

ASSIGNMENT

WHEREAS, each of the Undersigned has developed certain inventions described in U.S. patent application entitled:

SEMICONDUCTOR MEMORY DEVICE

- (X) executed on even date herewith;
() executed on _____;
() now U.S. Application No. _____ filed _____;

and has full right to convey their entire interest, both legal and equitable, in and to said inventions free from all prior assignments, agreements, licenses, mortgages, security interests, or other encumbrances whatsoever; and

WHEREAS, NEC Corporation ("ASSIGNEE"), a Japanese corporation having executive offices at 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan, is desirous of acquiring the entire right, title and interest in and to said invention or inventions and any and all patents to be obtained therefor;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged by each of the Undersigned, each of the Undersigned hereby sells, assigns and transfers unto said ASSIGNEE, its successors and assigns, their entire right, title and interest in and to said invention or inventions, as described in the aforesaid application and all applications resulting therefrom, including any and all divisionals, continuations, continuations in part, substitute application, and reissues or extensions thereof; and all resulting patents;

AND each of the Undersigned hereby authorizes and requests the issuing authority to issue any and all patents on said application or applications to said ASSIGNEE or its successors and assigns; the Undersigned agree(s) that the attorney of record in said application shall hereinafter act on behalf of said ASSIGNEE;

AND, each of the Undersigned further agrees, without any further payment or compensation by said ASSIGNEE or its successors and assigns, to communicate to said ASSIGNEE, its representatives or agents or its successors and assigns, any facts relating to said invention or inventions including evidence for interference purposes or for other legal proceedings whenever requested; to testify in any interference or other legal proceedings, whenever requested; to execute and deliver, on request, all lawful papers required to make any of the foregoing provisions effective; and to generally do everything possible to aid said ASSIGNEE, its successors or assigns and nominees to secure, obtain and enforce proper patent protection for said invention or inventions in this or any foreign country;

Each of the undersigned hereby authorizes Hutchins, Wheeler & Dittmar, of 101 Federal Street, Boston, MA 02110, to insert hereon any further identification information necessary or desirable for recordation of this document.

Table with 3 columns: Inventor(s), Date Signed, Witnesses. Contains 4 rows of inventor signatures (Hirooyuki Takahashi, Hideo Inaba, Masatoshi Sonoda, Yoshiyuki Kato) and witness signatures (Mitashi Ukeai, Akira Moto).

(X) Additional inventors are being named on separately numbered sheets attached hereto.

10/04/2002

U.S. Pat. Office
#1, 2

ASSIGNMENT
(continued)

Inventors(s)

Date Signed

Witnesses

5. Atsushi Nakagawa
Name: Atsushi Nakagawa

August 29, 2002

Atsushi Ukeni
Atsushi Ukeni

6. _____
Name:

7. _____
Name:

8. _____
Name:

9. _____
Name: