

⑫ **EUROPEAN PATENT APPLICATION**

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⑥① Int. Cl.³: **E 21 B 10/08, E 21 B 10/16,**
E 21 B 10/52

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Bulletin 81/42

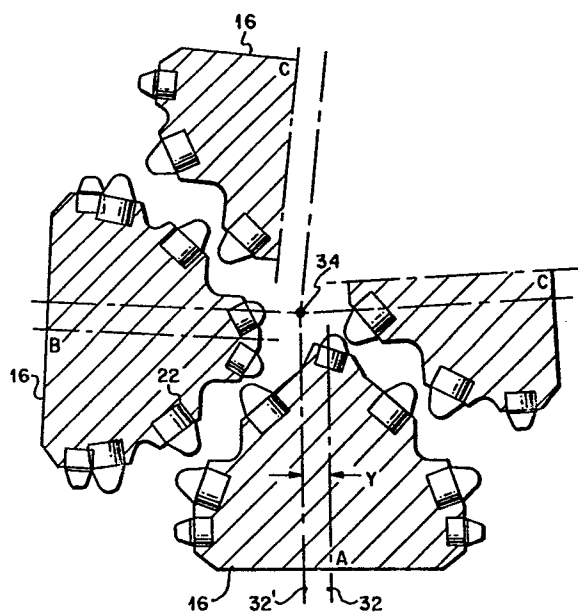
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⑧④ Designated Contracting States: **AT BE CH DE FR GB IT**
LI LU NL SE

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⑤④ **Rolling cutter drill bit.**

⑤⑦ This invention discloses a rolling cone drilling bit (10) having a plurality of cutters (16) which have inserted therein hard metal cutting elements (22) preferably formed of tungsten carbide alloy; and in which bit the rolling cone cutters (16) are located in such a manner that their rotational axes (32) are greatly offset from the rotational axis (34) of the drill bit.





European Patent
Office

EUROPEAN SEARCH REPORT

0038125
Application number

EP 81 30 1218

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int. Cl. ³)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
I	<u>US - A - 1 388 456</u> (FLETCHER) * Page 1, lines 42-47 * --	1,4	E 21 B 10/08 E 21 B 10/16 E 21 B 10/52
D	<u>US - A - 3 495 668</u> (SCHUMACHER) * Column 1, lines 55-69 * * Column 2, lines 1-4; column 2, lines 11-24 * --	1,4 3,5,6	
D	<u>US - A - 3 696 876</u> (OTT) * Column 3, lines 25-32 and 1-10; column 4, lines 62-65 * * Column 4, lines 62-65; column 5, lines 9-12 * --	1,3,4 5-7	TECHNICAL FIELDS SEARCHED (Int. Cl. ³)
	<u>US - A - 2 038 386</u> (SCOTT) * Page 1, left-hand column, lines 45-55 * --	1,3,4	E 21 B
	<u>US - A - 2 148 372</u> (GARFIELD) * Page 1, right-hand column, lines 23-37 * --	1,3,4	
	<u>US - A - 3 389 761</u> (OTT) * Column 4, lines 33-35; column 5, lines 11-16 * --	3,5-7	CATEGORY OF CITED DOCUMENTS X: particularly relevant A: technological background O: non-written disclosure P: intermediate document T: theory or principle underlying the invention E: conflicting application D: document cited in the application L: citation for other reasons
	<u>GB - A - 1 515 532</u> (HUGUES TOOL CY.) * Claim 1; figure 3 * --	3,5	
The present search report has been drawn up for all claims			&: member of the same patent family, corresponding document
Place of search	Date of completion of the search	Examiner	
The Hague	18-08-1981	SOGNO	



DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int. Cl.)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
P	OIL AND GAS JOURNAL, vol. 79, no. 8, February 13, 1981 Tulsa, Oklahoma USA KIM. E. SHINN: "Semicircular carbide insert", pages 60-62. * Page 60, right-hand column, lines 13-17; page 61, middle-column, lines 17-22 * ----	3,5-7	
			TECHNICAL FIELDS SEARCHED (Int. Cl.)