į	.S.	Patent	and	Trad	lemark	Office

10-2-01 101870709 To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof. 1. Name of conveying parties: 2. Name and address of receiving party(ies): Hee-Sub KIM Samsung Electronics Co., Ltd. Name: Kwan-Sun PARK Street Address: 416 Maetan-dong, Paldal-ku Additional name(s) of conveying party(ies) attached? yes in no City: Suwon-city State: Kyungki-do Zip Code: Country: Korea Additional name(s) & address(es) attached? ☐ yes 🗷 no 3. Nature of Conveyance: ☑ Assignment ☐ Merger ☐ Change of Name ☐ Security Agreement Other \_ 09/967938 Execution Dates: September 26, 2001 Application number: This document is being filed together with a new application, the execution date of the application is September 26, 2001 B. Patent No(s). A. Patent Application No. ☐ yes 🗵 no Additional numbers attached? 6. Total number of applications and patents involved 5. Name and address of party to whom correspondence concerning document should be mailed: 7. Total fee (37 C.F.R. § 3.41)......\$ 40.00 Name: HOWREY SIMON ARNOLD & WHITE, LLP ☐ Enclosed Internal Address: ☑ Authorized to be charged to Deposit Account 8. Deposit Account Number: 08-3038 Box No. 34 Street Address: 1299 Pennsylvania Ave, NW City: Washington State: DC Zip Code: 20004-2402 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. October 2, 2001 Michael J. Bell Date Signature Name of Person Signing Total number of pages including cover sheet, attachments and document 3 Registration No. 39,604 OMB NO. 0651-0011 (exp.4/94) Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks, Box Assignments Washington, D.C. 20231

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**PATENT** REEL: 012226 FRAME: 0290

## **ASSIGNMENT**

In consideration of the sum of One Dollar (\$1.00) or equivalent and other good and valuable consideration paid to each of the undersigned: <u>Hee-Sub KIM and Kwan-Sun PARK</u> the undersigned hereby sell and assign to <u>Samsung Electronics Co., Ltd</u>. (the Assignee), his/her entire right, title and interest

in the invention(s) known as APPARATUS FOR INJECTING LIQUID CRYSTAL MATERIALS AND METHODS FOR MANUFACTURING LIQUID CRYSTAL PANELS BY USING THE SAME, for which application(s) for patent in the United States of America has (have) been executed by the undersigned on \_\_\_\_\_\_\_ (also 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 agree(s) to execute all papers necessary in connection with the application(s) 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 agree(s) to execute all papers necessary in connection with any interference that may be declared concerning the application(s) or any continuing (continuation, divisional, or continuation-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 grant(s)

Jason C. Abair, Reg. No. 44,007 Michael J. Bell, Reg. No. 39,604 John A. Bendrick, Reg. No. 41,612 Andrew S. Brenc, Reg. No. 45,534 Celine T. Callahan, Reg. No. 34,301 Jenny W. Chen, Reg. 44,604 Mary S. Consalvi, Reg. No. 32,212 Thomas E. Coverstone, Reg. No. 36,492 Ben M. Davidson, Reg. No. 38,424 Ross E. Davidson, Reg. No. 41,698 James F. Davis, Reg. No. 21,072 Thomas M. Dunham, Reg. No. 39,965 Alan M. Grimaldi, Reg. No. 26,599 J. Jay Guiliano, Reg. No. 41,810 Albert P. Halluin, Reg. No. 25,227 Derek J. Jardieu, Reg. No. 44,483 Christopher L. Kelley, Reg. No. 42,714 Brian S.Y. Kim, Reg. No. 41,114 Viola T. Kung, Reg. No. 41,131 Robert C. Laurenson, Reg. No. 34,206 Joseph P. Lavelle, Reg. No. 31,036 Don F. Livornese, Reg. No. 32,040 Christopher A. Mathews, Reg. No. 35,944 Matthew J. Moore, Reg. No. 42,012 Andrew Y. Piatnicia, Reg. No. 40,772 Glenn W. Rhodes, Reg. No. 31,790 Richard M. San Pietro, Reg. No. 45,071 Charles Bret Seaton, Reg. No. 46,171 Michael J. Stimson, Reg. No. 45,429 Jennifer A. Tipsord, Reg. No. 40,205 William K. West, Reg. No. 22,057 Adam K. Whiting, Reg. No. 44,400 Jayna R. Whitt, Reg. No. 47,175 Karen K. Wong, Reg. No. 44,409 Wallace Wu, Reg. No. 45,380 Matthew S. Zises, Reg. No. 47,246

of HOWREY SIMON ARNOLD & WHITE, LLP, Box No. 34, 1299 Pennsylvania Ave., NW, Washington, DC 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(s) opposite their name(s).

Date: September 26, 2001 Signature of Inventor: Hee-Sub KIM

Date: September 26, 2001 Signature of Inventor: Kwan-Sur FARK

Kwan-Sun PARK

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