### PATENT ASSIGNMENT

## Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	UBMISSION TYPE: NEW ASSIGNMENT					
NATURE OF CONVE	YANCE:		ASSIGNMENT			
CONVEYING PARTY	DATA					
		N	lame	Execution Date		
David R. Hall         01/22/2010						
RECEIVING PARTY [	ΟΑΤΑ					
Name:	Schlumberge	r Tech	nology Corporation			
Street Address:	5599 San Fel	lipe				
Internal Address:	Suite 1600					
City:	Houston					
State/Country:	TEXAS					
Postal Code:	77056					
PROPERTY NUMBERS Total: 1 Property Type Number						
Application Number:		12846	647			
CORRESPONDENCE	DATA					
Fax Number:	(801)52	1-9639				
			hen the fax attempt is unsuccessful.	J.		
Phone:	801-521					
Email: Correspondent Name			nn@hro.com ann			
Address Line 1:	299 Sou					
Address Line 2:	Suite 18	00				
Address Line 4:	Salt Lak	e City,	UTAH 84111			
ATTORNEY DOCKET NUMBER: 55724-10301						
NAME OF SUBMITTER: Craig Buschmann						

source=20100428 Assign Hall Novatek to SLB#page3.tif
source=20100428_Assign_Hall_Novatek_to_SLB#page4.tif
source=20100428_Assign_Hall_Novatek_to_SLB#page5.tif
source=20100428_Assign_Hall_Novatek_to_SLB#page6.tif
source=20100428_Assign_Hall_Novatek_to_SLB#page7.tif
source=20100428_Assign_Hall_Novatek_to_SLB#page8.tif
source=20100428_Assign_Hall_Novatek_to_SLB#page9.tif
source=20100428_Assign_Hall_Novatek_to_SLB#page10.tif
source=20100428_Assign_Hall_Novatek_to_SLB#page11.tif
source=20100428_Assign_Hall_Novatek_to_SLB#page12.tif
source=20100428_Assign_Hall_Novatek_to_SLB#page13.tif
source=20100428_Assign_Hall_Novatek_to_SLB#page14.tif
source=20100428_Assign_Hall_Novatek_to_SLB#page15.tif
source=20100428_Assign_Hall_Novatek_to_SLB#page16.tif
source=20100428_Assign_Hall_Novatek_to_SLB#page17.tif
source=20100428_Assign_Hall_Novatek_to_SLB#page18.tif
source=20100428_Assign_Hall_Novatek_to_SLB#page19.tif

#### **INTELLECTUAL PROPERTY ASSIGNMENT**

This Intellectual Property Assignment (the "Assignment") is entered into as of January 22, 2010 ("Effective Date") by and between Novatek, Inc., a Utah corporation ("Novatek"), David R. Hall ("Hall") wherein Novatek and Hall are hereinafter referred to individually and/or collectively as "Assignor" and Schlumberger Technology Corporation, a Texas corporation ("Assignee"). Assignor and Assignee are referred to herein collectively as the "Parties" and each, individually, as a "Party."

WHEREAS, the Parties, along with Hall and certain others, have entered into that certain Amended and Restated Services and Cooperation Agreement, dated as of even date herewith (the "Services Agreement") and, pursuant to the transactions contemplated thereunder, Assignor is selling, conveying, assigning, transferring and delivering to Assignee, and Assignee is purchasing, acquiring and accepting from Assignor, all of Assignor's right, title and interest in certain of Assignor's intellectual property assets, including any and all intangible and tangible property, whether registered or not, anywhere in the world relating to the technologies, information, whether business or technical, designs, works of authorship, and all other intellectual property rights recognized anywhere in the world, which are owned by Assignor or to which Assignor has license rights, as set forth on <u>Schedule A</u> hereto (the "Intellectual **Property Assets**");

WHEREAS, the Intellectual Property Assets are subject to an exclusive license to Novatek for applications outside of "STC's Field of Use" as described in that certain Amended and Restated Technology License Agreement, dated as of even date herewith, among the Parties, David R. Hall and certain others; and

WHEREAS, Assignor and Assignee now wish to further memorialize that transfer.

NOW, THEREFORE, for and in consideration of the mutual covenants, rights and obligations set forth in this Assignment and other good and valuable consideration, the receipt and the sufficiency of which each Party hereby acknowledges, and upon the terms and subject to the conditions hereinafter set forth, the Parties do agree as follows:

Assignment. Assignor hereby sells, assigns, transfers and sets over, unto Assignee, its successors, legal representatives and assigns, the entire right, title, and interest in and to the Intellectual Property Assets, 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 which Intellectual Property Assets include the following: (a) any and all inventions, creations, works of authorships and other developments arising pursuant to the Services Agreement and (b) any and all intellectual property rights associated therewith, including (i) utility and design patents, utility and design patent applications, and any and all direct and indirect divisions, continuations and continuations-in-part of said applications and patents, and any and all Letters Patent in the United States and all foreign countries which may be granted therefore and thereon, and reissues, reexaminations and extensions of said Letters Patent, and all rights under the International Convention for the Protection of Industrial Property;

(ii) copyrights, whether registered or not; (iii) trade secrets; and (iv) all other rights which Assignor has enjoyed or otherwise could enjoy absent this Assignment both in the United States and throughout all countries of the world, 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 any and all rights of recovery based on past infringement of said Intellectual Property Assets accruing after the Effective Date, the same to be held and enjoyed by Assignee, its successors, and assigns forever and to the full end of the terms for which any of the aforesaid Intellectual Property Assets are registered and any renewals of the terms thereof, or otherwise until protection therefor expires.

Assignor hereby authorizes and directs the appropriate governmental officials to issue any and all such 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.

