FORM PTO-1595 (Modified) 04-15-2002 U.S. DEPARTMENT OF COMMERCE (Rev. 03-01) Pate It and Trademark Office OMB No. 0651-0027 (exp.5/31/2002) P08A/REV03 Tab settings → → → 102055153 _____atached original documents or copy thereof. To the Honorable Commissioner of Patent 1. Name of conveying party(ies): 2. Name and address of receiving party(ies): MIYACHI, Koichi IZUMI, Yoshihiro Name: Sharp Kabushiki Kaisha GOHDA, Hiroshi Address: 22-22 Nagaike-cho Abeno-ku ☐ Yes 🛛 No Additional names(s) of conveying party(ies) 3. Nature of conveyance: ■ Assignment ☐ Merger City: Osaka 545-8522 State/Prov.: ☐ Security Agreement ☐ Change of Name Country: Japan ☐ Other ZIP: Execution Date: April 1, 2002 Additional name(s) & address(es) ☐ Yes XI No 4. Application number(s) or patent numbers(s): If this dogument is being filed together with a new application, the execution date of the application is: April 5, 2002 Patent Application No. Filing date B. Patent No.(s) 04/10/2002 EHAILE1 00000054 10117614 **ó**3 FC:581 40.00 DP ☐ Yes 🛛 No Additional numbers 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved: concerning document should be mailed: Name: Steven M. Jensen 7. Total fee (37 CFR 3.41):....\$ 40.00 (Reg. No. 42,693) Registration No. Enclosed - Any excess or insufficiency should be credited or debited to deposit account Address. Dike, Bronstein, Roberts & Cushman Authorized to be charged to deposit account **Intellectual Property Practice Group** 8. Deposit account number: EDWARDS & ANGELL, LLP, P. O. Box 9169 04-1105 City: Boston _____ State/Prov.: MA (Attach duplicate copy of this page if paying by deposit account) Country: USA ZIP: 02209 DO NOT USE THIS SPACE 9. 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. April 5, 2002 Steven M. Jensen Date Signature Name of Person Signing Total number of pages including cover sheet, attachments, and Mail documents to be recorded with required cover sheet information to:

Docket No.: 57375 (45672)

Attorney Docket No. 57375 (45672) **Page 1 of 3**

ASSIGNMENT

WHEREAS, the following inventor(s):				
Koichi MIYACHI, Yoshihiro IZUMI, Hiroshi GOHDA				
(Names of Inventors)				
(hereinafter designated as the undersigned) has (have) invented certain new and useful				
improvements in <u>CIRCUIT STRUCTURE, MANUFACTURING METI</u>	HOD THEREOF AND			
WIRING STRUCTURE				
(Title of Invention)				
for which application for Letters Patent of the United States				
is being filed herewith				
has been filed on, Serial No				
and				
WHEREAS, Sharp Kabushiki Kaisha , a .	Japanese			
(Name of Assignee)	(State of Incorp.)			
Corporation having its principal place of business at 22-22, Nagai	<u>ke-cho, Abeno-ku,</u>			
Osaka-shi, Osaka 545-8522, Japan				
(Assignee's City)				
its heirs, successors, legal representatives and assigns (hereinafter	: designated as the			
Assignee) is desirous of acquiring the entire right, title and interest	in and to said			
invention and to any Letters Patent(s) that may be granted therefor	in the United States			
of America;				

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration to the undersigned, the receipt of which is hereby acknowledged, the undersigned has (have) sold, assigned and transferred, and by these presents do sell, assign and transfer unto said Assignee the full and exclusive right to the said invention in the United States of America and its territories, dependencies and possessions and the entire right, title and interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of America and its territories, dependencies and possessions, and in and to any and all divisions, reissues, continuations and extensions thereof for the full term or terms for which the same may be granted.

The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional or reissue applications 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 furnish all pertinent facts and documents relating to said application, said invention and said patent(s) as may be known and accessible to the undersigned, and will testify as to the same in any interference or litigation related thereto, and will promptly execute and deliver to Assignee any and all papers,

PATENT REEL: 012778 FRAME: 0464 instruments or affidavits necessary or desirable to apply for, obtain, maintain or enforce said application or said patent(s) in connection with any interference which may be declared, and any litigation concerning this application or any continuation, division or reissue thereof or Patent(s) or reissue patent(s) issued thereon, and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference or litigation.

The undersigned agree(s) to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

The undersigned hereby grant(s) the law firm of Edwards & Angell, LLP, of 130 Water Street, Boston, Massachusetts 02109-4280, U.S.A. the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents and Trademarks to issue any and all Letters Patents of the United States of America resulting from said application or any division or divisions or continuing or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he or she has the full right to convey the entire interest herein assigned, and that he or she has not executed, and will not execute, any agreement in conflict herewith.

In witness whereof, signed by the undersigned on the date(s) opposite the undersigned names.

Date_	April	1,	2002	Signature of Inventor:_		Koich	- hugaci	u-
				Name:	Koichi M	ГУАСНІ	<i></i>	

Attorney Docket No. Page 3 of 3

Date April 1, 2002	Signature of Inventor: Yoshilaro Jami
	Name: Yoshihiro IZUMI
Date April 1, 2002	Signature of Inventor: Kinoski Golda
	Name: Hiroshi GOHDA
Date	Signature of Inventor:
	Name:
Date	Signature of Inventor:
Date	Name:
Date	Signature of Inventor:
	Name:

3

RECORDED: 04/05/2002

PATENT REEL: 012778 FRAME: 0466