PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

 SUBMISSION TYPE:
 NEW ASSIGNMENT

 NATURE OF CONVEYANCE:
 ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Institut Français Du Petrole	09/20/2004

RECEIVING PARTY DATA

Name:	Halliburton Energy Services, Inc.	
Street Address:	10200 Bellaire Boulevard	
City:	Houston	
State/Country:	TEXAS	
Postal Code:	77072	

PROPERTY NUMBERS Total: 1

Property Type	Number
Patent Number:	5458209

CORRESPONDENCE DATA

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NAME OF SUBMITTER: Paul I. Herman

Total Attachments: 7

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PATENT REEL: 015312 FRAME: 0626

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ASSIGNMENT

WHEREAS, **INSTITUT FRANÇAIS DU PETROLE**, is a research organization incorporated under the laws of France and having its Head Office at Canada 1&4, Avenue du Bois Préau, 92852 RUEIL-MALMAISON Cedex;

WHEREAS, INSTITUT FRANÇAIS DU PETROLE is an owner of an undivided interest in U.S. Patent No. 5,458,209, issued on October 17, 1995, entitled DEVICE, SYSTEM AND METHOD FOR DRILLING AND COMPLETING A LATERAL WELL, and an owner of an undivided interest in the corresponding patent applications and patents filed and granted in other countries outside the United States (collectively the "Patent Rights") and the inventions described therein ("Said Inventions"),;

WHEREAS, the Patent Rights include the following patents and patent applications:

1 AUSTRALIA

DEVICE, SYSTEM AND METHOD FOR DRILLING AND COMPLETING A LATERAL WELL

Australian Patent No. AU663951 B2. Date of grant: 1996-02-13
Publication Date: 1993-12-16. Publication Number: AU4016893
Filling Date: 1993-06-10. Application Number: AU4016893
Priority numbers: French application number FR19920007142, filed June 12, 1992, published December 17, 1993, issuing as French Patent No. FR2692316 and French application number FR19930000154, filed January 8, 1993, issuing as French Patent

No. FR2692315.

2. CANADA

DEVICE, SYSTEM AND METHOD FOR DRILLING AND COMPLETING A LATERAL WELL

Canadian Patent Publication Date: 1993-12-13. Publication Number: CA2098272 Filing Date: 1993-06-11. Application Number: CA2098272 Priority numbers: French application number FR19920007142, filed June 12, 1992, published December 17, 1993, issuing as French Patent No. FR2692316 and French application number FR19930000154, filed January 8, 1993, issuing as French Patent No. FR2692315.

CHINA

DEVICE, SYSTEM AND METHOD FOR DRILLING AND COMPLETING A LATERAL WELL

China No. CNCN0037451 B. Date of grant: 1997-06-28

Publication Date: 1994-06-15. Publication Number: CN1087965 Filing Date: 1993-06-10. Application Number: CN19931089298

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Priority numbers: French application number FR19920007142, filed June 12, 1992, published December 17, 1993, issuing as French Patent No. FR2692316 and French application number FR19930000154, filed January 8, 1993, issuing as French Patent No. FR2692315

4. CHINA

RADIAL DRILLING AND WELL-BUILDING METHOD FROM THE MAIN WELL

China No. CN0060942 B. Date of grant: 2000-09-30

Publication Date: 1996-11-20. Publication Number: CN1136127 Filing Date: 1993-06-10. Application Number: CN19961019417

Priority numbers: French application number FR19920007142, filed June 12, 1992, published December 17, 1993, issuing as French Patent No. FR2692316 and French application number FR19930000154, filed January 8, 1993, issuing as French Patent No. FR2692315.

