



(11)

EP 1 469 147 A3

(12)

## EUROPEAN PATENT APPLICATION

(88) Date of publication A3:  
20.02.2008 Bulletin 2008/08

(51) Int Cl.:  
**E05B 47/06** (2006.01)      **E05B 15/04** (2006.01)  
**E05C 5/00** (2006.01)

(43) Date of publication A2:  
20.10.2004 Bulletin 2004/43

(21) Application number: 04008956.7

(22) Date of filing: 15.04.2004

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

(30) Priority: 17.04.2003 IT TO20030304

(71) Applicant: **BITRON S.p.A.**  
10042 Nichelino (Torino) (IT)

(72) Inventor: **Promutico, Fabrizio**  
03010 Alatri (Frosinone) (IT)

(74) Representative: **Quintero, Giuseppe et al**  
**Jacobacci & Partners S.p.A.**  
Corso Emilia, 8  
10152 Torino (IT)

## (54) A device for locking and unlocking the door of an electric household appliance

(57) The device comprises:  
a housing (2, 13) with an opening (3) into which a retaining member (A) connected to the door can be introduced along a predetermined axis,  
a slide (4) which is movable along the said axis and to which a hook member (5), pivotable about an axis (6) transverse the said axis, is articulated;  
a resilient member (8) is interposed between the slide (4) and the housing (2) and can adopt two stable configurations in which it arranges the slide (4) in a first operative position and in a second operative position, respectively, and in which guide profiles (7) which are fixed relative to the housing (2) and cooperate with the hook member (5) arrange the hook member in a rest position in which it allows the retaining member (A) to be introduced into the opening (3) and in a working position in which the hook member (5) can restrain the retaining member (A) which has been introduced into the opening (3), respectively.

The arrangement is such that, when the retaining member (A) of the door is introduced into the opening (3), it can bring about a movement of the slide (4) from the first position towards the second position by a distance sufficient to bring about a snap-switching of the resilient member (8) from the first configuration to the second and the consequent movement of the slide (4) to the second operative position.

The device (1) further comprises a locking member (14) movable between a release position and an engagement position in which it can permit and prevent the movement of the slide (4) from the working position to

the rest position, respectively.

