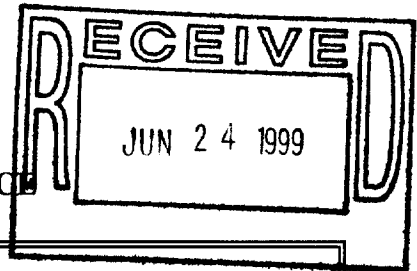


11-08-1999



101159898

U.S. DEPARTMENT OF COMMERCE



Case Docket No. 981319

U.S. DEPARTMENT OF COMMERCE

Patent and Trademark Office

CORRECTED RECORDATION FORM COVER SHEET

PATENTS ONLY

6-24-99

To the Assistant Commissioner for Patents.

Please record the attached original documents or copy thereof.

1. Name of conveying parties:

Akiomi KUNISA and Nobuo ITOH

Additional name(s) of conveying parties attached? Yes No XX

2. Name and address of receiving party:

Name: SANYO ELCTRIC CO., LTD.

Street Address:

5-5, Keihan-Hondori 2-chome
Moriguchi-shi, Osaka 570-8677, Japan

Additional name(s) & address(es) attached? Yes No XX

3. Nature of conveyance: XX Other

TO CORRECT THE EXECUTION DATE AND THE NAME OF THE FIRST
INVENTOR ON REEL 9723, FRAME 0905.

Execution Dates: January 7, 1999 and January 5, 1999

4. Title: DIGITAL MODULATION AND DEMODULATION

06/25/1999 BNGUYEN 00000168 09231817

01 FC:581

40.00 OP

40E
NO SPEC
Fee

5. Application number(s) or patent number(s):

A. Patent Application No.(s) B. Patent No.(s)
09/231,817

If this document is being filed together with a new application, the execution date of the application is: ____

Additional numbers attached? Yes No XX

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

Name: Armstrong, Westerman, Hattori,
McLeland & Naughton
Suite 1000
1725 K Street, N.W.
Washington, D.C. 20006

7. Total number of applications and patents involved: 1

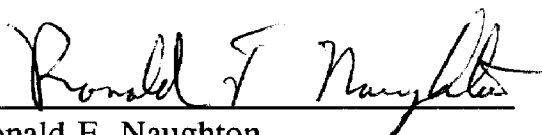
8. Total fee (37 CFR 3.41). \$ **40.00**

XX Check enclosed

9. Deposit Account No.: 01-2340

10. 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.



Ronald F. Naughton
Reg. No.: 24,616

Date June 24, 1999

Total number of pages including cover sheet: 7

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02-02-1999



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09/23/87

01/16/99

1-15-99

Case Docket No. **981319**

U.S. DEPARTMENT OF COMMERCE

Patent and Trademark Office

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1. Name of conveying party(ies):

09,231,817

Akioma KUNISA and Nobuo ITOH

Additional name(s) of conveying party(ies) attached? NO

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

Name: **SANYO ELECTRIC CO., LTD.**

Street Address:

5-5, Keihan-Hondori 2-Chome, Moriguchi-shi,
Osaka 570-8677, Japan

Additional name(s) & address(es) attached? NO

3. Nature of conveyance: **Assignment**

Execution Date: **January 5, 1999**

4. Title: **DIGITAL MODULATION AND DEMODULATION**

5. 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: January 5, 1999

A. Patent Application No.(s) B. Patent No.(s)

Additional numbers attached? NO

01/28/1999 ASELLMAN 0000093 09231617

40.00

FC:581

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

Name: Armstrong, Westerman, Hattori,
McLeland & Naughton
Suite 1000
1725 K Street, N.W.
Washington, D.C. 20006

7. Total number of applications and patents involved: 1

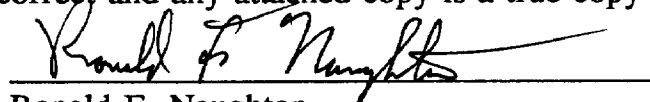
8. Total fee (37 CFR 3.41). \$ **40.00**

XX Check enclosed

9. Deposit Account No.: 01-2340

10. 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.



Ronald F. Naughton
Reg. No.: 24,616

Date January 15, 1999

Total number of pages including cover sheet: 3

RFN/yap

U.S. ASSIGNMENT

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

(Insert ASSIGNEE's
Name(s) Address(es))

SANYO ELECTRIC CO., LTD. 5-5, Keihan-Hondori 2-Chome,
Moriguchi-shi, Osaka 570-8677, 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

(Title of Invention)

Digital Modulation and Demodulation

(*If the assignment is
being filed after the filing
of the application, this
section must be
completed)

for which application for Letters Patent of the United States was executed on even date herewith unless otherwise indicated below:

"filed on _____, Serial No. _____.
(Armstrong, Westerman, Hattori, McLeland & Naughton 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, divisional, 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 the application and any continuation, 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, divisional, 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 inventor(s) has (have) affixed his/her/their signature(s).

(Signatures)

Akiomi Kunisa
(SIGNATURE)

Akiomi KUNISA
(TYPE NAME)

Jan. 7, 1999
(DATE)

Nobuo Itoh
(SIGNATURE)

Nobuo ITOH
(TYPE NAME)

Jan. 5, 1999
(DATE)

(SIGNATURE)

(TYPE NAME)

(DATE)

(SIGNATURE)

(TYPE NAME)

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