### 1. <u>REPRESENTATIONS, WARRANTIES, AND COVENANTS.</u>

(a) Assignor (i) is or will be through operation of law the owner of all right, title and interest in and to each of the Intellectual Property Assets, including those set forth in <u>Schedule A</u> hereof, free and clear of all encumbrances, (ii) has the right to use without payment to a third party all of the Intellectual Property Assets, including the Intellectual Property

Assets set forth in <u>Schedule A</u> hereof, and (iii) has full right and authority to transfer to Assignee the Intellectual Property Assets, including those Intellectual Property Assets set forth in <u>Schedule A</u> hereof.

(b) Assignor hereby covenants and agrees that Assignor will, whenever counsel of Assignee or the counsel of its successors, legal representatives, and assigns shall advise that it is lawful and desirable, sign all papers and documents, deliver necessary documents including original registration certificates, if available, take all lawful oaths, execute separate confirmatory assignments, and do all acts reasonably necessary or desirable to be done for the procurement, maintenance, enforcement, and defense of said Intellectual Property Assets and registrations thereof without charge to Assignee, its successors, legal representatives, and assigns, other than reasonable costs and expenses incurred by Assignor or any of its employees, agents, and representatives in connection with the foregoing actions.

### 2. <u>MISCELLANEOUS</u>.

(a) <u>Notice</u>. Any notice, request, instruction or other document to be given hereunder by any Party hereto to any other Party shall be in writing and delivered personally, by reputable overnight courier, via facsimile (with receipt confirmed) or sent by registered or certified mail, postage prepaid to the following addresses (or other addresses as designated in writing by the applicable Party):

if to Assignor:

Novatek, Inc. 2185 South Larsen Parkway Provo, Utah 84606 Attention: David R. Hall Telephone: (801) 374-6222 Facsimile: (508) 300-6357

If to Assignee:

Schlumberger Technology Corporation 300 Schlumberger Drive Sugar Land, Texas 77478 Attention: Brigitte Echols, General Counsel – Drilling & Measurements Telephone: (281) 285-7067 Facsimile: (281) 285-8282 with a copy, which shall not constitute notice, to

Fulbright & Jaworski L.L.P. 1301 McKinney, Suite 5100 Houston, Texas 77010 Attention: Brian P. Fenske Telephone: (713) 651-5557 Facsimile: (713) 651-5246

or at such other address for a Party as shall be specified by like notice. Any notice which is delivered personally or by overnight courier in the manner provided herein shall be deemed to have been duly given to the Party to whom it is directed upon actual receipt by such Party (or its agent for notices hereunder). Any notice which is sent by facsimile shall be deemed to have been duly given to the Party to which it is sent on the date of transmission, with confirmed transmission and receipt. Any notice which is addressed and mailed in the manner herein provided shall be conclusively presumed to have been duly given to the Party to which it is addressed at the close of business, local time of the recipient, on the third day after the day it is so placed in the mail. Notwithstanding the foregoing, if notice would be deemed to have been received by a recipient outside of normal business hours for such recipient, such notice shall instead be deemed to have been received by such recipient on the next business day, at the time such recipient normally opens for business.

- (b) <u>Headings</u>. The Section headings in this Assignment are for convenience of reference only, do not constitute a part of this Assignment and shall not limit, extend or otherwise affect the meaning or interpretation of the terms and provisions of this Assignment.
- (c) <u>Governing Law</u>. This Assignment shall be construed in accordance with the laws of the State of Texas without regard to laws or rules regarding conflicts of laws. Each Party hereby consents to submit to the exclusive jurisdiction and venue of the courts of Harris County, Texas and of the United States of America located in Harris County, Texas for any actions, suits or proceedings arising out of or relating to this Assignment.
- (d) Execution of Agreement. This Assignment may be executed in any number of counterparts, each of which shall be deemed an original, but all of which shall constitute one and the same instrument.. The exchange of copies of this Assignment and of signature pages by facsimile transmission shall constitute effective execution and delivery of this Assignment as to the Parties and may be used in lieu of the original Assignment for all purposes. Signatures of the Parties transmitted by facsimile shall be deemed to be their original signatures for all purposes.

[Signatures on following page]

4

IN WITNESS WHEREOF, the Parties have executed this Assignment on the date first written above.

NOVATEK, INC.

By:

Name: David R. Hall Title: President

RHell

David R. Hall

SCHLUMBERGER TECHNOLOGY CORPORATION

By: Name:

Name Title:

ATTORNEY IN FACT

LONG FORM NOVATEK IP ASSIGNMENT SIGNATURE PAGE

## **SCHEDULE A**

,

Ref. No.	Docket	Country	Status	Assignee	Notes	Title
US08/57677	85.0251	PCT	Pending	<b>(USPTO)</b> NOVADRILL, INC.		Downhole Tool String Component
61/073,190 5,396,965	85.0265 85.0001	US US	Expired Expired	none DAVID R. HALL	Provisional	Downhole Cover Down-hole Mud Actuated Hammer
6,367,565	85.0001-1	US	Granted	NOVADRILL, INC.		Means for Detecting Subterranean Formations and Monitoring the Operation of a Down- hole, Fluid Driven Percussive Piston
7,105,249	85.0002-1	US	Granted	NOVADRILL, INC.	Maintanence Fee Window Open	Pressure- Compressed Downhole Battery
7147965	85.0002	US	Granted	Novadrill, Inc.	Maintanence Fee Window Open	Pressure-balanced battery for downhole tools
10/633,889	85.0002-2	US	Abandoned	DAVID R. HALL		Pressurized Battery For High- Temperature, High- Pressure Environment
10/965,563	85.0003	US	Abandoned	NOVATEK INTERNATIONAL, INC.		Apparatus and Method for Seismic Measurement-While- Drilling
7190084	85.0004	US	Granted	Novadrill, inc.	Inventors did assign to Hall prior to Hall assigning to NovaDril; Reel/Frame No. 017569/0257	Method and apparatus for generating electrical energy downhole
10/982,478	85.0005	US	Abandoned	DAVID R. HALL & JOE FOX		Method for Distributing Electrical Power to Downhole Tools
7308795	85.0006	US	Granted	NOVADRILL, INC.	Joe Fox assigned invention to Hall (July 2008) prior to Hall assigning to NovaDrill	Method and system for cooling electrical components downhole
10/931,864	85.0007	US	Abandoned	DAVID R. HALL		High-Speed, Downhole, Seismic Measurement System
6,390,181	85.0014	US	Granted	DAVID R. HALL	Maintanence Fee Window Open	Densely Finned Tungsten Carbide and Polycrystalline Diamond Cooling Module

