FORM PTO-1595 (Rev. 6/93)	- 05-19-2004 102747936	U.S. DEPARTMENT OF COMMEI Patent and Trademark Of OVER SHEET LY Attorney Docket No. <u>5000-1-42</u>
	To the Assistant Com	missioner for Patents
<ol> <li>Name of conveying party(ies):</li> <li>Se-Youn LIM; A-Jung KIM; Min-Hyo LEE; Su-Hyung KIM; Jae-Yeon SONG; Jin-Hee KIM</li> </ol>		<ol> <li>Name and address of receiving party(ies):</li> <li>Name: <u>SAMSUNG ELECTRONICS CO.; LTD.</u></li> <li>Address: <u>416, MAETAN-DONG, YEONGTONG-C</u></li> </ol>
Additional name(s) of conveyin	g party(ies) attached? [] Yes [X] No	SUWON-SI, GYEONGGI-DO
3. Nature of conveyance:		REPUBLIC OF KOREA
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If this document is being A. Patent Application N 10/634,694	g filed together with a new application, th o.(s) Additional numbers attac	B. Patent No.(s)
<ol> <li>Name and address of pa concerning document sh</li> </ol>	rty to whom correspondence	6. Total number of applications and patents involved: _1
Name: <u>Steve Cha</u>		7. Total fee (37 CFR 3.41):
Address: CHA & REITER 210 Route 4 East, Suite #103 Paramus, New Jersey 07652		<ol> <li>Enclosed PAID ON 8/5/03 WITH ORIGINAL ASSIGNMENT</li> <li>Authorized to be charged to deposit account, if necessa for overages or underpayments only</li> <li><u>Deposit account number: 502-470</u> (Attach duplicate copy of this page if paying by deposit account)</li> </ol>
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PATEN	TS ONLY Attorney Docket No.
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1. Name of conveying party(ies):	2. Name and address of receiving party(ies):
Se-Youn LIM; A-Jung KIM; Min-Hyo LEE;	Name: <u>SAMSUNG ELECTRONICS CO.; LTD.</u>
Su-Hyung KIM; Jae-Yeon SONG; Jin-Hee KIM	Address: _416, MAETAN-DONG, YEONGTONG-G
Additional name(s) of conveying party(ies) attached? [] Yes [X] No	SUWON-SI, GYEONGGI-DO
3. Nature of conveyance:	REPUBLIC OF KOREA
[X] Assignment       [] Merger         [] Security Agreement       [] Change of Name         Other:       "Correct Assignment to make corrections on Reel 014378	Additional name(s) & address(es) attached? [] Yes [X] No
Execution Date:	
4. Application number(s) or patent number(s):	
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A. Patent Application No.(s)	B. Patent No.(s)
10/634,694	
Additional numbers atta	ached? [] Yes [] No
<ol><li>Name and address of party to whom correspondence concerning document should be mailed:</li></ol>	6. Total number of applications and patents involved:
Name: Steve Cha	7. Total fee (37 CFR 3.41): <u>\$40.00</u>
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<ul> <li>Statement and signature.</li> <li>To the best of my knowledge and belief, the foregoing information is true</li> <li><u>Steve Cha, Reg No.44,069</u></li> </ul>	E THIS SPACE

