

Title (en)

RELAY ATTACK DETECTION OF A SECURE VEHICLE COMMAND COMMUNICATION

Title (de)

ÜBERTRANGUNGSERKENNUNG EINER GESICHERTEN KOMMUNIKATION EINES FAHRZEUGSTEUERUNGSBEFEHLS

Title (fr)

SYSTEME DE DETECTION D'AGRESSION A RELAI AVEC COMMUNICATIONS PROTEGEES DE COMMANDE DE VEHICULE

Publication

EP 1216172 A2 20020626 (EN)

Application

EP 00967230 A 20001002

Priority

- US 0027098 W 20001002
- US 15706099 P 19991001

Abstract (en)

[origin: WO0125060A2] A passive remote entry system evaluates the delay between a challenge signal from security system and a response signal from the passive fob. If the delay exceeds a threshold identification fails and the access is denied. The fob utilizes the signal from the security system as a reference signal for transmitting its response signal. The security system generates a challenge signal with a changing frequency, which is compared to the frequency of the response signal. Any lag in the change of the frequency in the response signal compared to the change in the frequency of the challenge signal is indicative of the amount of delay between the challenge and response signal.

IPC 1-7

B60R 25/00; **E05B 49/00**; **G01S 13/74**

IPC 8 full level

E05B 49/00 (2006.01); **B60R 25/24** (2013.01); **G01S 13/82** (2006.01); **G07C 9/00** (2006.01); **G01S 13/34** (2006.01)

CPC (source: EP)

B60R 25/24 (2013.01); **G01S 13/825** (2013.01); **G07C 9/00309** (2013.01); **G01S 13/343** (2013.01); **G07C 2009/00396** (2013.01); **G07C 2009/00555** (2013.01); **G07C 2009/00793** (2013.01); **G07C 2009/00984** (2013.01); **G07C 2209/61** (2013.01)

Citation (search report)

See references of WO 0125060A2

Cited by

US11265929B2; US11818681B2; US12089178B2

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

WO 0125060 A2 20010412; **WO 0125060 A3 20011227**; **WO 0125060 A9 20021003**; EP 1216172 A2 20020626; JP 2003512218 A 20030402

DOCDB simple family (application)

US 0027098 W 20001002; EP 00967230 A 20001002; JP 2001528027 A 20001002