Schedule A to Long Form Novatek IP Assignment A-1

6,287,179	85.0015	US	Expired			Superabrasive Indexable Cutting Tool
6253864	85.0016	US	12th-yr-fee due 1/4/2013	NOVADRILL, INC.	NOVATEK licensed (confirmatory) to US DEPT OF ENERGY (before HALL assigned to NOVADRILL)	Percussive shearing drill bit
7380841	85.0021	US	Granted	DAVID R. HALL		High pressure connection
N/A NA 7586191	85.0023 85.0024 85.0025	US	Never filed Never filed Granted	n/a n/a david R. Hall	Generator Update Hall Effect Sensor Strip All inventors assigned their rights to Hall, but not recorded at PTO yet	N/A N/A Integrated circuit apparatus with heat spreader
7277026	85.0026	US	Granted	Novadrill, Inc.		Downhole component with multiple transmission elements
11/861,412	85.0026-1	US	Pending	NOVADRILL, INC.		Downhole Component with Multiple Transmission Elements
11179975	85.0027	US	Pending	NOVATEK INTERNATIONAL, INC.		Clamping Assembly
7291028	85.0029	US	Granted	DAVID R. HALL	Power Transmission	Actuated electric connection
7,482,945	85.0030-1	US	Granted	DAVID R. HALL	David R. Hall is sole inventor	Apparatus for interfacing with a transmission path
7298286	85.0030	US	Granted	DAVID R. HALL	David R. Hall is sole inventor	Apparatus for interfacing with a transmission path
N/A	85.0032		Never filed	N/A	Field Network	
7270199	85.0033	US	Granted	david R. Hall		Cutting element with a non-shear stress relieving substrate interface
7424928	85.0034	US	Granted	NOVADRILL, INC.		Apparatus, system and method for flexibly coupling sensors to a downhole tool
N/A	85.0036		Never filed	N/A	Hammer Valve	
6733087	85.0037	US	8th-yr-fee due 11/15/2011	DAVID R. HALL	Mining Pick	Pick for disintegrating natural and man- made materials
7252174	85.0039	US	Granted	NOVADRILL, INC.		Downhole Seismic- Sonic Receiver
N/A N/A	85.0040 85.0041		Never filed Never filed	N/A N/A	Drilling Business Plan Cooling Apparatus	

7377315	85.0043	US	Granted	NOVADRILL, INC.		Complaint covering of a downhole component
7270196	85.0045	US	Granted	NOVADRILL, INC.		Drill bit assembly
US06/043125	85.0045	PCT	Expired	DAVID R. HALL		Drill bit assembly
7198119	85.0046	US	Granted	NOVADRILL, INC.		Hydraulic drill bit
						assembly
7,328,755	85.0046-1	US	Granted	NOVADRILL, INC.		Hydraulic drill bit
7000040	05 00 17					assembly
7360610	85.0047	US	Granted	NOVADRILL, INC.		Drill bit assembly for directional drilling
11307196	85.0049	US	Pending	Novadrill, Inc.	Scott Dahlgren is listed as David Dahlgren on recordation document; the assignment correctly identifies Dahlgren as Scott Dahlgren	Thin-film Battery
7337858	85.0051	US	Granted	NOVADRILL, INC.	Scott Danigren	Drill bit assembly
1001000	00.0001		Chantoa	11017 BI (122, 1110.		adapted to provide
						power downhole
US07/64539	85.0051	PCT	Expired	DAVID R. HALL		
7225886	85.0053	US	Granted	NOVADRILL, INC.		Drill bit assembly with
						an indenting member
US06/43107	85.0053	PCT	Expired	DAVID R. HALL		Dell bit and each tractile
2647416	85.0058	CA	pending	NOVADRILL, INC.	country records show Hall as assignee still	Drill bit assembly with a logging device
7398837	85.0058	US	Granted	NOVADRILL, INC.	naii as assignee suii	Drill bit assembly with
1000001	00.0000	00	Oranicu	NOVADRILL, INO.		a logging device
7759037	85.0058	EU	pending	NOVADRILL, INC.	country records show	Drill bit assembly with
			P	··· <b>·</b> , ·····	Hall as assignee still	a logging device
20084384	85.0058	NO	pending	NOVADRILL, INC.	country records show	Drill bit assembly with
					Hall as assignee still	a logging device
80801752	85.0058	CN	pending	NOVADRILL, INC.	country records show	Drill bit assembly with
10000050540	AF 00F0				Hall as assignee still	a logging device
18080059549	85.0058	BR	pending	NOVADRILL, INC.	country records show Hall as assignee still	Drill bit assembly with a logging device
60080AUP00	85.0058	AU	pending	NOVADRILL, INC.	country records show	Drill bit assembly with
00000001 00	00.0000	70	pending	NOVADRILL, INC.	Hall as assignee still	a logging device
a/2008/012078	85.0058	MX	pending	NOVADRILL, INC.	country records show	Drill bit assembly with
			P - · · · · · · · · · · · · · · · · · ·	··· <b>··</b> , ·····	Hall as assignee still	a logging device
PCT/US07/64544	85.0058	PCT	Expired	NOVADRILL, INC.		Drill Bit Assembly with
	x					a Logging Device
PI20083683	85.0058	MA	pending	NOVADRILL, INC.	country records show	Drill bit assembly with
			<b>.</b>		Hall as assignee still	a logging device
7350565	85.0060	US	Granted	DAVID R. HALL		Self-expandable
						cylinder in a downhole tool
7426968	85.0062	US	Granted	NOVADRILL, INC.	Listed as pending 11278935	Drill bit assembly with a probe

