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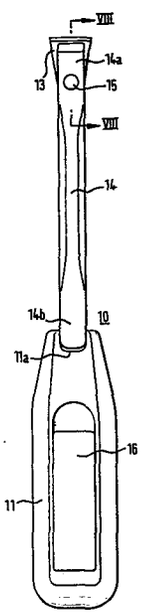
(54) A chisel.

(57) A chisel 10 is characterised by having a replaceable blade 13 releasably clamped to its shaft 12 by a springy elongate member 14 pivoted to the shaft 12 at 15, closely adjacent the blade 13, so that the front end 14a of member 14 bears down upon the blade 13 to clamp it to the shaft 12. The rear end 14b of springy member 14 is releasably located in a recess 11a at the front end of handle 11. The blade 13 is located by a spigot 12a of shaft 12 locating in a hole 13a in blade 13, and by the pivot 15 locating in a notch 13b at the rear end of blade 13. Advantageously, the blades may be a number of different widths 13f to 13k.



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A CHISEL

This invention relates to a chisel comprising a handle, a metal shaft projecting forwardly of the handle and a chisel blade on the front end of the shaft.

Such a chisel is well known for use in chiselling wood and similar material.

According to the invention, the chisel is characterised in that the blade is releasably clamped to the shaft so as to be replaceable.

The invention will be described by way of example with reference to the drawings, wherein:-

Fig. 1, Fig. 2 and Fig. 3 are respectively a front elevation, a side elevation and a rear elevation of a chisel embodying the invention;

Fig. 4 corresponds to Fig. 1, but with a removeable spare blade holder removed from the handle;

Fig. 5 is a section on line V-V of Fig. 4;

Fig. 6 is a section on line VI-VI of Fig. 1;

Fig. 7 illustrates the spare blade holder alone, containing two spare replacement blades;

Fig. 8 is an enlarged section on line VIII-VIII of Fig. 1;

Fig. 9 is a partial illustration of the front end of the chisel, with the clamping member omitted;

Fig. 10 illustrates the chisel being held in the

left hand, with the clamping member pivoted aside, and a blade being inserted or withdrawn by the right hand;

Fig. 11 illustrates a strip of blades for the chisel; and

Fig. 12 illustrates a number of alternative blades for the chisel.

Referring to the drawings, the illustrated chisel 10 comprises a handle 11, a metal shaft 12 projecting forwardly of the handle 11 and a chisel blade 13 on the front end of the shaft 12. The chisel blade 13 is releasably clamped to the shaft 12 so as to be replaceable. The blade 13 is releasably clamped to the shaft 12 by an elongate springy member 14 which extends along the shaft 12, being pivotably connected to the shaft 12 by a pivot connection 15 closedly adjacent the blade 13, the pivot 15 taking the form of a rivet, as shown most clearly in Fig. 8. The springiness of the member 14 is such that its front end 14a bears down strongly upon the blade 13 to clamp the blade 13 to the shaft 12, whilst the rear end 14b is biased downwardly into a recess 11a in handle 11. To release the blade 13, the rear end 14b of member 14 is lifted out of the recess 11a and member 14 is then pivoted about the pivot 15, as shown in Fig. 10.

The blade 13 is located on the shaft 12 by a spigot 12a of shaft 12 locating in a hole 13a in the blade 13, and by the pivot 15 locating in a notch 13b at the rear end of the blade 13, as well as the downward pressure of

the front end 14a of member 14 when in its normal position as shown in Figs. 1 to 5 and 8.

The handle 11 has a cavity 11b into which a spare blade holder 16 is releasably clipped by virtue of a small projection 11c at the rear end of cavity 11b locating in a recess 16a of the blade holder 16 and an integral spring arm 16b of blade holder 16 engaging the front end wall 11d of cavity 11b of handle 11. As illustrated in Fig. 7, the blade holder 16 can hold a number of blades 13c, 13d, for example, of different sizes. One side 16c of the holder 16 is enlarged and seats correspondingly in the handle 11 as shown, so that the holder 16 can only be inserted in the handle 11 one way round as shown.

Fig. 11 shows a strip of blades 13e, all of the same size, with waste material between each pair of adjacent blades, whilst Fig. 12 shows six blades 13f to 13k of progressively increasing widths.

The chisel 10 can of course be used by anybody, and affords the advantage of the blade being replaceable either when it gets blunt or a different width blade is required, or it is desired to remove the blade during non-use for safety or convenience. It is believed that the "do-it-yourself" handyman in particular will find the chisel 10 useful.

