

**PATENT ASSIGNMENT**

Electronic Version v1.1  
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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
Name	Execution Date
Schlumberger Technology Corporation	09/24/2009
<b>RECEIVING PARTY DATA</b>	
Name:	IntelliServ, LLC
Street Address:	7909 Parkwood Circle Drive
City:	Houston
State/Country:	TEXAS
Postal Code:	77036
<b>PROPERTY NUMBERS Total: 1</b>	
Property Type	Number
Application Number:	11873040
<b>CORRESPONDENCE DATA</b>	
Fax Number:	(713)238-8008
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
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ATTORNEY DOCKET NUMBER:	2841-00802
NAME OF SUBMITTER:	Matthew R. Moscicki
<b>Total Attachments: 9</b> source=Assignment-Schlumberger to IntelliServ#page1.tif source=Assignment-Schlumberger to IntelliServ#page2.tif source=Assignment-Schlumberger to IntelliServ#page3.tif source=Assignment-Schlumberger to IntelliServ#page4.tif	

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**ASSIGNMENT OF U.S. INTELLECTUAL PROPERTY  
WITH REVERSIONARY INTEREST  
FROM SCHLUMBERGER TECHNOLOGY CORPORATION TO INTELLISERV, LLC**

THIS ASSIGNMENT OF U.S. INTELLECTUAL PROPERTY WITH REVERSIONARY INTEREST ("**Assignment**") is made as of this 25th day of September, 2009, by and between Schlumberger Technology Corporation, a Texas corporation (hereafter, "**Assignor**"), and Intelliserv, LLC, a Delaware limited liability company (hereafter, "**Assignee**").

WHEREAS, **Assignor** is the record owner of the Intellectual Property and Intellectual Property rights identified herein;

WHEREAS, this Assignment is made as part of, pursuant to, and in consideration of that certain Organization Agreement dated as of November 18, 2008 (the "**Organization Agreement**"), by and among Intelliserv, Inc., Grant Prideco III CV, Grant Prideco, Inc., National Oilwell Varco, Inc., National Oilwell Varco, L.P., Schlumberger Technology Corporation, Schlumberger Oilfield Holdings Limited, and Schlumberger N.V. (Schlumberger Limited); and

WHEREAS, **Assignee** is desirous of acquiring the entire and exclusive right, title, and interest in and to, and possession of, the certain Intellectual Property and Intellectual Property rights identified herein, and subject to the reversionary interests specified herein.

**Definitions**

In addition to the terms that are defined herein, for all purposes of this Assignment, capitalized terms not otherwise defined herein shall have the meanings ascribed to such terms in the Organization Agreement.

**Assignment of Patents**

NOW, THEREFORE, for and in consideration of good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, **Assignor** does hereby assign, transfer, and convey to **Assignee**, the entire and exclusive right, title, and interest in and to, and possession and use of, including, but not limited to, the right to sue for past, present, and future damages due to infringement of, the following U.S. patent applications, patents and technology disclosed and/or claimed in the applications and/or patents, and to all other U.S. applications, patents, registrations and certificates, that claim priority directly to one or more of the following patents or applications:

File Number	Country [C]	Filing date	Filing number	Publication date	Publication number	Grant date	Grant number
19.0314	US	31/MAY/2002	10/160311	19/DEC/2002	2002-0193004	04/NOV/2003	6641434
19.0329	US	31/MAR/2005	10/907419	12/OCT/2006	2006-0225926	19/AUG/2008	7413021
19.0329	US	14/JUL/2008	12/172484				
19.0347	US	29/AUG/2003	10/604986	03/MAR/2005	2005-0046591	27/SEP/2005	6950034
19.0351	US	22/OCT/2003	10/605730	28/APR/2005	2005-0087368	09/MAY/2006	7040415

