05-17-2001 FORM PTO-1595 U.S. DEPARTMENT OF COMMERCE (Rev. 6-93) Patent and Trademark Office RF EET 101719983 Attorney Docket No.: 0537 5-5006 To the Commissioner for Patents: Please record the attached original docuber ATTN: BOX ASSIGNMENT 2. Name and address of receiving party(ies): 1. Name of conveying party(ies): 1. Soon-Sulig YOO 2. Dong-Yeung KWAK Name: LG. Philips LCD Co., Ltd. 3. Hu-Sung KIM 4. Yu-Ho JUNG 5. Yong-Wan KIM 6. Duk-Jin PARK 7. Woo-Chae LEE Internal Address: Additional name(s) of conveying party(ies) attached? _ Yes X No 3. Nature of conveyance: Street Address: 20 Yoido-dong, Youngdungpo-gu, Seoul, Korea __ Merger X Assignment State: Zip: __ Security Agreement __ Change of Name __ Other____ Additional name(s) & address(es) attached? __ Yes X No Execution Date: April 26, 2001, April 26, 2001, April 26, 2001, April 26, 2001 April 30, 2001, April 26, 2001 and April 30, 2001 4. Application number(s) or patent number(s): If this document is being filed together with a new application the execution date of the application is: B. Patent No.(s) A. Patent Application No.(s): 09/779,438 Additional numbers attached: ___ Yes 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved: 1 concerning document should be mailed: Robert J. Gaybrick 7. Total fee (37 C.F.R §3.41): \$40.00 Name: X Enclosed **Internal Address:** Customer No. 009629 __ Authorized to be charged to deposit account 50-0310 Morgan, Lewis & Bockius LLP Street Address: 1800 M Street, N.W. 8. Deposit account number: 50-0310 City: Washington **State:** D.C. **Zip:** 20036 Attach duplicate of page if paying by deposit account 9. Statement and Signature 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 document. Robert J. Goodell Name of Person Signing Signature Reg. No. 41,040 Total number of pages including cover sheet, attachments and documents: 1-WA/1592081 1

ATTORNEY DOCKET NO: 053785-5006 SOLEJOINT INVENTION

(U.S. Rights Only)

ASSIGNMENT

WHEREAS I/We, the below named inventor(s), [hereinafter referred to as Assignor(s)], have made an invention entitled:

ARRAY SUBSTRATE FOR USE IN LCD DEVICE AND METHOD OF FABRICATING SAME

for which I/WE executed an application for United States Letters Patent concurrently herewith; or filed an application for United States Letters Patent on __February 9, 2001, (Serial No. _09/779,438.); and

WHEREAS, L.G. Philips LCD Co., Ltd., a corporation of Korea, whose post office address is 20 Yoido-dong, Youngdungpo-gu, Seoul, Korea (hereinafter referred to as Assignee), is desirous of securing the entire right, title, and interest in and to this invention, the application for United States Letters Patent on this invention and the Letters Patent to be issue upon this application;

NOW THEREFORE, be it known that, for good and valuable consideration the receipt of which from assignee is hereby acknowledged, I/WE, as assignor(s), have sold, assigned, transferred, and set over, and do hereby soll, assign, transfer, and set over unto the assignee, its lawful successors and assigns, MY/OUR entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof; and I/WE hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue all Letters Patent for this invention to assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, I/WE HEREBY further covenant and agree that I/WE will, without further consideration, communicate with assignee, its successors and assigns, any facts known to ME/US respecting this invention and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver all papers that may be necessary or desirable to perfect the title to this invention in said assignee, its successors and assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States, it being understood that any expense incident to the execution of such papers shall be borne by the assignee, its successors and assigns.

AND, I/WE HEREBY authorize and request the attorneys I/WE have empowered in the Declaration and Power of Attorney in this application, to insert here in parentheses (Application No. <u>09/179.438</u>, filed <u>February 9, 2001</u>) the filing date and application number of said application when known.

IN TESTIMONY WHEREOF, I/WE have hereunto set our hand(s).

Full Name of Sole or First Assignor	Assignor's Signature	Date
Soon-Sung YOO	Soon-Sung YOU	April . 26. 2001.
Address		Citizenship
202/501 Kumbong town, Hwangsang-dong, Kumi-shi, Kyoungsangbuk-do, 730-330; Republic of Korea		Republic of Korea
Full Name of Second Assignor	Assignor's Signature	Date
Dong-Yeung KWAK	Dong Years Eval	26. April 2001
Address		Citizenship
103/1108 Green mension, Songhyon-dong, Talso-gu, Taegu, 704-340, Republic of Korea		Republic of Korea

