### 504085638 11/08/2016

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4132306

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
BRYAN A. SPARKS	05/17/2016
NICOLAS DENHEZ	05/18/2016
YEONGKYU YOO	05/18/2016
ANDREW KIM	05/18/2016
YOUNG DUK SONG	05/17/2016
GREGORY G JONES	05/12/2016
CARL J. LEDBETTER	05/13/2016

### **RECEIVING PARTY DATA**

Name:	MICROSOFT CORPORATION
Street Address:	ONE MICROSOFT WAY
City:	REDMOND
State/Country:	WASHINGTON
Postal Code:	98052

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

Property Type	Number
Application Number:	29564522

### **CORRESPONDENCE DATA**

**Fax Number:** (202)824-3001

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:** (202) 824-3000

**Email:** bwptopat@bannerwitcoff.com, lwilley@bannerwitcoff.com

Correspondent Name: BANNER & WITCOFF, LTD.

Address Line 1: 1100 13TH ST. NW

Address Line 2: STE 1200

Address Line 4: WASHINGTON, D.C. 20005

ATTORNEY DOCKET NUMBER:	013797.13108
NAME OF SUBMITTER:	STEVE S. CHANG
SIGNATURE:	/Steve Chang/
DATE SIGNED:	11/08/2016

# Total Attachments: 7 source=13108-assignment-executed#page1.tif source=13108-assignment-executed#page2.tif source=13108-assignment-executed#page3.tif source=13108-assignment-executed#page4.tif source=13108-assignment-executed#page5.tif source=13108-assignment-executed#page6.tif source=13108-assignment-executed#page7.tif

	arks ('ASSIGNOR'), have invented subject matter ('INVENTION') ned in a patent application entitled 'ELECTRONIC HOUSING' ich:
AS: rep Wa 283 05/	be filed without this executed PATENT ASSIGNMENT. SIGNOR hereby authorizes and requests ASSIGNEE'S legal presentatives, of Banner & Witcoff, LTD., 1100 13th Street NW, Suite 1200, ashington, DC 20005-4051, who are associated with customer number 319, to insert here in parenthesis (U.S. Serial No. $\frac{29/564,522}{13/16}$ ) this APPLICATION's U.S. Serial Number and filing date, when own;
☐ was	s filed on , and was given U.S. Serial No.
☐ is fi	iled concurrently herewith;
and assigns ('ASSIGN rights, title and interest and patents derived the territories, and all fore For good and the ASSIGNOR, the A entire and exclusive right APPLICATION DERIVASSIGNOR agand prosecution of the regarding letters pater	coration, a Washington Corporation, on behalf of itself and its successors NEE'), is entitled to, and is desirous of acquiring, the entire and exclusive st in the INVENTION and the APPLICATION (and all other applications herefrom, such as continuing applications, in and for the United States, its sign countries ('APPLICATION DERIVATIVES')); valuable consideration, the receipt of which is hereby acknowledged by ASSIGNOR hereby sells, assigns and transfers to the ASSIGNEE, the ights, title and interest in the INVENTION and the APPLICATION (and VATIVES); grees to execute all instruments and documents required for the making a APPLICATION (and APPLICATION DERIVATIVES), for litigation int derived therefrom, and for the purpose of protecting and perfecting title (and APPLICATION DERIVATIVES).
05/17/2016	Buf
DATE	Bryan A. Sparks

I, Nicola and/or claimed which:	is Denhez ('ASSIGNOR'), have invented subject matter ('INVENTION') disclosed in a patent application entitled 'ELECTRONIC HOUSING' ('APPLICATION'),
500	will be filed without this executed PATENT ASSIGNMENT. ASSIGNOR hereby authorizes and requests ASSIGNEE'S legal representatives, of Banner & Witcoff, LTD., 1100 13th Street NW, Suite 1200, Washington, DC 20005-4051, who are associated with customer number 28319, to insert here in parenthesis (U.S. Serial No_29/564.522, filed_5/13/16) this APPLICATION's U.S. Serial Number and filing date, when known;
Ľ	was filed on , and was given U.S. Serial No.
Γ	is filed concurrently herewith;
and assigns ('A rights, title and i and patents der territories, and a For good the ASSIGNOR entire and exclu	Recorporation, a Washington Corporation, on behalf of itself and its successors SSIGNEE'), is entitled to, and is desirous of acquiring, the entire and exclusive interest in the INVENTION and the APPLICATION (and all other applications ived therefrom, such as continuing applications, in and for the United States, its all foreign countries ('APPLICATION DERIVATIVES')); and and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR hereby sells, assigns and transfers to the ASSIGNEE, the issive rights, title and interest in the INVENTION and the APPLICATION (and DERIVATIVES);
and prosecution regarding letters	OR agrees to execute all instruments and documents required for the making of the APPLICATION (and APPLICATION DERIVATIVES), for litigation spatent derived therefrom, and for the purpose of protecting and perfecting title TION (and APPLICATION DERIVATIVES).
Nay 18th	1016 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
DATE/ —	Denhez /

