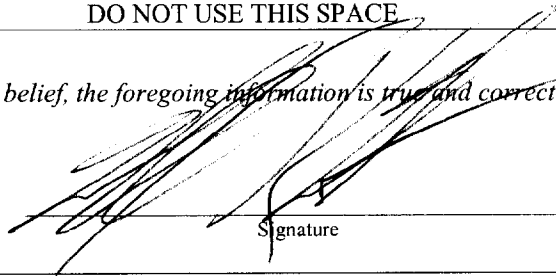


RECC

101941621. EN SHEET

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

<p>1. Name of conveying party(ies): [LAST NAME (ALL CAPS), First Name]</p> <p>MATSUI, Mitsuru TOKITA, Toshio NAKAJIMA, Junko KANDA, Masayuki</p> <p>Additional name(s) of conveying party(ies) attached? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p>	<p>2. Name and address of receiving party(ies)</p> <p>Name: MITSUBISHI DENKI KABUSHIKI KAISHA Internal Address: Street Address: 2-3, Marunouchi 2-chome, Chiyoda-ku City: Tokyo State: ZIP: Country: Japan Postal Code: 100-8310</p> <p>Additional name(s) & address(es) attached? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p>
<p>3. Nature of conveyance:</p> <p><input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other:</p> <p>Execution Date: October 11, 2001 and October 25, 2001</p>	
<p>4. Application number(s) or patent number(s):</p> <p>If this document is being filed together with a new application, the execution date of the application is: October 25, 2001</p> <p>A. Patent Application No(s). 09/959,853</p> <p>B. Patent No.(s).</p> <p>Additional numbers attached? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>	
<p>5. Name and address of party to whom correspondence concerning document should be mailed:</p> <p>Name: BIRCH, STEWART, KOLASCH & BIRCH, LLP Street Address: P.O. BOX 747 City: FALLS CHURCH State: VA ZIP: 22040-0747 Country: USA</p>	<p>6. Total No. of applications/patents involved: one (1)</p> <p>7. Total fee (37 C.F.R. § 3.41): \$40.00</p> <p><input checked="" type="checkbox"/> Enclosed <input checked="" type="checkbox"/> Authorized to be charged to deposit account, if no fee attached.</p> <p>8. Deposit account number: <u>02-2448</u></p> <p>(Attach triplicate copy of this page if paying by deposit account)</p>
<p>DO NOT USE THIS SPACE</p>	
<p>9. Statement and signature.</p> <p><i>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.</i></p> <p><u>Michael K. Mutter, #29,680</u>  <u>January 8, 2002</u> Name of Person Signing/Reg. No. Signature Date</p> <p style="text-align: right;">40E</p>	
<p>Total number of pages including cover sheet, attachments, and document: four (4)</p>	

Attachment to
RECORDATION FORM COVER SHEET

Continuation of Box 1--Name of conveying party(ies):

[LAST NAME (ALL CAPS), First Name]

MORIAI, Shiho

AOKI, Kazumaro

Continuation of Box 2--Name and address of receiving party(ies):

NIPPON TELEGRAPH AND TELEPHONE CORPORATION
3-1, OTEMACHI 2-CHOME, CHIYODA-KU, TOKYO 100-0004 JAPAN

Continuation of Box 4--Application number(s) or patent number(s):

ATTORNEY DOCKET NO.
2565-0240P

ASSIGNMENT

Application No. 09/959,853

Filed 11/9/01

Insert
Name(s) of
Inventor(s)

WHEREAS, Mitsuru Matsui, Toshio Tokita, Junko Nakajima,
Masayuki Kanda, Shiho Moriai, and Kazumaro Aoki

Insert Title
of Invention

(hereinafter designated as the undersigned) has (have) invented certain new and useful improvements in
Block Cipher Apparatus Using Auxiliary Transformation

Insert Date
of Signing of
Application

for which an application for Letters Patent of the United States of America has been executed by the undersigned
on October 11, 2001 and October 25, 2001; and

Insert Name
of Assignee

WHEREAS, Mitsubishi Denki Kabushiki Kaisha
of 2-3, Marunouchi 2-chome, Chiyoda-ku, Tokyo 100-8310 Japan

Insert Address
of Assignee

and Nippon Telegraph and Telephone Corporation
of 3-1, Otemachi 2-chome, Chiyoda-ku, Tokyo 100-0004 Japan

Its heirs, successors, legal representatives and the assigns (hereinafter designated as the Assignee) is desirous of
acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent(s) that may be
granted therefor in the

CHECK ONE
BOX

- (1) United States of America only; or
(2) United States of America and any and all foreign countries

NOW, THEREFORE, in consideration of the sum of Ten Dollars (\$10.00) to the undersigned in hand paid,
the receipt of which is hereby acknowledged, and other good and valuable consideration, the undersigned has
(have) sold, assigned and transferred, and by these presents do sell, assign and transfer unto said Assignee the
full and exclusive right to the said invention in:

1. the United States of America, its territories, dependencies and possessions and the entire right, title and
interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of America, its
territories, dependencies and possessions, if box (1) above is designated;

or

2. the United States of America, its territories, dependencies and possessions and in any and all foreign
countries and the entire right, title and interest in and to any and all Letters Patent(s) which may be granted
therefor in the United States of America, its territories, dependencies and possessions and in any and all foreign
countries, if box (2) above is designated;

and to any and all divisions, reissues, continuations and extensions thereof for the full term or terms for which the
same may be granted.

The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division or reissue thereof or Letter Patent(s) 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.

The undersigned agree(s) to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the 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 of America patent(s) or a grant of a valid United States of America and any foreign patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

The undersigned hereby authorize(s) and request(s) the Patent and Trademark Office Officials in the United States of America and/or any and all foreign countries to issue any and all Letters Patents resulting from said application or any division or divisions or continuing or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) the 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 law firm of Birch, Stewart, Kolasch and Birch, LLP 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 U.S. Patent and Trademark Office for recordation of this document.

The undersigned hereby covenant(s) that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

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

Date Oct 11, 2001, Name of Inventor Mitsuru Matsui (SEAL)
(signature) Mitsuru Matsui

Date Oct 11, 2001, Name of Inventor Toshio Tokita (SEAL)
(signature) Toshio Tokita

Date Oct 11, 2001, Name of Inventor Junko Nakajima (SEAL)
(signature) Junko Nakajima

Date Oct 25, 2001, Name of Inventor Masayuki Kanda (SEAL)
(signature) Masayuki Kanda

Date Oct 25, 2001, Name of Inventor Shiho Moriai (SEAL)
(signature) Shiho Moriai

Date Oct 25, 2001, Name of Inventor Kazumaru Aoki (SEAL)
(signature) Kazumaru Aoki

The execution by the Inventor(s) of this assignment may be witnessed by at least two persons who sign here.

Witness 

Witness 