11381709	85.0064	US	Pending	david R. Hall	Multiple inventors	A Rigid Composite Structure with a Superhard Interior Surface
7598886	85.0067	US	Granted	DAVID R. HALL		System and method for wirelessly communicating with a downhole drill string
7382273	85.0069	US	Granted	NOVADRILL, INC.		Wired tool string component
7453768	85.0070	US	Granted	NOVADRILL, INC.	Inventors Joe Fox and Christopher Durrand did assign to Hall prior to Hall assigning to NovaDrill, but their assignment wasn't recorded	High-speed, downhole, cross well measurement system
7503606 7488194	85.0073 85.0074	US US	Granted Granted	david R. Hall David R. Hall		Lifting assembly Downhole data and/or power transmission system
12/432,231	85.0075-1	US	Pending	NOVADRILL, INC.		Wired tool string component
7535377	85.0075	US	Granted	NOVADRILL, INC.		Wired tool string component
11424806	85.0076	US	Pending	DAVID R. HALL		An Attack Tool for Degrading Materials
7469972 7258179	85.0077 85.0078	US US	Granted Granted	david R. Hall Novadrill, INC.		Wear Resistant Tool Rotary bit with an indenting member
11428993	85.0083	US	Pending	NOVADRILL, INC.		System and Method for Sharing Information between Downhole Drill Strings
7464993	85.0084	US	Granted	DAVID R. HALL	assigned, not recorded	Attack tool
7384105	85.0085	US	Granted	DAVID R. HALL	· · · · · · · · · · · · · · · · · · ·	Attack tool
7338135	85.0086	US	Granted	DAVID R. HALL	assigned, not recorded	Holder for a degradation assembly
7419224	85.0087	US	Granted	DAVID R. HALL	assigned, not recorded	Sleeve in a degradation assembly
7413256	85.0088	US	Granted	david R. Hall		Washer for a degradation assembly
7445294	85.0089	US	Granted	DAVID R. HALL		Attack tool
11/927,917	85.0090-1	US	Pending	DAVID R. HALL		Shank for an Attack Tool
7320505	85.0090	US	Granted	DAVID R. HALL		Attack tool
11467095	85.0091	US	Pending	NOVADRILL, INC.	Inventors Scott Dahlgren and Michael Comfoltey assigned prior to Hall assigning to NovaDrill, their assignment hasn't been recorded yet.	Downhole Electric Power Generator

7571780	85.0095	US	Granted	NOVADRILL, INC.		Jack element for a drill bit
12/475,344	85.0095-1	US	Pending	NOVADRILL, INC.	assigned, not recorded	Jack element for a drill bit
11553651	85.0098	US	Pending	NOVADRILL, INC.		Method of Assembling a Drill Bit with a Jack Element
7419018	85.0099	US	Granted	NOVADRILL, INC.		Cam assembly in a downhole component
7527110	85.0100	US	Granted	NOVADRILL, INC.		Percussive drill bit
7410221	85.0101	US	Granted	DAVID R. HALL	Attorney/Agent listed as inventor.	Retainer sleeve in a degradation assembly
11553338	85.0102	US	Pending	DAVID R. HALL	inventor.	Superhard Insert with an Interface
7527105	85.0104	US	Granted	DAVID R. HALL		Power and/or data connection in a downhole component
7392857	85.0109	US	Granted	NOVADRILL, INC.		Apparatus and method for vibrating a drill bit
7600586	85.0111	US	Granted	NOVADRILL, INC.	Listed as pending 11611310	System for steering a drill string
11621183	85.0113	US	Pending	DAVID R. HALL		Tool String Direct Electrical Connection
7353893	85.0114	US	Granted	DAVID R. HALL		Tool with a large volume of a
7,469,756	85.0114-1	US	Granted	DAVID R. HALL		superhard material Tool with a large volume of a
7347292	85.0115	US	Granted	DAVID R. HALL	assigned, not recorded	superhard material Braze material for an attack tool
11679727	85.0116	US	Pending	DAVID R. HALL		Method of Manufacturing Downhole Tool String
7497279	85.0119	US	Granted	NOVADRILL, INC.		Components Jack element adapted to rotate independent of a drill bit
7533737	85.0120	US	Granted	NOVADRILL, INC.		Jet arrangement for a downhole drill bit
7265649	85.0121	US	Granted	NOVADRILL, INC.		Flexible inductive resistivity device
11679529	85.0122	US	Pending	NOVADRILL, INC.		Open Cavity in a Pocket of a Downhole Tool String Component
12/624,292	85.0122-1	US	pending	NOVADRILL, INC.		Open Cavity in a Pocket of a Downhole Tool String
11682758	85.0123	US	Pending	NOVADRILL, INC.		Component Method for taking seismic

