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M&G-9589.34USC1



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101840229

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1. Name of conveying party(ies):

Michael Schwager

F-10-001

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

TT Technologies, Inc.
1771 Mallette Road
Aurora, Illinois 60504

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ NoAdditional name(s) & address(es) attached? ☐ Yes ☒ No

3. Nature of conveyance:

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

Execution Date: January 20, 2000

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)

B. Patent No.(s)

5,984,583

Additional numbers attached? ☐ Yes ☒ No

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

Name: Douglas P. Mueller
Address: Merchant & Gould P.C.
PO Box 2903
Minneapolis, MN 55402-0903

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. Please charge any additional fees or credit any overpayments to our Deposit account number: 13-2725

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Douglas P. Mueller

Name of Person Signing

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September 5, 2001

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, with sufficient postage, in an envelope addressed to: Commissioner of Patents and Trademarks, Box Assignments, Washington, D.C. 20231 on September 5, 2001.

Name Sara Fowler

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PATENT
REEL: 012145 FRAME: 0114

M&G 9589.34USC1

ASSIGNMENT

WHEREAS, we, Murray Penman Craigmile, residing at 31 Willow Springs Crescent, Sylvan Lake, Alberta T4S-1G1, Canada and Michael Schwager, residing at 707 Belgrade Avenue North, Mankato, Minnesota 56003, USA, made certain new and useful inventions and improvements for which we filed an application for Letters Patent of the United States on August 25, 1997, application Serial No. 08/917,398 which is entitled METHODS AND APPARATUS FOR DIRECTIONALLY DRILLING A BORE AND PLACING PIPE.

AND WHEREAS, TT Technologies, Inc., a corporation organized and existing under and by virtue of the laws of the State of Illinois, and having an office and place of business at 1771 Mallette Road, Aurora, Illinois 60504 (hereinafter "Assignee") is desirous of acquiring the entire right, title and interest in and to said inventions, improvements and application and in and to the Letters Patent to be obtained therefor;

NOW THEREFORE, to all whom it may concern, be it known that for and in consideration of the sum of One Dollar and other good and valuable considerations, the receipt and sufficiency whereof is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid application, and in and to the application, all divisions, continuations, or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted therefrom; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the Assignee, its successors and assigns.

AND, for the consideration aforesaid, we do hereby agree that we and our executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to us relating to said improvements and

the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

AND, furthermore we covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by us and that full right to convey the same as herein expressed is possessed by us.

IN TESTIMONY WHEREOF, I have hereunto set my hand this _____ day of _____

_____, 19____.

Murray Penman Craigmile

STATE OF _____)
) ss.
COUNTY OF _____)

On this _____ day of _____, 19____, before me personally appeared Murray Penman Craigmile to me known and known to me to be the person described in and who executed the foregoing instrument, and he duly acknowledged to me that he executed the same for the uses and purposes therein set forth.

[SEAL]

Notary Public

IN TESTIMONY WHEREOF, I have hereunto set my hand this 20 day of

January, 19 2000

x Michael Schwager
Michael Schwager

STATE OF _____)
) ss.
COUNTY OF _____)

On this _____ day of _____, 19____, before me personally appeared Michael Schwager to me known and known to me to be the person described in and who executed the foregoing instrument, and he duly acknowledged to me that he executed the same for the uses and purposes therein set forth.

[SEAL]

Notary Public