Attorney Docket: 8021-371 (SS-24376-US) 03-07-2006 Form PTO-1595 U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office 1-31-92 103191919 To the Honorable Commissioner of Parameter ord the attached original documents or 1. Name of conveying party(ies): 2. Name and address of receiving party(ies): Jae-Hyuck Woo Name: SAMSUNG ELECTRONICS CO., LTD Jae-qoo LEE Won-Sik KANG Internal Address: 416, Maetan-dong, Yeongtong-qu, Suwon-si, Gyeonggi-do Additional name(s) of conveying party(ies) attached? □ Yes ☑ No Republic of Korea 3. Nature of conveyance: Additional name(s) & address(es) attached: ☑ Assignment □ Merger ☐ Yes ⊠ No ☐ Security Agreement ☐ Change of Name □ Other Execution Date: February 16, 2006 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: February 16, 2006 A. Patent Application No.(s) B. Patent No.(s) Additional numbers attached?

Yes

No 5. Name and address of party to whom 6. Total number of applications and correspondence concerning document patents involved: 1 should be mailed: Total fee (37 C.F.R. §3.41): \$40.00 Name: Frank Chau, Esq. ■ Credit Card Payment Form PTO-2038 Street Address: F. CHAU & ASSOCIATES, LLC enclosed 130 Woodbury Road ☐ Authorized to be charged to deposit City: Woodbury State: NY Zip: 11797 account 03/0E/2006 FMETEKII 00000104 11363902 Deposit account number: 01 FD:8021 (Attach duplicate copy of this page if paying by deposit account) DO NOT USE THIS SPACE 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. David W. Malloy Registration No. 56,652 Name of Person Signing Total number of pages including cover sheet, attachments and documents: Do not detach this portion Mail documents to be recorded with required cover sheet information to: Commissioner for Patents Mail Stop Assignments, PO Box 1450 Alexandria VA 22313-1450 Public burden reporting for this sample cover sheet is estimated to average about 30 minutes per document to be recorded, including time for reviewing the document and gathering the data needed, and completing and reviewing the sample cover sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Office of Information Systems, PK2-1000C, Alexandria VA 22313, and to the Office of Management and Budget, Paperwork Reduction Project (0651-0011), Alexandria VA 22313.

> PATENT REEL: 017618 FRAME: 0459

ASSIGNMENT

DOCKET NO.: 8021-371 (SS-24376-US)

AS A BELOW NAMED INVENTOR, I, and each of us, individually hereby declare that: IN CONSIDERATION of the sum of TEN (\$10.00) dollars or the equivalent thereof, and other good and valuable consideration, the receipt of which from the hereinafter named Assignee is hereby acknowledged. I do hereby sell, assign and forever grant and convey unto:

ASSIGNEE: Samsung Electronics Co., Ltd.

ADDRESS: 416, Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, KOREA

Who is my Assignee, and to the successes and assigns of my Assignee, all my right, title and interest, in and for the United States of America and all other countries, including all rights of priority, in and to the invention entitled:

TITLE:

DISPLAY PANEL DRIVING CIRCUIT CAPABLE OF MINIMIZING CIRCUIT AREA BY CHANGING INTERNAL MEMORY SCHEME IN DISPLAY PANEL AND METHOD USIN THE SAME

invented by me (if only one inventor is named below) or us (if more than one inventor is named below) and described in an application for a United States patent the specification of which is either attached hereto or otherwise accompanies this Assignment or indicates an attorney docket no. 8021-371 (SS-24376-US), or is more particularly identified as:

| \boxtimes | executed on even date herewith, or | | | | | | | | |
|-------------|------------------------------------|-------|--------|------|--------|---|-----------|--------|----|
| | Serial No. | filed | in the | U.S. | Patent | & | Trademark | Office | on |
| | or | | | | | | | | |
| | executed on | | | | | | • | | |

and in and to all United States patents which may be granted thereon and therefore, and in and to all certificates of corrections, divisions, continuations, continuations-in-part, reissued and reexamined patents, and to any extensions thereof, said interest being the entire ownership of the patent when granted, to be held and enjoyed by said SAMSUNG ELECTRONICS CO., LTD., my Assignee, its successors, assigns or other legal representatives, to the full end of the term, terms, or any extension or renewal thereof, for which said patent or patents may be granted, as fully and entirely as the same would have been held and enjoyed by me or us if this assignment, sale and conveyance had not been made;

AND I hereby covenant and agree to sign and execute any further documents or instruments which may from time-to-time be either necessary, lawful, proper or requested by the Assignee, in the prosecution of the above-named application or in the preparation and prosecution of any certificate of correction, division, continuation, continuation-in-part, reissue, re-examination, in any amendment, extension, or interference proceeding, whether administrative or judicial, or otherwise, to secure the title hereto in said Assignee;

AND I do hereby authorize and request the Commissioner of Patents and Trademarks to issue said Patent or Patents to the Assignee, and I hereby appoint as my, or our attorney, and authorize and request Frank Chau, Reg. No. 34,136, to insert on this Assignment any further identification or to complete such identification which may be either necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

Pag

IN WITNESS WHEREOF, I and we have set our hands and seals on the dates written beside my and our respective names:

INVENTOR(S)

Date Signed

1) JAE-HYUCK WOO

16. Feb. 2006

JAE-GOO LEE

16. Feb. 2006

3) WON-SIK KANG

RECORDED: 02/28/2006

16. Feb. 2006

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