PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3803504

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the SPELLING OF CONVEYING PARTY ONE AND ADD CONVEYING PARTY THREE previously recorded on Reel 037664 Frame 0551. Assignor(s) hereby confirms the SPELLING OF CONVEYING PARTY ONE AND ADD CONVEYING PARTY THREE.

CONVEYING PARTY DATA

Name	Execution Date
TOSHIKAZU TAKAYANAGI	01/28/2016
CHANG-BONG SHIN	01/15/2016
JIN-HO KIM	03/21/2016

RECEIVING PARTY DATA

Name:	SAMSUNG ELECTRONICS CO., LTD.
Street Address:	129, SAMSUNG-RO, YEONGTONG-GU
City:	SUWON-SI, GYEONGGI-DO
State/Country:	KOREA, REPUBLIC OF
Postal Code:	16677

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15015049

CORRESPONDENCE DATA

Fax Number: (202)403-3587

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.

Email: usdocketing@jeffersonip.com
Correspondent Name: JEFFERSON IP LAW, LLP

Address Line 1: 1130 CONNECTICUT AVE., NW, SUITE 420

Address Line 4: WASHINGTON, D.C. 20036

ATTORNEY DOCKET NUMBER:	0502-0213
NAME OF SUBMITTER:	RAYMOND B. PERSINO
SIGNATURE:	/Raymond B. PERSINO/
DATE SIGNED:	03/28/2016

Total Attachments: 8

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PATENT 503756858 REEL: 038275 FRAME: 0530

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RECORDATION FORM COVER SHEET					
PATENT	S ONLY				
To the Director of the U.S. Patent and Trademark Office: Pleas	e record the attached documents or the new address(es) below.				
1. Name of conveying party(ies)	2. Name and address of receiving party(ies)				
1) Toshikazu TAKAYANAKI and 2) Chang-bong SHIN	Name: Samsung Electronics Co., Ltd.				
	Internal Address:				
Additional name(s) of conveying party(ies) attached? Yes No 3. Nature of conveyance/Execution Date(s): Execution Date(s) January 15, 2016 and January 28, 2016 Assignment Merger Security Agreement Change of Name	Street Address: 129, Samsung-ro, Yeongtong-gu City: Suwon-si, Gyeonggi-do				
Joint Research Agreement	State:				
Government Interest Assignment Executive Order 9424, Confirmatory License	Country: Republic of Korea Zip: 16677				
Other	Additional name(s) & address(es) attached? Yes V No				
A. Patent Application No.(s) xx/xxx,xxx Additional numbers att	B. Patent No.(s) ached? ☐ Yes ☑ No				
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: One				
Name: Jefferson IP Law, LLP	7. Total fee (37 CFR 1.21(h) & 3.41) \$				
Internal Address: Raymond B. Persino	Authorized to be charged by credit card Authorized to be charged to deposit account				
Street Address: 1130 Connecticut Ave., NW, Suite 420	Enclosed None required (government interest not affecting title)				
City: Washington	8. Payment Information				
State: <u>DC</u> Zip:20036	a. Credit Card Last 4 Numbers Expiration Date				
Phone Number: 202-293-0804					
Fax Number: 202-403-3587	b. Deposit Account Number				
Email Address: usdocketing@jeffersonip.com	Authorized User Name				
9. Signature: /Raymond B. PERSINO/ Reg. Signature Raymond B. Persino	#58,082 February 4, 2016 Date Total number of pages including cover 5				
Name of Person Signing	sheet, attachments, and documents:				

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

REEL: 038275 FRAME: 0532

CLIENT REF.: SH-49618-US-DMC SAMSUNG REF.: MG-201505-016-1-US0

Assignment

WHEREAS, the following inventor, namely 1) Toshikazu TAKAYANAGI, a citizen of Japan and 2) Chang-bong SHIN, a citizen of the Republic of Korea (hereinafter called "Assignor"), having made or discovered certain new, useful and non-obvious improvements in an invention having a working title of:

ROLLABLE DISPLAY DEVICE.

for which a U	Inited	States Pai	ent App	plication i	is being f					
concurrently	filed,	was filed	on	Febr	ruary 4, 2	016	, and	assigned	Serial No.	15/015,409
; and,										

WHEREAS, Samsung Electronics Co., Ltd., a corporation duly organized under the laws of the Republic of Korea, located and doing business at 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea, 16677 (hereinafter called "Assignee"), is desirous of acquiring the entire right, title and interest therein;

NOW, THEREFORE, BE IT KNOWN that for and in good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged. Assignor does hereby sell, assign and transfer unto said Assignee the entire and exclusive worldwide right, title and interest in and to all said inventions and discoveries disclosed in said application, and in and to said application, any and all substitutions, divisions, provisionals, conversions of provisionals and continuations thereof, and in and to all Letters Patent, United States and foreign, that may be granted for said inventions and discoveries, and in and to all extensions, renewals and reissues thereof; and the right to file any foreign application and/or claim priority under the provisions of any international treaty or convention arising from this application or any divisional, continuing, substitute or reissue application therefrom. The aforesaid assignment includes the right in and to all income, royalties, damages and payments, now or hereafter due or payable with respect to any Letters Patent which may be granted, and in and to all causes of action (either in law or in equity), and the right to sue, counterclaim, and recover for past, present and future infringement of the rights assigned or to be assigned under this Assignment, as fully and entirely as the same would have been held and enjoyed by Assignor if this sale, assignment and transfer had not been made.

