## 505054605 08/21/2018

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5101360

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
EUNHEE YI	01/13/2016
JINHEE LEE	01/13/2016
JUNHEE YEO	01/13/2016
DOYOUNG LEE	01/13/2016
KIHO LEE	09/23/2015
JINYUNG PARK	01/13/2016
YOUNGHYUN KIM	01/13/2016

### **RECEIVING PARTY DATA**

Name:	LG ELECTRONICS INC.	
Street Address: 20 YEOUIDO-DONG, YEONGDEUNGPO-GU		
City:	City: SEOUL	
State/Country: KOREA, REPUBLIC OF		
Postal Code:	150-721	

### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	14782567

#### 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: TISDALE@BSKB.COM

Correspondent Name: BIRCH, STEWART, KOLASCH & BIRCH, LLP

Address Line 1: 8110 GATEHOUSE RD

Address Line 4: FALLS CHURCH, VIRGINIA 22042

ATTORNEY DOCKET NUMBER:	0465-5139PUS1
NAME OF SUBMITTER:	SIMONE TISDALE
SIGNATURE:	/SIMONE TISDALE/
DATE SIGNED:	08/21/2018

# Total Attachments: 8 source=ASSIGNMENT-0465-5139PUS1#page1.tif source=ASSIGNMENT-0465-5139PUS1#page2.tif source=ASSIGNMENT-0465-5139PUS1#page3.tif source=ASSIGNMENT-0465-5139PUS1#page4.tif source=ASSIGNMENT-0465-5139PUS1#page5.tif source=ASSIGNMENT-0465-5139PUS1#page6.tif source=ASSIGNMENT-0465-5139PUS1#page7.tif

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## BIRCH, STEWART, KOLASCH & BIRCH, LLP

P.O. Box 747 • Falls Church, Virginia 22040-0747 Telephone: (703) 205-8000 • Facsimile: (703) 205-8050 • Email: mailroom@bskb.com

## DECLARATION AND ASSIGNMENT FOR PATENT AND DESIGN APPLICATIONS

UNITED STATES PATENT RIGHTS, OR UNITED STATES PLUS ALL FOREIGN PATENT RIGHTS

itle of Invention	⇒ MOBILE DEVICE AND CONTROLLING METHOD THEREFOR
	As a below named inventor (hereinafter designated as the undersigned), I hereby declare that:
	This declaration is directed to the application attached hereto.
Application not Attached	⇒ 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:
Inter Appln, No.	⇒ United States Application Number or PCT International Appln. No. 14/782,567
inter Filing Date	⇒ filed on October 5, 2015
	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 ELECTRONICS INC.
insert Address of Assignee	of 20 Yeouido-dong, Yeongdeungpo-gu, Seoul 150-721, 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.

BSK8-DECASSIGN\(09-12)

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 patent(s) or 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	YI, Eunhee	Date:	Jan. 13, 2016
Inventor's Signature ⇒ Signature:	2 gran		
An application data sheet (PT Use a separate form for each i	O/SB/14 or equivalent), including naming the entire invention inventions or check the box below and complete the attached parts.	e entity, r ige(s) to li	nust accompany this form. st additional inventors,
M Additional inventors are I	neing named on the 1 supplemental sheet(s) attached hereto.		•

BSKB-DECASSIGN\(09-12)

# SUPPLEMENTAL SHEET FOR DECLARATION AND ASSIGNMENT

# ADDITIONAL INVENTOR Supplemental Sheet Page 1 of 1

	LEGAL N.	AME OF JOINT INVENTOR, IF ANY		
Inventor's Name	⇒ Inventor:	LEE, Jinhee	Date:	Jan , 13. 2016
Inventor's Signature	Signature:	Jan		
		AME OF JOINT INVENTOR, IF ANY		
Inventor's Name	⇒ Inventor:	YEO, Junhee	Date: _	Jan. 13, 2016
Inventor's Signature		NX		
	LEGAL N	AME OF JOINT INVENTOR, IF ANY		
Inventor's Name	⇔Inventor:	LEE, Doyoung	Date:	Jan. 13, 2016
Inventor's Signature	⇔Signature:	- Sparts		
	LEGAL N	AME OF JOINT INVENTOR, IF ANY		
Inventor's Name	⊸Inventor;	LEE, Kiho	Date:	
Inventor's Signature	⇔Signature:			
	LEGAL N	AME OF JOINT INVENTOR, IF ANY		
Inventor's Name	⇔Inventor:	PARK, Jinyung	Date:	Jan. 13,2016
Inventor's Signature	⇔Signature:	- Jours		
	LEGAL N	AME OF JOINT INVENTOR, IF ANY		
Inventor's Name	⇔Inventor:	KIM, Younghyun	Date:	
Inventor's Signature	⇔Signature:			
	LEGAL N	AME OF JOINT INVENTOR, IF ANY		-
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)