7484576	85.0124	US	Granted	NOVADRILL, INC.	Attorney/Agent listed as inventor.	Jack Element in Communication with an Electric Motor and or Generator
7873780.6	85.0125	EU	pending	DAVID R. HALL		Thick Pointed Superhard Material
11673634	85.0125	US	Pending	DAVID R. HALL		Thick Pointed Superhard Material
200780037792.8	85.0125	CN	pending	DAVID R. HALL		Thick Pointed Superhard Material
2009/00926	85.0125	ZA	pending	DAVID R. HALL		Thick Pointed Superhard Material
PCT/US07/75670	85.0125	PCT	expired	DAVID R. HALL		Thick Pointed Superhard Material
12/625,728	85.0125-1	US	pending	DAVID R. HALL		Thick Pointed Superhard Material
12/625,908	85.0125-2	US	pending	DAVID R. HALL		Thick Pointed Superhard Material
12/627,009	85.0125-3	US	pending	DAVID R. HALL		Thick Pointed Superhard Material
7301429	85.0127	US	Granted	Novadrill, Inc.		Multiple frequency inductive resistivity device
7419016	85.0130	US	Granted	NOVADRILL, INC.		Bi-center drill bit
7424922	85.0131	US	Granted	NOVADRILL, INC.		Rotary valve for a
						jack hammer
7568770	85.0132	US	Granted	DAVID R. HALL		Pick assembly
7497254	85.0133	US	Granted	NOVADRILL, INC.		Pocket for a downhole tool string component
7404725	85.0134	US	Granted	DAVID R. HALL		Wiper for tool string direct electrical connection
7462051	85.0134-1	US	Granted	DAVID R. HALL	Attorney/Agent listed as inventor.	Wiper for tool string direct electrical
7591327	85.0135	US	Granted	NOVADRILL, INC.	Listed as pending 11693838	connection Drilling at a resonant frequency
60/894,395	85.0136	US	expired	none		Horizontal Drilling
7396086	85.0138	US	Granted	DAVID R. HALL		Pick assembly
7588102	85.0139	US	Granted	DAVID R. HALL	Listed as 11691978	High impact resistant tool
D554162	85.0140	US	Granted	DAVID R. HALL	Bit	Diamond enhanced cutting element
11734675	85.0141	US	Pending	DAVID R. HALL		High Impact Shearing Element
7401863	85.0142	US	Granted	DAVID R. HALL		Press-fit pick

# PATENT REEL: 024787 FRAME: 0707

measurements

7572134	85.0143	US	Granted	None	Inventors still need to assign	Centering assembly for an electric downhole connection
7504963	85.0144	US	Granted	Novadrill, Inc.		System and method for providing electrical power downhole
11749039 7503405	85.0145 85.0146	US US	Pending Granted	DAVID R. HALL NOVADRILL, INC.		Spring Loaded Pick Rotary valve for
						steering a drill string
7469971	85.0147	US	Granted	DAVID R. HALL		Lubricated pick
7475948	85.0148	US	Granted	DAVID R. HALL	assigned, not recorded	Pick with a bearing
11747341	85.0149	US	Pending	DAVID R. HALL	assigned, not recorded	Diamond Nozzle
7594703	85.0150	US	Granted	DAVID R. HALL		Pick with a reentrant
60/914,619	85.0151	US	expired	none		Resistivity Tool
11773561	85.0156	US	Pending	DAVID R. HALL		Energy Storage in an Elastic Vessel
7598742	85.0157	US	Granted	NOVADRILL, INC.	Listed as pending 11776447	Externally guided and directed field induction resistivity tool
12/556,488	85.0157-1	US	Pending	DAVID R. HALL		Externally guided and directed field induction resistivity tool
11759992	85.0158	US	Pending	NOVADRILL, INC.		Drill Bit with an Electrically Isolated Transmitter
7549489	85.0159	US	Granted	NOVADRILL, INC.		Jack element with a stop-off
12/395,249	85.0159-1	US	Pending	DAVID R. HALL		Jack element with a stop-off
11761095	85.0160	US	Pending	NOVADRILL, INC.		Drill Bit Transducer Device
11761730	85.0161	US	Pending	DAVID R. HALL		Data and/or PowerSwivel
11757928	85.0162	US	Pending	NOVADRILL, INC.		Clutch for a Jack Element
7571782	85.0163	US	Granted	DAVID R. HALL		Stiffened blade for shear-type drill bit
7464772	85.0164	US	Granted	Novadrill, Inc.		Downhole pressure pulse activated by jack element
11772907	85.0165	US	Pending	NOVADRILL, INC.		Location Device with a Gravity Measuring Device
11766975	85.0167	US	Pending	DAVID R. HALL		Rotary Drag Bit with Pointed Cutting Elements
11828848 11774227	85.0169 85.0171	US US	Pending Pending	david R. Hall David R. Hall		Borehole Liner Carbide Stem Press Fit into a Steel Body of A Pick

