

(19)



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11) Publication number:

0 468 230 A3

(12)

EUROPEAN PATENT APPLICATION(21) Application number: **91110886.8**(51) Int. Cl.⁵: **E21B 29/00**(22) Date of filing: **01.07.91**(30) Priority: **25.07.90 GB 9016311**(43) Date of publication of application:
29.01.92 Bulletin 92/05(84) Designated Contracting States:
AT DE DK ES FR GB GR IT NL SE(88) Date of deferred publication of the search report:
25.11.92 Bulletin 92/48(71) Applicant: **The Red Baron (Oil Tools Rental)**

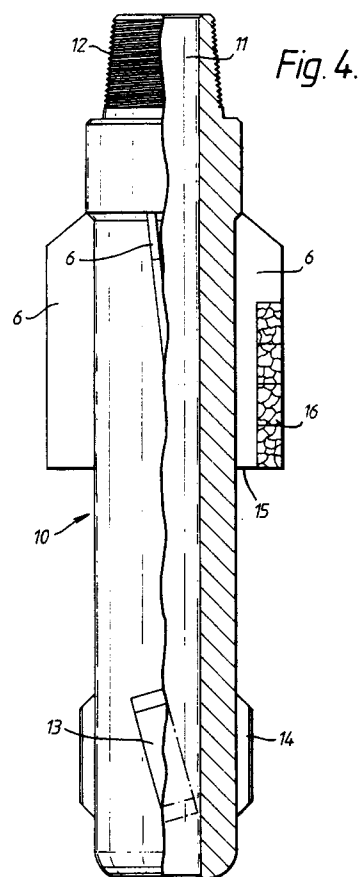
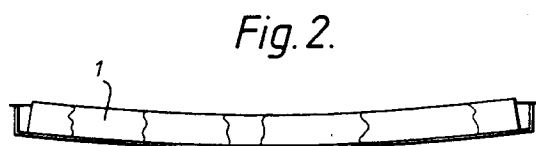
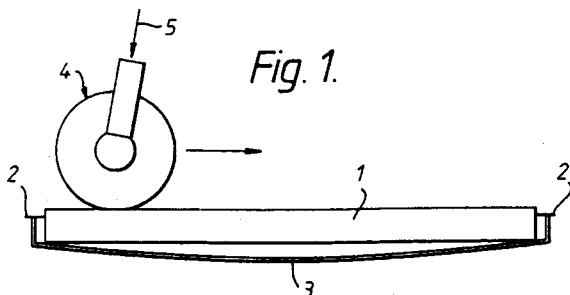
Limited
Blackness Avenue
Altens Aberdeen AB1 4PG(GB)

(72) Inventor: **Lau, Werner**
Grange Lodge, South Avenue
GB-Cults, Aberdeen(GB)

(74) Representative: **Frankland, Nigel Howard et al**
FORRESTER & BOEHMERT
Franz-Joseph-Strasse 38
W-8000 München 40(DE)

(54) **A mill or other metal cutting tool.**

(57) A metal cutting tool is made by taking a plate of hard metal carbide, and crushing the plate to form a mosaic consisting of a plurality of irregularly sized and irregularly shaped platelettes. The platelettes, in the form of a mosaic, are secured to a support surface. The support surface may form a blade protruding radially from a body which forms a mill to cut casing in a well bore.

**EP 0 468 230 A3**



European Patent
Office

PARTIAL EUROPEAN SEARCH REPORT

which under Rule 45 of the European Patent Convention
shall be considered, for the purposes of subsequent
proceedings, as the European search report

Application Number

EP 91 11 0886

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 5)
A,P	EP-A-0 392 519 (MITSUBISHI METAL CORPORATION) * page 2, line 42 - line 54 * * page 3, line 11 - line 45 * ---	1-3,5,6, 11,12	E21B29/00
A	US-A-2 846 193 (CHADDERDON) * column 1, line 15 - line 41 * * column 2, line 11 - line 38 * * column 3, line 23 - line 31; figures * ---	1,6,12	
A	US-A-3 110 084 (KINZBACH) * column 1, line 38 - column 2, line 18; figures * -----	1,6,13	
			TECHNICAL FIELDS SEARCHED (Int. Cl. 5)
			E21B B23P
INCOMPLETE SEARCH			
The Search Division considers that the present European patent application does not comply with the provisions of the European Patent Convention to such an extent that it is not possible to carry out a meaningful search into the state of the art on the basis of some of the claims Claims searched completely : Claims searched incompletely : Claims not searched : Reason for the limitation of the search: see sheet C			
Place of search THE HAGUE		Date of completion of the search 25 SEPTEMBER 1992	Examiner LINGUA D.G.
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			



EP 91 11 0886

-C-

Claims searched completely: 1-14

Claims not searched: 15-17

Claims 15-17 are not allowed according to Rule 29,
paragraph (6), of the European Patent Convention.