NAVY CASE #79195 FORM PTO-1595 1-3:92

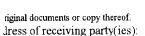
04-13-1999



101007595

U.S. DEPARTMENT OF COMMERCE

Patent and Trademark Office





To the Honorable Commiss Name of conveying party(ie., Harry F. Francis - signed 9/16/98 Thomas F. Cocke, IV - signed 9/16/98 Gary S. Calvert, II - signed 9/16/98 Roland H. Mattoon - signed 9/16/98 Timothy Y. Gorder - signed 9/16/98 Neal E. Moody - signed 9/16/98 Gair D. Brown - signed 10/6/98

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

3. Nature of conveyance:

Execution Date:

Other

Internal Address: CHIEF OF NAVAL RESEARCH

Name: The United States of America as

represented by the Secretary of the Navy

OFFICE OF COUNSEL (ATTN: CODE OOCCIP)

Street Address:

BALLSTON TOWER ONE

800 NORTH QUINCY STREET City: ARLINGTON State: VA ZIP: 22217-5660

REF: DOCUMENT ID NO. 100913764 Assignment

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

A. Patent Application No.(s) 09/156,379 Filing date: 09/18/98

Name and address of party to whom correspondence concerning documents should be mailed:

> James B. Bechtel Office of Counsel (CD222) Naval Surface Warfare Center Dahlgren Division Dahlgren, Virginia 22448-5100 Reg. No. 29,890

B. Patent No.(s)

patents involved: 1

Total number of applications and

Total fee (37 CFR 3.41) \$ 40.00

■ Authorized to be charged to deposit account

Deposit account number: 04-0814 (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.

James B. Bechtel Name of Person Signing

Total number of pages comprising cover sheet: 1

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

09156379 04/12/1999 JSHABAZZ_00000034 040814

Do not detach this portion

01 FC:581

10 100 iPdoc ments to be recorded with required cover sheet information to:

Commissioner of Patents and Trademarks **Box Assignment** Washington, D.C. 20231

CERTIFICATE OF MAILING

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, DC 20231.

Beverly D. Cook

PATENT REEL: 9871 FRAME: 0576

ASSIGNMENT OF INVENTION

Navy Case No. 79195

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, the Government is desirous of obtaining the entire right, title and interest in and to the invention disclosed in said application within the United States of America, its territories and possessions and other rights and benefits herein granted; and

WHEREAS, as to foreign rights, the Government desires an option to obtain such rights;

NOW, THEREFORE, in consideration of the premises and other good and valuable consideration, the receipt of which is hereby acknowledged, I(we) hereby assign and transfer to the United States of America as represented by the Secretary of the Navy the entire right, title, and interest in and to said invention within the United States of America, its territories an 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 United States of America as represented by the Secretary of the Navy 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(us) had this assignment not been made.

I(We) do hereby also grant unto the Government, the option to take the entire right, title and interest in and to the invention and all patent applications, patents and other forms of protection thereon in countries foreign to the United States of America within eight months of the filing date of any application for United States Letters Patent covering the invention; such option to be exercised by a written notification to me(us) within such eight months identifying the specific foreign countries in which the Government will file or cause to be filed an application for patent or other form of protection on the invention; and that the rights in the foreign countries not exercised under the option are left to me(us) subject to a nonexclusive, irrevocable, royalty-free license to the Government in any patent or other form of protection which may issue on the 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.

I(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, I (we) have set my (our) hand(s) and affixed my (our) seal(s).

9/16/68	477
(date)	Harry Francis Seal
9-16-98	Thomas T. Cocke III Seal
(date) 9/16/98	Thomas F. Cocke, IV Seal
(date)	Gary S. Calvert, II Polal A Mills Seal
9/16/18 (date)	Roland H. Mattoon Seal
(date)	Timothy Y. Gorden Seal
(date)	Neal E. Moody
10/6/98	\mathcal{D} \mathcal{D} \mathcal{D} Seal
(date)	Gair D. Brown PATENT

REEL: 9871 FRAME: 0577

12-07-1998

NAVY CASE # 79195 FORM PTO-1595

EPARTMENT OF COMMERCE Patent and Trad

100913764 1-3:92 To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. 2. Name and address of receiving party(ies): Name of conveying party(ies): Harry F. Francis Name: The United States of America as represented by the Secretary of the Navy Thomas F. Cocke, IV Gary S. Calvert, II Internal Address: CHIEF OF NAVAL RESEARCH Roland H. Mattoon OFFICE OF COUNSEL Timothy Y. Gorder (ATTN: CODE OOCCIP) Neal E. Moody Gair D. Brown aame(s) of conveying party(ies) attached? Yes No BALLSTON TOWER ONE Street Address: 800 NORTH QUINCY STREET City: ARLINGTON State: VA ZIP: 22217-5660 Nature of conveyance: Assignment Other Execution Date: __10/6/98 4. Application number(s) or patent number(s): B. Patent No.(s) A. Patent Application No.(s) Total number of applications and 5. Name and address of party to whom correspondence concerning documents patents involved: 1 should be mailed: James B. Bechtel Office of Counsel (CD222) Total fee (37 CFR 3.41) \$ 40.00 Naval Surface Warfare Center Dahlgren Division Authorized to be charged Dahlgren, Virginia 22448-5100 to deposit account Reg. No. 29,890 8. Deposit account number: 04-0814 (Attach duplicate copy of this page if paying by deposit account) DO NOT USE THIS SPACE 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. James B. Bechtel Name of Person Signing Total number of pages comprising cover sheet: 1

Do not detach this portion

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

Commissioner of Patents and Trademarks **Box Assignment** Washington, D.C. 20231

12/04/1998 DNGUYEN 00000180 040814

CERTIFICATE OF MAILING

01 FC:581

40.00 CH

OMB No. 0651-0611 (exp. 4/94)

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the Assistant

Commissioner for Patents, Washington, DC 20231.

Dereity D. Cook

PATENT REEL: 9871 FRAME: 0578

RECORDED: 04/06/1999