5. CHINA

APPARATUS AND METHOD FOR COMBINING TWO SETS OF DRILLING TOOLS

China No. CN0060943 B. Date of grant: 2000-09-30 (div1)

Publication Date: 1996-11-20. Publication Number: CN1136128

Filing Date: 1993-06-10. Application Number: CN19961019425

Priority numbers: French application number FR19920007142, filed June 12, 1992, published December 17, 1993, issuing as French Patent No. FR2692316 and French application number FR19930000154, filed January 8, 1993, issuing as French Patent No. FR2692315.

6. DENMARK

DEVICE, SYSTEM AND METHOD FOR DRILLING AND COMPLETING A LATERAL WELL

Denmark Patent No. DK574326T T3. Date of grant: 1997-10-22

Publication Date: 1993-12-15. Publication Number: DK574326

Filing Date: 1993-06-11. Application Number: 934015017

Priority numbers: French application number FR19920007142, filed June 12, 1992, published December 17, 1993, issuing as French Patent No. FR2692316 and French application number FR19930000154, filed January 8, 1993, issuing as French Patent No. FR2692315.

7. EUROPE

APPARATUS, SYSTEM AND METHOD FOR WELL DRILLING AND EQUIPMENT FOR A LATERAL HOLE

European Patent Convention No. EP0574326 B1. Date of grant: 1997-10-22

Publication Date: 1993-12-15. Publication Number: EP0574326

Filing Date: 1993-06-11. Application Number: 934015017

Priority numbers: French application number FR19920007142, filed June 12, 1992, published December 17, 1993, issuing as French Patent No. FR2692316 and French application number FR19930000154, filed January 8, 1993, issuing as French Patent No. FR2692315.

8. FRANCE

SYSTEME ET METHODE DE FORAGE ET D'EQUIPEMENT D'UN PUITS LATERAL, APPLICATION A L'EXPLOITATION DE GISEMENT PETROLIER.

France Patent No. FR2692315. Date of grant: 1994-09-02

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Publication Date: 1993-12-17. Publication Number: FR2692315

Filing Date: 1993-01-08. Application Number: 9300154 (Priority Application No. FR9207142 Filed June12, 1992)

9. FRANCE

SYSTEME ET METHODE DE FORAGE ET D'EQUIPEMENT DE FORAGE LATERAL, APPLICATION A L'EXPLOITATION DE GISEMENT PETROLIER.

France Patent No. FR2692316. Date of grant: 1995-08-18 Publication Date: 1993-12-17. Publication Number: FR2692316 Filing Date: 1992-06-12. Application Number: FR9207142

10. NORWAY

DEVICE, SYSTEM AND METHOD FOR DRILLING AND COMPLETING A LATERAL WELL

Norway Patent No. NO306266B B1. Date of grant: 1999-10-11 Publication Date: 1993-12-13. Publication number: NO199302123 Filing Date: 1993-06-10. Application number: NO199302123 Priority numbers: French application number FR19920007142, filed June 12, 1992, published December 17, 1993, issuing as French Patent No. FR2692316 and French application number FR19930000154, filed January 8, 1993, issuing as French Patent No. FR2692315.

11. RUSSIA

METHOD AND SYSTEM FOR DRILLING AND COMPLETION OF SIDE HOLES, AND CONNECTING DEVICE

Russian Patent No. RU2103472 C1

Date of grant: 1998-01-27

Publication Date: 1996-05-20. Publication number: RU199303886603 Filing Date: 1993-06-11. Application number: RU199303886603

Priority numbers: French application number FR19920007142, filed June 12, 1992, published December 17, 1993, issuing as French Patent No. FR2692316 and French application number FR19930000154, filed January 8, 1993, issuing as French Patent No. FR2692315.

12. UNITED STATES OF AMERICA

DEVICE, SYSTEM AND METHOD FOR DRILLING AND COMPLETING A LATERAL WELL

United States Patent No. US 5,458,209 A

Date of grant: 1995-10-17

Filing Date: 1993-06-11. Application number: 074475

Priority numbers: French application number FR19920007142, filed June 12, 1992, published December 17, 1993, issuing as French Patent No. FR2692316 and French application number FR19930000154, filed January 8, 1993, issuing as French Patent No. FR2692315.

