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(54) Title: EARTH-BORING TOOLS AND COMPONENTS THEREOF INCLUDING BLOCKAGE RESISTANT INTERNAL FLUID PASSAGeways, AND METHODS OF FORMING SUCH TOOLS AND COMPONENTS

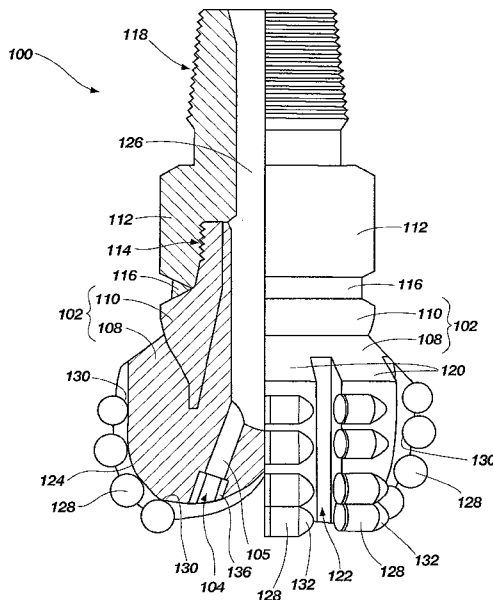


FIG. 1
(PRIOR ART)

(57) Abstract: Earth-boring drill bits include a bit body including a blockage-resistant internal fluid passageway. The blockage-resistant internal fluid passageway includes at least one internal fluid passageway formed in the bit body and a cuttings filtering feature formed in the at least one internal fluid passageway configured to prevent at least some cuttings from flowing through the at least one internal fluid passageway. In one embodiment, the cuttings filtering feature includes at least one lateral member extending transversely across the at least one internal fluid passageway. In another embodiment, the cuttings filtering feature includes forming a central portion of the at least one internal fluid passageway with a width along a lateral axis thereof less than an average width of a fluid path extending through a nozzle disposed at least partially within the at least one internal fluid passageway. Methods of forming the blockage-resistant internal fluid passageway are also disclosed.

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B. FIELDS SEARCHED

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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: 'filter', 'fluid'

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 04378853 A (CHIA et al.) 05 April 1983 See the abstract; figures 1-4; column 2 line 59 - column 5 line 18	1-16
A	EP 0107630 A2 (SANTRADE LTD.) 02 May 1984 See the abstract; figures 1,2,6; page 4 line 28 - page 5 line 26	1-16
A	US 06082473 A (DICKEY) 04 July 2000 See the abstract; figures 1-5; columns 1,2,6,7	1-16
A	US 05775446 A (LOTT) 07 July 1998 See the abstract; figures 2-4; column 3 line 8 - line 49	1-16

 Further documents are listed in the continuation of Box C. See patent family annex.

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INTERNATIONAL SEARCH REPORT

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 04378853 A	05.04.1983	None	
EP 0107630 A2	02.05.1984	EP 0107630 A3 NO 833530 A US 04494618 A	22.01.1986 02.04.1984 22.01.1985
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US 05775446 A	07.07.1998	None	