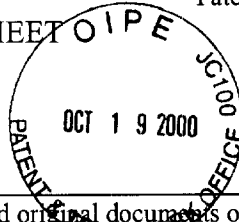




REGISTRATION FORM COVER SHEET



101523063

PATENTS ONLY

Our Ref.: 900-342

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

1. Name of conveying party(ies):  
Masahiro SHIOTA  
Toshiyuki SHINOZAKI  
Hideyuki TSUJI  
Toshiaki KINOSADA

10-19-00

2. Name and address of receiving party(ies):  
Name: Sharp Kabushiki Kaisha  
Internal Address:  
Street Address: 22-22, Nagaike-cho, Abeno-ku

Additional name/s of conveying party/ies attached?

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

City: Osaka-shi, Osaka  
State/Country: Japan  
Zip: 545-8522

Execution Date: August 22, 2000

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).  
(1) 09/603,433  
(2)  
(3)

B. Patent No(s).  
(1)  
(2)  
(3)

Additional numbers attached  Yes  No

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

Name: H. Warren Burnam, Jr.  
Internal Address:  
Street Address: Nixon & Vanderhye P.C.  
1100 North Glebe Road  
8<sup>th</sup> Floor  
City: Arlington State: VA Zip: 22201

6. Total number of applications & patents involved: 1

7. Total fee (37 CFR 3.41) \$ 40.00  
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8. The Commissioner is hereby authorized to charge any deficiency 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.

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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.  
Name of Person Signing  
Reg. No. 29,366

*H. Warren Burnam, Jr.*  
Signature

October 19, 2000  
Date

Total number of pages including original cover sheet, attachments, and document: [2]

**ASSIGNMENT OF U.S. PATENT APPLICATION**

**(Inventors)** Masahiro SHIOTA  
Toshiyuki SHINOZAKI  
Hideyuki TSUJI  
Toshiaki KINOSADA

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  
**(Assignee)** SHARP KABUSHIKI KAISHA a corporation of JAPAN  
**(Address)** 22-22, Nagaike-cho, Abeno-ku, Osaka-shi, Osaka 545-8522 JAPAN

**(Title)** (hereinafter designated as the Assignee) the undersigned's entire right, title and interest for the United States, its territories, dependencies and possessions in the invention, and all applications for patent and any Letters Patent which may be granted therefore, known as HETEROJUNCTION BIPOLAR TRANSISTOR AND ITS MANUFACTURING PROCESS  
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 June 23, 2000 or has already filed U.S. application Serial No. 09/603,433, on June 23, 2000.  
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 <u>August 22, 2000</u>	Signature of inventor	<u>Masahiro Shiota</u> Masahiro SHIOTA
Date <u>August 22, 2000</u>	Signature of inventor	<u>Toshiyuki Shinozaki</u> Toshiyuki SHINOZAKI
Date <u>August 22, 2000</u>	Signature of inventor	<u>Hideyuki Tsuji</u> Hideyuki TSUJI
Date <u>August 22, 2000</u>	Signature of inventor	<u>Toshiaki Kinoshada</u> Toshiaki KINOSADA
Date _____	Signature of inventor	_____

Witnessed by: \_\_\_\_\_ Date \_\_\_\_\_  
 Witnessed by: \_\_\_\_\_ Date \_\_\_\_\_