PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Samsung Electronics Co., Ltd.	07/11/2011

RECEIVING PARTY DATA

Name:	Samsung Electronics Co., Ltd.
Street Address:	416, Maetan-dong
Internal Address:	Yeongtong-gu
City:	Suwon-si, Gyeonggi-do
State/Country:	REPUBLIC OF KOREA

Name:	Samsung SDI Co., Ltd.
Street Address:	428-5 Gongse-dong
Internal Address:	Giheung-gu
City:	Yongin-si, Gyunggi-do
State/Country:	REPUBLIC OF KOREA

PROPERTY NUMBERS Total: 6

Property Type	Number
Application Number:	12385271
Application Number:	12385193
Application Number:	12654254
Application Number:	12585491
Application Number:	12801194
Application Number:	12320924

CORRESPONDENCE DATA

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PATENT REEL: 026592 FRAME: 0912 19385974

ICH \$240.00

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NAME OF SUBMITTER: John A. Castellano

Total Attachments: 3

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> PATENT REEL: 026592 FRAME: 0913

ASSIGNMENT

CORPORATE

Samsung Electronics Co., Ltd., a Korean corporation having a principal place of business at 416, Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea (hereafter the "Assignor"), is the owner by respective Assignment of the United States Patents and Patent Applications identified in Attachment A (hereafter the "Patents and Patent Applications").

Samsung Electronics Co., Ltd., a Korean corporation having a principal place of business at 416, Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea and Samsung SDI Co., Ltd., a Korean corporation having a principal place of business at 428-5 Gongse-dong, Giheung-gu, Yongin-si, Gyunggi-do, Republic of Korea, (hereafter the "Assignee"), desire to acquire all of the rights of the Patents and Patent Applications and all inventions described and claimed therein.

THEREFORE, in consideration of the sum of One Dollar (\$1.00) or equivalent and other good and valuable consideration paid to it, Assignor hereby sells and assigns to the Assignee the entire right, title, and interest in and to the Patents and Patent Applications identified in Attachment A, and all inventions described and claimed therein, and in any and all reissues and reexaminations as well as any and all continuations and divisionals thereof, such entire right, title, and interest to be held and enjoyed by the above-named Assignee the same as they would have been held and enjoyed by the Assignor had this Assignment and sale not been made.

By its undersigned representative, the Assignor agrees

- a. to execute all papers necessary in connection with the Patents and Patent Applications and any reissues and reexaminations as well as any continuations and divisionals thereof and also to execute separate Assignment in connection with such applications or Letters Patent thereof as the Assignee may deem necessary or expedient;
- b. to execute all papers necessary in connection with any interference which may be declared concerning the Patents and Patent Applications and any reissues and reexaminations as well as any continuations and divisionals thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference; and
- c. to perform all affirmative acts which may be necessary to obtain a grant of a valid patent to the Assignee on inventions described in the Patents and Patent Applications and any reissues and reexaminations as well as any and all continuations and divisionals thereof.

The Assignor hereby covenants that it has the right to convey its interest in the Patents and Patent Applications identified in Attachment A, and that it has not executed, and will not execute, any agreement in conflict therewith.

The Assignor certifies that it is the Owner of the entire right, title, and interest in the Patents and Patent Applications identified in Attachment A by virtue of an Assignment for of the Patents and Patent Applications. This Assignment was recorded as shown in Attachment A.

The undersigned has reviewed the documents in the Patents and Patent Applications identified in Attachment A and, to the best of undersigned's knowledge and belief, title is in the Assignor identified above.

The undersigned is empowered to sign this certificate on behalf of the Assignor.

The undersigned hereby declares that all statements made herein of his/her own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing therefrom.

IN WITNESS WHEREOF, executed by the Assignor's undersigned representative on the date following the undersigned's name.

By:	Simply
Title:	JungMin Lee Principal Patent Engineer
Date	11 July 2011

Samsung Electronics Co., Ltd..

Attachment A (Samsung Electronics Co., Ltd.)

	Appln No.	Filing Date	Patent No.	Issue Date	Reel/Frame No.	Reference No.
1.	12/385,271	04/03/2009			022534/0312	SD-33620-US
2.	12/385,193	03/31/2009	_	-	022498/0069	SD-32803-US
3.	12/654,254	12/15/2009	-	· 2 · ·	023710/0269	SD-36049-US
4.	12/585,491	09/16/2009	-		023302/0112	SD-34339-US
5.	12/801,194	05/27/2010	-	<u>.</u>	025308/0178	SD-34805-US
6.	12/320,924	02/09/2009	-	_	022284/0674	SD-39577-US

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