PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5723938

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KOKEUN KIM	09/04/2019
SUYEON KIM	09/04/2019
KAMIN LEE	09/04/2019
MINHO LEE	09/04/2019
SEUNGAH CHAE	09/04/2019

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:	16566688		

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:	3449-3841PUS1
NAME OF SUBMITTER:	ANH-VU DAO
SIGNATURE:	/anh-vu dao/
DATE SIGNED:	09/17/2019

Total Attachments: 3

source=2019-09-10_DeclarationAndAssignment_3449-3841PUS1#page1.tif

PATENT REEL: 050408 FRAME: 0151 $source = 2019-09-10_Declaration And Assignment_3449-3841 PUS1\#page2.tif\\ source = 2019-09-10_Declaration And Assignment_3449-3841 PUS1\#page3.tif\\$

PATENT REEL: 050408 FRAME: 0152

BIRCH, STEWART, KOLASCH & BIRCH, LLP

8110 Gatehouse Road, Suite 100 East, Falls Church, Virginia 22042-1248 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	ROBOT CLEANER FOR AVOIDING STUCK SITUATION THROUGH ARTIFICIAL INTELLIGEN AND METHOD OF OPERATING THE SAME	ICE
	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 set forth above and/or the following:	r as
Enter Appin, No.	United States Application Number or PCT International Appln. No.	
Enter Filing Date	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 application.	the
	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 Code of Federal Regulations \S 1.56.	: 37,
	WHEREAS, the undersigned has invented certain new and useful improvements described in application identified.	the
Insert Name of Assignee	WHEREAS, LG ELECTRONICS INC.	
Insert Address of Assignee	of 128, Yeoui-daero, Yeongdeungpo-gu, Seoul 07336, Republic of Korea,	
v	its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignee) is desir of acquiring the entire right, title and interest in and to said invention and in and to any Letters Pater 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 acknowledge the undersigned has sold, assigned and transferred, and by these presents does (do) sell, assign and transferred, and by these presents does (do) sell, assign and transferred, and said Assignee the full and exclusive right to the said invention in the United States of America territories, dependencies and possessions and the entire right, title and interest in and to any and all Let Patent(s) which may be granted therefor in the United States of America, its territories, dependencies possessions, and if the box above is designated, in any and all foreign countries; and to any and all division reissues, continuations, conversions and extensions thereof for the full term or terms for which the same be granted.	sfer , its ters and ons

PATENT

BSKB-DEC-ASSIGN (08-17)

REEL: 050408 FRAME: 0153

Application No. 16/566,688 filed on September 10, 2019 Attorney Docket No.: 3449-3841PUS1

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 <	Inventor:	Kokeun KIM	Date:	9/4/2019
Inventor's Signature ⇔	Signature:	10	Xuho	
Use a separate fo	rm for each i	nventor; or check the box	including naming the entire inventive entity, below and complete the attached page(s) to supplemental sheet(s) attached hereto.	

Application No. 16/566,688 filed on September 10, 2019 Attorney Docket No.: 3449-3841PUS1

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:	Suyeon KIM	Date:	9/4/2019
Inventor's Signature	Φ	Signature:	my		
		LEGAL N	AME OF JOINT INVENTOR, IF ANY		
Inventor's Name	ఫ	Inventor:	Kamin LEE	Date:	9/4/2019
Inventor's Signature	4	Signature;	0/7106	<u> </u>	
		LEGAL N	AME OF JOINT INVENTOR, IF ANY		
inventor's Name	43	Inventor:	Minho LEE	Date:	7141207
Inventor's Signature	4	Signature:	4-		
		LEGAL N	AME OF JOINT INVENTOR, IF ANY		
Inventor's Name	➾	Inventor	Seungah CHAE	Date:	914/2019
Inventor's Signature	9	Signature:	Mar		

BIRCH, STEWART, KOLASCH & BIRCH, LLP

RECORDED: 09/17/2019

Page 3

BSKB-DEC-ASSIGN (08-17)