Customer Service Window Mail Stop <u>Assignment Recordation Services</u> Randolph Bullding 401 Dulany Street Alexandria, VA 22314 10-29-20	U.S. PTO 11/976009 Atty. Docket No. 2557-000732/US 10/19/2007 Page 1 of 1 )07
	R SHEET
To ti 1034568 Please acturu the attached orig	74 And Trademarks: inal documents or copy thereof.
1. Name of conveying party(ies):	2. Name and address of receiving party(ies)
Wenxu XIANYU	Name: SAMSUNG ELECTRONICS CO., LTD.
Young-soo PARK	Street Address: 416, Maetan-dong, Yeongtong-gu
Hans S. CHO	City: Suwon-si, Gyeonggi-do
Huaxiang YIN	Country: Korea
Hyuck LIM	Country. Roica
Additional name(s) of conveying party(ies) attached?	Additional name(a) & addraw(aa) attached? 🗍 VES 🖾 NO
3. Nature of conveyance:	Additional name(s) & address(es) attached? 🗌 YES 🔯 NO
Assignment Merger Security Agreement	
Change of Name Other:	4/00/000
Execution Date: Aug. 7, 2007 4. Application number(s) or patent number(s):	11/976009
A. Patent Application No(s). Additional numbers attac	B. Patent No.(s). hed? YES X NO
5. Name and address of party to whom correspondence	6. Total No. of applications/patents involved: One (1)
concerning document should be mailed:	7. Total fee (37 C.F.R. § 3.41): \$40.00
Name: HARNESS, DICKEY & PIERCE, P.L.C.	Enclosed
Street Address: P.O. BOX 8910 City: RESTON State: VA ZIP: 20195	Authorized to be charged to deposit account,
City: RESTON State: VA ZIP: 20195 Country: USA	if no fee attached.   8. Deposit account number: 08-0750
County. OBR	(Attach triplicate copy of this page if paying by deposit account)
DO NOT USE	THIS SPACE
9. Statement and signature.	nformation is thue and correct and any attached copy is a true
John A. Castellano, #35,094 Name of Person Signing/Reg. No.	Signature October 19, 2007 Date
Total number of pages including co	ver sheet, attachments, and document:
	10/22/2007 MAHMED1 00000042 11976009 JAC:mth 05 FC:8021 40.00 0P

PATENT REEL: 020034 FRAME: 0472

Atty, Docket No. 2557-000732/US

## ASSIGNMENT

WHEREAS, the undersigned, hereinafter referred to collectively as Assignor, has invented:

## SINGLE CRYSTAL SILICON ROD FABRICATION METHODS AND A SINGLE CRYSTAL SILICON ROD STRUCTURE

for which Assignor is about to make or has made United States or International application for patent

- (a) A executed on even date preparatory to filing (each inventor should sign this Assignment on the same day as he/she signs the Declaration and Power of Attorney);
- (b) axecuted on \_\_\_\_; or
- (c) filed on \_\_\_\_, and assigned Serial No. \_\_\_\_ or PCT international Application No. \_\_\_\_;
- (d) U.S. Patent No. \_\_\_\_\_ issued \_\_\_\_; and

WHEREAS, Samsung Electronice Co., Ltd., 416, Maetan-Dong, Yeongtong-Gu, Suwon-si, Gyeongpi-do, Republic of Korea, and hereinafter referred to as Assignee, is desirous of acquiring an interest therein:

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy whereof is hereby acknowledged, Assignor by these presents does sell, assign and transfer unto Assignee and its successors in interest, the full and exclusive right, title and interest in the United States of America and all foreign countries, including the right to claim priority under the laws of the United States, the Paris Convention, and any foreign countries, to the said invention as described in the aforesaid application, said application for patent and all Latters Patent therefor to be held and enjoyed by Assignee to the full end of the term for which said Letters Patent therefor to be held and enjoyed by Assignee to the full end of the term for which said Letters Patent are granted and any extensions thereof as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made, and the right to recover for past infringements of, or liabilities for, any of the rights relating to any of said applications or patents resulting therefrom;

Assignor hereby covenants and agrees to execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent in the United States and in all foreign countries including, but not limited to, any provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, and as to letters patent any reissue, re-examination, or extension thereof, and for liligation regarding, or for the purpose of protecting title and to the said invention, the United States application for patent, or Letters Patent therefor, and to testify in support thereof, for the benefit of Assignes without further or other compensation than that above set forth;

Assignor hereby covenants that no assignment, sale or agreement or encumbrance has been or will be entered into which would conflict with this Assignment; and

Assignor hereby requests the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States of America to Assignee, and requests that any official of any country or countries foreign to the United States, whose duty it is to issue or grant patents and applications as aforesaid, to issue said Letters Patent, Utility Model Registration or inventor's Certificate to Assignee.

The undersigned hereby grant(s) the law firm of Hamess, Dickey & Pierce, P.L.C. the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

Page 1 of 2

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PATENT REEL: 020034 FRAME: 0473 ••

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Ally. Docket No. 2557-000732/U8

ASSIGNMENT
Wenzu XIANVU
 Dated
Young-soo PARK
7/August/2007 Dated
Hans B. CHO
Dated
Huaxlang VIN
<u></u>
Hyuck LIM
7/Auguat/2007 Dated

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Page 2 of 2

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**RECORDED: 10/19/2007** 

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