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 TRANSFERT DE DONNEES UNIFILAIRE BIDIRECTIONNEL

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2005015817A1] The invention relates to a method and a device for bi-directional single-wire data transmission of information between a control device (2) and at least one peripheral device (3). The inventive method comprises the following steps: generating a first current flow from the control device (2) to the peripheral device (3) during first windows of time via a single-wire line (4) for transmitting a voltage-coded or current-coded piece of information from the control device (2) to the peripheral device (3); and/or generating a second current flow from the peripheral device (3) to the control device (2) during second windows of time via the single-wire line (4) for retransmitting a voltage-coded or current-coded piece of information from the peripheral device (3) to the control device (2); whereby the first and second windows of time do not overlap; and/or generating information that should be additionally transmitted or retransmitted in first and/or second windows of time and that is transmitted as digital or as analog signals by modulating the current or the voltage of the single-wire line (4) and that are evaluated in the control device (2) or the peripheral device (3).

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