FORM PTO-1595 U.S. DEPARTMENT OF COMMERCE **RECO** 101866736 PAIENTS ONLY 2001 Staas & Halsey LLP To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. Name of conveying party(ies): 1. (1) Seong-jin KIM (2) Jae-hoon LEE 2. Name and Address of receiving party(ies): SAMSUNG ELECTRONICS CO., LTD. 416 Maetan-dong, Paldal-gu Suwon-city, Kyungki-do, Republic of Korea Nature of conveyance: 3. Assignment \_X\_ Change of Name Security Agreement Other: Execution Date(s): September 28, 2001 Application number(s) or patent number(s): 4. This document is being filed together with a new application: (a) The execution date(s) of the application is/are: September 28, 2001 (b) The title is:MICRO-LENS BUILT-IN VERTICAL CAVITY SURFACE EMITTING LASER This document is being filed after filing of the application: Patent Application No(s). 1 (a) Patent No(s). , issued (b) Name and address of party to whom correspondence concerning document should be mailed: 5. STAAS & HALSEY LLP Our Docket: 1293.1266 Attention: Michael D. Stein 700 Eleventh Street, N.W., Suite 500 Washington, D.C. 20001 Total number of applications and patents involved: \_\_1\_\_ 6. Total fee (37 CFR 3.41)..... (\$ 40.00 per Assignment) 7. Enclosed X Authorized to be charged to deposit account. Deposit Account No.: 19-3935 (Any underpayment is authorized to be charged to this Deposit Account) (Attach duplicate copy of this page if paying by deposit account) Statement and signature. 9. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original decument. 9964511 September 28, 2001 Michael D. Stein, Reg. No. 37,240 Name of Person Signing Date Total number of pages including cover sheet: 2 DO NOT USE THIS SPACE 10/01/2001 MAHMED

PATENT REEL: 012214 FRAME: 0581

## U.S. ASSIGNMENT

\*Lu 4 4.