## BIRCH, STEWART, KOLASCH & BIRCH, LLP

P.O. Box 747 • Falls Church, Virginia 22040-0747 Telephone: (703) 205-8000 • Facsimile: (703) 205-8050 • Email: mailroom@bskb.com

# DECLARATION AND ASSIGNMENT FOR PATENT AND DESIGN APPLICATIONS

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

Title of Invention SMORILE DEVICE AND CONTROLLING METHOD THEREFOR

	MODICE DEVICE AND CONTROLLING METHOD THEATEN	
	As a below named inventor (hereinafter designated as the undersigned), I hereby declare that:	
	This declaration is directed to the application attached hereto.	
Application not Attached	If the application is not attached hereto, the application is as identified by the attorney docket number a set forth above and/or the following:	38
Enter Appln, No.	→ United States Application Number or PCT International Appln. No. 14/782,567	_
Enter Filing Date	⇒ filed on October 5. 2015	
	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.	ае
	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 3 Code of Federal Regulations § 1.56.	7,
	WHEREAS, the undersigned has invented certain new and useful improvements described in application identified.	ne
Insert Name of Assignee	→ WHEREAS, LG ELECTRONICS INC.	
Insert Address of Assignee	→ of 20 Yeouido-dong, Yeongdeungpo-gu, Seoul 150-721, Republic of Korea,	
	its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignee) is desiro of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefor in the United States of America and	us (s)
Check Box if Appropriate	in any foreign countries.	
	NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledge the undersigned has sold, assigned and transferred, and by these presents does (do) sell, assign at transfer unto said Assignee the full and exclusive right to the said invention in the United States America, its territories, dependencies and possessions and the entire right, title and interest in and to a and all Letters Patent(s) which may be granted therefor in the United States of America, its territoris dependencies and possessions, and if the box above is designated, in any and all foreign countries; and any and all divisions, reissues, continuations, conversions and extensions thereof for the full term terms for which the same may be granted.	nd of ny es, to
	• •	

BSKB-DECASSIGN\(09-12)

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 patent(s) or 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.

Inventor's Name	⇒ Inventor:	YI, Eunhee	Date:	Jan. 13. 2016
Inventor's Signature	<sup>2</sup> ⇔ Signature:	2 Ars		

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.

LEGAL NAME OF INVENTOR

BSKB-DECASSIGN\(09-12)

