



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
01.05.2024 Bulletin 2024/18

(43) Date of publication A2:
21.02.2024 Bulletin 2024/08

(21) Application number: **24150073.5**

(22) Date of filing: **16.03.2020**

(51) International Patent Classification (IPC):
E05B 9/00 (2006.01) **E05B 45/06** (2006.01)
E05B 47/02 (2006.01) **E05B 9/02** (2006.01)
G08B 13/06 (2006.01) **E05B 17/20** (2006.01)
G07C 9/00 (2020.01) **E05B 47/00** (2006.01)

(52) Cooperative Patent Classification (CPC):
E05B 9/02; E05B 17/2084; E05B 45/06;
E05B 47/02; G08B 13/06; G08B 13/08;
G08B 13/1654; G08B 29/046; E05B 2045/063;
E05B 2045/064; E05B 2045/067; E05B 2047/0058;
E05B 2047/0067; E05B 2047/0091;
E05B 2047/0095; (Cont.)

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB
GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO
PL PT RO RS SE SI SK SM TR

(30) Priority: **21.03.2019 DE 102019107282**

(62) Document number(s) of the earlier application(s) in
accordance with Art. 76 EPC:
20712892.7 / 3 942 125

(71) Applicant: **Verisure Sàrl**
1290 Versoix (CH)

(72) Inventors:
• **Lindsjö, Henrik**
21120 Malmö (SE)
• **Månsson, Ola**
21120 Malmö (SE)

- **Schwartz, Rafael**
21120 Malmö (SE)
- **Zander, Johan**
21120 Malmö (SE)
- **Johansson, Robert**
21120 Malmö (SE)
- **Montolio, Sergio Benages**
21120 Malmö (SE)
- **Akhlagi, Noroz**
21120 Malmö (SE)
- **Ljungman, David**
21120 Malmö (SE)

(74) Representative: **Prinz & Partner mbB**
Patent- und Rechtsanwälte
Rundfunkplatz 2
80335 München (DE)

(54) **A DOOR LOCK ACTUATION DEVICE FOR OPERATING A DOOR LOCK AND AN ALARM INSTALLATION WITH SUCH DOOR LOCK ACTUATION DEVICE**

(57) The invention relates to smart lock (10) adapted to be mounted on a door (1), comprising a battery (20), an accelerometer (46) and an RF module (48) each located inside a housing (12), the housing (12) arranged to prevent access to the battery (20), the accelerometer (46) and an RF module (48) whilst the smart lock (10) is mounted on a door (1), the accelerometer (46) and the RF module (48) arranged to provide a RF tamper alert signal if the smart lock (10) is removed from the door (1). The invention also relates to an alarm installation comprising a central unit (52) and a smart lock (10) as defined above, wherein the central unit is adapted for triggering an alarm if the accelerometer signals indicate that the door lock actuation device (10) is being tampered with.

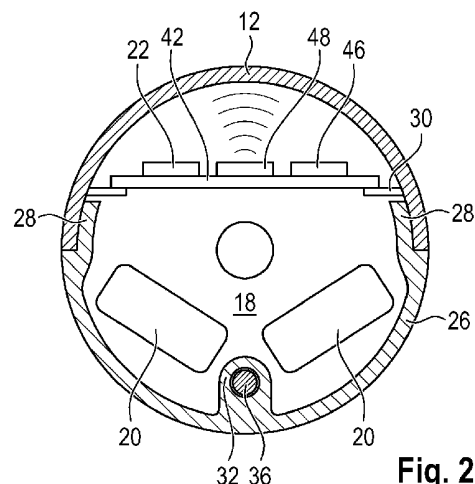


Fig. 2

(52) Cooperative Patent Classification (CPC): (Cont.)
G07C 9/00174; G08B 13/19697



EUROPEAN SEARCH REPORT

Application Number

EP 24 15 0073

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 2016/047145 A1 (JOHNSON JASON [US] ET AL) 18 February 2016 (2016-02-18) * the whole document *	1-15	INV. E05B9/00 E05B45/06 E05B47/02
X	US 2015/287254 A1 (RIBAS GABRIEL BESTARD [US] ET AL) 8 October 2015 (2015-10-08) * the whole document *	1-11, 14, 15	E05B9/02 G08B13/06 E05B17/20 G07C9/00
A	WO 2014/154738 A1 (MICROHARD SRL [IT]) 2 October 2014 (2014-10-02) * the whole document *	1-11, 14, 15	ADD. E05B47/00
A	WO 2013/177443 A1 (INGERSOLL RAND CO) 28 November 2013 (2013-11-28) * the whole document *	12, 13	
X		1, 9-15	
			TECHNICAL FIELDS SEARCHED (IPC)
			E05B
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
The Hague		18 March 2024	Robelin, Fabrice
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	

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

EP 24 15 0073

5

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.

18-03-2024

10

15

20

25

30

35

40

45

50

55

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2016047145 A1	18-02-2016	NONE	
US 2015287254 A1	08-10-2015	US 2015287254 A1	08-10-2015
		US 2017270731 A1	21-09-2017
WO 2014154738 A1	02-10-2014	EP 2978913 A1	03-02-2016
		ES 2695588 T3	09-01-2019
		KR 20150133834 A	30-11-2015
		US 2016054148 A1	25-02-2016
		WO 2014154738 A1	02-10-2014
WO 2013177443 A1	28-11-2013	AU 2013266171 A1	22-01-2015
		CA 2874636 A1	28-11-2013
		NZ 703361 A	29-07-2016
		US 2013335222 A1	19-12-2013
		US 2016292944 A1	06-10-2016
		US 2018158268 A1	07-06-2018
		US 2019206166 A1	04-07-2019
		US 2021174618 A1	10-06-2021
		WO 2013177443 A1	28-11-2013