## Europäisches Patentamt European Patent Office Office européen des brevets

(11) **EP 1 233 577 A8** 

(12)

## **CORRECTED EUROPEAN PATENT APPLICATION**

Note: Bibliography reflects the latest situation

(15) Correction information:

Corrected version no 1 (W1 A2) INID code(s) 30

(51) Int Cl.:

H04L 12/413 (2006.01)

H04L 12/46 (2006.01)

(48) Corrigendum issued on: 19.07.2006 Bulletin 2006/29

(43) Date of publication:

21.08.2002 Bulletin 2002/34

(21) Application number: 02003523.4

(22) Date of filing: 15.02.2002

(84) Designated Contracting States: **DE ES FR GB SE** 

(30) Priority: 20.02.2001 IT TO20010151

(71) Applicant: MAGNETI MARELLI SISTEMI ELETTRONICI S.p.A. 20011 Corbetta (Milano) (IT)

(72) Inventors:

 Borin, Andrea 29015 Castel San Giovanni, (Piacenza) (IT)  Mortara, Piero 10020 Baldissero Torinese, (Torino) (IT)

(74) Representative: Quinterno, Giuseppe et al Jacobacci & Partners S.p.A.
Corso Emilia, 8
10152 Torino (IT)

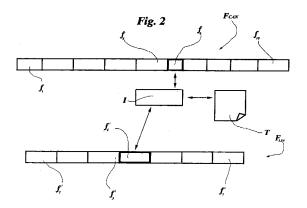
(54) A circuit module for interconnection between local networks in a distributed electronic system for motor vehicles

(57) A circuit module (I) for interconnection between local networks (CAN, LIN) of an on-board electronic-control system for motor vehicles is described, which comprises a plurality of electronic-control units (M) connected to one another by means of at least one main serial communication network (CAN) and a plurality of circuits (S) for driving on-board devices, connected to a node of the main network (CAN) by means of at least one peripheral serial communication network (LIN).

The circuit module (I) is arranged to interconnect the peripheral serial communication network (LIN) and the main serial communication network (CAN), operating as a node of the main network (CAN) and as the master node of the peripheral network (CAN, LIN).

A processing unit of the module can control conversion between the frames ( $F_{CAN}$ ,  $F_{LIN}$ ) of the signals routed on each network to permit the transfer of data between control units (M) and driver circuits (S), by breaking up the frame ( $F_{CAN}$ ;  $F_{LIN}$ ) of a signal received from one network (CAN; LIN) into a plurality of information elements ( $f_i$ ) and assembling a plurality of corresponding information elements ( $f_i$ ) into a different frame ( $F_{LIN}$ ;  $F_{CAN}$ ) for

transmission to the other network (LIN; CAN).



EP 1 233 577 A8