Assignor covenants and agrees, without further compensation to said Assignor but at Assignee's expense:

- a. to execute:
 - all papers to be used in connection with this application and any divisional, continuing, substitute or reissue application thereof, as the Assignee may deem necessary or expedient, and
 - ii. all papers in connection with any interference, litigation, mediation, arbitration or other proceeding relating to this application or any divisional, continuing, substitute or reissue application thereof, as may be necessary or expedient;
- to cooperate with the Assignee in every way possible in obtaining evidence and going forward in any interference, litigation, mediation, arbitration or other

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proceeding relating to said invention, said application and any divisional, continuing, substitute or reissue application thereof:

- c. to communicate to the Assignee any facts relating to said invention, said application and any divisional, continuing, substitute or reissue application thereof, including evidence for any interference, litigation, mediation, arbitration or other proceeding relating to said invention, whenever requested;
- d. to testify in any interference, litigation, mediation, arbitration or other proceeding relating to said invention, said application and any divisional, continuing, substitute or reissue application thereof whenever requested; and
- e. to perform all other affirmative acts which may be necessary or desirable to secure full and complete protection of the inventions and discoveries or that may be necessary or desirable to vest in Assignee the complete title to the inventions and discoveries and Letters Patent hereby conveyed and to enable Assignee to record title.

Assignor hereby authorizes and requests the United States Patent and Trademark Office or any other issuing authority to issue any and all Letters Patent that may be granted upon this invention and/or this application or any divisional, continuing, substitute or reissue application thereof to the Assignee, its legal representatives, successors and assigns.

Assignor hereby represents, covenants and warrants that he or she has the full right to convey the entire right, title and interest by this instrument, free of any encumbrances and that no other agreement has been or will be executed in conflict herewith.

The provisions of this Assignment are binding upon Assignor's heirs, legal representatives and/or administrators and assigns.

Assignor bereby grants to the law firm of Jefferson IP Law, LLP of Washington, DC and its attorneys and agents as associated with Customer No. 68103 the authority and power to insert on this instrument any further identification which may be necessary or desirable for purposes of recordation in the United States Patent and Trademark Office or a Patent Office of any foreign country.

Signature of Inventor:	Tahilagu Tanganazi	2016.01.28
	Toshikazu TAKAYANAGI	Date
Signature of Inventor:		
	Chang-bong SHIN	Date

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<u>Assignment</u>

WHEREAS, the following inventor, namely 1) Toshikazu TAKAYANAGI, a citizen of Japan and 2) Chang-bong SHIN, a citizen of the Republic of Korea (hereinafter called "Assignor"), having made or discovered certain new, useful and non-obvious improvements in an invention having a working title of:

ROLLABLE DISPLAY DEVICE,

for which a United						ewith or, i	f not being	1-
concurrently filed	, was filed	on Fe	bruary 4, 20	016	, and	assigned	Serial No.	15/015,409
; and,				1988				

WHEREAS, Samsung Electronics Co., Ltd., a corporation duly organized under the laws of the Republic of Korea, located and doing business at 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea, 16677 (hereinafter called "Assignee"), is desirous of acquiring the entire right, title and interest therein;

NOW, THEREFORE, BE IT KNOWN that for and in good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor does hereby sell, assign and transfer unto said Assignee the entire and exclusive worldwide right, title and interest in and to all said inventions and discoveries disclosed in said application, and in and to said application, any and all substitutions, divisions, provisionals, conversions of provisionals and continuations thereof, and in and to all Letters Patent, United States and foreign, that may be granted for said inventions and discoveries, and in and to all extensions, renewals and reissues thereof; and the right to file any foreign application and/or claim priority under the provisions of any international treaty or convention arising from this application or any divisional, continuing, substitute or reissue application therefrom. The aforesaid assignment includes the right in and to all income, royalties, damages and payments, now or hereafter due or payable with respect to any Letters Patent which may be granted, and in and to all causes of action (either in law or in equity), and the right to sue, counterclaim, and recover for past, present and future infringement of the rights assigned or to be assigned under this Assignment, as fully and entirely as the same would have been held and enjoyed by Assignor if this sale, assignment and transfer had not been made.

Assignor covenants and agrees, without further compensation to said Assignor but at Assignee's expense:

- a. to execute:
 - all papers to be used in connection with this application and any divisional, continuing, substitute or reissue application thereof, as the Assignee may deem necessary or expedient, and
 - all papers in connection with any interference, litigation, mediation, arbitration or other proceeding relating to this application or any divisional, continuing, substitute or reissue application thereof, as may be necessary or expedient;
- b. to cooperate with the Assignee in every way possible in obtaining evidence and going forward in any interference, litigation, mediation, arbitration or other

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proceeding relating to said invention, said application and any divisional, continuing, substitute or reissue application thereof;

- c. to communicate to the Assignee any facts relating to said invention, said application and any divisional, continuing, substitute or reissue application thereof, including evidence for any interference, litigation, mediation, arbitration or other proceeding relating to said invention, whenever requested;
- d. to testify in any interference, litigation, mediation, arbitration or other proceeding relating to said invention, said application and any divisional, continuing, substitute or reissue application thereof whenever requested; and
- e. to perform all other affirmative acts which may be necessary or desirable to secure full and complete protection of the inventions and discoveries or that may be necessary or desirable to vest in Assignee the complete title to the inventions and discoveries and Letters Patent hereby conveyed and to enable Assignee to record title.

