

Title (en)
Device for combination locks.

Title (de)
Anordnung für Kombinationsschlösser.

Title (fr)
Dispositif pour serrures à combinaison.

Publication
EP 0346317 A2 19891213 (EN)

Application
EP 89850191 A 19890608

Priority
SE 8802167 A 19880609

Abstract (en)
Device for monitoring that a complete locking operation is carried out for a combination lock, including means (A) arranged adjacent to the dial (1) whereby the combination lock is manually manipulated, arranged to sense the rotary direction of the dial (1), and in association with a related electronical circuit to initiate counting of the number of revolutions for the dial (1) when same is rotated in a direction resulting in the release of the combination wheels within the lock, and to perform counting until a predetermined number of revolutions while the rotary direction is maintained unchanged. The means arranged adjacent to the dial (1) may include magnetical, conductive, optical or mechanical sensors for monitoring the rotary direction of the dial (1). An electric switching means is arranged to be operated when the door is closed, which is lockable by means of the combination lock, or to be influenced when the lock bolts are moved to a locked position, and to initiate the circuit for sensing rotary movement of the dial (1). A timer circuit is preferably connected at the same time, arranged to cause transmission of alarm, preferably of audio type, should the dial (1) not be rotated predetermined number of revolutions in a predetermined rotary direction within a time period monitored by the timer circuit. The entire device is preferably arranged to receive a voltage supply from a battery voltage source, preferably with a battery voltage monitoring circuit, arranged to indicate when the battery voltage drops below a predetermined lower limit.

IPC 1-7
E05B 17/22; **E05B 49/00**

IPC 8 full level
E05B 17/22 (2006.01); **E05B 37/00** (2006.01); **E05B 37/08** (2006.01)

CPC (source: EP)
E05B 17/22 (2013.01); **E05B 37/08** (2013.01)

Cited by
US6750568B2; US6657537B1; US8690205B2; US6400278B1; WO9910615A1; WO9941475A1

Designated contracting state (EPC)
BE CH DE FR GB IT LI

DOCDB simple family (publication)
EP 0346317 A2 19891213; **EP 0346317 A3 19900321**; SE 459597 B 19890717; SE 8802167 D0 19880609

DOCDB simple family (application)
EP 89850191 A 19890608; SE 8802167 A 19880609