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(11)

EP 1 142 680 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
11.02.2004 Bulletin 2004/07

(51) Int Cl.7: **B28D 1/08**

(43) Date of publication A2:
10.10.2001 Bulletin 2001/41

(21) Application number: **01107416.8**

(22) Date of filing: **27.03.2001**

(84) Designated Contracting States:
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE TR**
Designated Extension States:
AL LT LV MK RO SI

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(30) Priority: **06.04.2000 IT TO000326**

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(54) **Process for cutting stone blocks in stone quarries, and machine using the method**

(57) According to the invention:

- a diamond wire cutting machine (M) is provided, with a structure essentially in the form of a gantry, astride a block (B) to be cut;
- the said cutting machine (M) is freely movable under its own power and advances in a step-by-step sequence along the said block (B);
- at each step, and with the machine (M) stationary, a diamond cutting wire wound in a closed loop around a plurality of pulleys supported by the gantry structure of the machine (M) is made to run in an essentially vertical plane, engaging the block (B) from above with its lower run, and makes a through cut in the block (B), forming a corresponding "slice" (S) from it;
- subsequently, in order to cut each "slice" (S), the cutting machine (M) is positioned astride the "slice" and is made to operate according to the same cutting sequence as that described above, to cut the "slice" (S) into a plurality of essentially parallelepipedal pieces.

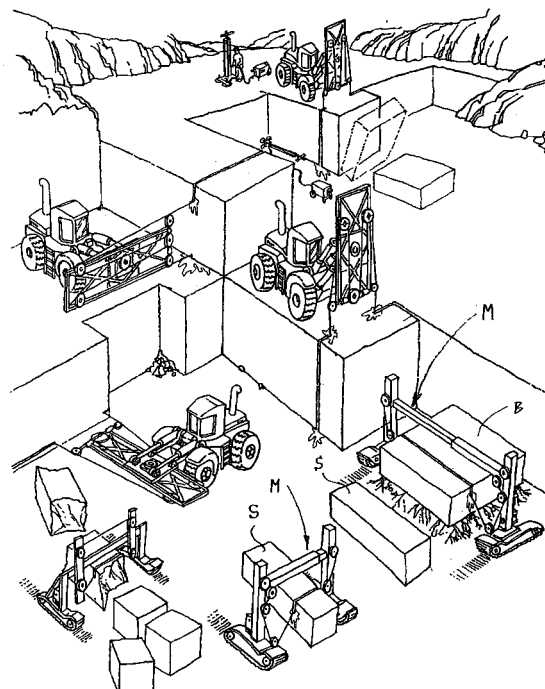


FIG. 2

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EUROPEAN SEARCH REPORT

Application Number
EP 01 10 7416

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.7)
X	DE 197 22 123 A (MAYER WOLFGANG) 3 December 1998 (1998-12-03)	1-3,5, 10,11	B28D1/08
Y	* column 1, line 36 - column 3, line 44; figures 1,2 *	4,6,8,9	
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Y	IT 1 180 793 B (BENETTI MACCHINE) 23 September 1987 (1987-09-23) * claim 11; figures 1,2 *	4,6,9	
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The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			B28D
Place of search		Date of completion of the search	Examiner
MUNICH		18 December 2003	Frisch, U
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EPO FORM 1503 03 82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82