

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

Publication  
**EP 1307373 A1 20030507 (DE)**

Application  
**EP 01974143 A 20010808**

Priority  
• DE 10038786 A 20000809  
• EP 0109178 W 20010808

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).

IPC 1-7  
**B60T 13/68**; **B60T 7/04**; **B60T 7/12**; **B60T 8/00**

IPC 8 full level  
**B60T 7/02** (2006.01); **B60T 7/12** (2006.01); **B60T 8/34** (2006.01); **B60T 13/68** (2006.01); **F16D 55/224** (2006.01); **F16D 65/18** (2006.01)

CPC (source: EP KR US)  
**B60T 7/122** (2013.01 - EP US); **B60T 8/345** (2013.01 - EP US); **B60T 13/68** (2013.01 - KR); **B60T 13/686** (2013.01 - EP US)

Citation (search report)  
See references of WO 0212040A1

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)  
**WO 0212040 A1 20020214**; BR 0113174 A 20031230; CZ 2003608 A3 20040915; DE 10038786 A1 20020228; DE 10038786 C2 20020919; EP 1307373 A1 20030507; JP 2004505835 A 20040226; KR 20030036688 A 20030509; MX PA03001132 A 20040420; PL 360078 A1 20040906; US 2004011610 A1 20040122

DOCDB simple family (application)  
**EP 0109178 W 20010808**; BR 0113174 A 20010808; CZ 2003608 A 20010808; DE 10038786 A 20000809; EP 01974143 A 20010808; JP 2002517352 A 20010808; KR 20037001955 A 20030210; MX PA03001132 A 20010808; PL 36007801 A 20010808; US 34411003 A 20030710