Names of additional inventors attached [X] Yes

1-WA/1834178.1

Morgan, Lewis & Bockius LLP

1-WA/1601126.1

PATENT REEL: 011797 FRAME: 0115

[]No

Full Name of Third Assignor	Assignor's Signature	Date
Hu-Sung KIM	Hu- Sung Krun	16. April - 200)
Address		Citizenship
5/5 55-105 Sangwolgok-dong, Songbuk	gu, Seoul, 136-120, Republic of Korea	
		Republic of Korea
Full Name of Fourth Assignor	Assignor's Signature	Date
Yu-Ho JUNG	Yu-HO JUNG	26. April 201/
Address		Citizenship
•••	ong, Kumi-shi, Kyoungsangbuk-do, 730-360,	Describing of Manne
Republic of Korea		Republic of Korea
Full Name of Fifth Assignor	Assignor's Signature	Date
Yong-Wan KIM		
Address		Citizenship
	ong, Kumi-shi,, Kyoungsangbuk-do, 730-360,	Republic of Korea
Republic of Korea		Republic of Roles
Full Name of Sixth Assignor	Assignor's Signature	Date
Duk-Jin PARK	Duk-Jin PARK	26. April. 2001
Address		Citizenship
104/601 Halla Apt., Taejon-dong, Puk-g	u, Taegu, 702-260, Republic of Korea	5
		Republic of Korea
Full Name of Seventh Assignor	Assignor's Signature	Date
Woo-Chae LEE		
Address		Citizenship
L G. PHILIPS LCD 642-3 Chinpyong-dong, Kumi-shi,, Kyoungsangbuk-do, 730-360, Republic of Korea		
		Republic of Korea

Names of additional inventors attached [] Yes

[X] No

1-WA/1534178,1

Morgan, Lewis & Bocklus LLP

1-WA/1601126.1

PATENT REEL: 011797 FRAME: 0116

ATTORNEY DOCKET NO: 053785-5006 SOLE/JOINT INVENTION

(U.S. Rights Only)

ASSIGNMENT

WHEREAS I/We, the below named inventor(s), [hereinafter referred to as Assignor(s)], have made an invention entitled:

ARRAY SUBSTRATE FOR USE IN LCD DEVICE AND METHOD OF FABRICATING SAME

for which I/WE executed an application for United States Letters Patent concurrently herewith; or filed an application for United States Letters Patent on <u>February 9, 2001</u>, (Serial No. <u>09/779,438</u>); and

WHEREAS, LG. Philips LCD Co., Ltd., a corporation of Korea, whose post office address is 20 Yoido-dong, Youngdungpo-gu, Seoul, Korea (hereinafter referred to as Assignee), is desirous of securing the entire right, title, and interest in and to this invention, the application for United States Letters Patent on this invention and the Letters Patent to be issue upon this application;

NOW THEREFORE, be it known that, for good and valuable consideration the receipt of which from assignee is hereby acknowledged, I/WE, as assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the assignee, its lawful successors and assigns, MY/OUR entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof; and I/WE hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue all Letters Patent for this invention to assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, I/WE HEREBY further covenant and agree that I/WE will, without further consideration, communicate with assignee, its successors and assigns, any facts known to ME/US respecting this invention and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver all papers that may be necessary or desirable to perfect the title to this invention in said assignee, its successors and assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States, it being understood that any expense incident to the execution of such papers shall be borne by the assignee, its successors and assigns.

AND, I/WE HEREBY authorize and request the attorneys I/WE have empowered in the Declaration and Power of Attorney in this application, to insert here in parentheses (Application No. 09/779,438, filed February 9, 2001) the filing date and application number of said application when known.

IN TESTIMONY WHEREOF, I/WE have hereunto set our hand(s).

Full Name of Sole or First Assignor	Assignor's Signature	Date
Soon-Sung YOO		
Address 202/501 Kumbong town, Hwangsang-dong, Kumi-shi, Kyoungsangbuk-do, 730-330, Republic of Korea		Citizenship
		Republic of Korea
Full Name of Second Assignor	Assignor's Signature	Date
Dong-Yeung KWAK		
Address 103/1108 Green mension, Songhyon-dong, Talso-gu, Taegu, 704-340, Republic of Korea		Citizenship
		Republic of Korea

Names of additional inventors attached [X] Yes

Morgan, Lowis & Bockius LLP

1-WA/1601126.1

PATENT REEL: 011797 FRAME: 0117

[] No

Full Name of Third Assignor	Assignor's Signature	Date
Hu-Sung KIM		
Address		Citizenship
5/5 55-105 Sangwolgok-dong, Songbuk-gu, Seoul, 136-120, Republic of Korea		Republic of Korea
Full Name of Fourth Assignor	Assignor's Signature	Date
Yu-Ho JUNG		
Address		Citizenship
•••	ng, Kumi-shi, Kyoungsangbuk-do, 730-360,	
Republic of Korea		Republic of Korea
Full Name of Fifth Assignor	Assignor's Signature	Date
Yong-Wan KIM		
Address		Citizenship
	ng, Kumi-shi,, Kyoungsangbuk-do, 730-360,	
Republic of Korea		Republic of Korea
Full Name of Sixth Assignor	Assignor's Signature	Date
Duk-Jin PARK		
Address		Citizenship
104/601 Halla Apt., Taejon-dong, Puk-gu	i, Taegu, 702-260, Republic of Korea	
		Republic of Korea
Full Name of Seventh Assignor	Assignor's Signature	Date
Wao-Chae LEE	Moo Chue Lee	Apr 30. 2001
Address		Citizenship
L G. PHILIPS LCD 642-3 Chinpyong-do	ng, Kumi-shi,, Kyoungsangbuk-do, 730-360,	
Republic of Korea		Republic of Kores