A-7

11766903	85.0173	US	Pending	none	Being cleared from a secrecy order; still needs	Attack Tool with an Interruption
					to be assigned	monupion
11773271	85.0174	US	Pending	DAVID R. HALL	assigned, not recorded	Tapered Bore in a
11841101	85.0175	US	Pending	Novadrill, Inc.		Pick Segmented Sleeve on a Downhole Tool String Component
7506706	85.0176	US	Granted	NOVADRILL, INC.		Retaining element for a jack element
11774647	85.0177	US	Pending	NOVADRILL, INC.		Retaining Element for a Jack Element
7541813	85.0178	US	Granted	NOVADRILL, INC.		Externally guided and directed halbach array field induction resistivity tool
11829577	85.0179	US	Pending	DAVID R. HALL		Pointed Diamond Working Ends on a Shear Bit
7559379	85.0180	US	Granted	NOVADRILL, INC.		Downhole Steering
11828901	85.0182	US	Pending	NOVADRILL, INC.	Inventor Christopher Durrand assigned assigned to Hall before Hall assigned to NovaDrill, still needs to be recorded	Stabilizer Assembly
11829761	85.0183	US	Pending	DAVID R. HALL	David R. Hall is sole inventor	Pick Shank in Axial Tension
7455117	85.0185	US	Granted	DAVID R. HALL		Downhole winding tool
11844662	85.0188	US	Pending	DAVID R. HALL		Pick Assembly
11851094	85.0191	US	Pending	NOVADRILL, INC.		Downhole Jack Assembly Sensor
7600823	85.0194	US	Granted	DAVID R. HALL	Listed as 11844586; assigned, not recored	Pick assembly
D556137	85.0195	US	Granted	DAVID R. HALL	Pick Bolster	Pick Bolster
D581952	85.0196	US	Granted	DAVID R. HALL	Mining Pick	Pick
11851582	85.0198	US	Pending	DAVID R. HALL		Pick with Carbide Cap
11871644	85.0199	US	Pending	NOVADRILL, INC.	Inventors assigned to Hall prior to Hall assigned to NovaDrill, still needs to be recorded	Indenting Member for a Drill Bit
12/559,731	85.0199-1	US	Pending	DAVID R. HALL		Indenting Member for a Drill Bit
11860761	85.0200	US	Pending	NOVADRILL, INC.		Downhole Coils
11871480	85.0201	US	Pending	NOVADRILL, INC.		Drill Bit Nozzle
11861641	85.0202	US	Pending	DAVID R. HALL	assignment recorded	Downhole Drill Bit
11871722	85.0205	US	Pending	DAVID R. HALL		Hollow Pick Shank
11860795	85.0206	US	Pending	NOVADRILL, INC.		Downhole Coils

11871835	85.0208	US	Pending	DAVID R. HALL		Non-rotating Pick with a Pressed in Carbide Segment
7413258	85.0209	US	Granted	None	assigned, not recorded	Hollow pick shank
11928471	85.0211	US	Pending	DAVID R. HALL	•	Tool Holder Sleeve
7451835	85.0213	US	Granted	NOVADRILL, INC.		Downhole turbine
7434634	85.0214	US	Granted	NOVADRILL, INC.		Downhole turbine
	85.0214			DAVID R. HALL		
11947644		US	Pending			Shank Assembly
11947949	85.0217	US	Pending	NOVADRILL, INC.		Tool String Threads
12/04/2007	85.0218	AU	Pending	NOVADRILL, INC.	country records show Hall as assignee still	System for Steering a Drill String
12/04/2007	85.0218	CA	Pending	NOVADRILL, INC.	country records show Hall as assignee still	System for Steering a Drill String
12/04/2007	85.0218	MX	Pending	NOVADRILL, INC.	country records show Hall as assignee still	System for Steering a Drill String
07865141.1	85.0218	EU	Pending	NOVADRILL, INC.	country records show Hall as assignee still	System for Steering a Drill String
20092420	85.0218	NO	Pending	NOVADRILL, INC.	country records show Hall as assignee still	System for Steering a Drill String
018090031332	85.0218	BR	Pending	NOVADRILL, INC.	country records show Hall as assignee still	System for Steering a Drill String
200780046096.3	85.0218	CN	Pending	NOVADRILL, INC.	country records show Hall as assignee still	System for Steering a Drill String
PCT/US07/86323	85.0218	PCT	expired	NOVADRILL, INC.	-	System for Steering a Drill String
PI20086459	85.0218	MA	Pending	NOVADRILL, INC.	country records show Hall as assignee still	System for Steering a Drill String
US/07/86449	85.0219	PCT	expired	NOVADRILL, INC.		Apparatus and Method for Vibrating a Drill Bit
11953424	85.0220	US	Pending	DAVID R. HALL		Holder Assembly
11956623	85.0221	US	Pending	NOVADRILL, INC.		Downhole Drive Shaft Connection
11971965	85.0222	US	Pending	DAVID R. HALL		Pick with an Interlocked Bolster
11962497	85.0223	US	Pending	DAVID R. HALL	assignment recorded	Retention for Holder Shank
7,583,085	85.0225	US	Granted	NOVADRILL, INC.	Paula Turner executed assignment to Hall prior to Hall assigning to NovaDrill; Turner's assignment still needs to be recorded	Downhole Sensor Assembly
12019782	85.0226	US	Pending	NOVADRILL, INC.		Fluid-actuated Hammer Bit
12020924	85.0227	US	Pending	DAVID R. HALL	assigned, not recorded	Shank Assembly with a Tensioned Element
12021019	85.0229	US	Pending	DAVID R. HALL		Impact Tool

