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11-22-2002



Our Ref.: 4074-3

102290057

Commissioner of Patents and Trademarks
Box Assignment, Washington, D.C. 20231

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

<p>1. Name of conveying party(ies): Keiji NOBUHARA Toshihiro YAMANAKA Katsumi NAKANISHI Shinsaku TOHKI Masako YOSHINAGA</p> <p style="text-align: right; font-size: 2em;"><i>11/14/02</i></p> <p>Additional name/s of conveying party/ies attached? <input type="checkbox"/></p> <p>3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Assignment <input type="checkbox"/> Change of Name <input type="checkbox"/> Other</p> <p>Execution Date: <u>November 8, 2002</u></p>	<p>2. Name and address of receiving party(ies):</p> <p>Name: <u>SHARP KABUSHIKI KAISHA</u> Internal Address: _____ Street Address: <u>22-22, Nagaike-cho, Abeno-ku</u> _____</p> <p>City: <u>Osaka</u> State/Country: <u>JAPAN</u> Zip: <u>545-8522</u></p> <p>Additional name/s & address/es attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
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16979 U.S. PTO
 10/29/02
 11/14/02

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: November 8, 2002

<p>A. Patent Application No(s). (1) _____ (2) _____ (3) _____</p>	<p>B. Patent No(s). (1) _____ (2) _____ (3) _____</p>
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Additional numbers attached Yes No

<p>5. Name and address of party to whom correspondence concerning document should be mailed:</p> <p>Name: <u>H. Warren Burnam, Jr.</u> Internal Address: _____ Street Address: <u>Nixon & Vanderhye P.C.</u> <u>1100 North Glebe Road</u> <u>8th Floor</u> City: <u>Arlington</u> State: <u>VA</u> Zip: <u>22201</u></p>	<p>6. Total number of applications & patents involved: <u>1</u></p> <p>7. Total fee (37 CFR 3.41) \$ <u>40.00</u> <input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> Authorized to be charged to deposit account #14-1140</p> <p>8. The Commissioner is hereby authorized to charge any <u>deficiency</u> in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper thereafter filed in this application by this firm) to our Account No. 14-1140.</p>
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9. Statements 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.

H. Warren Burnam, Jr. *H. Warren Burnam, Jr.* November 14, 2002
 Name of Person Signing Signature Date
 Reg. No. 29,366

Total number of pages including **original** cover sheet, attachments, and document: [3]

11/15/2002 ANAB11 00000064 10293335
 02 FC:8021 40.00 OP

ASSIGNMENT OF PATENT APPLICATION

(Inventors) **Keiji NOBUHARA
Katsumi NAKANISHI
Shinsaku TOHKI
Masako YOSHINAGA
Toshihiro YAMANAKA**

(Assignee)
(Address) In consideration of the sum of one dollar (\$1.00) and other good and valuable considerations paid to each of the undersigned, the undersigned agree(s) to assign, and hereby does assign, transfer and set over to
SHARP KABUSHIKI KAISHA
(of 22-22, Nagaikecho, Abeno-ku, Osaka 545-8522 Japan
(hereinafter designated as the Assignee) the undersigned's entire right, title and interest for the United States, its territories, dependencies and possessions, and for the country of
(Other Countries) (in the invention, and all application for patent and any Letters Patent which
(Title) may be granted therefore, known as
ELECTRONIC DEVICE (Case No. -)
for which the undersigned has (have) executed on even date herewith an application for patent in the United States of America or, if not on even date, then has executed (on or has already filed in
(U.S. appln. Serial No. , filed on).
The undersigned acknowledges an obligation of assignment of this invention to said assignee at the time the invention was made.

The undersigned agree(s) to execute all papers and documents necessary in connection with the application or any interference which may be declared and any continuing or divisional applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient and further to perform any act which may be necessary in connection with claims or provisions of the International Convention for 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 to the Assignee.

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

The undersigned hereby grant(s) the firm of NIXON & VANDERHYE P.C. 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 United States Patent Office for recordation of this document. It is understood and agreed that ASSIGNEE'S attorneys Nixon & Vanderhye P.C. have represented only ASSIGNEE and will continue to represent only ASSIGNEE with respect to this invention.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned signature(s).

Date November 8, 2002 Signature of inventor (Keiji Nobuhara
Keiji NOBUHARA

Date November 8, 2002 Signature of inventor (Katsumi Nakanishi
Katsumi NAKANISHI

Date November 8, 2002 Signature of inventor (Shinsaku Tohki
Shinsaku TOHKI

Date November 8, 2002 Signature of inventor (~~Shinsaku Tohki~~ Masako Yoshinaga
Masako YOSHINAGA S.T. Nov. 8, 2002

Date November 8, 2002 Signature of inventor (Toshihiro Yamanka
Toshihiro YAMANAKA

Date _____ Signature of inventor (_____

Date _____ Signature of inventor (_____

Date _____ Signature of inventor (_____

Date _____ Signature of inventor (_____

Date _____ Signature of inventor (_____

Date _____ Signature of inventor (_____

Date _____ Signature of inventor (_____

Date _____ Signature of inventor (_____

Date _____ Signature of inventor (_____

Date _____ Signature of inventor (_____

Date _____ Signature of inventor (_____

Witnessed by: _____

Date _____

Witnessed by: _____

Date _____

Witnessed by: _____

Date _____