OMB No. 0651-0011 (exp. 4/94)	U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office
To the Honorable Commissioner of Patents and	inal documents or copy thereof
1. Name of conveying party(ies):	2640328 2. Name and address of receiving party(ies):
Suk-beom Song Yong-in Han Chang-won Huh	Name: Samsung Electronics, Co., Ltd.
Hyen-aee Woo	Internal Address.
Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No	
3. Nature of conveyance:	Street Address: 416, Maetan-dong, Paldal-gu,
	Suwon-city, Kyungki-do, Republic of Korea
☐ Assignment ☐ Merger	
☐ Security Agreement ☐ Change of Name ☐ Other	City: State ZIP
Execution Date: December 8, 2003 4. Application number(s) or patent number(s):	Additional name(s) & address attached? ☐ Yes ☒ No
A. Patent Application No.(s) 16743633 Additional numbers attached	B. Patent No.(s)
	? □ Yes ⊠ No
<u> </u>	
5. Name and address of party to whom correspondence concerning document should be mailed:	 ? ☐ Yes ☒ No 6. Total number of applications and registrations involved
5. Name and address of party to whom correspondence concerning	6. Total number of applications and registrations
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and registrations
5. Name and address of party to whom correspondence concerning document should be mailed: Name: Steven M. Mills	6. Total number of applications and registrations involved
5. Name and address of party to whom correspondence concerning document should be mailed: Name: Steven M. Mills	6. Total number of applications and registrations involved
5. Name and address of party to whom correspondence concerning document should be mailed: Name: Steven M. Mills	6. Total number of applications and registrations involved
5. Name and address of party to whom correspondence concerning document should be mailed: Name: Steven M. Mills Internal Address: MILLS & ONELLO LLP	6. Total number of applications and registrations involved
5. Name and address of party to whom correspondence concerning document should be mailed: Name: Steven M. Mills Internal Address: MILLS & ONELLO LLP Street Address: Eleven Beacon Street, Suite 605	6. Total number of applications and registrations involved
5. Name and address of party to whom correspondence concerning document should be mailed: Name: Steven M. Mills Internal Address: MILLS & ONELLO LLP Street Address: Eleven Beacon Street, Suite 605 City: Boston State MA ZIP 02108	6. Total number of applications and registrations involved
5. Name and address of party to whom correspondence concerning document should be mailed: Name: Steven M. Mills Internal Address: MILLS & ONELLO LLP Street Address: Eleven Beacon Street, Suite 605 City: Boston State MA ZIP 02108 DO NOT USE TO the best of my knowledge and belief, the foregoing information is trudocument. Steven M. Mills Reg. No. 36,610 Name of Person Signing Signature	6. Total number of applications and registrations involved
5. Name and address of party to whom correspondence concerning document should be mailed: Name: Steven M. Mills Internal Address: MILLS & ONELLO LLP Street Address: Eleven Beacon Street, Suite 605 City: Boston State MA ZIP 02108 DO NOT USE TO the best of my knowledge and belief, the foregoing information is trudocument. Steven M. Mills Reg. No. 36,610	6. Total number of applications and registrations involved

Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Reference No.: SAM-0518

ASSIGNMENT

We, Suk-beom Song, of 211-605, Hwanggol Maeul Hanguk Apt., Youngtong-dong, Paldal-gu, Suwon-city, Kyungki-do, Republic of Korea; Yong-in Han, of 111-803, Hyundai Apt., Hyojachon, Seohyun-dong, Bundang-gu, Seongnam-city, Kyungki-do, Republic of Korea; Chang-won Huh, of 528-2006, Samhwan Jinro Apt., Baekseol Maeul, Jeongjal-dong, Jangan-gu, Suwon-city, Kyungki-do, Republic of Korea; and Hyen-aee Woo, of 202-1002, Geoje 2-cha Hyundai Hometown, Geoje-dong, Yeonje-gu, Pusan Metropolitan city, Republic of Korea having invented improvements in PROGRESSIVE SCAN METHOD USED IN DISPLAY USING ADAPTIVE EDGE DEPENDENT INTERPOLATION described in an application for Letters Patent of the United States, executed by us on even date herewith, for good and valuable consideration, receipt of which is hereby acknowledged from Samsung Electronics Co., Ltd., a Korean corporation having a place of business at 416, Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea (and hereinafter called the Assignee, which term shall include its successors and assigns), do hereby sell, assign and transfer unto the Assignee our entire right, title, and interest in and throughout the United States of America (including its territories and dependencies) and all countries foreign thereto, in and to and under said application (which term shall include hereinafter where the context so admits all divisional, continuing, reissue and other patent applications based thereon) and the inventions (which term shall include each and every such invention, or part thereof) therein described, and any and all patents and like rights of exclusion (including extensions thereof) of any country which may be granted on or for said inventions or on said application;

And for the same consideration We do also hereby sell, assign, and transfer unto the Assignee, all our rights under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, and all other treaties of like purpose in respect of said inventions and said application, and We do hereby authorize the Assignee to apply in our name or its own name or its designee for patents and like rights of exclusion on or for said inventions in all countries, claiming (if the Assignee so desires) the priority of the filing date of said application under the provisions of said Convention, Treaty or any such other Convention or Treaty;

And for the same consideration, We do hereby agree for ourselves and for our heirs, executors, and administrators, promptly upon request of the Assignee to execute and deliver without further compensation any power of attorney, assignment, original, divisional, continuing, reissue or other application or applications for patent or patents or like rights of exclusion of any country, or other lawful documents and any further assurances that may be deemed necessary or desirable by the Assignee, fully to secure to it said right, title, and interest as aforesaid in and to said inventions, applications, and said several patents and like rights of exclusion (including extensions thereof) or any of them, all, however, at the expense of the Assignee, its successors, or assigns;

And We do hereby authorize and request the Commissioner of Patents and Trademarks of the United States of America and the corresponding Official of each country foreign thereto to issue to the Assignee, any and all patents and like rights of exclusion which may be granted in any country upon said United States application on or for said inventions;

And We do hereby covenant for ourselves and our legal representatives and agree with the Assignee, that We have granted no right or license to make, use, or sell said inventions to anyone except the Assignee, that prior to the execution of this deed our right, title, and interest in and to said inventions has not been otherwise encumbered by us, and that We have not executed and will not execute any instruments in conflict herewith.

Page 1 of 2

Reference No.: SAM-0518

First or Sole Inventor:

Signature:

Suk-beom Song.

Date: 2003. 12.

Second Joint Inventor:

Signature: Young In Hon Date: 2003. 12. 8

Third Joint Inventor:

Signature: Chang Won Huh
Chang-won Huh

Date: 2003. 12.8

Fourth Joint Inventor:

Signature:

RECORDED: 12/22/2003

Hyen-aee Woo

Hyen-aee Woo

Date: 2003 12 B

REFERENCE NO. ; SAM-0518

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PATENT REEL: 014842 FRAME: 0619