DRM PTO-1595 (Modified)	
60, 03-01) 100 No. 6651-0017 (120 5/1/2002 9 ) 3 100 X/REV03	
Tab settings + + + 1	)2771338
To the Honorable Commissioner of Rate	rains, Fisase record the attached original documents or copy the
1. Name of conveying party(ies):	2. Name and address of receiving party(ies):
Hideo OHNO JAN 1 3 La	Name: [1] Sharp Kabushiki Kaisha
Kazuki KOBAYASHI Ikuo SAKONO	Address: 22-22 Nagaike-cho Abeno-ku,
Additional names(s) of conveying party(ies)	o Osaka Japan 545-8522
3. Nature of conveyance:	[2] Masashi KAWASAKI
🛛 Assignment 🗌 Merger	35-1-101 Kawauchimotohasekura Aoba-ku Sendai-shi
Security Agreement     Change of Name	ne City: Mlyagi Stale/Prov.:
Other	Country: Japan ZIP: 980-0861
Execution Date: August 6, 2002	Additional name(s) & address(es)
10/224,879 August 21, 2002	B. Patent No.(s)
10/224,879 August 21, 2002 Additional no 5. Name and address of party to whom correspondence concerning document should be mailed:	
Additional no 5. Name and address of party to whom correspondence	umbers I Yes X No 6. Total number of applications and patents involved:
Additional ne 5. Name and address of party to whom correspondence concerning document should be mailed:	umbers       Yes       No         6. Total number of applications and patents involved:       []         7. Total fee (37 CFR 3.41):\$ 40.00       []
Additional m 5. Name and address of party to whom correspondence concerning document should be mailed: Name: David G. Conlin	umbers       Yes X No         6. Total number of applications and patents involved:       [         7. Total fee (37 CFR 3.41):\$ 40.00       [         X Enclosed - Any excess or insufficiency should be credited or debited to deposit account       [
Additional m 5. Name and address of party to whom correspondence concerning document should be mailed: Name: David G. Conlin Registration No. 27,026	umbers       Yes X No         6. Total number of applications and patents involved:       [         7. Total fee (37 CFR 3.41):\$ 40.00       [         X Enclosed - Any excess or insufficiency should be credited or debited to deposit account       [
Additional ne 5. Name and address of party to whom correspondence concerning document should be mailed: Name: David G. Conlin Registration No. 27,026 Address: Edwards & Angell, LLP	umbers       Yes       No         6. Total number of applications and patents involved:       [         7. Total fee (37 CFR 3.41):\$ 40.00       [         Ø       Enclosed - Any excess or insufficiency should be credited or debited to deposit account
Additional ne 5. Name and address of party to whom correspondence concerning document should be mailed: Name: David G. Conlin Registration No. 27,026 Address: Edwards & Angell, LLP	umbers       Yes X No         6. Total number of applications and patents involved:       [         7. Total fee (37 CFR 3.41):\$ 40.00       [         X Enclosed - Any excess or insufficiency should be credited or debited to deposit account       [         Authorized to be charged to deposit account       [
Additional net 5. Name and address of party to whom correspondence concerning document should be mailed: Name: David G. Conlin Registration No. 27,026 Address: Edwards & Angell, LLP P.O. Box 9169	umbers       Yes X No         6. Total number of applications and patents involved:       [         7. Total fee (37 CFR 3.41):\$ 40.00       [         X Enclosed - Any excess or insufficiency should be credited or debited to deposit account       [         Authorized to be charged to deposit account       [         8. Deposit account number:       [
Additional net 5. Name and address of party to whom correspondence concerning document should be mailed: Name: David G. Conlin Registration No. 27,026 Address: Edwards & Angell, LLP P.O. Box 9169 City: Boston State/Prov.: MA Country: USA ZIP: 02009	umbers       Yes       No         6. Total number of applications and patents involved:       [         7. Total fee (37 CFR 3.41):\$ 40.00       P         Ø       Enclosed - Any excess or insufficiency should be credited or debited to deposit account         Image: Authorized to be charged to deposit account         8. Deposit account number:         04-1105
Additional net 5. Name and address of party to whom correspondence concerning document should be mailed: Name: David G. Conlin Registration No. 27,026 Address: Edwards & Angell, LLP P.O. Box 9169 City: Boston State/Prov.: MA Country: USA ZIP: 02009 City: Deston Control	umbers       Yes X No         6. Total number of applications and patents involved:       [         7. Total fee (37 CFR 3.41):\$ 40.00       P         X Enclosed - Any excess or insufficiency should be credited or debited to deposit account       [         Authorized to be charged to deposit account       8. Deposit account number:         04-1105       [         (Attach duplicate copy of this page if paying by deposit account)
Additional me         5. Name and address of party to whom correspondence concerning document should be mailed:         Name:       David G. Conlin         Registration No.       27,026         Address:       Edwards & Angell, LLP         P.O. Box 9169       City:         City:       Boston         State/Prov.:       MA         Country:       USA         ZIP:       02009         9.       Statement and signature.         To the best of my knowledge and belief, the foregoing of the original document.	umbers       Yes X No         6. Total number of applications and patents involved:       [         7. Total fee (37 CFR 3.41):\$ 40.00       P         X Enclosed - Any excess or insufficiency should be credited or debited to deposit account       [         Authorized to be charged to deposit account       [         8. Deposit account number:       04-1105         (Attach duplicate copy of this page if paying by deposit account)         DO NOT USE THIS SPACE         information is face and correct and any attached copy is a true component.
Additional net 5. Name and address of party to whom correspondence concerning document should be mailed: Name: David G. Conlin Registration No. 27,026 Address: Edwards & Angell, LLP P.O. Box 9169 City: Boston State/Prov.: MA Country: USA ZIP: 02009 City: Deston Control	umbers       Yes X No         6. Total number of applications and patents involved:       [         7. Total fee (37 CFR 3.41):\$ 40.00       [         X Enclosed - Any excess or insufficiency should be credited or debited to deposit account       [         Authorized to be charged to deposit account       [         8. Deposit account number:       [         04-1105       [         (Attach duplicate copy of this page if paying by deposit account)