undersigned inventor(s) (hereinafter, "ASSIGNOR")	DV	1			1
finsert nameis) & Address (03) of Assigneeis)) SAMSUNG ELECTRONICS CO.	, T./TĎ.				
416 Maetan-dong, Palda	1-gu, Suw	on-city,	Kyungk	.i,-d	•
Republic of Korea				-ı. j	
				<del>, ,</del>	
				<del></del>	
		<del> </del>		-	
		-		<del>,                                    </del>	
thereinatter, "ASSIGNEE"), the recaipt of which is I sixt transfers to ASSIGNEE the entire and exclusive	right, title and	edged, the u interest to the	indersignac Na inventio	ASS n enti	GNOR hereby sells, assignighted
(Titlo of Invention)					
MICRO-LENS BUILT-IN VERTI	CAL CAVIT	Y SURFAC	E EMITT	ING	TASER
•					
ralating to International Patent Application PCT/JF_	/ 0	nd/or for whi	ich applicat	ion fo	Letters Patent of the Unite
States was executed on even data herewith or, if R	ot so executed,	was:			
(a) executed on	: Ilnsert de	ite of execut	ion of appl	ica tio	n. if not concurrent
fel deminisco del	- -				
(b) filed on	Street. A	LW. Washin	aton, D.C.	2000	HALSEY, 100 Eleventi 01 (202)434-1600) is
Scrial No;	hereby a	uthorized to	insert in (4	פוע ג	specified date, when
rug to seld sprincetion and all rettels hateurie) of the	United States	granted on #1	id applicat	on a	nd any continuation, division
renewal, substitute, relieve or reexamination applice Patentish may be granted and including any extensection and including any extensection and including any extense de all acts which the ASSIGNEE may deem neconstitute for said invention, including in the properary Patentish. In any interference, reissue, reexamination which may arise or be declared in relation to exame, reparate assignments and declarations, taking all respectate assignments and declarations, taking all respectates.	ation pased tre clone thereof ( d ASSICNEE and assary, desirat tion and prosec n, or public use such age to in	d without chile or expedientian of said.	hereinafted aron to but ant, for so application and in any	at the curin (6) ar litiga	e expense of said ASSIGNE e, maintaining and enforcir of the issuance of said Lette tion or other legal proceeds kocuting all papers, includir
renewal, substitute, release or reexamination applice Patentish may be granted and including any extension and including any extension of the ASSIGNOR enrecish, when requested by sake to do all acts which the ASSIGNEE may deem neconstaction for said invention, including in the properse Patentish, in any interference, reissue, reexamination which may arise or be declared in relation to example separate assignments and declarations, taking all revidence.	ation based trip clone thereof ( d ASSIGNEE and assary, desirat tion and prosec n, or public use such acts to in dightfut oathe, p	d without chi de or expedi- mian of said proceeding, clude but not exceeding sw	heroinafter arge to but ant, for sq application and in any t be limites orn testim	at the curing (s) and	id application(s) and Lotto e expense of said ASSIGNE e, maintaining and enforcir of the issuance of said Lette tion or other legal proceeds cocuring all papers, including and obtaining and producing
renewal, substitute, relieve or reexamination appliced and including any extension and including any extension and including any extension and including any extension and all acts which the ASSIGNEE may deem neconstation for said invention, including in the property attention, in any interference, reistue, reexamination which may arise or be declared in relation to example the property and declarations, taking all revidence.  IN WITNESS WHEREOF, the undersigned invention	ation based trip clone thereof ( d ASSIGNEE and assary, desirat tion and prosec n, or public use such acts to in dightfut oathe, p	d without child or expedition of sald proceeding. clude but not expedite and the sald in t	heroinafter eron to but ent, for so epolication and in envi to be limited orn testim	at the curing (s) an living an livin	id application(s) and Lotto e expense of said ASSIGNE e, maintaining and enforcir of the issuance of said Lette tion or other legal proceeds cocuring all papers, including and obtaining and producing
renewal, substitute, relieve or reexamination applice Patentish may be granted and including any extension Patenticle.  The ASSIGNOR enrecish, when requested by sake to do all acts which the ASSIGNEE may deem neconstaction for said invention, including in the property Patentich, in any interference, relieve, reexamination which may erise or be declared in relation to example separate assignments and declarations, taking all revolutions.	ation pased trip clone thereof ( ASSIGNEE and assary, desiration and prosec a, or public use such acts to in rightfut oathe, p or (6) has (have)	d without child or expedituding said proceeding.	heroinafter eron to but ent, for so epolication and in envi to be limited orn testim	at the curing (s) an living an livin	id application(s) and Letter s expense of said ASSIGNE s, maintaining and enforcing the issuance of said Letter tion or either legal proceeds tocuting all papers, includir and obtaining and producing