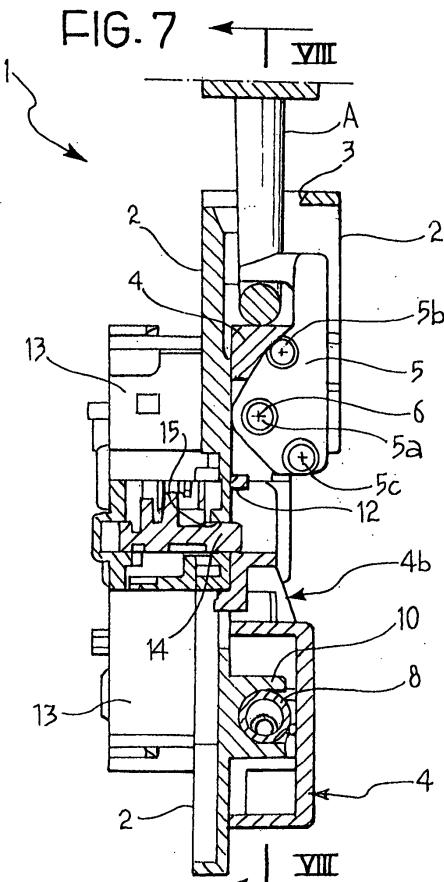
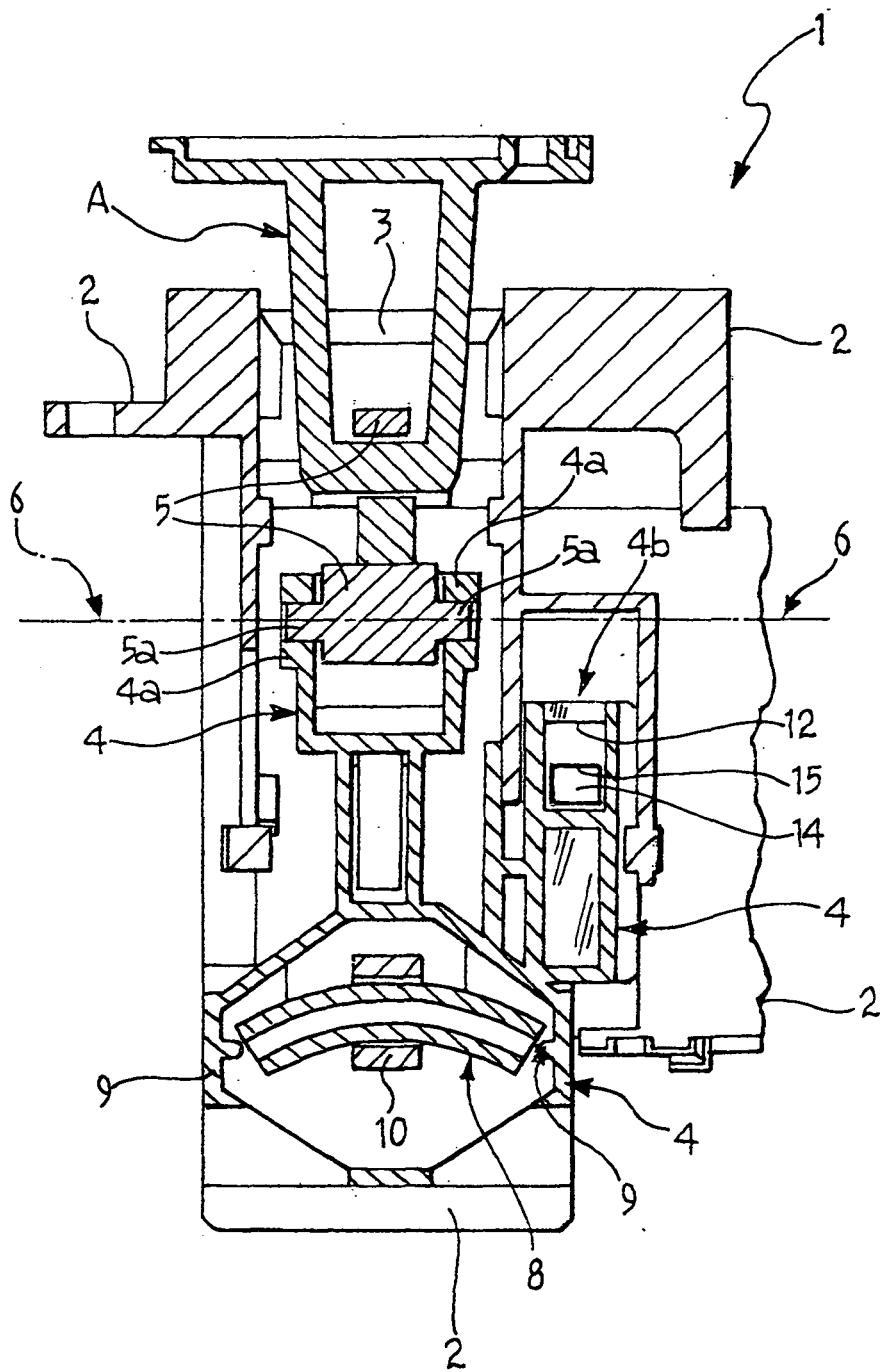


FIG. 8





DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	EP 0 654 556 A (YMOS AG IND PRODUKTE [DE]) 24 May 1995 (1995-05-24) * the whole document *	1	INV. E05B47/06 E05B15/04 E05C5/00
A	FR 2 692 648 A (MATERIEL OUTILLAGE RATIONNELS [FR] MATERIEL OUTILL RATIONNEL IND [FR]) 24 December 1993 (1993-12-24) * the whole document *	1	
A	CH 673 856 A5 (ZENITH STEINGER AG) 12 April 1990 (1990-04-12) * the whole document *	1	
A	DE 195 04 796 A1 (YMOS AG IND PRODUKTE [DE]) 22 August 1996 (1996-08-22) * the whole document *	1	
			TECHNICAL FIELDS SEARCHED (IPC)
			E05C D06F
<p>1 The present search report has been drawn up for all claims</p>			
Place of search		Date of completion of the search	Examiner
Munich		10 January 2008	Pieracci, Andrea
CATEGORY OF CITED DOCUMENTS		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	
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			

ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.

EP 04 00 8956

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on. The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

10-01-2008

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 0654556	A	24-05-1995	DE	4339621 A1	24-05-1995
FR 2692648	A	24-12-1993	DE	69306187 D1	09-01-1997
			DE	69306187 T2	05-06-1997
			EP	0580464 A1	26-01-1994
CH 673856	A5	12-04-1990	NONE		
DE 19504796	A1	22-08-1996	NONE		