Claims:-

1. A chisel (10) comprising a handle (11), a metal shaft (12) projecting forwardly of the handle (11) and a chisel blade (13) on the front end of the shaft (12), characterised in that the blade (13) is releasably clamped to the shaft (12) so as to be replaceable.

2. A chisel (10) according to claim 1 characterised in that the blade (13) is releasably clamped to the shaft (12) by a member (14) bearing down upon the top of the blade (13), the shaft (12) engaging the underside of the blade (13).

3. A chisel (10) according to claim 2 wherein said member (14) is connected to the shaft (12) by a connection (15) closely adjacent the blade (13).

4. A chisel (10) according to claim 3 wherein said member (14) is pivotable about said connection (15) for disengagement from and hence release of the blade (13), the connection (15) forming a pivot.

5. A chisel (10) according to claim 3 or 4 wherein the connection (15) is adapted also to locate the blade (13) by engaging in the blade (13).

6. A chisel (10) according to any one of claims 2 to 5 wherein said member (14) extends along the shaft (12).

7. A chisel (10) according to any one of claims 2 to 6 wherein said member (14) is springy.

8. A chisel (10) according to a combination of at least claims 1, 2, 3, 4, 6 and 7 wherein a rear end (14b) of said member (14) is located by a portion (11a) of the handle (11).

9. A chisel (10) according to any preceding claim wherein a spigot (12a) on the shaft (12) locates in a cutout (13a) in the blade (13).

10. A chisel (10) according to any preceding claim wherein the handle (11) stores replacement blades (13).

11. A chisel (10) according to claim 10 wherein a blade storage cartridge (16) is fitted to the handle (11).

12. A chisel (10) according to claim 11 wherein the cartridge (16) is moulded in one piece of plastics with an integral spring (16b) to locate it releasably in the handle (11).

13. A chisel (10) according to claim 10, 11 or 12 wherein the blades (13) are of different sizes.

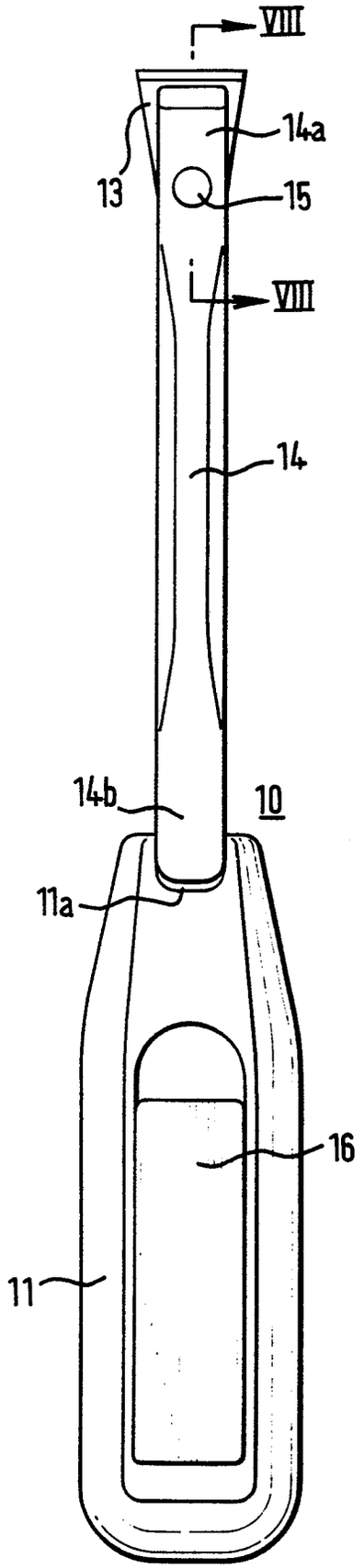

FIG.1.

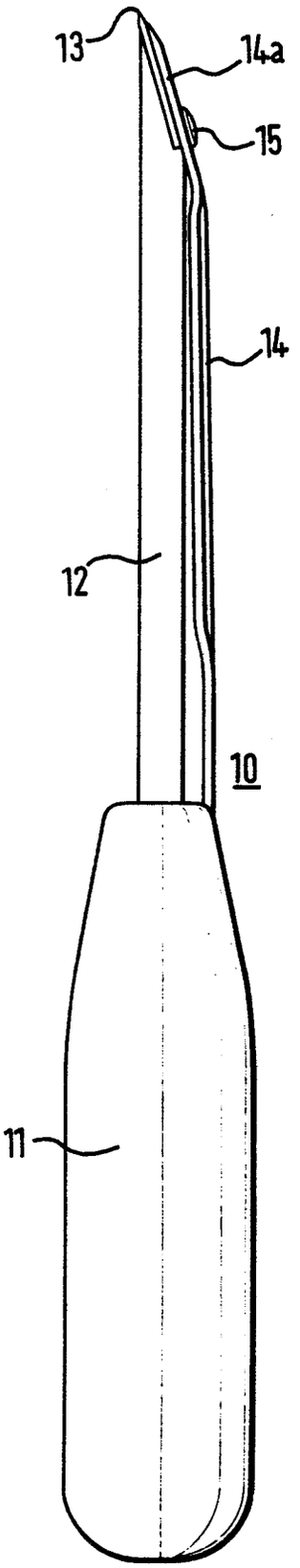

FIG.2.