Assignor hereby authorizes and requests the United States Patent and Trademark Office or any other issuing authority to issue any and all Letters Patent that may be granted upon this invention and/or this application or any divisional, continuing, substitute or reissue application thereof to the Assignee, its legal representatives, successors and assigns.

Assignor hereby represents, covenants and warrants that he or she has the full right to convey the entire right, title and interest by this instrument, free of any encumbrances and that no other agreement has been or will be executed in conflict herewith.

The provisions of this Assignment are binding upon Assignor's heirs, legal representatives and/or administrators and assigns.

Assignor hereby grants to the law firm of Jefferson IP Law, LLP of Washington, DC and its attorneys and agents as associated with Customer No. 68103 the authority and power to insert on this instrument any further identification which may be necessary or desirable for purposes of recordation in the United States Patent and Trademark Office or a Patent Office of any foreign country.

Signature of Inventor:		
	Toshikazu TAKAYANAGI	Date
Land Land		
Signature of Inventor:	changbong shin	2016/01/15
	Chang-bong SHIN	Date

CLIENT REF.: SH-49618-US-DMC SAMSUNG REF.: MG-201505-016-1-US0

Assignment

WHEREAS, the following inventors, namely 1) Toshikazu TAKAYANAGI, a citizen of Japan, 2) Chang-bong SHIN, a citizen of the Republic of Korea, and 3) Jin-ho KIM, a citizen of the Republic of Korea (hereinafter called "Assignors"), having made or discovered certain new, useful and non-obvious improvements in an invention having a working title of:

ROLLABLE DISPLAY DEVICE,

for which a United States Patent A	Application is being filed concurre	ently herewith or, if not being
concurrently filed, was filed on	T 1 4 6016	, and assigned Serial No. 15/015,409
; and,		

WHEREAS, Samsung Electronics Co., Ltd., a corporation duly organized under the laws of the Republic of Korea, located and doing business at 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea, 16677 (hereinafter called "Assignee"), is desirous of acquiring the entire right, title and interest therein;

NOW, THEREFORE, BE IT KNOWN that for and in good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignors do hereby sell, assign and transfer unto said Assignee the entire and exclusive worldwide right, title and interest in and to all said inventions and discoveries disclosed in said application, and in and to said application, any and all substitutions, divisions, provisionals, conversions of provisionals and continuations thereof, and in and to all Letters Patent, United States and foreign, that may be granted for said inventions and discoveries, and in and to all extensions, renewals and reissues thereof; and the right to file any foreign application and/or claim priority under the provisions of any international treaty or convention arising from this application or any divisional, continuing, substitute or reissue application therefrom. The aforesaid assignment includes the right in and to all income, royalties, damages and payments, now or hereafter due or payable with respect to any Letters Patent which may be granted, and in and to all causes of action (either in law or in equity), and the right to sue, counterclaim, and recover for past, present and future infringement of the rights assigned or to be assigned under this Assignment, as fully and entirely as the same would have been held and enjoyed by Assignors if this sale, assignment and transfer had not been made.

Assignors covenant and agree, without further compensation to said Assignors but at Assignee's expense:

- a. to execute:
 - all papers to be used in connection with this application and any divisional, continuing, substitute or reissue application thereof, as the Assignee may deem necessary or expedient, and
 - all papers in connection with any interference, litigation, mediation, arbitration or other proceeding relating to this application or any divisional, continuing, substitute or reissue application thereof, as may be necessary or expedient;

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- b. to cooperate with the Assignee in every way possible in obtaining evidence and going forward in any interference, litigation, mediation, arbitration or other proceeding relating to said invention, said application and any divisional, continuing, substitute or reissue application thereof;
- c. to communicate to the Assignee any facts relating to said invention, said application and any divisional, continuing, substitute or reissue application thereof, including evidence for any interference, litigation, mediation, arbitration or other proceeding relating to said invention, whenever requested;
- d. to testify in any interference, litigation, mediation, arbitration or other proceeding relating to said invention, said application and any divisional, continuing, substitute or reissue application thereof whenever requested; and
- e. to perform all other affirmative acts which may be necessary or desirable to secure full and complete protection of the inventions and discoveries or that may be necessary or desirable to vest in Assignee the complete title to the inventions and discoveries and Letters Patent hereby conveyed and to enable Assignee to record title.

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Assignors each hereby represents, covenants and warrants that he or she has the full right to convey the entire right, title and interest by this instrument, free of any encumbrances and that no other agreement has been or will be executed in conflict herewith.

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