

Title (en)
BI-DIRECTIONAL SWITCH, AND USE OF SAID SWITCH

Title (de)
BIDIREKTIONALER SCHALTER UND VERWENDUNG DES SCHALTERS

Title (fr)
COMMUTATEUR BIDIRECTIONNEL ET SON UTILISATION

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Application
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Abstract (en)
[origin: WO2004107442A1] The invention relates to a bi-directional switch and a use of said bi-directional switch. The inventive bi-directional switch comprises at least one first controllable semiconductor component (100) with a first input contact (101), a first output contact (102), and a first control contact (103), and at least one second controllable semiconductor component (200) with a second input contact (201), a second output contact (202), and a second control contact (203). The first input contact (101) of the first semiconductor component (100) and the second input contact (201) of the second semiconductor component (200) are interconnected in an electrically conducting manner, and the first control contact (103) of the first semiconductor component and the second control contact of the second semiconductor component are interconnected in an electrically conducting manner while the first output contact of the first semiconductor component and the second output contact (202) of the second semiconductor component are electrically insulated from each other. The semiconductor components are disposed on a common substrate (3) that is provided with an electrically conducting coating (4). At least one of said semiconductor components of the switch is arranged on the electrically conducting coating in such a way that a joint contact area (5) corresponding to at least 60 percent of the surface of the contact, which faces the coating, is created between the coating (4) and said surface (6) of the contact, which faces the coating (4). Said arrangement makes it possible to create a low-impedance, low-inductive bi-directional switch. The inventive switch is used for controlling the on-board network of a motor vehicle.

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