

12-15-2003

Attorney Docket No. 1030-23200



FORM PTO-1595
(Rev. 6-93) Patent and Trademark Office
OMB No. 0651-0011 (exp. 4/94)

102624317
PATENTS ONLY

EET

U. S. DEPARTMENT OF COMMERCE

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

1. Name of conveying parties(ies):

James L. Larsen
Dwayne P. Terracina
Syed Hossain
12-5-03

Additional name(s) of conveying party(ies):

Attached? Yes No

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

Smith International, Inc.
16740 Hardy Street
Houston, Texas 77032

Additional name(s) & address(es)

Attached? Yes No

22278 U.S. PTO
10/728650
120503

3. Nature of conveyance:

 Assignment Merger
 Security Agreement Change of Name
 Other _____

Execution Date: November 24, 2003 and December 1, 2003

4. Application number(s) or patent number(s):
10728650

If this document is being filed together with a new application, the execution date of the application is :
November 24, 2003 and December 1, 2003

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

Additional numbers attached? Yes No

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

ROBERT M. GRAY
Conley, Rose & Tayon, P.C.
P. O. Box 3267
Houston, Texas 77253-3267

6. Total number of application 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: 03-2769

(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 if a true copy of the original document

Robert M. Gray *Robert M. Gray* December 5, 2003
Name of Person Signing Signature Date

Mail documents to be recorded with required cover sheet information to:
Commissioner of Patents & Trademarks, Box Assignments
P.O. Box 1450, Arlington, VA 22313-1450

12/15/2003 LWELLER 00000070 032769 10728650

01 FC:0021 40.00 DA

PATENT
REEL: 014768 FRAME: 0201

ASSIGNMENT

IN CONSIDERATION OF TEN DOLLARS (\$10.00) cash in hand paid to us by SMITH INTERNATIONAL, INC., and other valuable consideration, the receipt and sufficiency of which are hereby acknowledged, we, JAMES L. LARSEN, DWAYNE P. TERRACINA, and SYED HOSSAIN ("ASSIGNORS"), having made an invention in DUAL PROPERTY HYDRAULIC CONFIGURATION, while in the employ either as an employee or consultant of SMITH INTERNATIONAL, INC., a corporation organized and existing under the laws of the State of Delaware, doing business at 16740 Hardy Street, Houston, Texas 77032 (sometimes hereinafter called "ASSIGNEE"), do hereby ASSIGN, SELL and CONVEY to said ASSIGNEE, its successors and assigns, the entire right, title and interest throughout the world in and to:

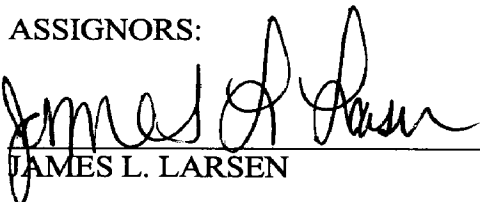
1. Said invention in DUAL PROPERTY HYDRAULIC CONFIGURATION;
2. United States of America patent application on said invention, filed concurrently herewith or as U.S. Patent Application No. _____ filed _____ 2003 (Attorney's File No. 1030-23200, attorney is authorized to fill in the application number and filing date after assignment by the U.S. Patent and Trademark Office), entitled DUAL PROPERTY HYDRAULIC CONFIGURATION;
3. All applications for patent or like protection on said invention that have now been or may in the future be made by us or our legal representatives, including any continuation, continuation-in-part and any other utility applications that may be based on this invention, whether in the United States of America or any other place anywhere in the world;
4. All patents and like protection that have now been or may in the future be granted on said invention to us or our legal representatives, whether in the United States of America or in any other country or place anywhere in the world;
5. All substitutions for and divisions, continuations, continuations-in-part, renewals, reissues, extensions, and the like of said applications and patents and like grants, including without limitation, those obtained or permissible under past, present and future laws and statutes;
6. All rights of action on account of past, present and future unauthorized use of said invention and for infringement of said patents and like protection;

7. The right in ASSIGNEE to file in its name applications for patents and like protection for said invention in any country or countries foreign to the United States; and
8. All international rights of priority associated with said invention, applications, patents and like protection;

and we covenant that we, and our heirs, legal representatives, assigns, administrators, and executors, will, at the expense of ASSIGNEE, its successors and assigns, execute all papers and perform such other acts as may be reasonably necessary to give ASSIGNEE, its successors and assigns, the full benefit of this Assignment.

EXECUTED in Houston, Texas on the date indicated below, opposite our signatures.

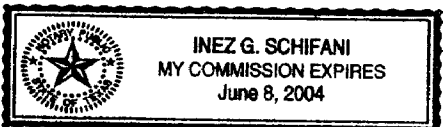
Date: 11/24/03

ASSIGNORS:

 JAMES L. LARSEN

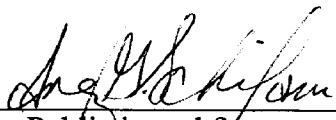
THE STATE OF TEXAS §
 §
 COUNTY OF HARRIS §

BEFORE ME, the undersigned authority, on this day personally appeared JAMES L. LARSEN, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 24th day of November, 2003.



[S E A L]


 Notary Public in and for
 the State of T E X A S

My Commission Expires:
6-8-04

Date: 12/1/03

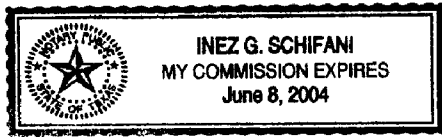
Dwayne P. Terracina
DWAYNE P. TERRACINA

THE STATE OF TEXAS §
 §
COUNTY OF HARRIS §

BEFORE ME, the undersigned authority, on this day personally appeared DWAYNE P. TERRACINA, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 1st day of December, 2003.

[S E A L]



Inez G. Schifani
Notary Public in and for
the State of T E X A S

My Commission Expires:

6-8-04

Date: 11/24/2003

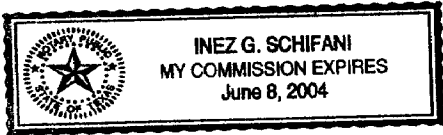
Syed Hossain
SYED HOSSAIN

THE STATE OF TEXAS §
 §
COUNTY OF HARRIS §

BEFORE ME, the undersigned authority, on this day personally appeared SYED HOSSAIN, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 24th day of November, 2003.

[S E A L]



Inez G. Schifani
Notary Public in and for
the State of T E X A S

My Commission Expires:

6-8-04