

MRD 10-18-99

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FORM PTO 1595  
1-21-92



U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

To The Honorable Commissioner of Patent,

101177605

original documents or copy thereof.

1. Name of conveying party(ies):  
Victor Kremer; Philippe Malivoir; Emile Lonardi

Additional name(s) of conveying party(ies) attached? ( ) YES (X) NO

3. Nature of Conveyance:  
 Assignment     Merger  
 Security Agreement  
 Change of Name  
 Other:

Execution Date: 6/10/99; 6/10/99; 7/10/99

2. Name and address of receiving party(ies):  
Name: Paul Wurth, S.A.  
Internal Address: 32, rue d'Alsace  
L-1122, Luxembourg

Street Address: 32, rue d'Alsace  
L-1122, Luxembourg

City:  
State: ZIP

Additional name(s) & address attached? ( ) YES (X) 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) 09/355,591	B. Patent No.(s)
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Additional numbers attached? ( ) YES (X) NO

5. Name and address of party to whom correspondence concerning documents should be mailed:  
Name: Charles N. Quinn  
Internal Address: Dann, Dorfman, Herell & Skillman  
1601 Market Street, Suite 720  
Philadelphia, PA 19103

Telephone: (215) 563-4100 Facsimile: (215) 563-4044

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41):.....\$40.00  
 Enclosed  
 Authorized to be charged to deposit account

8. In the event the check enclosed is improper, or the fee calculation is in error, the Commissioner is authorized to charge any underpayment or credit any overpayment to the account of the undersigned attorneys. A duplicate copy of this sheet is enclosed.

Deposit account number: 04-1406

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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.*

Charles N. Quinn, Reg. No. 27,223 Name of Person Signing/Reg. No.	 Signature	Oct 14, 1999 Date
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Total number of pages including cover sheet, attachments, and document: 4

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

10/20/1999 MTHAI1 00000296 09355591

FC:581 40.00 OP

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

PATENT  
REEL: 010316 FRAME: 0741

Inventor(s) : VICTOR KREMER; PHILIPPE MALIVOIR;  
EMILE LONARDI  
Application No. : 09/355,591  
Filed : 29 July 1999  
Title : TAPHOLE DRILLING MACHINE

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Suite 720, 1601 Market Street  
Philadelphia, Pa. 19103  
215-563-4100  
Docket No. 1044-99

**ASSIGNMENT**

Victor Kremer, Philippe Malivoir and Emile Lonardi are the inventors of an invention for which a United States patent is sought pursuant to a United States patent application having the title indicated above.

Paul Wurth, S.A., a Luxembourg corporation having a principal place of business at and a mailing address of 32, rue d'Alsace, L-1122, Luxembourg, is desirous of acquiring the entire right, title and interest in and to the above-referenced United States patent application, and all letters patent issuing therefrom.

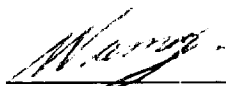
In consideration of the Euro equivalent of one U.S. dollar (\$1.00) and of other good and valuable consideration, receipt of which is hereby acknowledged, the undersigned, intending to be legally bound, do hereby sell, assign and transfer to Paul Wurth, S.A. the entire right, title and interest for the United States of America, its territories and possessions, the patent application referenced above, all divisions and continuations of such patent

application, all rights to claim priority in connection therewith and all letters patent and reissues thereof for the invention in the United States of America.

The undersigned acknowledge being legally bound to supply, upon request of Paul Wurth, S.A., or its successors or assigns or a legal representative thereof, all information and evidence of which the undersigned have knowledge or possession, relating to the making and practice of the invention, to testify in any legal proceeding relating thereto, to execute all instruments proper to patent the invention in the United States of America in the name of Paul Wurth, S.A. and to execute all instruments reasonably necessary to carry out the intent of this instrument of assignment.

The rights and property herein conveyed by the undersigned are free and clear of any encumbrance.

VICTOR KREMER



Signature

6-10-99

Date

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95, rue de l'Egalité  
L-1456 Luxembourg

PHILIPPE MALIVOIR



Signature

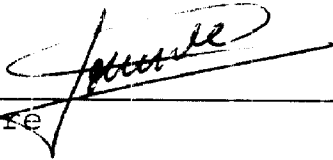
6-10-99

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EMILE LONARDI



Signature

07-10-89

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