Names of additional inventors attached [] Yes

[X] No

Morgan, Lewis & Bockius LLP

1-WA/1601126.1

PATENT REEL: 011797 FRAME: 0118

ATTORNEY DOCKET NO: 053785-5006 SOLE/JOINT INVENTION (U.S. Rights Only)

ASSIGNMENT

WHEREAS I/We, the below named inventor(s), [hereinafter referred to as Assignor(s)], have made an invention entitled:

ARRAY SUBSTRATE FOR USE IN LCD DEVICE AND METHOD OF FABRICATING SAME

for which I/WE executed an application for United States Letters Patent concurrently herewith; or filed an application for United States Letters Patent on February 9, 2001, (Serial No. _09/779,438); and

WHEREAS, LG. Philips LCD Co., Ltd., a corporation of Korea, whose post office address is 20 Yoido-dong, Youngdungpo-gu, Seoul, Korea (hereinafter referred to as Assignee), is desirous of securing the entire right, title, and interest in and to this invention, the application for United States Letters Patent on this invention and the Letters Patent to be issue upon this application;

NOW THEREFORE, be it known that, for good and valuable consideration the receipt of which from assignee is hereby acknowledged, I/WE, as assignor(s), have sold, assigned, transferred, and set over, and do horeby sell, assign, transfer, and set over unto the assignee, its lawful successors and assigns, MY/OUR entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof; and I/WE hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue all Letters Patent for this invention to assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, I/WE HEREBY further covenant and agree that I/WE will, without further consideration, communicate with assignee, its successors and assigns, any facts known to ME/US respecting this invention and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver all papers that may be necessary or desirable to perfect the title to this invention in said assignee, its successors and assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States, it being understood that any expense incident to the execution of such papers shall be borne by the assignee, its successors and assigns.

AND, I/WE HEREBY authorize and request the attorneys I/WE have empowered in the Declaration and Power of Attorney in this application, to insert here in parentheses (Application No. <u>09/779,438</u>, filed <u>February 9, 2001</u>) the filing date and application number of said application when known.

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Full Name of Sole or First Assignor	Assignor's Signature	Date
Soon-Sung YOO		m.
Address		Citizenship
202/501 Kumbong town, Hwangsang-dong, Kumi-shi, Kyoungsangbuk-do, 730-330, Republic of Korea		Republic of Korea
Full Name of Second Assignor	Assignor's Signature	Date
Dong-Yeung KWAK		
Address		Citizenship
103/1108 Green mension, Songhyon-dong, Talso	-gu. Taegu, 704-340, Republic of Korea	Republic of Korea

Names of additional inventors attached [X] Yes

[]No

Morgan, Lewis & Bockius LLP

1-WA/1601126 1

PATENT REEL: 011797 FRAME: 0119

		Date
Full Name of Third Assignor	Assignor's Signature	Date
Hu-Sung KIM		
Address		Citizenship
5/5 55-105 Sangwolgok-dong, Songbuk-	gu, Seoul, 136-120, Republic of Korea	
		Republic of Korea
Full Name of Fourth Assignor	Assignor's Signature	Date
Yu-Ho JUNG		
Address		Citizenship
• • •	ong, Kumi-shi, Kyoungsangbuk-do, 730-360,	
Republic of Korea		Republic of Korea
Full Name of Fifth Assignor	Assignor's Signature	Date
Yong-Wan KIM	Kim Yong Wan	30, Apr. 200) Citizenship
Address	, , , , , , , , , , , , , , , , , , , 	Citizenship
L G. PHILIPS LCD 642-3 Chinpyong-de	ong, Kumi-shi,, Kyoungsangbuk-do, 730-360,	
Republic of Korea		Republic of Korea
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Address		Citizenship
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<u> </u>		Republic of Korea
Full Name of Seventh Assignor	Assignor's Signature	Date
Woo-Chae LEE		
Address		Citizenship
L G. PHILIPS LCD 642-3 Chinpyong-de	ong, Kumi-shi,, Kyoungsangbuk-do, 730-360,	
	Republic of Korea	

Names of additional inventors attached [] Yes

[X] No

1-WA/1354176,1

Morgan, Lewis & Bockius LLP

I-WA/1601126.1

RECORDED: 05/11/2001

PATENT REEL: 011797 FRAME: 0120