I, Yeongk and/or claimed in which:	yu Yoo ('ASSIGNOR'), have invented subject matter ('INVENTION') disclosed a patent application entitled 'ELECTRONIC HOUSING' ('APPLICATION'),
	will be filed without this executed PATENT ASSIGNMENT. ASSIGNOR hereby authorizes and requests ASSIGNEE'S legal representatives, of Banner & Witcoff, LTD., 1100 13th Street NW, Suite 1200, Washington, DC 20005-4051, who are associated with customer number 28319, to insert here in parenthesis (U.S. Serial No_29/564,522, filed_5/13/16) this APPLICATION's U.S. Serial Number and filing date, when known;
О	was filed on , and was given U.S. Serial No.
	is filed concurrently herewith;
and assigns ('ASt rights, title and ini and patents deriv	Corporation, a Washington Corporation, on behalf of itself and its successors SIGNEE'), is entitled to, and is desirous of acquiring, the entire and exclusive erest in the INVENTION and the APPLICATION (and all other applications ad therefrom, such as continuing applications, in and for the United States, its foreign countries ('APPLICATION DERIVATIVES'));
For good a the ASSIGNOR, t entire and exclusi APPLICATION DI	and valuable consideration, the receipt of which is hereby acknowledged by he ASSIGNOR hereby sells, assigns and transfers to the ASSIGNEE, the ve rights, title and interest in the INVENTION and the APPLICATION (and ERIVATIVES);
and prosecution o regarding letters p	R agrees to execute all instruments and documents required for the making f the APPLICATION (and APPLICATION DERIVATIVES), for litigation latent derived therefrom, and for the purpose of protecting and perfecting title ON (and APPLICATION DERIVATIVES).
5/18/	120/6 GZTT
DATE /	- Vannakui Yaa

Atty, Ref. 013797,13108\US MS# 360030.01

### **PATENT ASSIGNMENT**

I, Andrew and/or claimed in which:	Kim ('ASSIGNOR'), have invented subject matter ('INVENTION') disclosed a patent application entitled 'ELECTRONIC HOUSING' ('APPLICATION'),
X	will be filed without this executed PATENT ASSIGNMENT. ASSIGNOR hereby authorizes and requests ASSIGNEE'S legal representatives, of Banner & Witcoff, LTD., 1100 13th Street NW, Suite 1200, Washington, DC 20005-4051, who are associated with customer number 28319, to insert here in parenthesis (U.S. Serial No_29/564,522_, filed_5/13/2016_) this APPLICATION's U.S. Serial Number and filing date, when known;
	was filed on , and was given U.S. Serial No.
	is filed concurrently herewith;
and assigns ('ASS rights, title and int and patents derive territories, and all	Corporation, a Washington Corporation, on behalf of itself and its successors GIGNEE'), is entitled to, and is desirous of acquiring, the entire and exclusive erest in the INVENTION and the APPLICATION (and all other applications and therefrom, such as continuing applications, in and for the United States, its foreign countries ('APPLICATION DERIVATIVES'));
the ASSIGNOR, ti	and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR hereby sells, assigns and transfers to the ASSIGNEE, the verights, title and interest in the INVENTION and the APPLICATION (and ERIVATIVES);
ASSIGNO and prosecution o regarding letters p	R agrees to execute all instruments and documents required for the making fithe APPLICATION (and APPLICATION DERIVATIVES), for litigation attent derived therefrom, and for the purpose of protecting and perfecting title ON (and APPLICATION DERIVATIVES).
5/18/	zo 16 MM
DATÉ	Andrew Kim

