FORM PTO-1595 (Rev. 6/93)



U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

SHEET

Attorney Docket No. 5000-1-414

To the Assistant Commissioner for Patents			
1. Name of conveying party(ies): 7_23_3 Jeong-Hwan SONG; Kyong-Shik LEE; Oh-Dal KWON Sun-Tae JUNG; Myong-Won KIM; Joon-Yong CHO; In-Jae LEE; Bang-Weon LEE; Seung-Wan LEE Additional name(s) of conveying party(ies) attached? [1 Yes [X] No 3. Nature of conveyance: [X] Assignment [] Merger [] Change of Name Other:	2. Name and address of receiving party(ies): Name:SAMSUNG ELECTRONICS CO.: LTD. Address: _416. MAETAN-DONG, PALDAL-GU SUWON-CITY, KYUNGKI-DO KOREA, REPUBLIC OF KOREA Additional name(s) & address(es) attached? [] Yes [X] No		
Execution Date:Iuly 18, 2003			
If this document is being filed together with a new application, the A. Patent Application No.(s) Additional numbers attack	B. Patent No.(s)		
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 Address: CHA & REITER 411 Hackensack Avenue, 9th Floor Hackensack, New Jersey 07601 5/2003 SZEMDIE1 00000097 10625161 E:8021 40.00 0P	7. Total fee (37 CFR 3.41): \$40,00 [X] Enclosed [X] Authorized to be charged to deposit account, if necessary - for overages or underpayments only 8. Deposit account number: 502-470 (Attach duplicate copy of this page if paying by deposit account)		
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Assistant Commissioner for Patents Box Assignments Washington, D.C. 20231

(BDSM 8)

(9/94)

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,

- 1) Jeong-Hwan SONG of 224-16, Pangi-dong, Songpa-gu, Scoul, Republic of Korea
- 2) Kyong-Shik LEE of 185, Kaepo-dong, Kangnam-gu, Seoul, Republic of Korea
- Oh-Dal KWON of #923-902, Byuckjukgol Samsung APT., Youngtong-dong, Paldal-gu, Suwon-shi, Kyonggi-do, Republic of Korca
- 4) Sun-Tae JUNG of 1115, Hogye-dong, Tongan-gu, Anyang-shi, Kyonggi-do, Republic of Korea
- 5) Myong-Won KIM of #117-102, Kolon APT., Yatap-dong, Pundang-gu, Songnam-shi, Kyonggi-do, Republic of Korea
- 6) Joon-Yong CHO of 607, Sipjong-dong, Pupyong-gu, Inchonkwangyok-shi, Republic of Korea
- 7) In-Jae LEE #307-1203, Hanil APT., Chongja-dong, Pundang-gu, Songnam-shi, Kyonggi-do, Republic of Korea
- 8) Bang-Weon LEE 97-1, Yangjae-dong, Socho-gu, Seoul, Republic of Korea
- 9) Seung-Wan LEE 928, Youngtong-dong, Paldal-gu, Suwon-shi, Kyonggi-do, Republic of Korca

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

SAMSUNG ELECTRONIC CO., LTD. 416, MAETAN-DONG, PALDAL-GU, SUWON-CITY, KYUNGKI-DO, KOREA 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:

ATHERMAL ARRAYED WAVEGUIDE GRATING

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.

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

Name of Sole or First Inventor: Jeong-Hwan SONG Jeong Hwan Song Signature of inventor		
		Dated: July 18, 2003 WITNESSED: Jong-Hee KIM
Name of Second Inventor:	Ky d ng-Shik LEE	Signature of inventor Dated: July 18, 2003
	OL DALKHON	WITNESSED: Jag-Hee KIM Oh Dal Kwon
Name of Third Inventor:	Oh-Dal KWON	Signature of inventor Dated: July 18, 2003 WITNESSED: Jong-Hee K ^{2M}
Name of Fourth Inventor:	Sun-Tae JUNG	Sun Tae Jung Signature of inventor Dated: July 18, 2003
Name of Fifth Inventor:	Myong-Won KIM	WITNESSED: Jong-Hee 12M Myong Wan Kinn Signature of inventor Dated: July 18, 2003
		WITNESSED: Jong-Hee K217

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Name of Sixth Inventor:	Joon-Yong CHO	Joon-Yong Cho Signature of inventor
		Dated: July 18, 2003 WITNESSED: Jong-Her K2M
Name of Seventh Inventor:	In-Jae LEE	In Jae Lee Signature of inventor Dated: July 18, 2003 WITNESSED: Jong -Hee K217
Name of Eighth Inventor:	Bang-Weon LEE	Bang We on LEE Signature of inventor Dated: July 18, 2003 WITNESSED: Jong-Hee K217
Name of Ninth Inventor:	Scung-Wan LEE	Signature of inventor Dated: July 18, 2003 WITNESSED: Jong-Hee KZM

RECORDED: 07/23/2003