504171009 01/10/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4217687

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YUNJIN CHOI	12/02/2016
SIYOUNG PARK	12/02/2016
KWANGSOON JANG	12/02/2016
HYUNWOO YOO	12/23/2016
SOOYONG SHIM	12/22/2016

RECEIVING PARTY DATA

Name:	LG ELECTRONICS INC.
Street Address:	128, YEOUI-DAERO, YEONGDEUNGPO-GU
City:	SEOUL
State/Country:	KOREA, REPUBLIC OF
Postal Code:	07336

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15401769

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: tuyen.y.ly@bskb.com, mailroom@bskb.com
Correspondent Name: BIRCH, STEWART, KOLASCH & BIRCH, LLP

Address Line 1: P.O. BOX 747

Address Line 4: FALLS CHURCH, VIRGINIA 22040-0747

ATTORNEY DOCKET NUMBER:	0465-5878PUS1
NAME OF SUBMITTER:	TUYEN LY
SIGNATURE:	/tuyen ly/
DATE SIGNED:	01/10/2017

Total Attachments: 9

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Application No: 15/401,769

Filed on 01/09/2017

LGE Ref.: 16FiPD006US02_syc

Attorney Docket No.

0465-5878PUS1

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	⇔	PORTABLE KEYBOARD
		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:
Enter Appln. No.	⇔	United States Application Number or PCT International Appln. No. PCT/KR2016/008931
Enter Filing Date	⇔	filed on August 12, 2016
		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 \S 1.56.
er vigere i mega	* 4	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 128, Yeoui-daero, Yeongdeungpo-gu, Seoul, 07336, 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	4	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.

Attorney Docket No: 0465-5878PUS1

LGE Ref.: 16FIPD006US02_syc

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 N.	AME OF INVENTOR			
Inventor's Name - Inventor:	CHOI, Yunjin	Date: 2	2016.	12.2
Inventor's Signature ⇒ Signature:	리 운 전			

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.

LGE Ref.: 16FIPD006US02_syc

SUPPLEMENTAL SHEET FOR DECLARATION AND ASSIGNMENT

ADDITIONAL INVENTOR(S) Supplemental Sheet Page 1 of 1

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name	Inventor:	PARK, Siyoung	Date:	2016.12.2
Inventor's Signature	Signature:	방시여		
	LEGAL NA	AME OF JOINT INVENTOR, IF ANY		·
Inventor's Name	→ Inventor:	JANG, Kwangsoon	Date: _	
Inventor's Signature	Signature:			
	LEGAL NA	AME OF JOINT INVENTOR, IF ANY		
Inventor's Name	⇒Inventor:	YOO, Hyunwoo	Date: _	
Inventor's Signature	⇔Signature:			
	LEGAL NA	AME OF JOINT INVENTOR, IF ANY		
Inventor's Name	⇒Inventor:	SHIM, Sooyong	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:			
	LEGAL NA	AME OF JOINT INVENTOR, IF ANY		
Inventor's Name	⇔Inventor:		Date:	
Inventor's Signature	⇔Signature:			19119997

LGE Ref.: 16FIPD006US02_syc

Attorney Docket No.

0465-5878PUS1

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 □ PORTABLE KEYBOARD 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 If the application is not attached hereto, the application is as identified by the attorney docket number as Attached set forth above and/or the following: Enter Appln, No. [⇒] United States Application Number or PCT International Appln. No. PCT/KR2016/008931 Enter Filing Date ⇒ filed on August 12, 2016 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 ➡ WHEREAS, LG ELECTRONICS INC. of Assignee Insert Address 👼 of 128, Yeoui-daero, Yeongdeungpo-gu, Seoul, 07336, Republic of Korea, of Assignee 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 in any foreign countries. Appropriate 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.

Application No: 15/401,769 Filed on 01/09/2017

Attorney Docket No: 0465-5878PUS1

LGE Ref.: 16PIPD006US02_syc

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 N		LEGAL NA	NAME OF INVENTOR	
Inventor's Name	➾	Inventor:	CHOI, Yunjin	Date:
Inventor's Signatur	·е 🗢	Signature:		
			O/SB/14 or equivalent), including naming the entire inventiventor; or check the box below and complete the attached pa	
Additiona	d in	ventors are b	eing named on the <u>1</u> supplemental sheet(s) attached hereto.	

LGE Ref.: 16FIPD006US02_syc

SUPPLEMENTAL SHEET FOR DECLARATION AND ASSIGNMENT

ADDITIONAL INVENTOR(S) Supplemental Sheet Page 1 of 1

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name	Inventor:	PARK, Siyoung	Date:	
Inventor's Signature	Signature:		•	
	LEGAL NA	AME OF JOINT INVENTOR, IF ANY		•
Inventor's Name	> Inventor:	JANG, Kwangsoon	Date:	2016. Pec 2nd
Inventor's Signature	Signature:	장생선		
,	LEGAL NA	AME OF JOINT INVENTOR, IF ANY		
Inventor's Name	⇒Inventor:	YOO, Hyunwoo	Date:	2016.12.23
Inventor's Signature	⇒Signature:			
	LEGAL NA	AME OF JOINT INVENTOR, IF ANY		
Inventor's Name	⇔Inventor:	SHIM, Sooyong	Date:	
Inventor's Signature	⇒Signature:			
	LEGAL NA	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:			
	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:			

LGE Ref.: 16FIPD006US02_cyc

Alterney Docket No. 0465-5878PUS1

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

	United States Plus all Foreign Patent Rights
Title of Invention	PORTABLE KEYBOARD
	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:
Enter Appln. No.	⇒ United States Application Number or PCT International Appln. No. PCT/KR2016/008931
Enter Filing Date	⇒ filed on August 12, 2016
	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 128, Yeoui-daero, Yeongdeungpo-gu, Seoul, 07336, Republic of Korea,
	its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignee) is destrous 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, reignates, continuations, convergious and extensions thereof for the full forms and any and all divisions, reignates, continuations, convergious and extensions thereof for the full forms any

terms for which the same may be granted.

Application No: 15/401,769 Filed on 01/09/2017

Attorney Docket No: 0465-5878PUS1

LGE Ref.: 16FIPD006US02_syc

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

LEGAL NAME OF INVENTOR						
Inventor's Name	⇒ Inventor:	CHOI, Yunjin	Date:			
Inventor's Signatur	e ⇒ Signature:					
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.						

Application No: 15/401,769 Filed on 01/09/2017

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ADDITIONAL INVENTOR(S) Supplemental Sheet Page $\underline{1}$ of $\underline{1}$

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name	⇒ Inventor:	PARK, Siyoung	Date:
Inventor's Signature	⇒ Signature:		
	LEGAL NA	AME OF JOINT INVENTOR, IF ANY	
Inventor's Name	⇒ Inventor:	JANG, Kwangsoon	Date:
Inventor's Signature	⇒ Signature:		
	LEGAL NA	AME OF JOINT INVENTOR, IF ANY	
Inventor's Name	⇒Inventor:	YOO, Hyunwoo	Date:
Inventor's Signature	⇒Signature:		
	LEGAL NA	AME OF JOINT INVENTOR, IF ANY	
Inventor's Name	[⇒] Inventor:	SHIM, Sooyong	Date:
Inventor's Signature	⇔βignature:		*
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	LEGAL NA	AME OF JOINT INVENTOR, IF ANY	
Inventor's Name	⇔Inventor;		Date:
Inventor's Bignature	⇔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:		

PATENT REEL: 040933 FRAME: 0011

RECORDED: 01/10/2017