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To the Honorable Commissioner of	Patents and Trademarks	: Please record the attached orig	inal documents or copy thereo	
. Name of conveying party(ies):		2. Name and address of recei	iving party(ies):	
	·	Name: [3] Hideo OHNO		
		Address: 3-33-10, Katsura	Izumi-ku Sendai-shi	
Additional names(s) of conveying party(ies)	🛛 Yes 🗋 No			
Nature of conveyance:	······································			
Assignment	Merger			
Security Agreement	Change of Name	City: Miyagi	State/Prov.:	
D Other		Country: Japan	ZIP: 981-3134	
Execution Date:		Additional name(s) & address(es)	□ Yes ⊠ No	
Application number(s) or patent nu	mhere(a)-			
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## ASSIGNMENT

WHEREAS, the following inventor(s): Masashi KAWASAKI, Hideo OHNO, Kazuki KOBAYASHI and Ikuo SAKONO, hereinafter designated as the undersigned) has (have) invented certain new and useful improvements in THIN FILM TRANSISTOR AND MATRIX DISPLAY DEVICE, for which application for Letters Patent of the United States has been filed on\_\_\_\_\_\_, Serial No\_\_\_\_\_\_; and

WHEREAS, Masashi KAWASAKI, Hideo OHNO and SHARP KABUSHIKI KAISHA, a Japanese corporation, having its principal place of business at OSAKA JAPAN, its heirs, successors, legal representatives (hereinafter designated as the Assignees) are 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 Assignce any and all papers, 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.

PATENT REEL: 013661 FRAME: 0167

Page 2 of 2



The undersigned hereby grant(s) the law firm of Edwards & Angell, LLP, of P.O. Box 9169, Boston, Massachusetts 02209, 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: August 6, 2002	Signature of Inventor: Magger Cara
	Name: Masashi KAWASAKI
Date: August 6, 2002	Signature of Inventor:
	Name: Hideo OHNO
Date: Augu st 6. 2002	Signature of Inventor: Hazuki Hobayashi
	Name: Kazuki KOBAYASHI
Date: <u>August 6, 2002</u>	Signature of Inventor: 1840 Sakono
	Name: Ikuo SAKONO
Date:	Signature of Inventor:
	Name:
Date:	Signature of Inventor:
	Name:

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RECORDED: 01/13/2003

PATENT REEL: 013661 FRAME: 0168

**RECORDED: 01/13/2003**