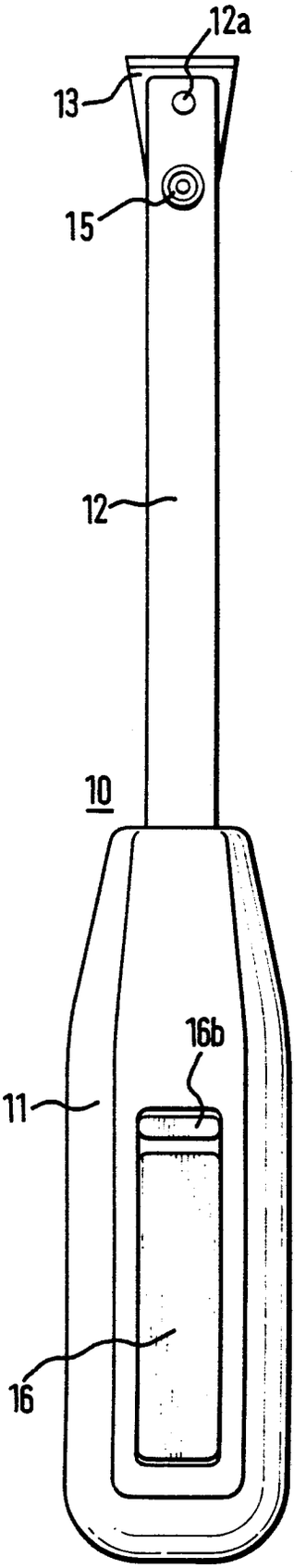

FIG.3.

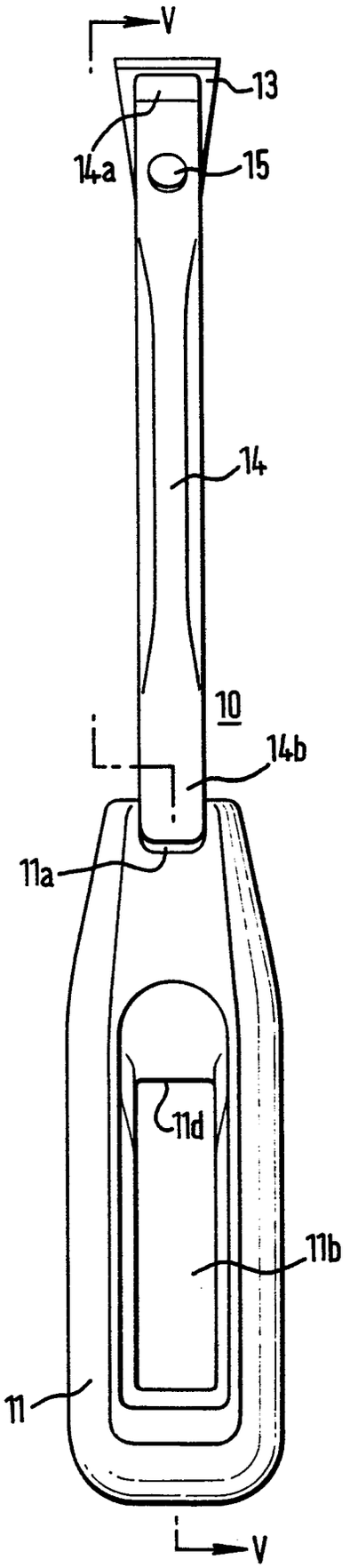

FIG.4.

