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- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

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(54) Title: DRILL BIT WITH CONTINUOUSLY SHARP EDGE CUTTING ELEMENTS

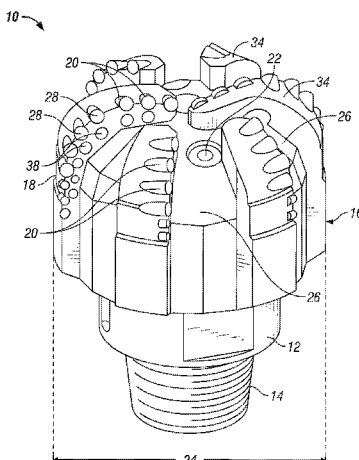


FIG. 1

(57) Abstract: A method of optimizing drill bit design and an optimized drill bit for drilling a well into an earth formation comprising a bit body; a number of blades spaced around the bit body, each blade having a curved outer edge and a forward face; a first row of cutter pockets recessed into the face along the outer edge of each blade; a second group of cutter pockets recessed into the face of each blade offset from the first row; and a plurality of cutting elements, each cutting element being brazed into a different one of the cutter pockets.



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## INTERNATIONAL SEARCH REPORT

International application No.  
**PCT/US2009/060404****A. CLASSIFICATION OF SUBJECT MATTER****E21B 10/46(2006.01)i, E21B 10/48(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 10/46; E21B 10/42

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  
(Chinese Patents and application for patent)

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

eKOMPASS(KIPO internal) &amp; Keywords: bit, drilling, and pocket

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5025873 A (BAKER HUGHES INCORPORATED) 25 June 1991 See column 4, line 29 - line 50 and figures 1, 7B, 9B	1-20
Y	US 5531281 A (CAMCO DRILLING GROUP LTD.) 02 July 1996 See column 6, line 9 - line 11 and figures 6-8	1-20
Y	US 6123161 A (CAMCO INTERNATIONAL LIMITED) 26 September 2000 See column 4, line 51 - column 5, line 2 and figure 3	4,5,10,11,16,17
A	US 5103922 A (SMITH INTERNATIONAL, INC.) 14 April 1992 See column 2, line 52 - line 55 and figure 1	1-20

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

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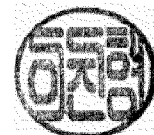
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Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5025873 A	25.06.1991	EP 0420262 B1	12.07.1995
US 5531281 A	02.07.1996	None	
US 6123161 A	26.09.2000	EP 0884449 A1 GB 2326659 A	16.12.1998 30.12.1998
US 5103922 A	14.04.1992	None	