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(54) **Abrading ultra-hard stones.**

(57) An ultrahard stone, such as a diamond gem stone, is cut or kerfed by moving the cutting edge of a diamond compact relative to and in contact with the stone. The diamond compact may be in the form of a disc with a cutting edge thickness of 0.5 to 1 mm. Preferably, the diamond compact is thermally stable at 1200°C in an inert or non-oxidising atmosphere.

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EUROPEAN SEARCH REPORT

Application Number

EP 89 30 7317

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)
P,X	WO-A-8 807 409 (THE AUSTRALIAN NATIONAL UNIVERSITY) * page 1, lines 2 - 15 ** page 31, lines 20 - 26 * - - -	1,2,5	B 28 D 5/00
Y	EP-A-0 208 414 (DE BEERS INDUSTRIAL DIAMOND DIVISION (PROPRIETARY) LIMITED) * page 3, lines 2 - 5 ** page 4, lines 8 - 10 * - - -	1-5	
Y	GB-A-2 078 572 (GERSAN ESTABLISHMENT) * abstract ** page 1, lines 59 - 60 * - - -	1-5	
A	US-A-4 643 741 (H. YU ET AL.) * column 1, lines 20 - 26 ** column 1, lines 47 - 50 @ column 1, lines 61 - 64 * - - -	3,5	
A	EP-A-0 114 497 (DE BEERS INDUSTRIAL DIAMOND DIVISION (PROPRIETARY) LIMITED) * page 1, lines 2 - 5 ** page 4, line 26 - page 5, line 9; figure 1 * - - -	4,5	
A	SU-A-5 266 40 (STATE BEARING ET AL.) * the whole document * - - - - -	5	TECHNICAL FIELDS SEARCHED (Int. Cl.5) B 24 D B 28 D
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of search 19 February 91	Examiner MOET H.J.K.
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	