renewal, substitute, release or reexamination applice Patentish may be granted and including any extense Patentich may be granted and including any extense of the ASSIGNOR agree(s), when requested by said to do all acts which the ASSIGNEF may deem necestation for said invention, including in the property Patentish, in any interference, reissue, reexamination which may arise or be declared in relation to example the separate assignments and declarations, taking all revidence.  IN WITNESS WHEREOF, the undersigned inventor (Typed Nama & Signature of Inventor(s))	ation passed trip clone thereof ( d ASSICNEE and assary, desiration and prosec n, or public use such acts to in rightfut oathe, p	d without child or expedituding said proceeding.	heroinafter eron to but ent, for so epolication and in envi to be limited orn testim	at the curing (s) an living an livin	id application(s) and Letter s expense of said ASSIGNE s, maintaining and enforcing the issuance of said Letter tion or either legal proceeds tocuting all papers, includir and obtaining and producing
renewal, substitute, release or reexamination applice Patentish may be granted and including any extension and second and including any extension of the ASSIGNOR enrecish, when requested by said to do all acts which the ASSIGNER may deem neconstaction for said invention, including in the property Patentish, in any interference, reissue, reexamination which may arise or be declared in relation to example the property and declarations, taking all revidence.  IN WITNESS WHEREOF, the undersigned inventor (IT when the Maria & Signature of Inventor(S))	ation based the clone thereof ( d ASSIGNEE and assairy, desiration and prosect, or public use such acts to in lightful oathe, parts to the cortes has the cortes had been dependent to the cortes had bee	d without chile or expedientian of sald proceeding. clude but not providing switching	heroinafter eron to but ent, for so epolication and in envi to be limited orn testim	at the puring (6) an living of the orange only, and	id application(s) and Letter s expense of said ASSIGNE s, maintaining and enforcing the issuance of said Letter tion or either legal proceeds tocuting all papers, includir and obtaining and producing
renewal, substitute, release or reexamination applice Patentish may be granted and including any extense Patentich may be granted and including any extense of the ASSIGNOR agree(s), when requested by said to do all acts which the ASSIGNEF may deem necestation for said invention, including in the property Patentish, in any interference, reissue, reexamination which may arise or be declared in relation to example the separate assignments and declarations, taking all revidence.  IN WITNESS WHEREOF, the undersigned inventor (Typed Nama & Signature of Inventor(s))	ation pased trip clone thereof ( ASSIGNEE and assary, desiration and prosec a, or public use such acts to in rightfut oathe, p or (6) has (have)	d without chile or expedientian of sald proceeding. clude but not providing switching	heroinafter eron to but ent, for so epolication and in envi to be limited orn testim	at the puring (6) an living of the orange only, and	id application(s) and Letter s expense of said ASSIGNE s, maintaining and enforcing the issuance of said Letter tion or either legal proceeds tocuting all papers, includir and obtaining and producing
renewal, substitute, release or reexamination applic Patentish may be granted and including any extension that we property is do all acts which the ASSIGNER may deem necessarily in the property patentish. In any interference, reissue, reexamination which may arise or be declared in relation to example the personal assignments and declarations, taking all revidence.  IN WITNESS WHEREOF, the undersigned inventor (Typed Name & Signature of Inventor(s))  SECING JITT KAM	ation based the clone thereof ( d ASSIGNEE and assairy, desiration and prosect, or public use such acts to in lightful oathe, parts to the cortes has the cortes had been dependent to the cortes had bee	d without chile or expedientian of sald proceeding. clude but not providing switching	heroinafter eron to but ent, for so epolication and in envi to be limited orn testim	at the puring (6) an living of the orange only, and	id application(s) and Letter s expense of said ASSIGNE s, maintaining and enforcing the issuance of said Letter tion or either legal proceeds tocuting all papers, includir and obtaining and producing
renewal, substitute, release or reexamination applic Patentish may be granted and including any extension that we property is do all acts which the ASSIGNER may deem necessarily in the property patentish. In any interference, reissue, reexamination which may arise or be declared in relation to example the personal assignments and declarations, taking all revidence.  IN WITNESS WHEREOF, the undersigned inventor (Typed Name & Signature of Inventor(s))  SECING JITT KAM	ation based the clone thereof ( d ASSIGNEE and assairy, desiration and prosect, or public use such acts to in lightful oathe, parts to the cortes has the cortes had been dependent to the cortes had bee	d without chile or expedientian of sald proceeding. clude but not providing switching	heroinafter eron to but ent, for so epolication and in envi to be limited orn testim	at the puring (6) an living of the orange only, and	id application(s) and Letter s expense of said ASSIGNE s, maintaining and enforcing the issuance of said Letter tion or either legal proceeds tocuting all papers, includir and obtaining and producing