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<u>4-5-03</u> РАТЕ	Patent and Trademark Office         6775       HEET         CNTS ONLY       Attorney Docket No. 5000-1-425         2       2
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1. Name of conveying party(ies):	2. Name and address of receiving party(ies):
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Su-Hyung KIM; Jae-Yeon SONG; Jin-Hee KIM	Address: 416, MAETAN-DONG, PALDAL-GU
Additional name(s) of conveying party(ies) attached? []. Yes [X] No	SUWON-CITY, KYUNGKI-DO
3. Nature of conveyance:	KOREA, REPUBLIC OF KOREA
[x] Assignment[] Merger[] Security Agreement[] Change of Name	
Other:	Additional name(s) & address(es) attached? [] Yes [X] No
Execution Date:August 1, 2003	—
Execution DateAugust 1, 2005	
4. Application number(s) or patent number(s):	
If this document is being filed together with a new application	a, the execution date of the application is: <u>August 1, 2003</u>
A. Patent Application No.(s)	B. Patent No.(s)
	D. Fatent NO.(S)
	D. Falent No.(S)
10,634694	
10, 634694 Additional numbers a 5. Name and address of party to whom correspondence concerning	attached? [] Yes [x] No
10, 634694 Additional numbers a	attached? [] Yes [x] No
10, 634694 Additional numbers a 5. Name and address of party to whom correspondence concerning	attached? [] Yes [x] No
10,634694 Additional numbers a 5. Name and address of party to whom correspondence concernin document should be mailed:	attached? [] Yes [x] No ng 6. Total number of applications and patents involved: <u>1</u>
10, 634694 Additional numbers a 5. Name and address of party to whom correspondence concernin document should be mailed: Name: <u>Steve Cha</u> Address: CHA & REITER 411 Hackensack Avenue, 9th Floor	attached?       [] Yes       [x] No         ng       6. Total number of applications and patents involved:       1          7. Total fee (37 CFR 3.41):       \$40.00         [X] Enclosed       [X] Authorized to be charged to deposit account, if necessary
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<i>U</i> , <i>L</i> 34694         Additional numbers a         5. Name and address of party to whom correspondence concernindocument should be mailed:         Name:       Steve Cha         Address:       CHA & REITER         411 Hackensack Avenue, 9th Floor         Hackensack, New Jersey 07601         DO NOT U         • Statement and signature.         To the best of my knowledge and belief, the foregoing information is to	attached? [] Yes [x] No         ng       6. Total number of applications and patents involved: 1         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)         USE THIS SPACE         true and correct and any attached copy is a true copy of the original document.         Signatuze         Total number of pages including cover sheet, attachments, and document: 3
D       LO       LO       Additional numbers a         Additional numbers a       Additional numbers a         S. Name and address of party to whom correspondence concernindocument should be mailed:       Name: Steve Cha         Name:       Steve Cha         Address:       CHA & REITER         411 Hackensack Avenue, 9th Floor         Hackensack, New Jersey 07601         DO NOT U         Statement and signature.         To the best of my knowledge and belief, the foregoing information is to         Steve Cha, Reg No.44,069         Name of Person Signing	attached? [] Yes [x] No         ng       6. Total number of applications and patents involved:         7. Total fee (37 CFR 3.41): <u>\$40.00</u> [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)         USE THIS SPACE         true and correct and any attached copy is a true copy of the original document. $\overline{Stgnatuze}$
LO       634694         Additional numbers a         Additional numbers a         Mame and address of party to whom correspondence concerning         Source of the should be mailed:         Name:       Steve Cha         Address:       CHA & REITER         A11 Hackensack Avenue, 9th Floor         Hackensack, New Jersey 07601         DO NOT U         Statement and signature.         To the best of my knowledge and belief, the foregoing information is to         Steve Cha, Reg No.44,069         Name of Person Signing         Mail documents to be recorded         Adsistant Co	attached? [] Yes [x] No         ng       6. Total number of applications and patents involved: 1         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)         USE THIS SPACE         true and correct and any attached copy is a true copy of the original document. Signature         Total number of pages including cover sheet, attachments, and document: 3         ed with required cover sheet information to:
LO       634694         Additional numbers a         Additional numbers a         Mame and address of party to whom correspondence concerning         Statement should be mailed:         Name:         Steve Cha         Address:         CHA & REITER         411 Hackensack Avenue, 9th Floor         Hackensack, New Jersey 07601         DO NOT U         Statement and signature.         To the best of my knowledge and belief, the foregoing information is to         Steve Cha, Reg No.44,069         Name of Person Signing         Mail documents to be recorded         Adsistant Co	attached? [] Yes [x] No         ng       6. Total number of applications and patents involved: 1         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)         USE THIS SPACE         true and correct and any attached copy is a true copy of the original document.         Signature         Total number of pages including cover sheet, attachments, and document: 3         ad with required cover sheet information to:         ommissioner for Patents sx Assignments

PATENT (\*\*\* REEL: 015338 FRAME: 0058

# **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) Se-Youn LIM of 1054-33, Namhyun-dong, Kwanak-gu, Seoul, Republic of Korea
- 2) A-Jung KIM of #5-805, Chunghwa APT., Itaewon 2-dong, Yongsan-gu, Seoul, Republic of Korea
- Min-Hyo LEE of #902-506, Byuckjukgol 9-danji APT., Youngtong-dong, Paldal-gu, Suwon-shi, Kyonggi-do, Republic of Korea
- 4) Su-Hyung KIM of #5-706, Woosung APT., Pungnap 2-dong, Songpa-gu, Seoul, Republic of Korea
- Jae-Yeon SONG of #514-902, Yangjimaeul Hanyang APT., Sunae-dong, Pundang-gu, Songnam-shi, Kyonggi-do, Republic of Korea
- 6) Jin-Hee KIM of 963-2, Youngtong-dong, Paldal-gu, Suwon-shi, Kyonggi-do, Republic of Korea

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

#### SAMSUNG ELECTRONIC CO., LTD. of 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:

### OAM CAPABILITY DISCOVERY METHOD IN ETHERNET PASSIVE OPTICAL NETWORK

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.

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

Name of Sole or First Inventor: Se-Youn LIM

Se Youn LIM Signature of inventor

Dated: August 1, 2003

WITNESSED: Jong Hee KZM

Name of Second Inventor: A-Jung KIM

A-June KIM Signature of inventor

Dated: August 1, 2003

WITNESSED: Jong Hee KOM

Name of Third Inventor: Min-Hyo LEE

<u>Min-Hyo</u> LEE Signature of inventor

Dated: <u>August 1, 2003</u> WITNESSED: <u>Joing-Her K2M</u>

Name of Fourth Inventor: Su-Hyung KIM

Su - Hrung KIM

Dated: August 1, 2003 WITNESSED: Jourg - Hep KZM

Name of Fifth Inventor: Jae-Yeon SONG

Jae - Yeon Song Signature of inventor

Dated: August 1, 2003

WITNESSED: Jong Hee KIM\_

Name of Sixth Inventor: Jin-Hee KIM

Jm Hee Kom

Dated: <u>August 1, 2003</u> WITNESSED: <u>Jong-Hee KZM</u>

2

### PATENT REEL: 015338 FRAME: 0060

**RECORDED: 05/17/2004**