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**Declarations under Rule 4.17:**

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

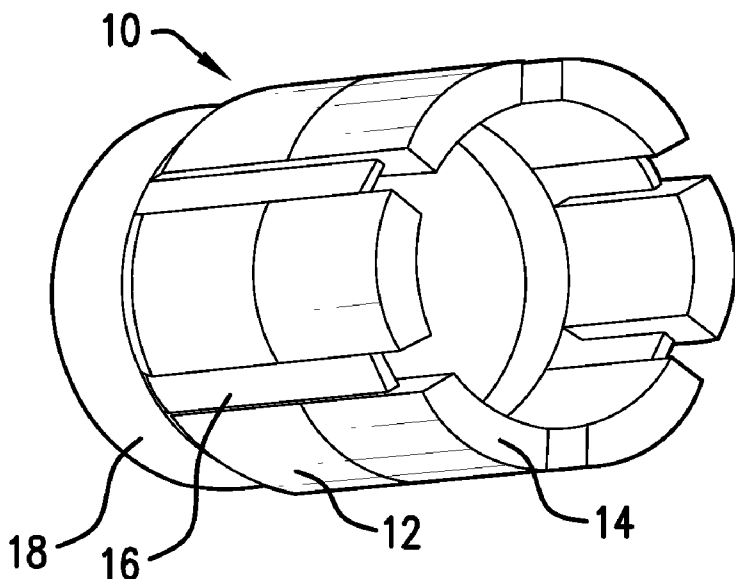
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(54) Title: DOWNHOLE CUTTING TOOL AND METHOD



**FIG. 1**

(57) Abstract: A downhole cutting tool includes a base including a first consolidated powder; and at least one cutting feature affixed to the base, the at least one cutting feature including a cutting material suspended in a second consolidated powder, wherein the base and the at least one cutting feature are both consolidated and bonded together simultaneously. Also included is a method of manufacturing a cutting tool.



**A. CLASSIFICATION OF SUBJECT MATTER*****E21B 10/48(2006.01)i, E21B 10/02(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 10/48; E21B 10/36; E21B 10/00; E21B 10/02

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) &amp; Keywords: cutting, powder, matrix, slot 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 A	US 2010-0012385 A1 (DRIVDAHL, K. SHAYNE et al.) 21 January 2010 See paragraphs 21- 28 and figure 2	1-5 6-10
X A	US 2006-0131081 A1 (MIRCHANDANI, PRAKASH K. et al.) 22 June 2006 See paragraphs 26-29 and figures 1, 3a	6-10 1-5
A	US 2008-0202814 A1 (LYONS, NICHOLAS J. et al.) 28 August 2008 See paragraphs 36, 37, 56 and figures 1, 6A-6C	1-10
A	US 2007-0102199 A1 (REDD, SMITH et al.) 10 May 2007 See paragraphs 6, 17 and figures 1,2	1-10

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

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