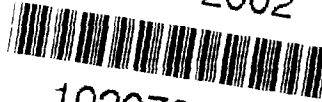


412910Z

05-06-2002

520.41246X00



1.02079002

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

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):  
**HIDA, Haruhisa**  
**TAKEMOTO, Iwao**  
**MATSUMOTO, Katsumi**  
**ADACHI, Shigeo**

2 Name and address of receiving party(ies)  
Name: (1) **Hitachi, Ltd.**  
Name: (2) **Hitachi Device Engineering Co., Ltd**  
  
Street Address: (1) 6, Kanda Surugadai, 4-chome,  
Chiyoda-ku, Tokyo, Japan

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

(2) 3681, Hayano, Mobarashi,  
Chiba-ken, Japan

3. Nature of conveyance:  
 Assignment  Merger  
 Security Agreement  Change of Name  
 Other \_\_\_\_\_

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

Execution Date: **March 29, & April 1, 2002.**

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)

**10/097,574 Filed March 15, 2002**

Additional number(s) attached  Yes  No

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

6. Total number of applications and patents involved **1**

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

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

Internal Address:

Enclosed

**1300 North Seventeenth Street**

Authorized to be charged to deposit account

**Suite 1800**

8. Deposit account number:

**Arlington, VA 22209**

**01-2135**


**USA**

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

City: State: Zip:

**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**  **04/29/2002**

Name of Person Signing Signature Date

Total number of pages including cover sheet, attachments, and document: **2**

Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patent & Trademarks, Box Assignments  
Washington, D.C. 20231

04/30/2002 00000046 10097574

02 FC:581

40.00 DF

**PATENT**  
**REEL: 12849 FRAME: 0837**

# 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 the below named inventor(s), citizens of Japan by HITACHI, LTD., and HITACHI DEVICE ENGINEERING CO., LTD., corporations organized under the laws of Japan, located at 6, Kanda Surugadai 4-chome, Chiyoda-ku, Tokyo, Japan, and 3681, Hayano, Mobara-shi, Chiba-ken, Japan, respectively,

receipt of which is hereby acknowledged, we, the below named inventor(s), 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 HAVING A LOW-VOLTAGE DRIVING CIRCUIT

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>Haruhisa Aida</u>	<u>March 29, 2002</u>
2) <u>Joao Takamoto</u>	<u>Apr 1, 2002</u>
3) <u>Katsumi Matsumoto</u>	<u>Apr. 1, 2002</u>
4) <u>Shigeo Adachi</u>	<u>Apr. 1, 2002</u>
5) _____	_____
6) _____	_____
7) _____	_____
8) _____	_____
9) _____	_____
10) _____	_____