

Title (en)  
A SMART LOCK FOR OPERATING A DOOR LOCK AND AN ALARM INSTALLATION WITH SUCH SMART LOCK AND A CENTRAL UNIT

Title (de)  
INTELLIGENTES SCHLOSS ZUM BETÄTIGEN EINES TÜRSCHLOSSES UND EINE ALARMANLAGE MIT EINEM SOLCHEN SCHLOSS UND EINER ZENTRALEINHEIT

Title (fr)  
VERROU INTELLIGENT PERMETTANT D'ACTIONNER UN VERROU DE PORTE ET INSTALLATION D'ALARME DOTÉE D'UN TEL VERROU INTELLIGENT, ET UNITÉ CENTRALE

Publication  
**EP 3942128 B1 20230524 (EN)**

Application  
**EP 20713855 A 20200317**

Priority  
• DK BA201900020 U 20190321  
• EP 2020057258 W 20200317

Abstract (en)  
[origin: WO2020187899A1] The invention relates to a 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 provides an alarm installation comprising a central unit (52) and a smart lock (10) according to any of the preceding claims wherein the central unit (52) is adapted for evaluating RF tamper alert signals received via the RF module (48) in order to distinguish between at least two of the following situations: a rotation of the smart lock (10) about a central axis, a tilting of the smart lock (10) about a horizontal axis which is perpendicular to the central axis, rotation of the door (1) to which the smart lock (10) is mounted, vibrations resulting from an interaction with the smart lock (10), shocks resulting from an interaction with the door (1), stop of the door (1) in an open position, closing of the door (1), and a predefined sequence of knocks on the door (1).

IPC 8 full level  
**E05B 45/06** (2006.01); **E05B 47/00** (2006.01); **G08B 13/06** (2006.01)

CPC (source: EP IL)  
**E05B 45/06** (2013.01 - EP IL); **G08B 13/06** (2013.01 - EP IL); **E05B 2047/0058** (2013.01 - EP IL); **E05B 2047/0067** (2013.01 - EP IL)

Citation (examination)  
• US 9500006 B2 20161122 - DAYANIKLI MUSTAFA [TR], et al  
• US 7334443 B2 20080226 - MEEKMA GLENN [US], et al  
• US 2018061163 A1 20180301 - KU CHE MING [TW]  
• US 2018135337 A1 20180517 - JOHNSON JASON [US], et al

Designated contracting state (EPC)  
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

DOCDB simple family (publication)  
**WO 2020187899 A1 20200924**; BR 112021018714 A2 20211123; CL 2021002450 A1 20220408; EP 3942128 A1 20220126; EP 3942128 B1 20230524; EP 4234854 A2 20230830; EP 4234854 A3 20231115; ES 2947190 T3 20230802; IL 286491 A 20211201; PE 20211991 A1 20211018; PT 3942128 T 20230620

DOCDB simple family (application)  
**EP 2020057258 W 20200317**; BR 112021018714 A 20200317; CL 2021002450 A 20210921; EP 20713855 A 20200317; EP 23174392 A 20200317; ES 20713855 T 20200317; IL 28649121 A 20210919; PE 2021001559 A 20200317; PT 20713855 T 20200317