# SUPPLEMENTAL SHEET FOR DECLARATION AND ASSIGNMENT

# ADDITIONAL INVENTOR Supplemental Sheet Page 1 of 1

## LEGAL NAME OF JOINT INVENTOR, IF ANY

Terromanna Bandin	inventor:	LEE, Judice	Date	Administrações, organismos es es em embradado de Assantina de Assantina de Assantina de Assantina de Assantina
Inventor's telephotose	· Signature:	1425-416-416-416-416-416-416-416-416-416-416	energy after a great contract adjustment	
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	LEGALN	AME OF BOINT INVENTOR IF ANY		
Improved a bismer	*Inventor:	LEE TOWNSHIPS	Date	deserving a common colors a links of all his processing philadelphic of the season in the company of which has \$75 holds for
lawater's September	<sup>4</sup> Segnature:		and salending when it over	namining menjelikan kalikat 1220-162 Sering <del>i paparan menjelikan manaman menjelikan kali</del>
	LEGALN	AME OF JOINT INVENTOR, IF ANY		
Imagelon's Chares	"Investor:	LEE, Kilvo	Date.	15.9.23
In-men's September:	" <sup>†</sup> Šięnolure:	£74-		and a supplier of the section of the
	LEGAL N	ame of joint inventor, if any		
(more) barne	<sup>13</sup> lasvendeur	PARK Instructed	Date:	Construction and the Cartery States and a State of American Cartery States and the Cartery
licesides's Regulatory	*Signature:	Machinistra control control was been control and all fines and a second of the control		والمستقورة والمعارفين المعارفين المعارفين المعارفين المعارفين المعارفين المعارفين المعارفين المعارفين المعارفين
	LEGALIN	AME OF JOINT INVENTOR, IF ANY		
berretbern Nama	<sup>4</sup> inventor:	KIM, Younghyun	Date	
Inventori e Segratorio	"Signabue:		and	70 PM
	LEGALN	AME OF JOINT INVENTOR, IF ANY		
Inschaeta Name	<sup>e</sup> lawerdor	Management of the design of th	Date	
Imenium'i Signature	*Signature:			
	LEGAL N	AME OF JOINT INVENTOR, IF ANY		
dansenson's leisense	**Inventor:		Dыс	
Genericado Bagrierado	<sup>9</sup> Signature:	Section 2012 19 12 19 12 19 19 19 19 19 19 19 19 19 19 19 19 19		
보고 있는 것이 없는 아니는 아니라 그 사람들은 것이 없는 것이다.	방향 환화의 작가가 가입하다	그 사람들은 그림을 가지 않는 것이 하나 하나 그들은 것이 되었다. 그리는 그 사람들은 얼마를 받는데 되었다.	A 155 Y 15 15 A 1	A CONTRACTOR OF THE PROPERTY O

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PATENT

**REEL: 046651 FRAME: 0073** 

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IMENT Description: Oath or declaration filed

PTO/AL/02 (07-13)

Approved for use through 01/31/2014, OMB 0651-0032

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### SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)

Title of Invention	MOBILE DEVICE AND CONTROLLING M	METHOD THEREFOR			
This statement is directed to:  The attached application,  OR  United States application or PCT international application number 14/782,567 filed on October 5, 2015  LEGAL NAME of inventor to whom this substitute statement applies:  (E.g., Given Name (first and middle (if any)) and Family Name or Surname)  Younghyun KIM  Residence (except for a deceased or legally incapacitated inventor):  City Seoul State Country KR  Mailing Address (except for a deceased or legally incapacitated inventor):					
	s Inc. Intellectual Property Center ong, Seocho-gu				T .
City Secul		State	Zip 150-721		Country KR
I believe the above-named inventor or joint inventor to be the original inventor or an original joint inventor of a claimed invention in the application.  The above-identified application was made or authorized to be made by me.  I hereby acknowledge that any willful false statement made in this statement is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.					
Relationship to the inventor to whom this substitute statement applies:  Legal Representative (for deceased or legally incapacitated inventor only),  Assignee,  Person to whom the inventor is under an obligation to assign,  Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1,46 is required), or Joint Inventor.					

[Page 1 of 2]

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minutes to complete, including gathering, preparing, and submitting the complete optication form to the USPTO. Time will very depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this turneds, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commence, P.O. Box 1450, Alexandria, VA 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450,

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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## SUBSTITUTE STATEMENT Circumstances permitting execution of this substitute statement: \_\_\_ inventor is deceased, Inventor is under legal incapacity, ✓ Inventor cannot be found or reached after diligent effort, or Inventor has refused to execute the oath or declaration under 37 CFR 1.63. If there are joint inventors, please check the appropriate box below: An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) naming the entire inventive entity has been or is currently submitted. An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) has not been submitted. Thus, a Substitute Statement Supplemental Sheet (PTO/AIA/11 or equivalent) naming the entire inventive entity and providing inventor information is attached. See 37 CFR 1.64(b). WARNING: Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available. PERSON EXECUTING THIS SUBSTITUTE STATEMENT: Wonseok YOU Name: APPLICANT NAME AND TITLE OF PERSON EXECUTING THIS SUBSTITUTE STATEMENT: If the applicant is a juristic entity, list the applicant name and the title of the signer. Applicant Name: LG ELECTRONICS INC. Title of Person Executing Manager This Substitute Statement The signer, whose little is supplied above, is authorized to act on behalf of the applicant. Residence of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent): Country KR State Mailing Address of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent) 20 Yeouldo-dong, Yeongdeungpo-gu Zip 150-721 Country KR City Seoul Note: Use an additional PTO/AIA/02 form for each inventor who is deceased, legally incapacitated, cannot be found or reached

[Page 2 of 2]

after diligent effort, or has refused to execute the oath or declaration under 37 CFR 1.63.