12037682	85.0230	US	Pending	Novadrill, Inc.	Inventors assigned to Hall prior to Hall assigned to NovaDrill, still needs to be recorded	Downhole Hammer Assembly
7537051	85.0231	US	Granted	NOVADRILL, INC.	10001404	Downhole power generation assembly
12021051	85.0232	US	Pending	DAVID R. HALL		Impact Tool
7537053	85.0233	US	Granted	NOVADRILL, INC.		Downhole electrical
		•••		,,		connection
29304177	85.0238	US	Pending	DAVID R. HALL	Hall is sole inventor	Drill Bit
12039608	85.0240	US	Pending	NOVADRILL, INC.		Downhole Valve
12000000	00.0210	00	1 onding			Mechanism
12037733	85.0241	US	Pending	NOVADRILL, INC.		Downhole Hammer Assembly
12037764	85.0242	US	Pending	NOVADRILL, INC.	Inventors assigned to Hall prior to Hall assigned to NovaDrill, still needs to be recorded	Downhole Hammer Assembly
12039635	85.0244	US	Pending	NOVADRILL, INC.	10001000	Downhole Mechanism
12051586	85.0245	US	Pending	DAVID R. HALL		Degradation
12001000	00.0210	00	i onding	0/11/0/11/122		Assembly
12041754	85.0246	US	Pending	Novadrill, Inc.		Externally Guided and Directed Field Induction Resistivity Tool
12041880	85.0247	US	Pending	DAVID R. HALL		Attack Tool
12051689	85.0249	US	Pending	DAVID R. HALL		Degradation
12001000	00.02.10		· ononig			Assembly
12051738	85.0250	US	Pending	DAVID R. HALL		Degradation
						Assembly
12099038	85.0252	US	Pending	DAVID R. HALL		Method of Forming a Workpiece
12057597	85.0253	US	Pending	DAVID R. HALL		Drill Bit
12112743	85.0256	US	Pending	DAVID R. HALL		Locking fixture for a
						degradation assembly
12109211	85.0257	US	Pending	Novadrill, Inc.	Inventors assigned to Hall prior to Hall assigned to NovaDrill, still needs to be recorded	Downhole sample rate system
12112099	85.0259	US	Pending	DAVID R. HALL	David R. Hall is sole inventor	Layered polycrystalline diamond
N/A	85.0260	N/A	Never filed	N/A		BHA Pulser
N/A	85.0261	N/A	Never filed	N/A		Power Management
12135556	85.0262	US	Pending	NOVADRILL, INC.	No PAIR entry	Instrumentation
			-			Package in a Downhole Tool String Component
12141996	85.0263	US	Pending	NOVADRILL, INC.	No PAIR entry	Downhole Component with an Electric Device in a

### Blind-hole

• manihin a

12134442	85.0266	US	Pending	NOVADRILL, INC.	No PAIR entry	Constricting Flow Diverter
N/A	85.0267	N/A	Never filed	N/A		Turbine Dynamics
12112815	85.0270	US	Pending	DAVID R. HALL		Locking fixture
12178467	85.0272	US	Pending	DAVID R. HALL	Scott Dahlgren still needs to assign	Drill Bit Porting System
12135595	85.0273	US	Pending	DAVID R. HALL		Retention System
12135654	85.0275	US	Pending	DAVID R. HALL	assigned, not recorded	Retention System
12135714	85.0276	US	Pending	DAVID R. HALL	assigned, not recorded	Retention System
12146665	85.0277	US	Pending	DAVID R. HALL	assigned, not recorded	High-impact Resistant Tool
US08/69231	85.0279	PCT	expired	DAVID R. HALL		Wear Resistant Tool
7533738	85.0280	US	Granted	DAVID R. HALL		Insert in a downhole drill bit
12169345	85.0281	US	Pending	DAVID R. HALL		Retention for an Insert
12177556	85.0282	US	Pending	None	Inventors still need to assign	Degradation assembly shield
12177599	85.0283	US	Pending	None	Inventors still need to assign	Shield of a Degradation Assembly
12177637	85.0284	US	Pending	None	Inventors still need to assign	Degradation Assembly Shield
7628233	85.0285	US	Granted	DAVID R. HALL	Scott Dahlgren still needs to assign	Carbide Bolster
12200786	85.0286	US	Pending	DAVID R. HALL	-	Braze Thickness Control
12200810	85.0287	US	Pending	DAVID R. HALL		Braze Thickness Control
12262372	85.0294	US	Pending	NOVADRILL, INC.	assigned, not recorded	Downhole Turbine
12262398	85.0295	US	Pending	NOVADRILL, INC.	assigned, not recorded	Downhole Turbine
12341771	85.0296	US	Pending	NOVADRILL, INC.	assigned, not recorded	Resistivity Reference Receiver
12339388	85.0297	US	Pending	NOVADRILL, INC.	assigned, not recorded	Downhole Nuclear Tool
61/185,135	85.0298	US	Pending	None	Provisional	Downhole Resistivity Receiver with Canceling Element
12339758	85.0299	US	Pending	NOVADRILL, INC.	assigned, not recorded	Segmented Tubular Body
12339799	85.0300	US	Pending	NOVADRILL, INC.	assigned, not recorded	Downhole Cover
12341817	85.0301	US	Pending	NOVADRILL, INC.	assigned, not recorded	Resistivity Reference Spacing
12341843	85.0302	US	Pending	NOVADRILL, INC.	assigned, not recorded	Independently Excitable Resistivity Units
12341872	85.0303	US	Pending	NOVADRILL, INC.	assigned, not recorded	Induction Resistivity Cover

•

.

