

APR 18 2002

04-30-2002

4.1802

1113.40888X00

Form PTO-1595

(Rev. 03/01)

OMB No. 0651-0027 (exp. 5/31/2002)



102072738

U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

MAKISHIMA, TATSUO
IWASAKI, SHINICHI
KITAJIMA, MASAOKI
OOWAKI, YOSHIO
TAKAHASHI, KOJI
MORISHITA, SHUNSUKEAdditional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

2. Name and address of receiving party(ies)

Name: **HITACHI, LTD.**Street Address: **6, Kanda Surugadai 4-chome,
Chiyoda-ku, Tokyo, Japan**Name: **Hitachi Device Engineering Co., Ltd.**Street Address: **3681 Hayano Mobara-shi, Chiba-
ken 297-8582**

3. Nature of conveyance:

☒ Assignment☐ Merger☐ Security Agreement☐ Change of Name☐ Other _____Execution Date: **October 16, 2001.**Additional name(s) & address(es) attached? ☐ Yes ☒ No

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: _____

A. Patent Application No.(s)

B. Patent Registration No.(s)

U.S. Serial No. 09/989,171 filed Nov. 21, 2001Additional number(s) attached ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: **Antonelli, Terry, Stout & Kraus, LLP**

Internal Address:

**1300 North Seventeenth Street
Suite 1800
Arlington, VA 22209
USA**

City: State: Zip:

6. Total number of applications and patents involved **1**7. Total fee (37 CFR 3.41)..... **\$40.00**☒ Enclosed☒ Authorized to be charged to deposit account

8. Deposit account number:

01-2135

(Attach duplicate copy of this page if paying by deposit account)

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.***Melvin Kraus, Reg. No. 22,466****04/18/02**

Name of Person Signing

Signature

Date

Total number of pages including cover sheet, attachments, and document: **4**Mail documents to be recorded with required cover sheet information to:
Commissioner of Patent & Trademarks, Box Assignments
Washington, D.C. 20231

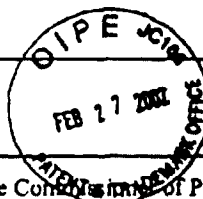
04/19/2002 BARRAHAI 00000122 09989171

01 FC:581

40.00 00

**PATENT
REEL: 012830 FRAME: 0306**

2-2702



RECOR

03-04-2002



Docket No.: 1113.40888X00

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks

101998018

original documents or copy thereof.

1. Name of conveying party(ies):

Tatsuo MAKISHIMA
Shinichi IWASAKI
Masaaki KITAJIMA
Koji TAKAHASHI
Shunsuke MORISHITA

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

2. Name and address of receiving party(ies):

Name: (1.) Hitachi, Ltd./ (2.) Hitachi Device Engineering

Street Address: (1.) 6, Kanda Surugadai 4-chome, Chiyoda-ku
Tokyo/
(2.) 3681 Hayano Mobara-shi, Chiba-ken 297-8582

Country: Japan

Additional name(s) & address(es) attached? ☒ Yes ☐ No

3. Nature of conveyance:

- ☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Other _____

Execution Date: October 16, 2001

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:

A. Patent Application No.(s)
09/989,171 Filed November 21, 2001

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: ANTONELLI, TERRY, STOUT & KRAUS, LLP

Internal Address:

Street Address: 1300 North Seventeenth Street
Suite 1800

City: Arlington State: VA Zip: 22209

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41).....\$40.00

- ☒ Enclosed
☒ Any deficiencies may be charged to deposit account
☐ Authorized to be charged to deposit account

8. Deposit account number: 01-2135

(Attach duplicate copy of this page if paying by deposit account)

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.

Alan E. Schiavelli
Name of Person Signing

Signature

February 27, 2002
Date

Attorney Registration No. 32,087

Total number of pages including cover sheet, attachments, and document: 5

OMB No. 0651-0011 (exp. 4/94)

PATENT
REEL: 012448 FRAME: 0783

PATENT
REEL: 012830 FRAME: 0307

11-28-2001
101902282
PATENTS ONLY

113.40888X00
U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office

Form PTO-1595
(Rev. 03/01)
OMB No. 0651-0027 (exp. 5/31/2002)