13. MALAYSIA

DEVICE, SYSTEM AND METHOD FOR DRILLING AND COMPLETING A LATERAL WELL

Malaysia Patent Application No. PI 9301135

Filing Date: June 10, 1993

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Patent number: MY0110459. Date of Grant: 1998-05-30

Priority numbers: French application number FR19920007142, filed June 12, 1992. published December 17, 1993, issuing as French Patent No. FR2692316 and French application number FR19930000154, filed January 8, 1993, issuing as French Patent No. FR2692315.

14. **FRANCE**

APPARATUS, SYSTEM AND METHOD FOR WELL DRILLING AND EQUIPMENT FOR A LATERAL HOLE

French Patent 0574326 B1. Date of grant: 1997-10-22 Publication Date: 1993-12-15. Publication Number: 0574326

Filing Date: 1993-06-11. Application Number: 93401501.7

Priority numbers: French application number FR19920007142, filed June 12, 1992. published December 17, 1993, issuing as French Patent No. FR2692316 and French application number FR19930000154, filed January 8, 1993, issuing as French Patent No. FR2692315.

15. **UNITED KINGDOM**

APPARATUS, SYSTEM AND METHOD FOR WELL DRILLING AND EQUIPMENT FOR A LATERAL HOLE

UK Patent 0574326 B1. Date of grant: 1997-10-22

Publication Date: 1993-12-15. Publication Number: 0574326 Filing Date: 1993-06-11. Application Number: 93401501,7

Priority numbers: French application number FR19920007142, filed June 12, 1992, published December 17, 1993, issuing as French Patent No. FR2692316 and French application number FR19930000154, filed January 8, 1993, issuing as French Patent No. FR2692315.

16. **ITALIA**

APPARATUS, SYSTEM AND METHOD FOR WELL DRILLING AND EQUIPMENT FOR A LATERAL HOLE

Italian Patent 0574326 B1. Date of grant: 1997-10-22

Publication Date: 1993-12-15. Publication Number: 0574326

Filing Date: 1993-06-11. Application Number: 9819433/BE

Priority numbers: French application number FR19920007142, filed June 12, 1992. published December 17, 1993, issuing as French Patent No. FR2692316 and French application number FR19930000154, filed January 8, 1993, issuing as French Patent No. FR2692315.

17. THE NETHERLANDS

APPARATUS, SYSTEM AND METHOD FOR WELL DRILLING AND EQUIPMENT FOR A LATERAL HOLE

Dutch Patent 0574326 B1. Date of grant: 1997-10-22

Publication Date: 1993-12-15. Publication Number: 0.574.326

Filing Date: 1993-06-11. Application Number: 93.401.501.7

Priority numbers: French application number FR19920007142, filed June 12, 1992. published December 17, 1993, issuing as French Patent No. FR2692316 and French application number FR19930000154, filed January 8, 1993, issuing as French Patent No. FR2692315.

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18. VENEZUELA

DEVICE, SYSTEM AND METHOD FOR DRILLING AND COMPLETING A LATERAL WELL

Venezuelan Patent. Date of grant: 1996-02-09

Filing Date: 1993-06-11. Application Number: 9300852

Priority numbers: French application number FR19920007142, filed June 12, 1992, published December 17, 1993, issuing as French Patent No. FR2692316 and French application number FR19930000154, filed January 8, 1993, issuing as French Patent No. FR2692315.

