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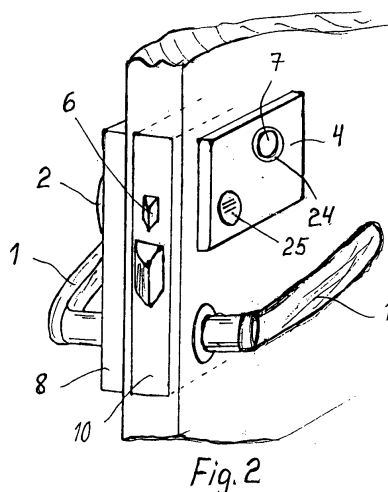
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(54) **Locking device mounted to a door**

(57) Locking device either including a lock body (10) which can be embedded inside a door or can be installed on the surface of a door or that the locking device can be adjusted in a door equipped with the mentioned lock body (10) wherein the mentioned lock body (10) comprises two shaft lines (L1), (L2) of which shaft lines for one a turning knob (2) is adjusted and for the other operating handles (1) are adjusted and that the lock body (10) comprises a mechanism which locks the door and unlocks the door wherein the functions of the locking element (3) protruding out of the lock body (10) are adjusted to occur with the help of the mentioned locking device and that the mentioned locking device comprises at least a touch element, such as a fingerprint detector (7), as a controlling function. The locking device comprises an inner unit (8, 9) and an outer unit (4) which can be attached to the door wherein a mechanism is adjusted in the inner unit (8, 9) on the shaft line (L1) of the turning knob (2) with the help of which mechanism the shaft (17) of the turning knob (2) can be adjusted both to have a rotation connection with operating handles (1) which are located on the other shaft line (L2) and can be adjusted to be disengaged from the mentioned rotation connection wherein the element which conveys the rotation connection and opens it is a switching element (13) which is adjusted on the shaft line (L1) of the turning knob (2) and moves in the direction of the mentioned shaft (17).



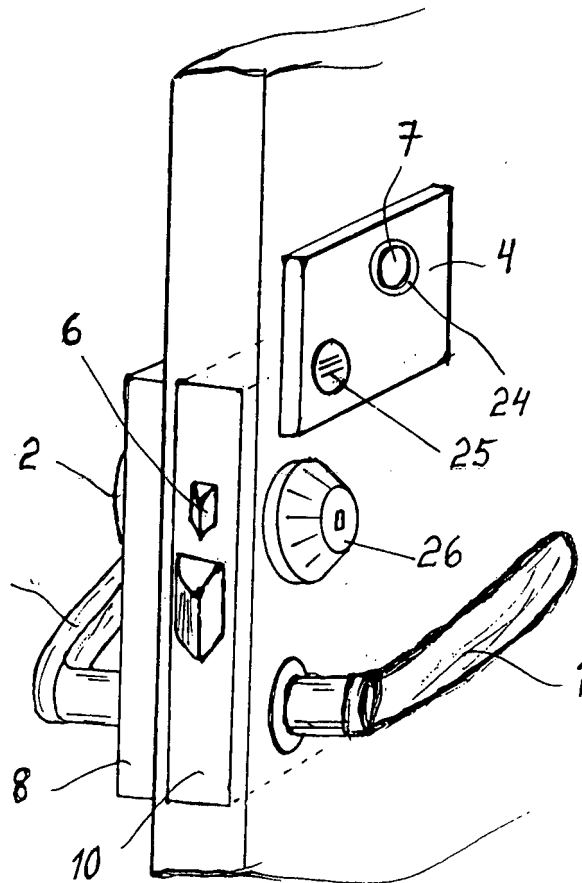


Fig. 2a



## EUROPEAN SEARCH REPORT

Application Number  
EP 13 39 6009

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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	WO 2007/144766 A2 (GIRONI SYSTEM S R L [IT]; GIRONI PIETRO [IT]) 21 December 2007 (2007-12-21) * page 4, line 3 - line 18 * * page 5, line 7 - line 11 * * page 5, line 34 - page 6, line 23 * * claims 1, 4, 5 * * figures 2-20 *	1-9	INV. G07C9/00 E05B47/06 E05B63/00 E05B53/00  ADD. E05B35/00 E05B47/00
A	US 3 999 789 A (MAURITS ORVILLE C ET AL) 28 December 1976 (1976-12-28) * column 2, line 59 - column 3, line 31 * * column 4, line 5 - column 5, line 14 * * column 7, line 22 - column 8, line 30 * * figures 1-4C *	1-9	
A	US 5 881 586 A (SHEN MU-LIN [TW]) 16 March 1999 (1999-03-16) * column 1, line 10 - line 17 * * column 2, line 66 - column 3, line 33 * * column 4, line 30 - line 59 * * figures 1-13 *	1-9	TECHNICAL FIELDS SEARCHED (IPC)
A	US 4 129 019 A (URDAL JAN) 12 December 1978 (1978-12-12) * column 1, line 5 - line 18 * * column 1, line 48 - column 2, line 48 * * column 4, line 9 - line 23 * * column 5, line 44 - column 6, line 7 * * figures 1-9 *	1-9	E05B
A	US 6 170 305 B1 (SHEN MU-LIN [TW]) 9 January 2001 (2001-01-09) * column 1, line 6 - line 9 * * column 2, line 60 - column 3, line 9 * * column 4, line 12 - line 23 * * figures 1-5 *	1-9	
		-/--	
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 23 October 2017	Examiner Antonov, Ventseslav
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	

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Application Number  
EP 13 39 6009

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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	US 5 027 629 A (LIU YIN-CHIC [TW]) 2 July 1991 (1991-07-02) * column 2, line 5 - column 5, line 34 * * figures 1-7 *	1-9	
A	DE 198 00 304 A1 (FLIETHER KARL GMBH & CO [DE]) 8 July 1999 (1999-07-08) * column 3, line 17 - column 6, line 4 * * figures 1-7 *	1-9	
A	EP 2 233 668 A1 (MEGALOCK OY [FI]) 29 September 2010 (2010-09-29) * paragraph [0009] - paragraph [0013] * * paragraph [0019] * * paragraph [0024] - paragraph [0025] * * figures 1-3 *	1-9	
			TECHNICAL FIELDS SEARCHED (IPC)
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 23 October 2017	Examiner Antonov, Ventseslav
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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	

EPO FORM 1503 03.82 (P04C01)

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

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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  
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2007144766 A2	21-12-2007	NONE	
US 3999789 A	28-12-1976	AU 1637376 A CA 1041137 A ES 452025 A1 JP S5288499 A MX 145805 A US 3999789 A	02-02-1978 24-10-1978 01-10-1977 23-07-1977 05-04-1982 28-12-1976
US 5881586 A	16-03-1999	NONE	
US 4129019 A	12-12-1978	NONE	
US 6170305 B1	09-01-2001	NONE	
US 5027629 A	02-07-1991	NONE	
DE 19800304 A1	08-07-1999	NONE	
EP 2233668 A1	29-09-2010	DK 201000002 U3 EP 2233668 A1 FI 20095298 A WO 2010109055 A1	09-07-2010 29-09-2010 24-09-2010 30-09-2010