FORM PTO-1595 (Rev. 6/93)

•

03-30-2004

U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

HEET

102707190

32 C3. 0 \$ 102(2A)	Attorney Docket No. 3000-1-54				
To the Assistant Com	nmissioner for Patents				
1. Name of conveying party(ies): Sung Kee KIM: Hen Lim LEE: Seens Teels HWANG	2. Name and address of receiving party(ies):				
Sung-Kee KIM; Han-Lim LEE; Seong-Taek HWANG Additional name(s) of conveying party(ies) attached? [] Yes [X] No	Name: SAMSUNG ELECTRONICS CO.: LTD. Address: 416, MAETAN-DONG, YEONGTONG-G				
3. Nature of conveyance: [X] Assignment [] Merger	SUWON-SI, GYEONGGI-DO REPUBLIC OF KOREA				
[X] Assignment [] Merger [] Change of Name Other:	Additional name(s) & address(es) attached? [] Yes [X] No				
Execution Date: March 17, 2004					
If this document is being filed together with a new application, the					
A. Patent Application No.(s)	B. Patent No.(s)				
Additional numbers atta	iched? [] Yes [] No				
Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1				
Name: Steve Cha	7. Total fee (37 CFR 3.41): \$\(\frac{\$40.00}{}\)				
Address: CHA & REITER 210 Route 4 East, Suite #103 Paramus, New Jersey 07652	 [X] Enclosed [X] Authorized to be charged to deposit account, if necess - for overages or underpayments only 				
	Deposit account number: 502-470 (Attach duplicate copy of this page if paying by deposit account) (Attach duplicate copy of this page if paying by deposit account)				
DO NOT USE	THIS SPACE				
9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true of	and correct and any attached copy is a true copy of the original document.				
Steve Cha, Reg No.44,069 Name of Person Signing	Total number of pages including cover sheet, attachments, and document				

Box Assignments
Washington, D.C. 20231

40.00 OP

(BDSM 8) (9/94)

PATENT REEL: 015133 FRAME: 0220



Docket No.: 5000-1-547

Assignment of Invention and Patent Application

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, be it known that for and in consideration of TEN (\$10.00) DOLLAR,

- Sung-Kee KIM of Samcheonri 2-cha APT., 1238, Gwonseon-dong, Gwonseon-gu, Suwon-si, Gyeonggi-do, Republic of Korea
- 2) Han-Lim LEE of #202, 602-170, Namhyeon-dong, Gwanak-gu, Seoul, Republic of Korea
- 3) Seong-Taek HWANG of #102-303, Daerim APT., Dokgok-dong, Pyeongtaek-si, Gyeonggi-do,
 Republic of Korea

(hereinafter Assignor) hereby sells, assigns, transfers, and sets over unto:

SAMSUNG ELECTRONIC CO., LTD. of 416, MAETAN-DONG, YEONGTONG-GU, SUWON-SI, GYEONGGI-DO, REPUBLIC OF KOREA

(hereinafter **Assignee**) the entire right, title and interest for the United States Of America as defined in 35 U.S.C.§ 1.00, in and to the invention entitled as:

DUO-BINARY ENCODER AND OPTICAL DUO-BINARY TRANSMISSION APPARATUS USING THE SAME

invented by **Assignor**; the application for United States patent therefor, invented by **Assignor**; any patent or reissues of any patent that may be granted thereon; and any applications which are continuations, continuation-in-part, substitutes, or divisions of said application. **Assignor** authorizes **Assignee** to enter the date of signature and/or Serial Number and Filing Date in the above. **Assignor** also authorizes and requests the Commissioner of Patents and Trademarks to issue any resulting patent(s) to the said **Assignee**, for its interests as **Assignee**, its successors, assigns and legal representatives. The undersigned agrees that the attorney of record in said application shall hereafter act on behalf of said **Assignee**; and **Assignor** further conveys to **Assignee** all priority rights resulting from the above-identified application for United States Patent. **Assignor** agrees to execute all papers, give any required testimony and perform other lawful acts, as deemed essential by **Assignee** to perfect **Assignee**'s interest in any resulting patent of the United States, and to acquire, hold, enforce, convey, and uphold the validity of said patent and reissues and extensions thereof, and **Assignee**'s interest therein.

1

PATENT REEL: 015133 FRAME: 0221

SIGNED ON THE DATES(S) INDICATED BESIDE MY/OUR SIGNATURE(S):

Name of First Inventor: S	ung-Kee KIM	Sung kee Kim Signature of inventor				
		Dated: March 17, 2004				
		WITNES	SSED:	Jong	-Hee	kIM
Name of Second Inventor:	Han-Lim LEE	He	an Lim	Lee		
		Dated:				nventor
•		WITNES				kim
Name of Third Inventor:	Seong-Taek HWANG		Signa	aek ture of ir	Hwar entor	7
		Dated: _	Mar	ch 17,	2004	4
		WITNES	SED:	Jong.	-Hee	kim

RECORDED: 03/23/2004