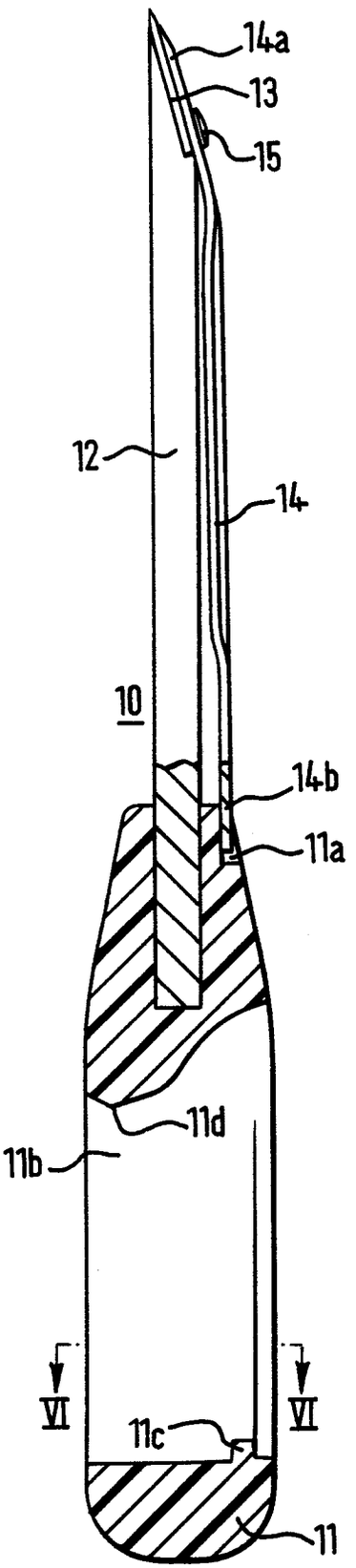

FIG.5.

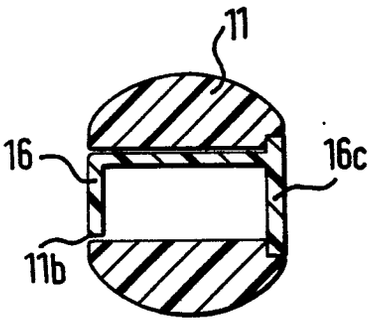

FIG.6.

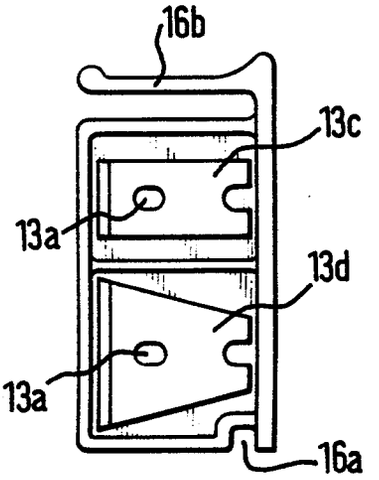

FIG.7.

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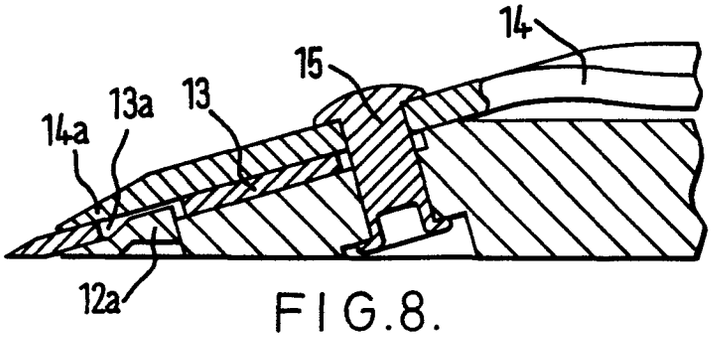

FIG.8.

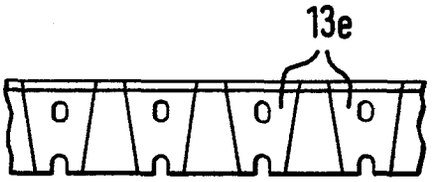

FIG.11.

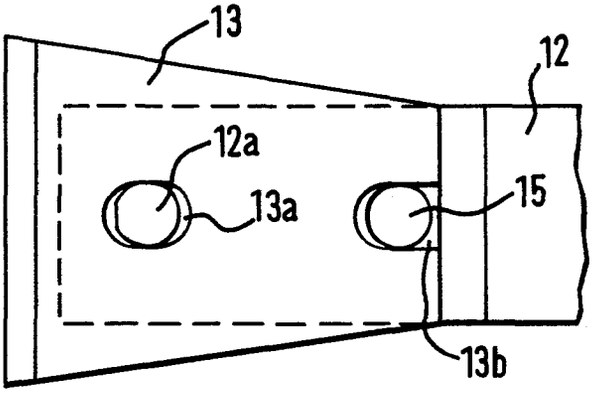

FIG.9.

