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EUROPEAN PATENT APPLICATION

21 Application number: **84308323.9**

51 Int. Cl.⁴: **E 21 B 10/46, E 21 B 10/56**

22 Date of filing: **30.11.84**

30 Priority: **03.12.83 GB 8332343**
28.02.84 GB 8405179

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43 Date of publication of application: **19.06.85**
Bulletin 85/25

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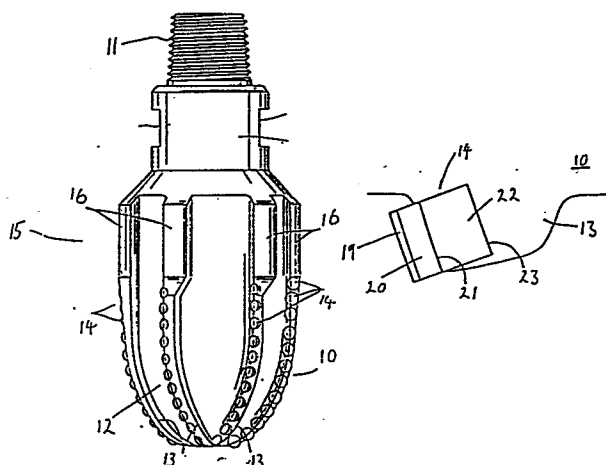
84 Designated Contracting States: **BE CH DE FR LI NL SE**

88 Date of deferred publication of search
report: **28.05.86 Bulletin 86/22**

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54 **Improvements in rotary drill bits.**

57 A rotary drill bit for use in drilling or coring deep holes in subsurface formations comprises a bit body (10) having a shank (11) for connection to a drill string, a plurality of cutting elements (14) mounted at the surface of the bit body, and a channel in the bit body for supplying drilling fluid to nozzles (17) in the surface of the bit body for cooling and/or cleaning the cutting elements. The cutting elements (14) each comprise a thin hard facing layer (19), defining a front cutting face, bonded to a less hard backing layer (20), and the cutting element is mounted on a carrier (22) which is received in a socket (23) in the bit body in such manner that, at least before any wear of the bit has occurred, the carrier (22) is wholly shrouded by the material of the bit body, the carrier (22) being formed from material which is less hard than the backing layer (20) of the cutting element (14).





European Patent
Office

EUROPEAN SEARCH REPORT

0145422

Application number

EP 84 30 8323

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.4)
Y	US-A-4 244 432 (ROWLEY) * Column 6, lines 24-42; figures 11 and 12 *	1-4, 8, 9, 11-13	E 21 B 10/46 E 21 B 10/56
P, Y	DE-A-3 406 442 (NL INDUSTRIES) * Page 28, line 5 - page 29, line 26; page 36, line 33 - page 38, line 8 *	1-4, 8, 9, 11-13	
A	US-A-4 200 159 (PESCHEL) * Column 5, lines 19-55; figures 14-17 *	1-4	
A	EP-A-0 032 428 (BARR) * Figures 3 and 4 *	5-7	TECHNICAL FIELDS SEARCHED (Int. Cl.4) E 21 B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 19-02-1986	Examiner PAUCNIK B.
CATEGORY OF CITED DOCUMENTS 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 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			