Form PTO-1595 U.S. Department of Comn RECORDATION FORM COVER SHEETPatent 100944061 PATENTS ONLY To the Honorable Commissioner of Patents and Trademarks Please record the attached original documents or copy thereof. 2. Name and address of receiving party(ie3): 1 Name of conveying party(ies): Hoi-Sik MOON and Dong-Won PARK SAMSUNG ELECTRONICS CO, LTD. Name. Street Address: 416, Maetan-cong, Paldal-ku City: Suwon State: Kyung + do Additional name(s) of conveying party(ies) attached? \Im yes \boxtimes no Country: Republic of Korea Additional name(s) & address(es) attached? □ yes ⊠ no 3 Nature of Conveyance: **⊠**Assignment □ Merger ☐ Security Agreement ☐ Change of Name Other _ 09221174 Execution Date(s): December 21, 1998 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 Dicember 28, 1998 B. Patent No(s). A. Patent Application No(s) ⊠ no □ yes 5. Name and address of party to whom correspondence 6. Total number of applications and paten's involved concerning document should be mailed: 7. Total fee (37 C.F.R. § 3.41).... \$ 40 (0) Name: HOWREY & SIMON Internal Address: STHOÜNTO 00000014 09221174 ☐ Authorized to be charged to Deposit Account 40.00 (8. Deposit Account Number: 08- 038 Street Address Box No. 1299 P nnsylvania Ave, N.W. City: Washington State: D.C. Zip Code: 20004-2402 DO NOT USE THIS SPACE 9. Statement and signature. ing information is true and correct and any at achea copy is a true To the best of my knowledge and belief, the copy of the original document. December 28, 1998 Cono A. Carrano Signature Registration No. 39,623 Total number of pages including cover sheet, attachments and document OMB NO. 0651-0011 (exp.4/94) Mail documents to be recorded with required cover sheet information to:

2 FC:581

Commissioner of Patents and Trademarks. Box Assignments Washington, D.C. 2023:

ASSIGNMENT

In consideration of the sum of One Dollar (\$1.00) or equivalent and other good and valuable consideration paid to the undersigned: MOON, Hoi-Sik and PARK, Dong-Won, the undersigned hereby sells and assigns to SAMSUNG ELECTRONICS CO., LTD. (the Assignee), his entire right, little and interest

in the invention known as A LIQUID CRYSTAL DISPLAY HAVING A DUAL BANK DATA STRUCTURE AND A DRIVING METHOD THEREOF, for which application for patent in the United States of America has been executed by the undersigned on (a so known as United States Application No filed), in any and all applications thereon, in any and all Letters Patent(s) therefor, and in any and all reissues, extensions, renewals, reexaminations of such applications or Letters Patent(s) and divisional and continuation applications thereof, to the full end of the term or terms for which such Letters Patent(s) issue, including all claims, if any, that may have arisen for infringement prior to the date of this assignment, such entire right, title and interest to be held and enjoyed by the above-named Assignee to the same extent as they would have been held and enjoyed by the undersigned had this assignment and sale not been made.

The undersigned agrees to execute all papers necessary in connection with the application and any continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agrees to execute all papers necessary in connection with any interference that may be declared concerning the application or any continuing (continuation, divisional, or continuat on-in-part), reissue or reexamination application thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.

The undersigned hereby represents that the undersigned has full right to convey the entire interest herein assigned, and that the undersigned has not executed, and will not execute, any agreement in conflict therewith.

The undersigned hereby grants:

Jeffrey I. Auerbach, Reg. No. 32,680 Melvin L. Barnes, Jr. Reg. No. 38,375 Michael J. Bell, Reg. No. 39,604 Mark R. Buscher, Reg. No. 35,006 Cehne T. Callahan, Reg. No. 34,301 Cono A. Carrano, Reg. No. 39,623 Joseph V. Colaianni, Reg. No. 39,948 James F. Davis, Reg. No. 21,072 Thomas M. Dunham, Reg. No. 39,965 Joel M. Freed. Reg. No. 25,101 Alan M. Grimaldi, Reg. No. 26,599

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Andrew Piatnicia, Reg. No. 40,772
Andrea G. Reister, Reg. No. 36 253
Stephen J. Rosenman, Reg. No. 29,209
Timothy L. Scott, Reg. No. 37,931

PATENT REEL: 9695 FRAME: 0331 Alexander J. Hadjis, Reg. No. 36,540 Albert P. Halluin, Reg. No. 25,227 Michael N. Haynes, Reg. No. 40,014

Date: Dec. 21 1998

RECORDED: 12/28/1998

Anthony W. Shaw, Reg. No. 30 104 J. David Smith, Reg. No. 39,839 Michael J. Songer, Reg. No. 39.841

of HOWREY & SIMON, Box No. 34, 1299 PENNSYLVANIA Avenue, N.W., Washington, D.C. 20004-2402, power to insert in this Assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, executed by the undersigned on the date opposite his name.

Moon has Rik

MOON, Hoi-Sik

Park, Dong blon

PARK, Dong-Mon Date: Dec. 21 1998 Signature of Inventor:

Signature of Inventor:

PATENT REEL: 9695 FRAME: 0332