19.0361	US	10/JUL/2006	11/456464	21/FEB/2008	2008-0041575		
19.0395	US	16/SEP/2005	11/228111	22/MAR/2007	2007-0063865		
19.0395	US	29/DEC/2006	11/648041	16/AUG/2007	2007-0188344		
19.0397	US	29/DEC/2006	11/648139	03/JUL/2008	2008-0158005		
19.0403	US	03/AUG/2006	11/498847	08/FEB/2007	2007-0030167		
19.0410	US	03/AUG/2006	11/995027				
19.0410	US	10/MAR/2009	12/401185	09/JUL/2009	2009-0173493		
19.0410	US	04/AUG/2005	60/705326				
19.0423	US	28/NOV/2006	11/564024	12/JUL/2007	2007-0159351		
19.0423	US	16/OCT/2007	11/873040	08/MAY/2008	2008-0106433		
19.0423	US	12/DEC/2005	60/749546				
19.0426	US	29/DEC/2006	11/648109	03/JUL/2008	2008-0159077		
19.0462	US	16-Apr-2009	12/424539				
19.0464	US	25/SEP/2008	12/237488				
19.0504	US	08/JUN/2007	60/942863				
19.0505	US	03/MAR/2009	12/397171				
19.0507	US	24/FEB/2009	12/392019				
19.0508	US	27/SEP/2007	11/862904	02/APR/2009	2009-0084541		
19.0515	US	27/DEC/2007	11/965148	12/FEB/2009	2009-0038849		
19.0515	US	07/AUG/2007	60/954482				
19.0517	US	27/DEC/2007	11/965440				
19.0571	US	08/APR/2008	61/043258				
24.0888	US	29/APR/2003	10/249669	04/NOV/2004	2004-0217880	29/AUG/2006	7096961
60.1336	US	14/JUN/2001	09/881333	26/SEP/2002	2002-0135179	15/MAR/2005	6866306
60.1336	US	12/MAR/2007	11/717000				
60.1336	US	23/MAR/2001	60/278090				

This assignment of Patents is full and complete and includes all rights that would be enjoyed and all obligations that would be suffered by **Assignor** if this assignment of Patents had not been made, including, but not limited the right to sue for past, present and future damages arising from infringement of these U.S. rights.

**Assignor** hereby authorizes and directs the appropriate governmental officials to issue any and all such United States patent or related property right assigned hereunder to **Assignee**, as the owner of the entire and exclusive right, title, and interest in and to the same.

**Assignor** further covenants and agrees that **Assignor** will at any time upon reasonable

request make, execute, and deliver without further compensation, any and all other instruments in writing, including further applications, papers, affidavits, powers of attorney, assignments, and other documents, and do all lawful acts and things, which, in the opinion of counsel for **Assignee**, may be required or necessary to more effectively secure and vest in **Assignee**, its successors, and permitted assigns the rights transferred hereunder, and that **Assignor** will sign any applications for reissue, division, continuation, continuation-in-part, counterpart, renewal, reexamination, substitute, patents of importation, patents of addition, patents of improvement, or extension of said right transferred hereunder or any resulting patent or related property right.

**Assignor** further covenants and agrees that **Assignor** will at any time upon request communicate to the **Assignee**, any facts relating to the aforesaid inventions known to it, and will testify as to the same in any interference, litigation, mediation, arbitration, or other proceeding when requested to do so.

**Assignee** agrees to notify **Assignor** in writing if **Assignee** intentionally fails to pay maintenance fees or annuities for any of the patents or patent applications assigned herein. Such notice shall occur in advance of the actual intentional abandonment of the patents or patent applications but no later than the six-month period immediately following the due date for the maintenance fee or annuity payment.

### Assignment of Other Intellectual Property

NOW, THEREFORE, for and in consideration of good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, **Assignor** does hereby assign, transfer, and convey to **Assignee**, all right, title, and interest in and to, and possession and use of, in the U.S., all of the following other Intellectual Property that directly relates to the Business and is currently owned or used by **Assignor**, provided, that for the avoidance of doubt, in no event shall any Intellectual Property not directly related to the Business be deemed to be other Intellectual Property transferred by this Assignment.

Unfiled Invention Disclosures	Internal Title	Summary
19.0339	MWD TELEMETRY SYSTEM WITH ARMORED HELICAL CABLE	Helical armored cable with inductive coupling.
19.0340	CABLE RETENTION MECHANISM	Method for suspending a cable in a drill pipe.
19.0377	WDP PIPE POWER GENERATION AND SIGNAL BOOST	Vibration power generators used to boost signal for WDP system.
19.0396	INSTRUMENTED SURFACE SUB FOR DRILLING MECHANICS AND TELEMETRY	Incorporated into 19.0410 provisionally filed August 2005. Integrated telemetry and sensor sub for WDP and DMM measurements, including higher sampling rate pressure measurements for mud telemetry demodulation.
19.0432	WIRELESS COMMUNICATION SURFACE SUB FOR WIRED DRILL PIPE SYSTEM	Surface systems for wireless transmission between drill string and logging unit.
19.0439	EXPANDABLE INNER TUBE STRUCTURE AND MANUFACTURING PROCESS FOR WIRELESS DRILL PIPE	Mechanical, not hydro-forming, method to manufacture wireless drill pipe. The inner lining tube could be solid but perforated lining is preferred. The lining is insulated from the pipe by epoxy impregnated fiberglass insulation cloth.
19.0458	A DUAL-HOP SYSTEM FOR WIRED DRILL PIPE	New repeater bus topology with each bus being shared by three repeaters. This enables the system to work even when there is a repeater failure.

