

## PATENT ASSIGNMENT

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| SUBMISSION TYPE:                                                                                                                                                                                                                                                                                                                                                                                               | NEW ASSIGNMENT             |
| NATURE OF CONVEYANCE:                                                                                                                                                                                                                                                                                                                                                                                          | ASSIGNMENT                 |
| CONVEYING PARTY DATA                                                                                                                                                                                                                                                                                                                                                                                           |                            |
| Name                                                                                                                                                                                                                                                                                                                                                                                                           | Execution Date             |
| David R. Hall                                                                                                                                                                                                                                                                                                                                                                                                  | 08/06/2008                 |
| RECEIVING PARTY DATA                                                                                                                                                                                                                                                                                                                                                                                           |                            |
| Name:                                                                                                                                                                                                                                                                                                                                                                                                          | Novadrill, Inc.            |
| Street Address:                                                                                                                                                                                                                                                                                                                                                                                                | 2185 South Larsen Parkway  |
| City:                                                                                                                                                                                                                                                                                                                                                                                                          | Provo                      |
| State/Country:                                                                                                                                                                                                                                                                                                                                                                                                 | UTAH                       |
| Postal Code:                                                                                                                                                                                                                                                                                                                                                                                                   | 84606                      |
| PROPERTY NUMBERS Total: 1                                                                                                                                                                                                                                                                                                                                                                                      |                            |
| Property Type                                                                                                                                                                                                                                                                                                                                                                                                  | Number                     |
| Application Number:                                                                                                                                                                                                                                                                                                                                                                                            | 13170374                   |
| CORRESPONDENCE DATA                                                                                                                                                                                                                                                                                                                                                                                            |                            |
| Fax Number:                                                                                                                                                                                                                                                                                                                                                                                                    | (801)355-7901              |
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| <i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>                                                                                                                                                                                                                                                                                          |                            |
| Correspondent Name:                                                                                                                                                                                                                                                                                                                                                                                            | Craig Buschmann            |
| Address Line 1:                                                                                                                                                                                                                                                                                                                                                                                                | 222 South Main Street      |
| Address Line 2:                                                                                                                                                                                                                                                                                                                                                                                                | Suite 1930                 |
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| ATTORNEY DOCKET NUMBER:                                                                                                                                                                                                                                                                                                                                                                                        | 55724.10402                |
| NAME OF SUBMITTER:                                                                                                                                                                                                                                                                                                                                                                                             | Craig Buschmann            |
| Total Attachments: 7<br>source=20120402_Assign_Hall_to_NovaDrill#page1.tif<br>source=20120402_Assign_Hall_to_NovaDrill#page2.tif<br>source=20120402_Assign_Hall_to_NovaDrill#page3.tif<br>source=20120402_Assign_Hall_to_NovaDrill#page4.tif<br>source=20120402_Assign_Hall_to_NovaDrill#page5.tif<br>source=20120402_Assign_Hall_to_NovaDrill#page6.tif<br>source=20120402_Assign_Hall_to_NovaDrill#page7.tif |                            |

CH \$40.00 13170374

## PATENT ASSIGNMENT

This PATENT ASSIGNMENT (the "Assignment") is effective August 6, 2008, by and between David R. Hall, an individual residing in the State of Utah (the "Assignor"), and NovaDrill, Inc., a limited liability company existing under the laws of the State of Delaware (the "Assignee"); collectively, the Assignor and the Assignee are referred to as the "Parties."

### WITNESSETH:

The Assignor is the owner of the entire right, title and interest in and to certain patents and patent applications listed on Exhibit A annexed hereto and may have rights to the patents in Exhibit B (collectively referred to as the "Patents"), and the Assignee is desirous of acquiring all right, title and interest in and to the Patents and related intellectual property.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Assignor hereby sells, assigns and transfers to the Assignee the entire right, title and interest in and to the Patents in Exhibit A and all of his rights to the Patents in Exhibit B, if any, throughout the world and the inventions and designs covered thereby, including the right to claim priority and the right to any continuation, division, continuation-in-part or substitute application thereof and the right to any renewal, reissue, restoration, extension or reexamination of any patent thereof, together with all claims by the Assignor for damages and other recoveries by reason of past infringements of the Patents with the right to sue for, and collect the same for its own use and benefit, and for the use and benefit of its successors, assigns and other legal representatives, the same to be held and enjoyed by the Assignee for its own use and enjoyment, and for the use and enjoyment of its successors, assigns and legal representatives, to the end of the terms for which the Patents have been or will be granted, as fully and entirely as the same would have been held and enjoyed by the Assignor if this Assignment had not been made.

