

Title (en)

METHOD AND DEVICE FOR BI-DIRECTIONAL SINGLE-WIRE DATA TRANSMISSION

Title (de)

VERFAHREN UND VORRICHTUNG ZUR BIDIREKTIONALEN EINDRAHT-DATENÜBERTRAGUNG

Title (fr)

PROCEDE ET DISPOSITIF DE TRANSMISSION DE DONNEES UNIFILAIRE BIDIRECTIONNELLE

Publication

EP 1676390 A1 20060705 (DE)

Application

EP 04738834 A 20040701

Priority

- DE 2004001388 W 20040701
- DE 10335905 A 20030806

Abstract (en)

[origin: WO2005015816A1] The invention relates to a device and a method for the bi-directional single-wire data transmission of data information between an electronic control unit (2) and at least one peripheral appliance (3), said method comprising the following steps: a pre-defined constant voltage or a pre-defined constant current is applied to a driver device (20) of the electronic control unit (2) in order to produce voltage-coded or current-coded information; the voltage-coded or current-coded information is transmitted from the driver device (20) of the electronic control unit (2) to a driver device (30) of the peripheral appliance (3) via a single-wire line (4); at least the driver logic of the driver device (30) and/or the communication logic of the peripheral appliance (3) is controlled and supplied by the current flow; information resulting from the activation of the peripheral appliance (3) is current-coded or voltage-coded; and the current-coded or voltage-coded information is redirected from the driver device (30) of the peripheral appliance (3) to the driver device (20) of the electronic control unit (2) during the activation of the peripheral appliance (3) via the same single-wire line (4).

IPC 1-7

H04L 5/14; **H04L 25/49**

IPC 8 full level

H04L 5/14 (2006.01); **H04L 25/49** (2006.01)

CPC (source: EP US)

H04L 5/1423 (2013.01 - EP US); **H04L 25/4902** (2013.01 - EP US)

Citation (search report)

See references of WO 2005015816A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

DE 10335905 A1 20050224; **DE 10335905 B4 20180705**; CN 1833394 A 20060913; CN 1833394 B 20100609; EP 1676390 A1 20060705; JP 2007501549 A 20070125; JP 4384171 B2 20091216; US 2008217076 A1 20080911; US 8165740 B2 20120424; WO 2005015816 A1 20050217

DOCDB simple family (application)

DE 10335905 A 20030806; CN 200480022606 A 20040701; DE 2004001388 W 20040701; EP 04738834 A 20040701; JP 2006522207 A 20040701; US 56691604 A 20040701