19.0469	A SOFT-INPUT SOFT-OUTPUT REPEATER FOR TELEMETRY	WDP repeater that has soft input and outputs a signal that preserves the soft data in the input, so called soft-input, soft-output repeater.
19.0491	INSTRUMENTED REPEATER POWERED BY THE GENERATION OF ENERGY FROM DRILLSTRING ROTATION	Using drill string rotational energy to power a repeater sub.
19.0497	INSTRUMENTED REPEATER POWERED BY THE GENERATION OF ENERGY FROM DRILLSTRING ROTATION	
19.0514	WIRED PIPE WITH CABLE RUN OUTSIDE THE PIPE	WDP communication slot to eliminate deformation under pressure.
19.0516	WDP TOROID INSPECTION PROCESS	Using machine vision software to inspect the number and spacing of the toroid wraps.
19.0518	METHOD FOR REMOTE ADAPTATION OF COMMUNICATIONS SYSTEMS DISTRIBUTED THROUGHOUT A DRILLSTRING	Remote adaptation of the WDP protocol to account for changing conditions.
19.0519	MIDDLE SECTION WIRING FOR DRILL PIPE TO CREATE AN ELECTRICAL COMMUNICATION PATH ALONG MULTIPLE PIPES USING A DIRECT CONTACT	Using a flat wire to traverse the length of the WDP.
19.0520	WDP PIPE SLOT PRESSURE RELIEF METHODS	Passage between coupler slot in shoulder to internal diameter of pipe to eliminate pressure differentials.
19.0521	CONCENTRIC CONTACTS ON DRILL PIPE ID WITH AN INSULATION LAYER	Concentric ring contacts for direct connection of WDP.
19.0528	WIRED DRILL PIPE CONNECTION FOR SINGLE SHOULDERED APPLICATION AND BHA ELEMENTS	Single-shouldered WDP connection.
19.0544	DETECTION OF FAULTS IN WDP WHILE DRILLING	Apparatus and methods for determining the location of a fault in a WDP system.
19.0545	WIRED DRILL PIPE CONTACT DESIGN	Direct connect (galvanic) couplings for drill pipe.
19.0546	LOW POWER REPEATER FOR THE WIRED DRILL PIPE APPLICATION	Methods to reduce power in WDP repeater.
19.0547	METHOD FOR OPTIMIZING THE TRANSMISSION OVER A SET OF WIRED DRILL PIPES	Predicting overall channel characteristics based on individual pipe characteristics and ordering pipes based on this knowledge.
19.0548	METHOD FOR TIME/DEPTH STAMPING AND CLOCK SYNCHRONIZATION IN A WIRED DRILL PIPE SYSTEM	Method for clock synchronization and time stamping in WDP systems .Enables time stamping of data and depth correlation.
19.0549	CHANNEL CALIBRATION FOR WIRED DRILL PIPE	System and methods for characterizing a transmission channel during drilling operations.
19.0550	COMMUNICATION SYSTEM MAINTAINING BACKWARDS COMPATIBILITY IN A MWD/LWD NETWORK	
19.0551	EFFICIENT COMMUNICATION PROTOCOL OVER WIRED DRILL PIPE WITH REPEATER DATA	WDP transmission protocol.
19.0552	WELDED PIN NOSE FOR DOUBLE SHOULDERED CONNECTION	Welding high strength material to interface points to increase strength at these locations, while still using normal materials for the remainder of the connection/pipe.
19.0553	HYBRID ENCAPSULATED CABLE	WDP cable is twisted, shielded pair, except at ends, where it is coaxial.
19.0554	ADAPTIVE DOWNHOLE TELEMETRY	Automatically adapting channel and rate based on channel and noise conditions.
19.0555	POWER GENERATION FOR DOWNHOLE COMMUNICATION WITH WIRED DRILL PIPE TELEMETRY	Self-powered repeaters.