The Assignor agrees that when requested by the Assignee it will, at the sole cost of the Assignee, execute all documents necessary or desirable to properly vest full right, title and interest in and to all Patents throughout the world in the name of the Assignee or which, in the sole judgment of the Assignee, may be necessary to obtain, maintain, issue or enforce said Patents.

**[Remainder of this page intentionally left blank]**

IN WITNESS WHEREOF, Assignor has caused this Patent Assignment to be executed and delivered, and Assignee accepts this Assignment executed and delivered, as of the date first above written.

**ASSIGNOR:**

  
\_\_\_\_\_  
David R. Hall

**ASSIGNEE:**

NOVADRILL, INC.

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

IN WITNESS WHEREOF, Assignor has caused this Patent Assignment to be executed and delivered, and Assignee accepts this Assignment executed and delivered, as of the date first above written.

**ASSIGNOR:**

\_\_\_\_\_  
David R. Hall

**ASSIGNEE:**

NOVADRILL, INC.

By: Robert H. Schwartz  
Name: Robert H. Schwartz  
Title: Vice President

## **EXHIBIT A**

### **PATENTS**

| <b>Patents</b> |                                                                 |
|----------------|-----------------------------------------------------------------|
| 7,105,249      | Pressure-Compressed Downhole Battery                            |
| 7,147,965      | Pressure-Balanced Battery for Downhole Tools                    |
| 7,190,084      | Method and Apparatus For Generating Electrical Energy Downhole  |
| 7,198,119      | Hydraulic Drill Bit Assembly                                    |
| 7,225,886      | Drill Bit Assembly with an Indenting Member                     |
| 7,252,174      | Downhole Seismic-Sonic Receiver                                 |
| 7,258,179      | Rotary Bit with an Indenting Member                             |
| 7,265,649      | Flexible Inductive Resistivity Device                           |
| 7,270,196      | Drill Bit Assembly (JackBit)                                    |
| 7,277,026      | Downhole Component with Multiple Transmission Elements          |
| 7,301,429      | Multiple Frequency Inductive Resistivity Device                 |
| 7,308,795      | Method and Apparatus for Cooling Electrical Components Downhole |
| 7,328,755      | Hydraulic Drill Bit Assembly                                    |
| 7,337,858      | A Drill Bit Assembly Adapted to Provide Power Downhole          |
| 7,360,610      | Drill Bit Assembly for Directional Drilling                     |
| 7,377,315      | Complaint Covering of a Downhole Component                      |
| 7,382,273      | Wired Tool String Component                                     |

| <b>Pending PCT Applications</b> |                                                        |
|---------------------------------|--------------------------------------------------------|
| PCT/US06/43107                  | Drill Bit Assembly with an Indenting Member            |
| PCT/US06/43125                  | Drill Bit Assembly                                     |
| PCT/US07/64539                  | A Drill Bit Assembly Adapted to Provide Power Downhole |
| PCT/US07/64544                  | Drill Bit Assembly with a Logging Device               |
| PCT/US07/86323                  | System for steering a drill string                     |
| PCT/US07/86449                  | Apparatus and Method for Vibrating a Drill Bit         |
| PCT/US08/57677                  | Downhole Tool String Component                         |

| <b>Pending U.S. Applications</b> |                                                                               |
|----------------------------------|-------------------------------------------------------------------------------|
| 10/453,290                       | Pressure-Balanced Battery for Downhole Tools                                  |
| 10/633,819                       | Pressure-Compressed Downhole Battery                                          |
| 10/633,889                       | Pressurized Battery For High-Temperature, High-Pressure Environment           |
| 10/931,864                       | High-Speed, Downhole, Seismic Measurement System                              |
| 10/965,563                       | Apparatus and Method for Seismic Measurement-While-Drilling                   |
| 10/982,478                       | Method for Distributing Electrical Power to Downhole Tools                    |
| 10/982,612                       | Method and Apparatus For Generating Electrical Energy Downhole                |
| 11/008,467                       | Method and Apparatus for Cooling Electrical Components Downhole               |
| 11/162,503                       | Apparatus, System and Method for Flexibly Coupling Sensors to a Downhole Tool |
| 11/277,394                       | Drill Bit Assembly with a Logging Device                                      |
| 11/278,935                       | Drill Bit Assembly with a Probe                                               |
| 11/307,196                       | Thin-film Battery                                                             |

