

Title (en)
ELECTRONICALLY CONTROLLED PARKING BRAKE FOR A MOTOR VEHICLE

Title (de)
ELEKTRONISCH GESTEUERTE FESTSTELLBREMSE FÜR EIN FAHRZEUG

Title (fr)
FREIN DE STATIONNEMENT A COMMANDE ELECTRONIQUE DESTINE A UN VEHICULE

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Application
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Abstract (en)
[origin: WO0212040A1] The invention relates to an electronically controlled parking brake for a motor vehicle, comprising a switch-on device (35) for generating an electronic activation signal, a release device (35) for generating an electronic deactivation signal, an electronic control device (25) that processes said signal, a pressure fluid source (14, 16, 21) and brake modules (2) that can be optionally linked with the pressure fluid source (14, 16, 21) via on-off valves (11, 12) and that generate braking forces on the wheels of the motor vehicle. Each brake module is provided with a first pressure compartment (34) that is contiguous with a tensioning member of the respective brake module, said pressure compartment being linkable with a main braking cylinder (23) via service brake circuit (22). Each brake module is further provided with a second pressure compartment (9) that is contiguous with a tensioning member of the respective pressure brake module, said pressure compartment being linkable with the pressure fluid source (14, 16, 21) via a separate hydraulic circuit (17, 18, 19, 20). In at least a part of the brake modules (2) the respective tensioning member is provided with two separate coaxially disposed pressure pistons (4, 5), one of which defines the first pressure compartment (34), and between which the second pressure compartment (9) is configured. The pressure fluid source is provided with a pressure accumulator (16) for accumulating the pressure fluid, and with a pressure generator (14) for filling the pressure accumulator (16) and the fluid reservoir (21). The hydraulic circuit comprises valve systems (11, 12) that are controlled by control signals supplied by the control device (25). Said valve systems optionally link the pressure outlet of the pressure accumulator (16) with the respective second pressure compartment (9) of the wheel brake modules (2) and optionally link the respective second pressure compartment (9) of the wheel brake modules (2) with the fluid reservoir (21). Said valve systems (11, 12) are controlled by the control signals of the control device (25).

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