

Title (en)
ELECTRONIC LOCKING DEVICE FOR MOTOR VEHICLES

Publication
EP 0215291 B1 19910227 (DE)

Application
EP 86111113 A 19860812

Priority
• DE 3532156 A 19850910
• DE 3616197 A 19860514

Abstract (en)
[origin: US4723121A] A simple and economical, yet tamper-proof, electronic locking apparatus for motor vehicles features an electronic key and an electronic lock, which each contain a synchronized, constantly operating, precision oscillator. The output of each oscillator is applied at a predetermined counting rate to a respective number sequence generator. Both generators contain the same predetermined number sequence, which they step through at the same clock rate, applying the instantaneous value of the count to a first input of a respective computer. A second input of each computer is connected to a fixed memory which supplies a permanent, characteristic code number to the computer. Both the count state and the characteristic code number are combined using corresponding algorithms in the key and in the lock to produce a combination code. The key-produced combination code is sent from a transmitter in the key to a receiver in the lock and compared there with the lock-produced combination code. In the event of a successful comparison, a control pulse is generated, which actuates various positioning means in the lock.

IPC 1-7
E05B 49/00

IPC 8 full level
E05B 49/00 (2006.01); **G07C 9/00** (2006.01)

CPC (source: EP US)
G07C 9/00182 (2013.01 - EP US); **G07C 2009/00253** (2013.01 - EP US); **G07C 2009/00769** (2013.01 - EP US);
G07C 2009/00785 (2013.01 - EP US); **G07C 2209/06** (2013.01 - EP US)

Cited by
EP0992643A1; EP0559930A1; AT155U1; DE4430315A1; US5623257A; FR2784205A1; FR2747814A1; EP0667506A1; EP0711892A1;
EP0372791A3; US5841363A; DE4223258C3; EP0831197A3; EP0880295A3; CN105678989A; WO9807940A1; WO9736263A1; US6661333B1;
EP0257376B1

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
EP 0215291 A1 19870325; EP 0215291 B1 19910227; DE 3677676 D1 19910404; US 4723121 A 19880202

DOCDB simple family (application)
EP 86111113 A 19860812; DE 3677676 T 19860812; US 90567886 A 19860909