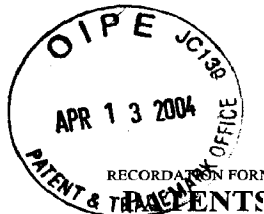


4-13-04

Atty Docket No.: 245458US2CRL

FORM PTO-1595
1-31-92

04-19-2004

DEPARTMENT OF COMMERCE
Patent and Trademark Office

To the Director of the United States Patent and Trademark Office

102723478

nts or copy thereof.

1. Name of conveying party(ies):

Christophe ANDRIEU

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

Name: KABUSHIKI KAISHA TOSHIBA

Address: 1-1 Shibaura 1-chome, Minato-ku,
Tokyo 105-8001 JapanAdditional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of Conveyance:

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

Execution Date: December 16, 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:

A. Patent Application No.(s)

10/714,900

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

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

Customer Number

22850

Tel. (703) 413-3000
Fax. (703) 413-2220

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

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

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.*Eckhard H. Kuesters
Name of Person Signing

Signature

Date

Registration Number: 28,870

Joseph A. Scafetta, Jr.
Registration No. 26, 803

Total number of pages including this cover sheet: 3

Do not detach this portion

Mail documents to be recorded with required cover sheet information to:

Director of the United States Patent and Trademark Office
 Mail Stop Assignment Recordation Services
 Alexandria, Virginia. 22313

04/16/2004 MGETACHE 00000030 10714900

01 FC:8021

40.00 DP

PATENT
 REEL: 015211 FRAME: 0598

245458US2CRL

Assignment of Application

WHEREAS, I (WE) Christophe ANDRIEU of Bristol, United Kingdom

_____ , respectively,

have invented certain new and useful improvements in: SIGNAL ESTIMATION METHODS AND APPARATUS

For which an application for Letters Patent was executed on _____
(Application No. 10/714,900 _____, filed November 18, 2003 _____), and

WHEREAS, Kabushiki Kaisha Toshiba

(hereinafter referred to as "ASSIGNEE") having places of business at: 1-1 Shibaura 1-chome, Minato-ku, Tokyo 105-8001 Japan is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;

NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I (WE), by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.

I (WE) hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my (our) entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its (his) successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me (us) had this Assignment and sale not been made.

10/01

Further, I (WE) agree that I (WE) will communicate to said ASSIGNEE or its (his) representatives any facts known to me (us) respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letter Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.

The undersigned hereby grant(s) the firm of Oblon, Spivak, McClelland, Maier & Neustadt, P.C. of 1940 Duke Street, Alexandria, Virginia 22314 the power to insert on this assignment any further identification, including the application number and filing date, which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

X Date:

16/12/03

(Signature of Inventor)

Christophe ANDRIEU

Date:

(Signature of Inventor)

Date:

(Signature of Inventor)

Date:

(Signature of Inventor)

Date:

(Signature of Inventor)

Date:

(Signature of Inventor)

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, P.C.
ATTORNEYS AT LAW
1940 DUKE STREET
ALEXANDRIA, VIRGINIA 22314

10/01