19.0556	REPEATER CHASSIS ID MAXIMIZATION FOR A FIXED OD BY SPRING PLACEMENT OF ELECTRONICS AND POWER SOURCES	Repeater chassis.
19.0557	WIRE ROUTE ON A PIPE WITHOUT INTERNAL UPSET MAINTAINING FLUSH ID	Wire routing in a drill pipe with no internal upset.
19.0558	WIRE ROUTE FROM A HOLE TO PIPE ID WHEN NO PIPE INTERNAL UPSET	Methods to reduce stresses seen at the transition from the tool joint hole into the internal diameter or outer diameter of the pipe.
19.0559	STRESS RELIEF ON A WIRE ROUTE BY GRADUAL CHANGE IN RIGIDITY UTILIZING A TAPERED COVER TUBE OR TRANSITION FOR PIPES	Tapered sleeve to reduce stresses seen on wire route path at transition from tool joint into pipe inner diameter or outer diameter.
19.0560	SHAPES OF TUBES OR CABLES TO MAXIMIZE THE ADHESION TO THE PIPE'S ID	Wire retainer tube shapes with increased adhesion to pipe internal diameter.
19.0566	SPIRAL SEALS IN DIRECT CONTACTS TO PRESSURE BALANCE AND ELECTRICALLY ISOLATE	Spiral seals used in direct contact WDP to seal and pressure balance across the seal, while maintaining high electrical resistance.
19.0568	METHODS TO HARVEST VIBRATION ENERGY FROM DRILLSTRING	Harvesting vibration energy in a drill string. Can be used to power a repeater.
19.0569	FLUX COUPLER PACKAGING	
19.0570	UNIVERSAL METHOD OF WIRING DRILL STRING COMPONENTS	Methods for running a wire through drilling components such as WDP and jars.
19.0575	DETECTION IN FAULTS IN WDP WHILE DRILLING FOR INDUCTIVE COUPLERS	
19.0578	RETENTION METHODS FOR FACE LOCATED COUPLERS	
19.0591	REDUCING THE EFFECT OF STRAY FIELDS IN AN INDUCTIVE COUPLER USED IN WIRED DRILL PIPE	
19.0595	REDUCING THE EFFECT OF GAP IN AN INDUCTIVE COUPLER USED IN WIRED DRILL PIPE	
19.0596	COATING CONNECTION FOR LOW CONTACT RESISTANCE AT HIGH FREQUENCIES FOR WIRED DRILL PIPE	
19.0597	METHOD FOR ESTIMATION OF DISTANCE TO FAILURES AND DEGRADATIONS IN WIRED DRILL PIPE	
19.0611	DRILL PIPE DIRECT CONNECTOR	
92.1198	INSTRUMENTED REPEATER POWERED BY THE GENERATION OF ENERGY FROM DRILLSTRING ROTATION.	

- Copyrights to written materials and Software and each application or registration therefor;
- Know-How;
- Software; and

- All other Intellectual Property.

**Assignee** acknowledges that **Assignor** retains all right, title, and interest in and to, and possession and use of, in all countries except the U.S., each of the above listed other Intellectual Property.

This assignment of other Intellectual Property is undivided, full and complete with respect to the U.S. and includes all rights that would be enjoyed and all obligations that would be suffered by **Assignor** if this assignment had not been made, including, but not limited to, the right to sue for past, present and future damage arising from infringement of these U.S. rights.

**Assignor** further covenants and agrees that **Assignor** will at any time upon reasonable request make, execute, and deliver without further compensation, any and all other instruments in writing, including further applications, papers, affidavits, powers of attorney, assignments, and other documents, and do all lawful acts and things, which, in the opinion of counsel for **Assignee**, may in any country be required or necessary more effectively secure and vest in **Assignee**, its successors, and assigns the other Intellectual Property.

**Assignor** further covenants and agrees that **Assignor** will at any time upon request communicate to the **Assignee**, any facts relating to the aforesaid other Intellectual Property known to it, and will testify as to the same in any interference, litigation, mediation, arbitration, or other proceeding when requested to do so.