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies): MAKISHIMA, TATSUO IWASAKI, SHINICHI KITAJIMA, MASAOKI OOWAKI, YOSHIO TAKAHASHI, KOJI MORISHITA, SHUNSUKE <i>4/21/01</i>		2. Name and address of receiving party(ies) Name: <u>MITSUBISHI LTD.</u> Internal Address: <u>8, Kanda Surugadai 4-chome, Chiyoda-ku</u> <u>Tokyo, Japan</u> Street Address: City: _____ State: _____ Zip: _____ <input type="checkbox"/> Other	
Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Security Agreement <input type="checkbox"/> Other _____ <input type="checkbox"/> Merger <input type="checkbox"/> Change of Name Execution Date: <u>October 18, 2001</u>			
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: <u>October 18, 2001</u> A. Patent Application No.(s) <i>09/982171</i> B. Patent Registration No.(s) Additional number(s) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
5. Name and address of party to whom correspondence concerning document should be mailed: Name: <u>Antonelli, Terry, Stout & Kraus, LLP</u> Internal Address: 1300 North Seventeenth Street Suite 1800 Arlington, VA 22209 USA City: _____ State: _____ Zip: _____		6. Total number of applications and patents involved <u>1</u> 7. Total fee (37 CFR 3.41)..... \$40.00 <input type="checkbox"/> Enclosed <input type="checkbox"/> Authorized to be charged to deposit account 8. Deposit account number: 01-2135 (Attach duplicate copy of this page if paying by deposit account)	
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. Ronald J. Shore Name of Person Signing Registration Number: 28,577 <i>Ronald J. Shore</i> Signature November 21, 2001 Date Total number of pages including cover sheet, attachments, and document: <u>2</u> Mail documents to be recorded with required cover sheet information to: Commissioner of Patent & Trademarks, Box Assignments Washington, D.C. 20231			

11/23/2001 VTRU081 00000001 09989171
05 FC:581 40.00 OP

PATENT
REEL: 012448 FRAME: 0784

PATENT
REEL: 012830 FRAME: 0308

ASSIGNMENT
(譲渡証)

IN CONSIDERATION of the sum of One Dollar (\$1.00) or the equivalent thereof, and other good and valuable consideration paid to Tatsuo MAKISHIMA, Shinichi IWASAKI, Masaaki KITAJIMA, Yoshio OOWAKI, Kouji TAKAHASHI, and, Shunsuke MORISHITA citizens of Japan by HITACHI, LTD., and Hitachi Device Engineering Co. Ltd., corporations organized under the laws of Japan, located at 8, Kanda Surugadai 4-chome, Chiyoda-ku, Tokyo, Japan and 3681 Hayano Mobara-shi, Chiba-ken 297-8582, Japan, respectively,

receipt of which is hereby acknowledged, we, the said Tatsuo MAKISHIMA, Shinichi IWASAKI, Masaaki KITAJIMA, Yoshio OOWAKI, Kouji TAKAHASHI, and, Shunsuke MORISHITA

do hereby sell and assign to said HITACHI, LTD., and Hitachi Device Engineering Co. Ltd their successors and assigns, all our right, title and interest, in and for the United States of America, in and to

LIQUID CRYSTAL DISPLAY DEVICE

Invented by us and described in the application for United States Letters Patent therefor, executed on even date herewith, and all United States Letters Patent which may be granted therefor, and all divisions, continuations and extensions thereof, the said interest being the entire ownership of the said Letters Patent when granted, to be held and enjoyed by said HITACHI, LTD., and Hitachi Device Engineering Co. Ltd.,

their successors, assigns or other legal representatives, to the full end of term for which said Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by us if this assignment and sale had not been made;

And we hereby agree to sign and execute any further documents or instruments which may be necessary, lawful, and proper in the prosecution of said above-named application or in the preparation and prosecution of any continuing, continuation-in-part, substitute, divisional, renewal, reviewed or reissue applications or in any amendment, extension, or interference proceedings, or otherwise to secure the title thereto in said assignee;

And we do hereby authorize and request the Commissioner of Patents to issue said Letters Patent to said HITACHI, LTD., and Hitachi Device Engineering Co. Ltd

Signed on the date(s) indicated aside signatures:

INVENTOR(S) (発明者フルネームサイン)	Date Signed (署名日)
1) <u>Tatsuo Makishima</u>	<u>Oct. 16, 2001</u>
2) <u>Shinichi Iwasaki</u>	<u>Oct 16, 2001</u>
3) <u>Masaaki Kitajima</u>	<u>Oct. 16, 2001</u>
4) <u>Yoshio Oowaki</u>	<u>Oct. 16, 2001</u>
5) <u>Kouji Takahashi</u>	<u>Oct. 16, 2001</u>
6) <u>Shunsuke Morishita</u>	<u>Oct. 16, 2001</u>
7) _____	_____
8) _____	_____
9) _____	_____
10) _____	_____

RECORDED: 02/27/2002

PATENT
REEL: 012448 FRAME: 0786

PATENT
REEL: 012830 FRAME: 0309

(讓 渡 証)

REEL: 012830 FRAME: 0310