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9 August 2012

(54) Title: COMBINATION WHIPSTOCK AND COMPLETION DEFLECTOR

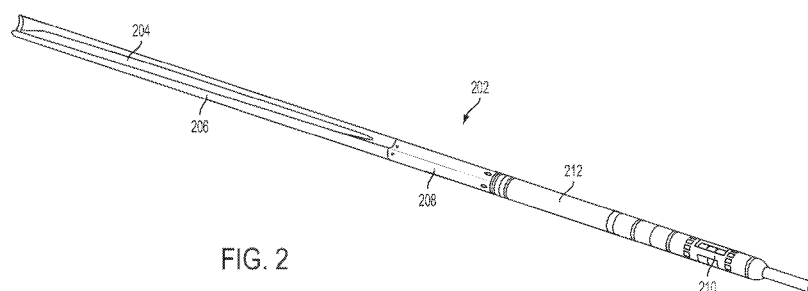


FIG. 2

(57) Abstract: Assemblies that can be disposed in a subterranean bore are described. An assembly can include a surface that can divert a cutting tool for creating a branch wellbore and that can divert a completion component for completing the branch wellbore without requiring the assembly or part of the assembly from being removed from a parent wellbore prior to the completion component being diverted.



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A. CLASSIFICATION OF SUBJECT MATTER***E21B 7/08(2006.01)i, E21B 23/12(2006.01)i***

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)

E21B 7/08; E21B 29/06; E21B 7/04; E21B 23/00

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

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) & Keywords: whipstock, diverter, lateral wellbore and similar terms

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y A	US 2009-0255664 A1 (HART, DANIEL R. et al.) 15 October 2009 See paragraphs 9-15 and figures 1, 2, 4, 6	1-3, 15-18 9 4-8, 10-14, 19-22
Y A	US 6786283 B2 (FREEMAN, TOMMIE A. et al.) 07 September 2004 See column 4, line 23 - column 4, line 42 and figure 1	9 1-8, 10-22
A	US 2008-0296029 A1 (ORTIZ, ALEJANDRO) 04 December 2008 See paragraph 15 and figure 4	1-22
A	US 6915855 B2 (STEELE, DAVID J. et al.) 12 July 2005 See column 9, line 52 - column 9, line 60 and figure 10	1-22



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

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19 JUNE 2012 (19.06.2012)

Name and mailing address of the ISA/KR

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2011/058905**Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)**

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

The only common technical feature between independent claims 1, 11 and 15 is an assembly comprising a surface being capable of diverting a cutting tool for forming a branch wellbore and of diverting at least part of a completion component toward the branch wellbore.

However, this feature lacks novelty in that US 2009/0255664 A1 (Hart, Daniel R. et al.) discloses a whipstock and seal bore diverter combination system which comprises surfaces for diverting a cutting tool and a wellbore completion tool.

Thus there is no technical relationship left over the prior art among the claimed inventions, leaving the claims without a single general inventive concept. Hence there is lack of unity a posteriori (PCT Rules 13.1 and 13.2).

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☒ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2011/058905

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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