# <u>PATENT ASSIGNMENT</u>

I, Young disclosed and/or ('APPLICATION'	Duk Song ('ASSIGNOR'), have invented subject matter ('INVENTION') claimed in a patent application entitled 'ELECTRONIC HOUSING'  ) which:
, , , , , , , , , , , , , , , , , , , ,	will be filed without this executed PATENT ASSIGNMENT. ASSIGNOR hereby authorizes and requests ASSIGNEE'S (egal representatives, of Banner & Witcoff, LTD., 1100 13th Street NW, Suite 1200, Washington, DC 20005-4051, who are associated with customer number 28319, to insert here in parenthesis (U.S. Serial No 29/564,522 , filed 5/13/16 ) this APPLICATION's U.S. Serial Number and filing date, when known;
	was filed on , and was given U.S. Serial No.
	is filed concurrently herewith;
and assigns ('AS rights, title and in and patents deriv territories, and all For good the ASSIGNOR, I entire and exclus APPLICATION D ASSIGNC and prosecution or regarding letters	Corporation, a Washington Corporation, on behalf of itself and its successors SIGNEE'), is entitled to, and is desirous of acquiring, the entire and exclusive terest in the INVENTION and the APPLICATION (and all other applications ed therefrom, such as continuing applications, in and for the United States, its foreign countries ('APPLICATION DERIVATIVES')); and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR hereby sells, assigns and transfers to the ASSIGNEE, the ve rights, title and interest in the INVENTION and the APPLICATION (and ERIVATIVES);  R agrees to execute all instruments and documents required for the making of the APPLICATION (and APPLICATION DERIVATIVES), for litigation obstent derived therefrom, and for the purpose of protecting and perfecting title ON (and APPLICATION DERIVATIVES).
5/17/2	olb /////
DATE' '	Young Duk Song

Atty, Ref: 013797.13106\US MS# 360030.01

### PATENT ASSIGNMENT

I, Gregory G. disclosed and/or cla ('APPLICATION'), w	. Jones ('ASSIGNOR'), have invented subject matter ('INVENTION') imed in a patent application entitled 'ELECTRONIC HOUSING' rhich:
X w A re W 21	ill be filed without this executed PATENT ASSIGNMENT. SSIGNOR hereby authorizes and requests ASSIGNEE'S legal epresentatives, of Banner & Witcoff, LTD., 1100 13th Street NW, Suite 1200 Vashington, DC 20005-4051, who are associated with customer number 8319, to insert here in parenthesis (U.S. Serial No29/564,522_, filed 5/13/16) this APPLICATION's U.S. Serial Number and filing date, when nown;
☐ w	as filed on , and was given U.S. Serial No.
is	s filed concurrently herewith;
and assigns ('ASSIC rights, title and interand patents derived territories, and all for For good and the ASSIGNOR, the entire and exclusive APPLICATION DEF ASSIGNOR and prosecution of tregarding letters pa	agrees to execute all instruments and documents required for the making the APPLICATION (and APPLICATION DERIVATIVES), for litigation tent derived therefrom, and for the purpose of protecting and perfecting title
to the APPLICATIO	N (and APPLICATION DERIVATIVES).
5/12/16 _	Oregory G. Janes
	<i>y</i>

	edbetter ('ASSIGNOR'), have invented subject matter ('INVENTION') claimed in a patent application entitled 'ELECTRONIC HOUSING' which:
	will be filed without this executed PATENT ASSIGNMENT. ASSIGNOR hereby authorizes and requests ASSIGNEE'S legal representatives, of Banner & Witcoff, LTD., 1100 13th Street NW, Suite 1200, Washington, DC 20005-4051, who are associated with customer number 28319, to insert here in parenthesis (U.S. Serial No $\underline{29/564,522}$ , filed $\underline{5/13/16}$ ) this APPLICATION's U.S. Serial Number and filing date, when known;
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	is filed concurrently herewith;
and assigns ('ASS rights, title and int and patents derive territories, and all For good at the ASSIGNOR, tentire and exclusi APPLICATION DE ASSIGNO and prosecution or regarding letters p	Corporation, a Washington Corporation, on behalf of itself and its successors SIGNEE'), is entitled to, and is desirous of acquiring, the entire and exclusive erest in the INVENTION and the APPLICATION (and all other applications ed therefrom, such as continuing applications, in and for the United States, its foreign countries ('APPLICATION DERIVATIVES')); and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR hereby sells, assigns and transfers to the ASSIGNEE, the verights, title and interest in the INVENTION and the APPLICATION (and ERIVATIVES); Ragrees to execute all instruments and documents required for the making of the APPLICATION (and APPLICATION DERIVATIVES), for litigation extent derived therefrom, and for the purpose of protecting and perfecting title ON (and APPLICATION DERIVATIVES).
M- 40 0040	
May 13, 2016  DATE	Carl J. Ledbetter

**RECORDED: 11/08/2016**