

08-03-2001



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To the Honorable Commissioner of Patents and

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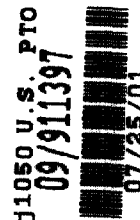
1. Name of conveying party(ies):

Masato KOYAMA and Akira NISHIYAMA

7-250)

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

Name: KABUSHIKI KAISHA TOSHIBA

Address: 1-1 Shibaura 1-chome, Minato-ku,
Tokyo, JapanAdditional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of Conveyance:

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

Execution Date: July 16, 2001

Additional name(s) and 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: July 16, 2001

A. Patent Application No.(s)

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No5. Name and address of party to whom correspondence
concerning document should be mailed:

6. Total 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: 15-0030
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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.

Norman F. Oblon

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C. Ivan McClelland

Registration Number 21,124

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A S S I G N M E N T

In consideration of value received, I, having a mailing address at
c/o Intellectual Property Division, KABUSHIKI KAISHA TOSHIBA, 1-1 Shibaura
1-chome, Minato-ku, Tokyo 105-8001, Japan and a residence as stated below
next to my name, the sole inventor (if only one name is listed below)
or a joint inventor (if plural inventors are listed below) of an
invention described in an application for United States patent entitled:

SEMICONDUCTOR DEVICE AND METHOD OF MANUFACTURING THE SAME

said application having been filed on
and assigned Application No. ;
sell and assign to
KABUSHIKI KAISHA TOSHIBA
a corporation of Japan, having a business address at
1-1 Shibaura 1-chome, Minato-Ku, Tokyo, Japan

its successors, assigns or nominees, hereinafter referred to as
"Assignee", my entire right, title and interest in and to said invention
as disclosed, shown and described in said application for United States
patent: (check one)

☒ executed concurrently herewith;

☐ executed separately herefrom:

and in and to all applications for patent and patents for said invention,
in all countries of the world, including all divisions, reissues, contin-
uations, substitutions and extensions thereof and all rights arising
under or pursuant to any and all international agreements, treaties or
laws relating to the protection of industrial property, including rights
of priority, resulting from the filing of any of said applications;
and I authorize and request any official whose duty is to issue patents,
to issue any patent on said invention or resulting therefrom to said
Assignee, and I agree that on request and without further consideration,
but at the expense of said Assignee, I will communicate to said Assignee
or its representatives all facts known to me respecting said invention
and testify in any legal proceeding, sign all lawful papers, execute all
divisional, continuing, reissue, or other applications, make all rightful
oaths and declarations, and generally do everything possible to aid said
Assignee to obtain and enforce proper patent protection for said
invention in all countries.

I hereby grant the following law firm the power to insert on this Assi-
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Oblon, Spivak, McClelland, Maier & Neustadt, P.C., Fourth Floor, 1755
Jefferson Davis Highway, Arlington, Virginia 22202

A S S I G N M E N T

01S0499

Inventor: (Signature)

Date

Residence

Masato Koyama
Masato Koyama

JUL. 16. 2001

Miura-gun, Japan

Akira Nishiyama
Akira Nishiyama

JUL. 16. 2001

Yokohama-shi, Japan

RECORDING OFFICER:

After recording please return to:
Oblon, Spivak, McClelland,
Maier & Neustadt, P.C.,

Fourth Floor,
1755 Jefferson Davis Highway,
Arlington, Virginia 22202

Docket No:

U.S. ASSIGNMENT

IN CONSIDERATION of the sum of One Dollar (\$1.00), and of other good and valuable consideration paid to the undersigned inventors (hereinafter ASSIGNOR) by:

FUJITSU LIMITED

1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki-shi, Kanagawa 211-8588 Japan

(hereinafter ASSIGNEE), the receipt of which is hereby acknowledged, the undersigned ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE the entire and exclusive right, title and interest to the invention entitled:

SEMICONDUCTOR MEMORY DEVICE WITH CONCURRENT REFRESH AND DATA ACCESS OPERATION

for which application for Letters Patent of the United States was filed on _____, and assigned Serial No. _____ (Arent Fox Kintner Plotkin & Kahn, PLLC is hereby authorized to insert the series code, serial number and/or filing date hereon, when known) and all Letters Patent of the United States to be obtained therefor on said application or any continuation, division, renewal, substitute, reissue or reexamination thereof for the full term or terms for which the same may be granted.

The ASSIGNOR agrees to execute all papers necessary in connection with application and any continuing, divisional, reissue or reexamination applications thereof and also to execute separate assignments in connection with such applications as the ASSIGNEE may deem necessary or expedient.

The ASSIGNOR agrees to execute all papers necessary in connection with any interference, litigation, or other legal proceeding which may be declared concerning this application or any continuation, division, reissue or reexamination thereof or Letters Patent or reissue patent issued thereon and to cooperate with the ASSIGNEE in every way possible in obtaining and producing evidence and proceeding with such interference, litigation, or other legal proceeding.

IN WITNESS WHEREOF, the undersigned inventors have affixed their signatures.

<u>Ayako Kitamoto</u>	<u><i>Ayako Kitamoto</i></u> (SIGNATURE)	<u>July 12, 2001</u> (DATE)
<u>Masato Matsumiya</u>	<u><i>Masato Matsumiya</i></u> (SIGNATURE)	<u>July 12, 2001</u> (DATE)
_____	_____ (SIGNATURE)	_____ (DATE)
_____	_____ (SIGNATURE)	_____ (DATE)
_____	_____ (SIGNATURE)	_____ (DATE)
_____	_____ (SIGNATURE)	_____ (DATE)
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NO LEGALIZATION REQUIRED

RECORDED: 07/25/2001

PATENT
REEL: 012027 FRAME: 0535