Schedule A to Long Form Novatek IP Assignment A-11

12358446	85.0305	US	Pending	NOVADRILL, INC.	assigned, not recorded	Downhole Battery Assembly
12362586	85.0306	US	Pending	NOVADRILL, INC.	assigned, not recorded	Changing Communication Priorities for Downhole LWD/MWD Applications
12362661	85.0307	US	Pending	NOVADRILL, INC.	assigned, not recorded	Lead the Bit Rotary Steerable Tool
12/557,679	85.0307-1	US	Pending	NOVADRILL, INC.		Lead the Bit Rotary Steerable Tool
12366706	85.0308	US	Pending	david R. Hall	assigned, not recorded	Thermally Stable Pointed Diamond with Increased Impact Resistance
12372302	85.0309	US	Pending	DAVID R. HALL	No PAIR entry	Chamfered Pointed Enhanced Diamond Insert
12405480	85.0310	US	Pending	NOVADRILL, INC.	No PAIR entry	Displaceable Plug in a Tool String Filter
12390353	85.0311	US	Pending	DAVID R. HALL	assigned, not recorded	Inductive Power Coupler
12391358	85.0313	US	Pending	NOVADRILL, INC.	assigned, not recorded	Downhole Turbine Actuator
12391376	85.0314	US	Pending	NOVADRILL, INC.	assigned, not recorded	Downhole Turbine Actuator
12393796	85.0315	US	Pending	Novadrill, INC.		Intelligent Electrical Power Distribution System
12405880	85.0316	US	Pending	Novadrill, Inc.		Downhole Removable Cage with Circumferentially Disposed Instruments
12415188	85.0317	US	Pending	Novadrill, Inc.		Downhole Percussive Tool with Alternating Pressure Differentials
12415315	85.0318	US	Pending	NOVADRILL, INC.		Downhole Percussive Tool with Alternating Pressure Differentials
61/164,770	85.0319	US	Pending	none	provisional	TSP Segments Integrated into a Cutting Element
12/424,815	85.0321	US	Pending	david R. Hall	assigned, not recorded	Seal with Rigid Element for Degradation Assembly
12424853	85.0322	US	Pending	NOVADRILL, INC.	No PAIR entry	Resettable Actuator for Downhole Tool
12424901	85.0323	US	Pending	NOVADRILL, INC.	No PAIR entry	Resettable Actuator for Downhole Tool
12428531	85.0324	US	Pending	DAVID R. HALL		Manually Rotatable Tool

A-12

12428541	85.0325	US	Pending	DAVID R. HALL		Manually Rotatable
12432109	85.0326	US	Pending	NOVADRILL, INC.	No PAIR entry	Drill Bit Cutter Pocket Restitution
12473416	85.0327	US	Pending	NOVADRILL, INC.		Downhole Acoustic Receiver with Canceling Element
12473444	85.0328	US	Pending	NOVADRILL, INC.		Flow Guide Actuation
12473473	85.0329	US	Pending	NOVADRILL, INC.	,	Flow Guide Actuation
12491149	85.0330	US	Pending	NOVADRILL, INC.	Multiple inventors	Lead the Bit Rotary Steerable System
12/491,848	85.0331	US	Pending	DAVID R. HALL		Resilient Pick Shank
12491897	85.0332	US	Pending	DAVID R. HALL		Resilient Pick Shank
12492804	85.0333	US	Pending	DAVID R. HALL	No PAIR entry	Bonded Assembly having Low Residual Stress
12493013	85.0334	US	Pending	DAVID R. HALL		Dense Diamond Body
12494802	85.0335	US	Pending	DAVID R. HALL	No PAIR entry	Downhole Lubrication System
12494888	85.0336	US	Pending	DAVID R. HALL	assigned, not recorded	Downhole Lubrication System
12511185	85.0337	US	Pending	Novadrill, Inc.	No PAIR entry	Downhole Tool Actuation having a Seat with a Fluid By-
12511209	85.0338	US	Pending	Novadrill, Inc.	No PAIR entry	Pass Downhole Tool Actuation having a Seat with a Fluid By-
12/550,501	85.0340	US	Pending	Novadrill, Inc.		Pass Circumferentially Spaced Magnetic Field Generating Devices
12/575,237	85.0341	US	Pending	NOVADRILL, INC.	assigned, not recorded	Low Stress Threadform with a Non-Conic Section Curve
12/578,916	85.0342	US	Pending	NOVADRILL, INC.		A Fixed Bladed Drill Bit Force Balanced by Blade Spacing
12/578,984	85.0343	US	Pending			A Fixed Bladed Drill Bit Force Balanced by Blade Spacing
N/A	85.0344	N/A	Never filed '	N/A	Inventors are currently reviewing	Directional Resistivity Fields
12/608,744	85.0345	US	Pending	NOVADRILL, INC.	-	A Ratchet Mechanism in a Fluid Actuated Device
12/614,668	85.0346	US	Pending	NOVADRILL, INC.		Sensor for Determining a Position of a Jack Element

12/614,635	85.0347	US	Pending	Novadrill, Inc.		Magnetic Field Deflector in an Induction Resistivity
12/614,614	85.0349	US	Pending	DAVID R. HALL		Tool Test Fixture that Positions a Cutting Element at a Positive
12/619,305	85.0350	US	Pending	DAVID R. HALL	assigned, not recorded	Rake Angle A Cutting Element Attached to a Downhole Fixed Bladed Bit at a
12/616,200	85.0351	US	Pending	Novadrill, Inc.		Positive Rake Downhole Tool String Component that is Protected from Drilling Stresses
12/616,377	85.0352	US	Pending	DAVID R. HALL	assigned, not recorded	A Fixed Bladed Bit that Shifts Weight between an Indentor and Cutting Elements
12/619,423	85.0353	US	Pending	DAVID R. HALL		Method for Drilling with a Fixed Bladed Bit
12/619,466	85.0354	US	Pending	DAVID R. HALL		Cutting Element with Low Metal Concentration
12/624,207	85.0355	US	Pending	NOVADRILL, INC.		Turbine Driven Hammer that Oscillates at a
7506701	85.0047-1	US	Granted	NOVADRILL, INC.	Inventor assignments to Hall not yet recorded	Constant Frequency Drill bit assembly for directional drilling
12536695	85.0250-1	US	Pending	DAVID R. HALL	No PAIR entry	Degradation Assembly

RECORDED: 08/04/2010