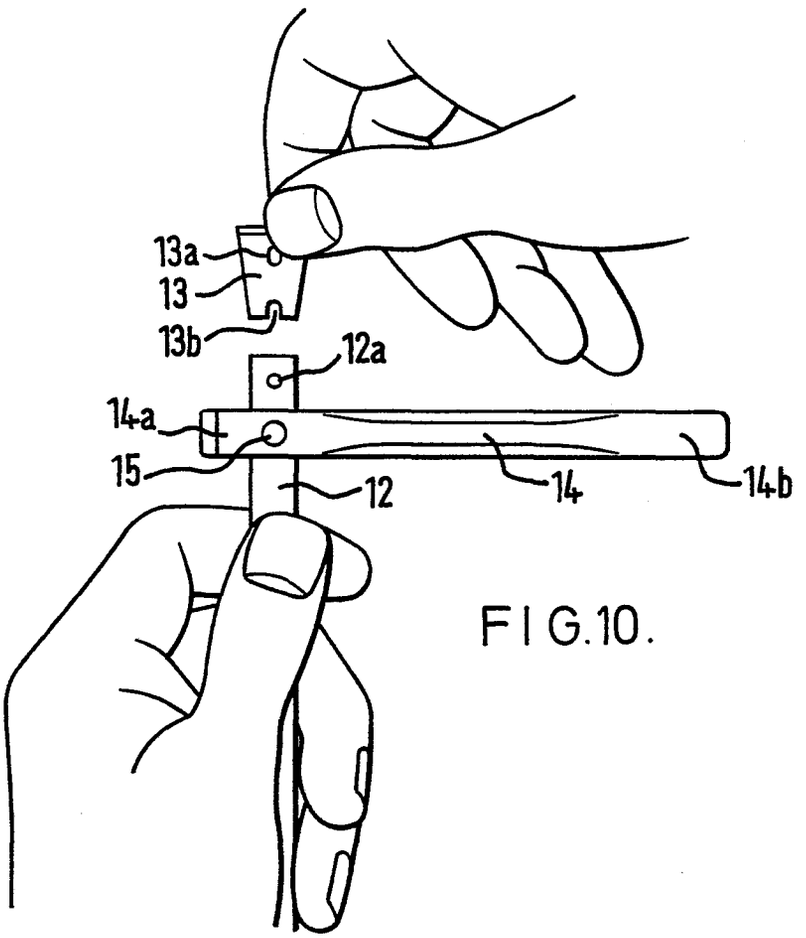

FIG.10.

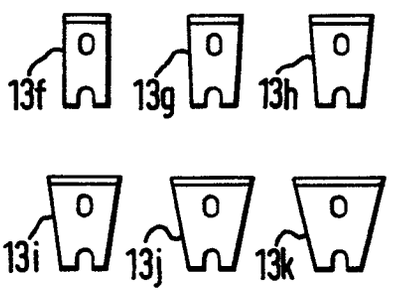

FIG.12.

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EUROPEAN SEARCH REPORT

Application number

EP 84 30 0160

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. ³)
X	GB-A-1 582 330 (E. FREEMAN) * Page 2, lines 42-51; claims 1,6; figures 1-3 *	1	B 25 D 3/00 B 26 B 5/00 B 27 G 17/08
A	GB-A- 713 101 (ALORIX) * Page 1, lines 50-73; figures 1,2 *	1-4,6	
A	US-A-3 996 665 (D.B. MALCHOW) * Column 1, line 45 - column 2, line 61; figures 1-6 *	1-4,7	
A	US-A-1 458 171 (J.S. DONALDSON) * Whole document *	1,5,9	
A	DE-C- 877 279 (W. SCHULTHESS) * Page 1, line 31 - page 2, line 50; figures 1-6 *	1,5	TECHNICAL FIELDS SEARCHED (Int. Cl. ³)
A	FR-A-2 354 855 (KANGO ELECTRIC HAMMERS) * Whole document *	1,5	B 25 D B 25 G B 26 B B 27 G
A	US-A-3 157 946 (F. SMECKO) * Column 1, line 52 - column 3, line 13; figures 1-7 *	1,2	
A	DE-A-2 028 360 (STANLEY WORKS) * Page 4, line 15 - page 9, line 2; figures 1-5 *	10-12	

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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	05-06-1984	JAUNEZ X.

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. ³)
A	GB-A- 915 761 (A. FISCHER) * Page 1, lines 51-75; figures 1,2 *	10,11	
A	GB-A- 295 832 (G. STABLES)		
A	GB-A- 709 740 (PERKINS & SMITH)		
A	GB-A- 224 046 (G. STABLES)		
			TECHNICAL FIELDS SEARCHED (Int. Cl. ³)

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