

Title (en)
BRAKING SYSTEM FOR MOTOR VEHICLES

Title (de)
BREMSANLAGE FÜR KRAFTFAHRZEUGE

Title (fr)
SYSTEME DE FREINAGE POUR VEHICULES AUTOMOBILES

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Application
EP 06708283 A 20060215

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Abstract (en)
[origin: WO2006087338A1] The invention relates to a braking system comprising: a master cylinder (1) and a master cylinder housing (20), to which wheel-brake cylinders can be connected; a first piston (2), which is coupled to a brake pedal (3) via a pressure rod (34) that transmits actuating forces; a second piston (4), which is used to actuate the master cylinder (1); a third piston (5), which can be hydraulically actuated by the first piston (2); at least one elastic element (6, 7), which forms a pedal travel simulator and which during the brake-by-wire mode gives the vehicle driver a comforting pedal sensitivity; elements for coupling the displacement of the first (2) and the third piston (5); an intermediate chamber (11) that can be subjected to a hydraulic pressure, the influence of the latter causing a hydraulic force to act on the second (4) and third piston (5); and an electrically controlled pressure-provision module (9), which permits the intermediate chamber (11) to be filled with hydraulic fluid and to be evacuated. The aim of the invention is to assist the actuating force even when the electronic controller or the electric energy supply fails. To achieve this, the system is equipped with a fourth piston (8), which can be subjected to two opposing forces by means of the elastic element (6, 7) on the input side and the hydraulic pressure in the intermediate chamber (11) on the output side, and elements (14,19,15) that allow the pressure-provision module (9), in addition to being electrically controlled, to be controlled in accordance with the position of the fourth piston (8), obtained by the aforementioned exertion of forces.

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