|            |                                                                               |
|------------|-------------------------------------------------------------------------------|
| 11/382,324 | High-Speed, Downhole, Cross Well Measurement System                           |
| 11/421,387 | Wired Tool String Component                                                   |
| 11/428,993 | System and Method for Sharing Information between Downhole Drill Strings.     |
| 11/467,095 | Downhole Electric Power Generator                                             |
| 11/535,036 | Jack Element for a Drill Bit                                                  |
| 11/549,513 | Percussive Drill Bit                                                          |
| 11/553,651 | A Method of Assembling a Drill Bit with a Jack Element                        |
| 11/555,334 | Cam Assembly in a Downhole Component                                          |
| 11/611,310 | System for steering a drill string                                            |
| 11/619,418 | Apparatus and Method for Vibrating a Drill Bit                                |
| 11/668,341 | A Jack Element Adapted to Rotate Independent of a Drill Bit                   |
| 11/673,872 | Jack Element in Communication with an Electric Motor and/or Generator         |
| 11/673,936 | Jet Arrangement for a Downhole Drill Bit                                      |
| 11/679,529 | Open Cavity in a Pocket of a Downhole Tool String Component                   |
| 11/680,997 | Bi-center Drill Bit                                                           |
| 11/682,758 | Seismic Tool                                                                  |
| 11/686,638 | Rotary Valve for a Jack Hammer                                                |
| 11/688,952 | Pocket for a Downhole Tool String Component                                   |
| 11/693,838 | Drilling at a Resonant Frequency                                              |
| 11/737,034 | Rotary Valve for Steering a Drill String                                      |
| 11/739,344 | System and Method for Providing Electrical Power Downhole                     |
| 11/750,700 | Jack Element with a Stop-off                                                  |
| 11/757,928 | A Clutch for a Jack Element                                                   |
| 11/759,992 | A Drill Bit with an Electrically Isolated Transmitter                         |
| 11/761,095 | Drill Bit Transducer Device                                                   |
| 11/766,707 | Downhole Pressure Pulse Activated by a Jack Element                           |
| 11/772,907 | Location Device with a Gravity Measuring Device                               |
| 11/774,645 | Retaining Element for a Jack Element                                          |
| 11/774,647 | Retaining Element for a Jack Element                                          |
| 11/776,447 | Externally Guided and Directed Field Induction Resistivity Tool               |
| 11/776,484 | Externally Guided and Directed Halbach Array Field Induction Resistivity Tool |
| 11/828,901 | Stabilizer Assembly                                                           |
| 11/837,321 | Downhole Steering                                                             |
| 11/841,101 | Segmented Sleeve on a Downhole Tool String Component                          |
| 11/851,094 | Downhole Jack Assembly Sensor                                                 |
| 11/860,761 | Downhole Coils                                                                |
| 11/860,795 | Downhole Coils                                                                |
| 11/861,412 | Downhole Component with Multiple Transmission Elements                        |
| 11/871,480 | Drill Bit Nozzle                                                              |
| 11/871,644 | Indenting Member for a Drill Bit                                              |
| 11/940,091 | Downhole Turbine                                                              |
| 11/940,117 | Downhole Turbine                                                              |
| 11/947,949 | Tool String Threads                                                           |
| 11/956,623 | Downhole Drive Shaft Connection                                               |
| 12/019,782 | Fluid-activated Hammer Bit                                                    |
| 12/021,565 | Downhole Power Generation Assembly                                            |
| 12/021,743 | Downhole Electrical Connection                                                |

|            |                                                                 |
|------------|-----------------------------------------------------------------|
| 12/037,682 | Downhole Hammer Assembly                                        |
| 12/037,733 | Downhole Hammer Assembly                                        |
| 12/037,764 | Downhole Hammer Assembly                                        |
| 12/037,803 | Downhole Sensor Assembly                                        |
| 12/039,608 | Downhole Valve Mechanism                                        |
| 12/039,635 | Downhole Mechanism                                              |
| 12/041,754 | Externally Guided and Directed Field Induction Resistivity Tool |
| 12/053,334 | Drill Bit Assembly for Directional Drilling                     |
| 12/109,211 | Downhole Sampling Rate                                          |
| 12/134,442 | Constricting Flow Diverter                                      |
| 12/135,556 | Instrumentation Package in a Downhole Tool String Component     |
| 12/141,996 | Downhole Component with An Electrical Device in a Blind-hole    |
| 29/304,177 | Drill Bit                                                       |
| 60/914,619 | Resistivity Tool                                                |

**EXHIBIT B**

**PATENTS**

| Patents   |                                                                                                                         |
|-----------|-------------------------------------------------------------------------------------------------------------------------|
| 6,253,864 | Percussive Shearing Drill Bit                                                                                           |
| 6,367,565 | Means for Detecting Subterranean Formations and Monitoring the Operation of a Down-hole, Fluid Driven Percussive Piston |