renewal, substitute, release or reexamination applic Patentish may be granted and including any extension that we property is do all acts which the ASSIGNER may deem necessarily in the property patentish. In any interference, reissue, reexamination which may arise or be declared in relation to example the personal assignments and declarations, taking all revidence.  IN WITNESS WHEREOF, the undersigned inventor (Typed Name & Signature of Inventor(s))  SECING JITT KAM	ation based the clone thereof ( d ASSIGNEE and assairy, desiration and prosect, or public use such acts to in lightful oathe, parts to the cortes has the cortes had been dependent to the cortes had bee	d without chile or expedientian of sald proceeding. clude but not providing switching	heroinafter eron to but ent, for so epolication and in envi to be limited orn testim	at the puring (6) an living of the orange only, and	id application(s) and Letter s expense of said ASSIGNE s, maintaining and enforcing the issuance of said Letter tion or either legal proceeds tocuting all papers, includir and obtaining and producing
renewal, substitute, release or reexamination applic Patentis) may be granted and including any exten Patentis) may be granted and including any exten Patentis!  The ASSIGNOR egree(s), when requested by said to do all acts which the ASSIGNEE may deem neceprotection for said invention, including in the propers Patentis!, in any interference, reissue, reexamination which may erise or be declared in relation to exams, separate assignments and declarations, taking all revidence.  IN WITNESS WHEREOF, the undersigned inventor (Tryped Name & Signature of inventor(s))  SCONDON LEE  31	ation based the clone thereof ( d ASSIGNEE and assairy, desiration and prosect, or public use such acts to in lightful oathe, parts to the cortes has the cortes had been dependent to the cortes had bee	d without chile or expedientian of sald proceeding. clude but not providing switching	heroinafter eron to but ent, for so epolication and in envi to be limited orn testim	at the puring (6) an living of the orange only, and	id application(s) and Letter s expense of said ASSIGNE s, maintaining and enforcing the issuance of said Letter tion or either legal proceeds tocuting all papers, includir and obtaining and producing
The ASSIGNOR egree(s), when requested by said to do all acts which the ASSIGNER may deem necessarily in any interference, reissue, reexamination which may erise or be declared in relation to said invention, including in the propers Patent(s). In any interference, reissue, reexamination which may erise or be declared in relation to same, separate assignments and declarations, taking all revidence.  IN WITNESS WHEREOF, the undersigned inventor (Typed Name & Signature of Inventor(s))  SEORG Jiri Kim  2)  Jae-hoon Lee	ation based the clone thereof ( d ASSIGNEE and assairy, desiration and prosect, or public use such acts to in lightful oathe, parts to the cortes has the cortes had been dependent to the cortes had bee	d without chile or expedientian of sald proceeding. clude but not providing switching	heroinafter eron to but ent, for so epolication and in envi to be limited orn testim	at the puring (6) an living of the orange only, and	id application(s) and Letter s expense of said ASSIGNE s, maintaining and enforcing the issuance of said Letter tion or either legal proceeds tocuting all papers, includir and obtaining and producing
renewal, substitute, release or reexamination applic Patentish may be granted and including any exten Patentic!  The ASSIGNOR egrec(s), when requested by said to do all acts which the ASSIGNEE may deem nec protection for said invention, including in the propers Patent(s), in any interference, reissue, reexamination which may erise or be declared in relation to exam, separate assignments and declarations, taking all re evidence.  IN WITNESS WHEREOF, the undersigned inventor  (Typed Nama & Signature of inventor(s))  11  SCOND Jim Kim 21  Jae-hoon Lee  31	ation based the clone thereof ( d ASSIGNEE and assairy, desiration and prosect, or public use such acts to in lightful oathe, parts to the cortes has the cortes had been dependent to the cortes had bee	d without chile or expedientian of sald proceeding. clude but not providing switching	heroinafter eron to but ent, for so epolication and in envi to be limited orn testim	at the puring (6) an living of the orange only, and	id application(s) and Letter s expense of said ASSIGNE s, maintaining and enforcing the issuance of said Letter tion or either legal proceeds tocuting all papers, includir and obtaining and producing

**RECORDED: 09/28/2001** 

**PATENT** 

**REEL: 012214 FRAME: 0582**