PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE: **NEW ASSIGNMENT** NATURE OF CONVEYANCE: **ASSIGNMENT**

CONVEYING PARTY DATA

Name	Execution Date
Luke T. Perkins	01/02/2008

RECEIVING PARTY DATA

Name:	Schlumberger Technology Corporation
Street Address:	One Hampshire Street
City:	Cambridge
State/Country:	MASSACHUSETTS
Postal Code:	02139

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	11957183

CORRESPONDENCE DATA

Fax Number: (617)768-2402

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 6177682276

Email: JConner2@boston.oilfield.slb.com Correspondent Name: Schlumberger-Doll Research

Address Line 1: PO Box 425045

Address Line 2: Attn: IP Law Department

Address Line 4: Cambridge, MASSACHUSETTS 02142

ATTORNEY DOCKET NUMBER: 49.0348 US NP

NAME OF SUBMITTER: James J. Conner

Total Attachments: 4

500507203

source=490348USNPASSIGNMENT#page1.tif source=490348USNPASSIGNMENT#page2.tif source=490348USNPASSIGNMENT#page3.tif source=490348USNPASSIGNMENT#page4.tif

<u>PATENT</u>

REEL: 020765 FRAME: 0405

ASSIGNMENT

WHEREAS, the undersigned inventors hereinafter referred to as the "Inventors" each said Inventor's address being listed below

Luke T. Perkins, a citizen of the United States of America, whose post office address is 78 Edgemere Avenue, Plainsboro, NJ, 08536-2518, USA

Has/have invented certain new and useful improvements in

BI-DIRECTIONAL DISPENSER CATHODE

as described and set forth in an application for Letters Patent of the United States of America, Application No. 11/957,183, filed by me on the 14th day(s) of December, 2007 (49.0348 US NP).

WHEREAS each of the undersigned persons warrants that no person other than these undersigned persons are inventors of the above-described invention;

AND WHEREAS, the "COMPANIES", listed in Schedule A, are desirous of acquiring or confirming their acquisition of the entire right, title and interest in and to said invention, inventions or improvements, and in and to said application, and in and to any and all patents, both of the United States and of all foreign countries, that may be obtained therefore as outlined in Schedule A:

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, BE IT KNOWN, that the undersigned Inventors, for good and valuable considerations, the receipt and sufficiency of which hereby acknowledge, have sold, assigned, transferred and conveyed, and by this assignment do sell, assign, transfer and convey, unto said COMPANIES, their successors and assigns, the entire right, title and interest throughout the world, in and to the above-described invention, inventions or improvements described or set forth in said application, in any form or embodiment thereof, and in and to said application, and in and to any applications filed in any foreign country based thereon, including the right to file foreign applications under the provisions of any convention or treaty; and in and to any confirmation, divisional, continuation, continuation-in-part, or substitute application which may be filed on said invention, inventions or improvements in the United States or in any foreign country; and in and to any and all patents, certificates, utility models, reissues, extensions, additions or confirmations thereof which may be granted in the United States or in any foreign country upon said invention, inventions or improvements,

TO HAVE AND TO HOLD the same to the full end of the term or terms for which any and all such United States and foreign patents and grants may be issued on said invention, inventions or improvements.

AND said Inventors do hereby authorize and request the issuing authority to issue any and all of said United States and foreign patents on said application or applications to said COMPANIES, their successors and assigns, as the assignee of the entire right, title and interest in and to the same, for the sole use and benefit of said COMPANIES, their successors and assigns.

1

PATENT REEL: 020765 FRAME: 0406 AND said Inventors do hereby covenant and warrant that said Inventors have full right to convey the entire right, title and interest herein assigned free and clear of all licenses, encumbrances and liens whatsoever, and that no said Inventors has executed and will execute any instruments in conflict herewith.

AND said Inventors, for the conditions aforesaid, do hereby covenant and agree to and with the said COMPANIES, their successors and assigns, that each Inventor, his or her executors, administrators, or other personal representatives, shall and will do all lawful acts and things, make all rightful oaths, and make, execute and deliver any and all other instruments in writing, and any and all further applications, papers, powers, affidavits, assignments, disclaimers and other documents, which in the opinion of counsel for said COMPANIES, their successors and assigns, may be required or necessary in this or in any foreign country more effectually to secure to and vest in said COMPANIES, their successors and assigns, the entire right, title and interest in and to said invention, inventions or improvements, application or applications, patents, rights, titles, benefits, privileges, and advantages hereby sold, assigned, confirmed, transferred and conveyed.

SCHEDULE A "COMPANIES"

SCHLUMBERGER CANADA LIMITED

Corporation of: Canada

Located at: 525-3rd Avenue S.W., Calgary, Alberta, CA T2P 0G4

Assignee for applications in: Canada

SCHLUMBERGER TECHNOLOGY CORPORATION

Corporation of: USA

Located at: One Hampshire Street, Cambridge, MA 02139, USA

Assignee for applications in: USA

SERVICES PETROLIERS SCHLUMBERGER

Corporation of: France

Located at: 42 rue Saint Dominique, 75007 Paris, FR

Assignee for applications in: France

SCHLUMBERGER HOLDINGS LIMITED

Corporation of: British Virgin Islands

Located at: PO Box 71, Craigmuir Chambers, Road Town, Tortola, BVI

Assignee for applications in: Japan, the Netherlands, Saudi Arabia, United Kingdom

SCHLUMBERGER TECHNOLOGY B.V.

Corporation of: the Netherlands

Located at: Parkstraat 83-89, 2514 JG The Hague, The Netherlands

Assignee for applications in: Albania, Argentina, Australia, Azarbaijan, Brunei, Bulgaria, Colombia, Czech Republic, Denmark, Faroe Islands, Germany, Greece, Hungary, Indonesia, Ireland, Israel, Italy, Kazakhstan, Korea, Kuwait, Lithuania, Malaysia, Mexico, New Zealand, Norway, Oman, Pakistan, Poland, Qatar, Romania, Russia, Slovakia, Slovenia, South Africa, Thailand, Trinidad, Tunisia, Turkey, Turkmenistan, Ukraine, Uzbekistan, Venezuela

* PRAD RESEARCH AND DEVELOPMENT LIMITED

Corporation of: British Virgin Islands

Located at: PO Box 71, Craigmuir Chambers, Road Town, Tortola, BVI

Assignee for applications in: Countries not Otherwise Listed

IN WITNESS WHEREOF, I, Luke T. Perkins, have hereunto set my hand and seal this 2 day of, 2008.
(signature of Inventor)
(L. S.)
State of New Gersey
County of Mexcer
BEFORE ME this and day of hanuary , 200 8, personally appeared
Luke T. Perkins, to me known to be the person on is described in and who executed the foregoing assignment instrument and acknowledged to me that he executed the same of his own free will for the purpose therein expressed.
Margaret Spell
O E A L

SEAL

RECORDED: 04/07/2008

-