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(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).

