

A/D 581-00

104331

FORM PTC-1595
P23770.P02

08-04-2003

SHEET

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

5-27-03 To the Honorable Di



DT12 Rec'd PCT/PTO 27 MAY 2003
attached original documents or copy thereof.

1. Name of Conveying party(ies):
YASUNAGA, Kazutoshi
MORII, Toshiyuki
EHARA, Hiroyuki
MANO, Kazunori
HIWASAKI, Yusuke

102515001

and address of receiving party(ies)

Name: MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD

Additional name(s) of conveying party(ies) attached? Yes No

Internal Address: _____

3. Nature of conveyance:

Street Address: 1006, Oaza-Kadoma, Kadoma-shi,

Assignment Merger

Security Agreement Change of Name

Other _____

Osaka 571-8501 JAPAN

City: _____ State: _____ ZIP: _____

Execution Date: April 2, 2, 2, 25 and 25, 2003

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: April 2, 2, 2, 25 and 25, 2003

A. Patent Application No.(s)

B. Patent No.(s)

10,416,532

Additional numbers attached: Yes No

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

6. Total number of applications and patents involved: 1

Name: Bruce H. Bernstein

7. Total Fee (37 CFR 3.41).....\$40.00

Internal Address: P23770

Enclosed

Authorized to be charged to deposit account

Street Address: GREENBLUM & BERNSTEIN, P.L.C.

8. Deposit account number:

1950 Roland Clarke Place

19-0089

(Attach duplicate copy of this page if paying by deposit account)

City: Reston State: VA ZIP: 20191

DO NOT USE THIS SPACE

9. Statement 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.

Bruce H. Bernstein, Reg. No. 29,027
Name of Person Signing

[Signature] Reg. No. 33,329
Signature

5/27/03
Date

Total number of pages including cover sheet, attachments and document: 4

Mail documents to be recorded with required cover sheet information to:
Director of the United States Patent and Trademark Office, Mail Stop Assignments
PO Box 1450 Alexandria, Virginia 22313-1450

05/20/2003 5NAJARRD 00000148 10416532

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40.00 DP

PATENT
REEL: 014331 FRAME: 0176

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DT12 RECORDED 27 MAR 2005

P23770.P03

LISTING OF ADDITIONAL RECEIVING PARTIES

Name: NIPPON TELEGRAPH AND TELEPHONE CORPORATION

Street address: 3-1, Otemachi 2-chome, Chiyoda-ku, Tokyo 100-8116 Japan

ASSIGNMENT

WHEREAS, Kazutoshi YASUNAGA, a citizen of Japan, whose post office address is 1-284-401, Kyo-machi, Fushimi-ku, Kyoto-shi, Kyoto 612-8083 Japan, Toshiyuki MORII, a citizen of Japan, whose post office address is 3-1-12-304, Nijigaoka, Asao-ku, Kawasaki-shi, Kanagawa 215-0015 Japan, Hiroyuki EHARA, a citizen of Japan, whose post office address is 2-37-8, Maruyamadai, Konan-ku, Yokohama-shi, Kanagawa 233-0013 Japan, Kazunori MANO, a citizen of Japan, whose post office address is C/O NTT Intellectual Property Center, 9-11, Midori-cho 3-chome, Musashino-shi, Tokyo 180-8585 Japan and Yusuke HIWASAKI, a citizen of Japan, whose post office address is C/O NTT Intellectual Property Center, 9-11, Midori-cho 3-chome, Musashino-shi, Tokyo 180-8585 Japan, hereinafter referred to as the ASSIGNORS, have invented a certain improvement relating to

LPC VECTOR QUANTIZATION APPARATUS

for which he has executed, on the same date as this assignment, an application for Letters Patent for the United States to be filed in the United States Patent and Trademark Office, which is a National Stage Application of International Application No. PCT/JP01/10425, filed on November 29, 2001.

AND WHEREAS, MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD organized and existing under the laws of Japan, whose post-office address is 1006, Oaza Kadoma, Kadoma-shi, Osaka 571-8501 Japan and NIPPON TELEGRAPH AND TELEPHONE CORPORATION organized and existing under the laws of Japan, whose post-office address is 3-1, Otemachi 2-chome, Chiyoda-ku, Tokyo 100-8116 Japan hereinafter known as the ASSIGNEES, are desirous of acquiring the entire rights, titles and interests for the United States in and to said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues, and prolongations thereof.

NOW, THIS WITNESSETH that for and in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt whereof is hereby acknowledged, said ASSIGNORS hereby assign, sell and transfer to said ASSIGNEES, its assigns and legal representatives, the entire and exclusive right, title and interest in and to said invention and application, for the United States including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted therefore, said ASSIGNEES and its assigns and legal representatives to have, hold, exercise and enjoy the said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues and prolongations thereof, with all the rights, powers, privileges, and advantages in any ways arising from or pertaining thereto, for and during the term or terms of any and all such Letters Patent when granted, including any and all renewals, reissues, and prolongations thereof, for the use and benefit of said ASSIGNEES and its assigns and legal representatives in as ample and beneficial a manner to all intents and purposes as the said ASSIGNORS might or could have held and enjoyed the same, if this assignment had not been made.

AND said ASSIGNORS hereby agree to execute all papers necessary to file applications in the United States for said invention and to assign the same to said ASSIGNEES, or any assignee acquiring title to said invention, and to execute any other papers that may be needed in connection with filing said application and securing Letters Patent thereon.

AND said ASSIGNORS authorize and request the Commissioner of Patents to issue Letters Patent on said application, and on any and all divisions and continuations thereof, to said ASSIGNEES, its assigns and legal representatives, in accordance herewith.

IN TESTIMONY WHEREOF, this assignment is executed by said ASSIGNORS, on the respective dates indicated below.

Kazutoshi Yasunaga
Kazutoshi YASUNAGA

April 2, 2003
Date

Toshiyuki Morii
Toshiyuki MORII

April 2, 2003
Date

Hiroyuki Ehara
Hiroyuki EHARA

April 2, 2003
Date

Kazunori Mano
Kazunori MANO

April 25, 2003
Date

Yusuke Hiwasi
Yusuke HIWASAKI

April 25, 2003
Date