**Assignee** agrees to notify **Assignor** in writing if **Assignee** intentionally fails to pay maintenance fees, annuities or renewal fees for any of the patents, patent applications, registered trademarks or trademark applications assigned herein. Such notice shall occur in advance of the actual intentional abandonment of the patents, patent applications, registered trademarks or trademark applications but no later than the six-month period immediately following the due date for the maintenance fee, annuity payment or renewal fee.

#### Reversionary Interest

This Assignment is made and accepted with the following reversionary interest in favor of **Assignor** and its successors:

If that certain Joint Venture Rights Agreement dated as of September 25, 2009 (the "**Joint Venture Rights Agreement**"), by and among Intelliserv, Inc., Grant Prideco III CV, Grant Prideco, Inc., National Oilwell Varco, Inc., National Oilwell Varco, L.P., Schlumberger Technology Corporation, Schlumberger Oilfield Holdings Limited, and Schlumberger N.V. (Schlumberger Limited) is ever terminated pursuant to Section 14(b)(ii) thereof (hereafter, the "**Event**"), then immediately prior to or simultaneously with such Event, the entire and exclusive rights, titles, and interests transferred by this Assignment, including, but not limited to, rights to sue and maintain suit for past, present and future damages, shall revert to **Assignor**, or its successor, as if this Assignment had never occurred, except that activities authorized by the Joint Venture occurring after the Closing and prior to the Event shall not be subject to suit for past damages. Any and all licenses or sublicenses that may hereafter be granted by **Assignee** are subject to this reversionary interest and any such license or sublicense shall terminate simultaneously with such reversion. Nothing in this Assignment shall undo the reversionary assignment to **Assignor**, once the Event occurs. Notwithstanding anything in the foregoing, the



exercise of any parties' rights under Section 3 of the Joint Venture Rights Agreement shall not be a termination of the Joint Venture Rights Agreement pursuant to Section 14(b)(ii) thereof.

This reversionary interest shall automatically expire and terminate, unless the reversion described in the paragraph immediately above has already occurred, immediately prior to the consummation of a Transfer (as defined in the Joint Venture Rights Agreement) of the **Assignor's**, or an Affiliate of the Assignor's, Transferring Interests (as defined in the Joint Venture Rights Agreement) pursuant to Section 3 of the Joint Venture Rights Agreement.

### **Miscellaneous**

This Assignment shall be binding upon and inure to the benefit of the successors and assigns of the parties to this Assignment. This Assignment may neither be assigned nor transferred, either in whole or in part by Assignee without first obtaining the prior written consent of Assignor.

This Assignment and performance hereunder shall be governed by and construed in accordance with the laws of the State of Texas. Any and all proceedings relating to the subject matter hereof shall be maintained in the courts of the state of Texas or the Federal district courts sitting in Texas, which courts shall have exclusive jurisdiction for such purpose.

If any provision of this Assignment shall be held to be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall in no way be affected or impaired thereby.

This Assignment is entered into by the parties in furtherance of the Organization Agreement, and the terms, conditions and obligations expressed herein are intended to be consistent with the intent of the Organization Agreement and the other Transaction Documents (as defined in the Organization Agreement). Subject only to the immediately preceding sentence, this Assignment contains the entire agreement between the parties hereto with respect to the subject matter hereof.

All amendments and other modifications hereof shall be in writing and signed by each of the parties hereto. The failure of either party to exercise in any respect any right provided for herein shall not be deemed a waiver of any right hereunder.

\* \* \*

IN WITNESS WHEREOF, Assignor and Assignee have hereunto set their hand and seal.

**Schlumberger Technology Corporation**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name

\_\_\_\_\_  
Title

\_\_\_\_\_

\_\_\_\_\_  
Date of Execution

**Intelliserv, LLC**

*Daniel L. Molinaro*  
\_\_\_\_\_  
Signature

\_\_\_\_\_  
Daniel L. Molinaro  
Name

\_\_\_\_\_  
Vice President & Treasurer  
Title

\_\_\_\_\_

\_\_\_\_\_  
Date of Execution

IN WITNESS WHEREOF, Assignor and Assignee have hereunto set their hand and seal.

Schlumberger Technology Corporation



Signature

Jean-Francois Poupeau

Name

Vice President

Title

24 September 2009

Date of Execution

Intelliserv, LLC

Signature

Name

Title

Date of Execution