(11) **EP 0 738 823 A3** 

(12)

## **EUROPEAN PATENT APPLICATION**

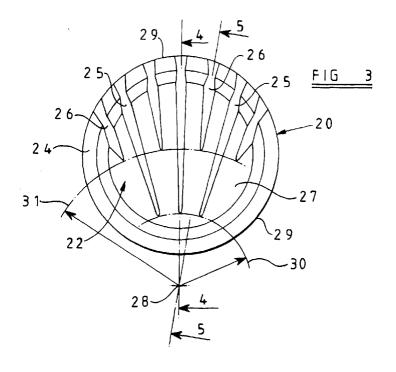
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- (51) Int Cl.<sup>6</sup>: **E21B 10/56**, F16C 33/04, B05B 1/00, B21C 3/02, F16H 53/06, B23B 27/14
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## (54) Improvements in or relating to elements faced with superhard material

(57) A preform element, such as a cutting element for a rotary drag-type drill bit, includes a facing table (20) of superhard material having a front face (23), a peripheral surface(29), and a rear surface (27) bonded to a substrate (21) which is less hard than the superhard material. The rear surface (27) of the facing table is inte-

grally formed with a plurality of ribs (25, 26) which project into the substrate (21), and at least major portions of the ribs extend across the rear surface of the facing table in directions which are generally radial with respect to at least one point (28) which is adjacent or outside the peripheral surface (29) of the facing table.





## **EUROPEAN SEARCH REPORT**

Application Number EP 96 30 2709

Category	Citation of document with indic of relevant passa			evant daim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
х	EP 0 601 840 A (CAMCO DRILLING GROUP LIMITED)  * column 6, line 9 - line 29 * * column 8, line 31 - line 44; figures 14,15 *		1-1 16- 25-	20,	E21B10/56 F16C33/04 B05B1/00 B21C3/02 F16H53/06 B23B27/14
X,D	US 5 120 327 A (DENNI	s)	1,5 10, 20,		
	* abstract * * column 3, line 65 -	column 4, line 13	*		
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	* column 4, line 10 - * column 6, line 1 -	line 45 * line 15 *			
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X,P, D	GB 2 283 773 A (CAMCO DRILLING GROUP LIMITED)		1-4 6-1 21		E21B F16C B05B
	* page 12, line 21 - page 13, line 3; figures 16,10 *  * page 11, line 5 - line 10 *  * page 10, line 1 - line 6 *  * page 8, line 11 - line 16 *  * page 6, line 16 - line 20 *				B21C F16H B23B
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	The present search report has been				
	Place of search	Date of completion of the sear	Į.	٥.,	Examiner
	THE HAGUE  CATEGORY OF CITED DOCUMENT rticularly relevant if taken alone rticularly relevant if combined with anoth	E : earlier pat after the f	orinciple unde ent document iling date	rlying the , but publ	ished on, or



## **EUROPEAN SEARCH REPORT**

Application Number EP 96 30 2709

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:				TECHNICAL FIELDS SEARCHED (Int.Cl.6)	
	The present search report has been	drawn up for all claims			
Place of search		Date of completion of the search	C	Examiner	
X: par Y: par doc A: tec O: no:	THE HAGUE  CATEGORY OF CITED DOCUMENTS rticularly relevant if taken alone rticularly relevant if combined with another rument of the same category thnological background n-written disclosure ermediate document	E : earlier patent docur after the filing date D : document cited in t L : document cited for & : member of the same	T: theory or principle underlying the E: earlier patent document, but public after the filing date D: document cited in the application L: document cited for other reasons  &: member of the same patent family document		

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