mathfrak{I})	Jeon, Eun Jung	(6)	

who have made a contain new and useful invention, hereby sell, assign and transfer unto-

LG INNOTEK CO., LTD. 98, Huam-ro, Jung-gu, Seoul 04637 Republic of Korea

its successors and assigns (hereinalter designated "NESIGMEE") the entire right, side and interest for the United States of America as defined in 33 U.S.C. 100 in the invention entitled

PARTICLE SENSING DEVICE

(a) for which an application for United States Letters Patenr was filed on __________ and identified by United States Serial No._________ or

(b) for which an application for United States Letters Patent was executed on February 22, 2018; February 27, 2018; March 6, 2018

and the undersigned hereby authorize and request the United States Commissioner of Patents and Trademarks to issue any and all United States Letters Patent which may be granted therefor and/or that claim priority thereto and any and all extensions, divisions, missues, substitutes, nutewals, continuations, or continuations-in-part thereof and/or that claim priority thereto, and the right to all benefits under the International Convention for the Protection of Industrial Property to the said ASSIGNEEE, for its interest as ASSIGNEEE, its successors, assigns and legal representatives; the undersigned agree that the attorneys of record in said application shall hereafter act on helial of said ASSIGNEE;

AND the undersigned hereby agree to transfer a bkc interest, and to render all necessary assistance in making application for and obtaining original, divisional, costauct or extended Letters Parent of the United States, upon request of the said ASSIGNEE, its socressors, assigns and legal representatives, and without further remaneration, in and to any improvements, and applications for patent based thereon, growing out of or robust to the said avention, and to encode any papers by the said ASSIGNEE, its successors, assigns and legal representatives, and to encode any papers by the said ASSIGNEE's foll protection and to encode any papers by the said ASSIGNEE's foll protection and the in and to the inventues hered.

AND the undersigned hereby grants the farm of **KED & ASSOCIATES**, LLAP the power to insert on this assignment any further identification that may be necessary or desirable in order to comply with the niles of any issuing authority, including the United States Patent and Trademark Office, for reconductor of this document.

SIGNED on the dates indicated aside our signatures:

INVENTOR

DATE SIGNED

7)

Name: Lee, Ho Min

2)

3)

Name: Seong, Dong Mug

Name: Jeon, Eun Jung



2018.02.2

RECORDED: 03/14/2018