

Title (en)
METHOD FOR THE AUTHENTICATION OF SENSOR DATA AND CORRESPONDING SENSOR

Title (de)
VERFAHREN ZUR AUTHENTIFIZIERUNG VON SENSORDATEN UND ZUGEHÖRIGEM SENSOR

Title (fr)
PROCEDE POUR AUTHENTIFIER DES DONNEES DE CAPTEUR ET CAPTEUR ASSOCIE

Publication
EP 1745651 A1 20070124 (DE)

Application
EP 05753699 A 20050517

Priority
• DE 2005000915 W 20050517
• DE 102004024002 A 20040514

Abstract (en)
[origin: WO2005112459A1] The invention relates to a method for the authentication of sensor data (D), exchanged between a sensor (S1 to S4) and a corresponding receiver (2), whereby, firstly, a challenge is transmitted from the receiver (2) to the at least one sensor (S1 to S4) with an encoded random number, said challenge is decoded by the at least one sensor (S1 to S4), the random number modified and the modified random number used as unique key (Session Key) for the subsequent sensor data transmission (Response), a first hash value (H) is calculated in the sensor from the sensor data (D), a cryptographic check sum (DS) is generated for authentication of the sensor data (D) for transmission, whereby a second hash value (H') is calculated from the first hash value (H) and the unique key as data block and encoded by means of the sensor key (GS). The authenticated sensor data (DS+D) is transmitted to the receiver (2) and the cryptographic check sum (DS) is checked for authenticity in the receiver.

IPC 8 full level
H04L 9/32 (2006.01); **H04N 7/18** (2006.01)

CPC (source: EP US)
H04L 9/3236 (2013.01 - EP US); **H04L 9/3271** (2013.01 - EP US); **H04L 2209/805** (2013.01 - EP US)

Citation (search report)
See references of WO 2005112459A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2005112459 A1 20051124; DE 102004024002 A1 20051201; DE 102004024002 B4 20080521; EP 1745651 A1 20070124; US 2008276092 A1 20081106

DOCDB simple family (application)
DE 2005000915 W 20050517; DE 102004024002 A 20040514; EP 05753699 A 20050517; US 59642505 A 20050517