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[Continued on next page]

(54) Title: REAMER WITH POLYCRYSTALLINE DIAMOND COMPACT INSERTS

(57) Abstract: Reamers for use in core-sample drilling having PDC inserts and methods for using the reamers with PDC inserts are described. A reamer with PDC inserts may be used to maintain borehole diameters, reduce deviation, and/or stabilize drill strings used in core sample drilling. The PDC inserts may be of different sizes and shapes and may be arranged around the reamer in various ways.

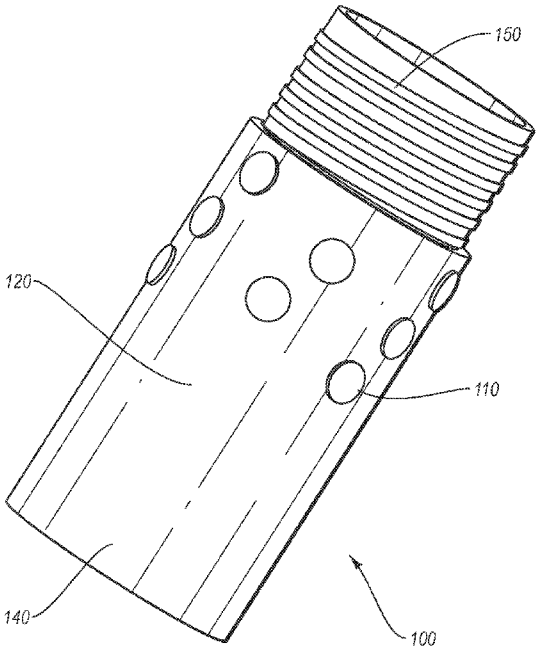


Fig. 1

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A. CLASSIFICATION OF SUBJECT MATTER

E21B 10/26(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 10/26; E21B 10/30; E21B 10/32; E21B 10/36; E21B 17/10; E21B 17/22; E21B 7/28

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)

eKOMPASS(KIPO internal) & Keywords: drill, reamer, polycrystalline diamond, PDC, insert

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 7293617 B2 (BEATON; TIMOTHY P.) 13 November 2007 see column 3, line 53 - column 8, line 26 and figures 1-3.	1-28
A	US 6880650 B2 (HOFFMASTER; CARL M. et al.) 19 April 2005 see column 5, line 6 - column 10, line 21 and figures 2-6.	1-28
A	US 5474143 A1 (MAJKOVIC; DAVOR) 12 December 1995 see column 2, line 57 - column 4, line 22 and figures 2-5.	1-28
A	US 2006-0157285 A1 (CANNON; RANDON S. et al.) 20 July 2006 See paragraphs 35 - 50 and figures 1-16.	1-28

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
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Information on patent family members

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