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To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof. 2. Name and address of receiving party(ies): 1. Name of conveying party(ies): Takashi MAEDA, Takanori TSUNASHIMA and Hiroyuki KABUSHIKI KAISHA TOSHIBA Name: KIMURA Address: 1-1, Shibaura 1-chome, Minato-ku, Tokyo, Japan Additional name(s) of conveying party(ies) attached? \(\subseteq\) Yes 05-21-2003 3. Nature of Conveyance: Assignment ☐ Merger ☐ Security Agreement ☐ Change of Name 102453696 ☐ Other Additional name(s) and address(es) attached? □Yes ■No Execution Date: April 14, 2003 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) 10/325,937 Additional numbers attached?

Yes No 5. Name and address of party to whom correspondence 6. Total applications and patents involved: 1 concerning document should be mailed: 7. Total fee (37 CFR 3.41): \$40.00 Enclosed ☐ Authorized to be charged to deposit account 8. Deposit account number: 15-0030 (Attach duplicate copy of this page if paying by deposit account)

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9. Statement and signature

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PATENT

REEL: 014075 FRAME: 0489

Assignment of Application

Page 1 of 2

	WHEREAS, I (WE)	Takashi MAEDA of S	Saitama-ken,	Japan		
SERT NAMES ID RESIDENCE	Takanori TSUNASHIMA of Saitama-ken, Japan					
DDRESS OF HE INVENTORS:	Hiroyuki KIMURA of Saitama-ken, Japan					
		1 Thomas and the second				
					480	
			*			
				- A.M. A.M.		
	, respectively,					
SERT TITLE INVENTION:	have invented certain new and useful improvements in: METHOD FOR DRIVING DISPLAY DEVICE HAVING					
	DIGITAL MEMORY FOR EACH PIXEL					
SERT DATE IN- ENTORS SIGNED CLARATION:	for which an application for Letters Patent was executed on					
SERT NAME ID ADDRESS OF IMPANY OR THER ASSIGNEE	(Application No. 10/325,937 , filed December 23, 2002), and WHEREAS, KABUSHIKI KAISHA TOSHIBA					
	(hereinafter referred to as "ASSIGNEE") having a place of business at:					
	1-1, Shibaura 1-chome, Minato-ku, Tokyo, Japan					
	is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;					
				VE DOLLARS (\$5.00), the rec , I (WE), by these presents do:		

possessions and in all foreign countries and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.

I (WE) hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the

unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial

and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my (our) entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its (his) successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me (us) had this Assignment and sale not been made.

10/01

Further, I (WE) agree that I (WE) will communicate to said ASSIGNEE or its (his) representatives any facts known to me (us) respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letter Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.

The undersigned hereby grant(s) the firm of Oblon, Spivak, McClelland, Maier & Neustadt, P.C. of Fourth Floor, 1755 Jefferson Davis Highway, Arlington, Virginia 22202 the power to insert on this assignment any further identification, including the application number and filing date, which 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.

Date:	April 14,2003	Takashi Macda
		(Signature of Inventor) Takashi MAEDA
Date:	April 14,2003	Takanori Tsunashima (Signature of Inventor) Takanori TSUNASHIMA
		(Signature of Inventor) Takanori TSUNASHIMA
Date:	April 14,2003	Hiroguk Kimure (Signature of Inventor) Hiroyuki KIMURA
		(Signature of Inventor) Hiroyuki KIMURA
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OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, P.C. ATTORNEYS AT LAW

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