



TO THE ASSISTANT COMMISSIONER FOR PA

ments or copy thereof.

102311125

1. Name of conveying party(ies): (If multiple assignors, list numerically)

Francis D. Rowe

Additional name(s) of conveying party(ies) attached?

() Yes (X) No

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

Name: Rowe-Deines Instruments, Inc.

Street Address: 9855 Businesspark Avenue

City: San Diego State: CA ZIP: 92131

Additional name(s) of receiving party(ies) attached?

() Yes (X) No

3. Nature of conveyance:

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

Execution Date: (If multiple assignors, list execution dates in numerical order corresponding to numbers indicated in 1 above) December 3, 2002

4. Application number(s) or Patent number(s):

() Application(s) filed herewith Execution Date(s):

(X) Patent Application No.: 10/232,812

Filing Date: August 28, 2002

() Patent No.:

Issue Date:

Additional numbers attached? ()

Yes

(X)

No

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

Name: Michael H. Trenholm
KNOBBE, MARTENS, OLSON & BEAR, LLP
Customer No. 20,995

Internal Address: Fourteenth Floor
Street Address: 2040 Main Street
City: Irvine State: CA ZIP: 92614
Attorney's Docket No.: RDINS.044A

7. Total fee (37 CFR 1.21(h)):

\$40

(X) Enclosed

() Authorized to be charged to deposit account

8. Deposit account number: 11-1410

Please charge this account for any additional fees which may be required, or credit any overpayment to this account.

6. Total number of applications and patents involved: 1

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.

Michael H. Trenholm
Name of Person Signing

Signature

Date

37,743
Registration No.

Total number of pages including cover sheet, attachments and document: 2

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

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Attn: Assignment Division
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1213 Jefferson Davis Highway, Suite 320
Arlington, VA 22202

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ASSIGNMENT

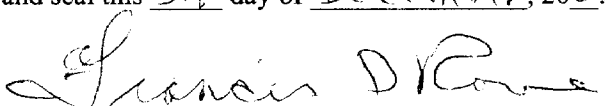
WHEREAS, I, Francis D. Rowe, a United States of America citizen, residing at 5723 Lodi Street, San Diego, CA 92117, have invented certain new and useful improvements in a FREQUENCY DIVISION BEAMFORMING FOR SONAR ARRAYS for which I have filed an application for Letters Patent in the United States, Application No. 10/232,812, filed August 28, 2002;

AND WHEREAS, Rowe-Deines Instruments, Inc. (hereinafter "ASSIGNEE"), a Delaware Corporation, with its principal place of business at 9855 Businesspark Avenue, San Diego, CA 92131, desires to acquire the entire right, title, and interest in and to the said improvements and the said Application:

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to me in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, I, the said inventor, do hereby acknowledge that I have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title, and interest throughout the world in, to and under the said improvements, and the said application and all provisional applications relating thereto, and all divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and I hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND I HEREBY covenant and agree that I will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to me respecting said improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said improvements in all countries.

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 31st day of December, 2002

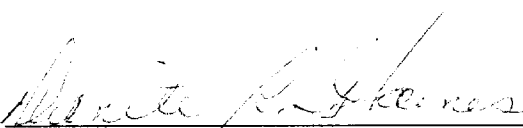

Francis D. Rowe

STATE OF _____ }
COUNTY OF _____ } ss.

On 3 December 02, before me, Dante R Haines, personally appeared Francis D. Rowe personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument, and acknowledged to me that he executed the same in his authorized capacity(ies), and that by his signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

[SEAL]


Notary Signature

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