WHEREAS, Halliburton Energy Services, Inc, a Delaware corporation, having a place of business at Houston, Harris County, Texas (hereinafter referred to as "HALLIBURTON") is desirous of acquiring from INSTITUT FRANÇAIS DU PETROLE its entire right, title, and interest in and to U.S. Patent No. 5,458,209 and the corresponding patent applications and patents filed and granted in other countries outside the United States (all Patent Rights) and any inventions described therein:

NOW, THEREFORE, in consideration of one dollar the receipt of which is hereby acknowledged, and other good and valuable consideration, INSTITUT FRANÇAIS DU PETROLE by these presents does sell, assign, and transfer unto HALLIBURTON, its successors and assigns (hereinafter collectively referred to as "ASSIGNEE"), the entire right, title, and interest of INSTITUT FRANÇAIS DU PETROLE throughout the world in and to:

- Any invention described in U.S. Patent No. 5,458,209, issued on October 17, 1995, entitled DEVICE, SYSTEM AND METHOD FOR DRILLING AND COMPLETING A LATERAL WELL and any invention described in the corresponding patent applications and patents filed and granted in other countries outside the United States as listed above (Patent Rights);
- United States of America Patent No. 5,458,209, entitled DEVICE, SYSTEM AND METHOD FOR DRILLING AND COMPLETING A LATERAL WELL, and all corresponding patent applications and patents filed and granted in other countries outside the United States (all Patent Rights) as listed above;
- All applications for patent or like protection on Said Inventions that have now been or may in the future be made by INSTITUT FRANÇAIS DU PETROLE or its legal representatives, whether in the United States of America or any other place anywhere in the world;
- All patents and like protection that have now been or may in the future be granted on Said Inventions to INSTITUT FRANÇAIS DU PETROLE or its legal

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representatives, whether in the United States of America or in any other country or place anywhere in the world;

- 5. All substitutions for and divisions, continuations, continuations-in-part, renewals, reissues, extensions, and the like of any of the Patent Rights and like grants, including without limitations, those obtained or permissible under past, present and future law and statues, to the full end of the term for which letters patent may be granted as fully and entirely as the same would have been held by INSTITUT FRANÇAIS DU PETROLE had this assignment and sale not been made;
- 6. All rights of action on account of past, present and future unauthorized use of Said Inventions for infringement of any of said Patent Rights and like protection;
- The right to ASSIGNEE to file in its name applications for patents and like protection for Said Inventions in any country or countries foreign to the United States; and
- 8. All international rights of priority associated with Said Inventions, said Patent Rights, and like protection.

INSTITUT FRANÇAIS DU PETROLE, its successors, legal representatives, and assigns will, at the expense of ASSIGNEE, its successors and assigns, execute all papers and perform such other acts as may be reasonably necessary to give ASSIGNEE, its successors and assigns, the full benefit of this Assignment.

INSTITUT FRANÇAIS DU PETROLE, its successors, legal representatives, and assigns will, at the expense of ASSIGNEE, its successors and assigns, sign all papers, make all rightful oaths and do all requisite acts for the filing of any disclaimer or for the filing and assignment of any divisional, continuing or reissue application or applications for patent based on the Said Inventions disclosed in U.S. Patent No. 5,458,209, entitled DEVICE, SYSTEM AND METHOD FOR DRILLING AND COMPLETING A LATERAL WELL, and all corresponding patent applications and patents filed and granted in other countries outside the United States as listed in the table above, as well for any other U.S. or foreign application for patent which is based on Said Inventions.

INSTITUT FRANÇAIS DU PETROLE does further agree to communicate to HALLIBURTON, its successors, assigns, and other legal representatives such facts relating to the Said Inventions disclosed in U.S. Patent No. 5,458,209 and all corresponding patent

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applications and patents filed and granted in other countries outside the United States as listed in the table above as may be known to INSTITUT FRANÇAIS DU PETROLE, and to testify as to such facts in any interference, reissue, or other litigation relating to such patents.

EXECUTED by the undersigned on the date indicated:

INSTITUT FRANÇAIS DU PETROLE

Date: 09/20/2,004

Print Name: Gérard FRIES

Title: Executive Vice President

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PATENT REEL: 015312 FRAME: 0634

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RECORDED: 10/29/2004