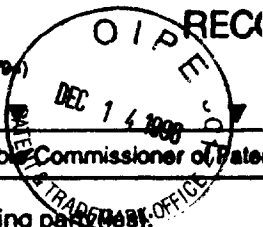


12-16-1998

FORM PTO-1506
(Rev. 6-83)

OMB No. 0651-0011 (exp. 4/94)



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FEET

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

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

1. Name of conveying party(ies)

Joseph Frankovich
Dale Reynolds

MDO 12-14-98

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

2. Name and address of receiving party(ies)

Name: The United States of America as
represented by the Secretary of the Navy.
Internal Address: CHIEF OF NAVAL RESEARCH

OFFICE OF COUNSEL

(ATTN: CODE OOCPIP)

Street Address: BALLSTON TOWER ONE

800 NORTH QUINCY STREET

City: ARLINGTON State: VA ZIP: 22217

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

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- Assignment Merger
- Security Agreement Change of Name
- Other _____

Execution Date: 11/30/98 and 12/4/98

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)

09/178,536

NC 79,067

B. Patent No.(s)

Additional numbers attached? Yes No

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

Name: ASSOCIATE COUNSEL (PATENTS)

Internal Address: NAVAL RESEARCH LABORATORY

(ATTN: CODE 3008.2)

Street Address: 4555 OVERLOOK AVENUE, S.W.

City: WASHINGTON, DC State: _____ ZIP: 20375

6. Total number of applications and patents involved:

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

Enclosed

Authorized to be charged to deposit account

8. Deposit account number: 04-0814

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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.

THOMAS E. McDONNELL

Reg. No. 26950

Name of Person Signing

Thomas E. McDonnell
Signature

11 Dec 98
Date

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

ASSIGNMENT

WHEREAS, we, **Joseph Frankovich and Dale Reynolds**, while employed by the Government of the United States, have invented certain new and useful improvements in "**A MEANS FOR EXTRACTING PHASE INFORMATION FOR RADIO FREQUENCY DIRECTION OF ARRIVAL**", identified as Navy Case No. **79,067** and described in application for Letters Patent of the United States of America U.S. Application Serial No. 09/178,536 filed on 10-26-98; and:

WHEREAS, the Government of the United States, represented by the Secretary of the Navy and hereinafter referred to as the Government, is desirous of acquiring an assignment of the invention disclosed in said application and other rights and benefits herein granted; and

WHEREAS, the conditions under which the invention was made are such as to entitle the Government under Paragraph 1(a) of Executive Order 10096, to the entire right, title and interest therein, including foreign rights; and

WHEREAS, as to foreign rights, it is the policy of the Government to obtain an option to exercise such rights;

NOW, THEREFORE, in consideration of the premises and other good and valuable consideration the receipt of which is hereby acknowledged, we hereby assign and transfer to the Government the entire rights, title and interest in and to said invention within the United States of America, its territories and possessions, and the entire right, title and interest in and to said application and any continuation, division, or substitution thereof, and such Letters Patent as may issue therefrom and any reissue or extensions thereof, said invention, application and Letters Patent to be held by the Government to the 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 had this assignment not been made.

We do hereby also grant unto the Government, the option to take the entire rights, title and interest in the invention and all patent applications or other forms of protection thereon in all countries foreign to the United States in which the Government may file, or cause to be filed, applications for Letters Patent or other forms of protection, without payment of any consideration; provided, however, that this grant of an option to take foreign rights in the invention, or applications or other forms of protection thereon, shall have force and effect only as to such applications filed in foreign countries within eight months of the filing date of any application for United States Letters Patent covering the invention, or within eight months from the declassification of the invention, whichever is later, and that all foreign rights not exercised under the option are left to me subject to a nonexclusive, irrevocable, royalty-free license to the Government in any patent or other form of protection which may issue on said invention in any foreign country, including the power to issue sub-licenses for use in behalf of the Government and/or in furtherance of the foreign policies of the Government.

ASSIGNMENT (CONTINUATION)

We hereby further agree to make, execute, and deliver to the Government, any and all papers, documents, affidavits, statements, or other instruments that may be necessary in the prosecution of the application and of any continuation, division or substitution of the application, or any application for reissue or extension of said Letters Patent, and to assist the Government in every way in protecting the invention as may be requested, provided that any expense arising through such efforts will be paid by the Government.

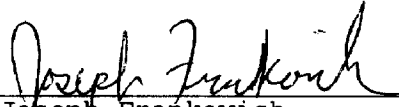
IN TESTIMONY WHEREOF, we have set our hands and affixed our seals.

12/4/98

(Date)

11/30/98

(Date)



Joseph Frankovich



Dale Reynolds