METHODS FOR USING A FORMATION TESTER

Abstract: A method of testing a downhole formation using a formation tester on a drill string. The formation tester is disposed downhole on a drill string and a formation test is performed by forming a seal between a formation probe assembly and the formation. A drawdown piston then creates a volume within a cylinder to draw formation fluid into the volume through the probe assembly. The pressure of the fluid within the cylinder is monitored. The formation test procedure may then be adjusted. The test procedure may be adjusted to account for the bubble point pressure of the fluid being monitored. The pressure may be monitored to verify a proper seal is formed or is being maintained. The test procedure may also be performed by maintaining a substantially constant drawdown rate using a hydraulic threshold or a variable restrictor.
(88) Date of publication of the international search report:
11 January 2007

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.
### INTERNATIONAL SEARCH REPORT

**A. CLASSIFICATION OF SUBJECT MATTER**

**IPC:** E21B 49/08 (2006.01)

**USPC:** 73/152.27

According to International Patent Classification (IPC) or to both national classification and IPC

### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S.: 73/152.27, 152.02, 152.51, 152.22, 152.38, 152.46, 152.54; 166/250.1, 256

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

### C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
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<tbody>
<tr>
<td>X</td>
<td>US 20040231842 A1 (SHAMMAI et al.) 25 November 2004 (25.11.2004), Page 4, paragraphs 43 &amp; 47; Page 5, paragraphs 53 &amp; 54; Page 9, paragraphs 106 &amp; 108; Page 10, paragraph 109</td>
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<td>Y</td>
<td>US 6,058,773 A (ZIMMERMAN et al.) 09 May 2000 (09.05.2000)</td>
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<td>Y</td>
<td>US 2004/0020649 A1 (FIELDS) 05 February 2004 (05.02.2004), Page 2, paragraph 25; Page 5, paragraph 28</td>
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<td>Y</td>
<td>US 4799,157 A (KUCUK et al.) 17 January 1989 (17.02.1989), column 9, lines 50-68; column 10, lines 1-48</td>
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Date of the actual completion of the international search

17 August 2006 (17.08.2006)

Date of mailing of the international search report

16 Oct 2006

Name and mailing address of the ISA/US

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