

Title (en)

ELECTROMECHANICAL BRAKE COMPRISING AN ENERGY ACCUMULATOR AND A DOWNSTREAM FORCE MULTIPLICATION UNIT

Title (de)

ELEKTROMECHANISCHE BREMSE MIT KRAFTSPEICHER UND NACHGESCHALTETER KRAFTÜBERSETZUNGSEINHEIT

Title (fr)

FREIN ELECTROMECHANIQUE COMPRENANT UN ACCUMULATEUR DE FORCE ET UNE UNITE DE MULTIPLICATION DE FORCE

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2007042358A1] The invention relates to an electromechanical brake (10), especially for motor vehicles, which comprises an element (e.g., brake disk 12) to be braked, at least one friction lining (18) for frictionally engaging with the element to be braked, and an electric actuator (26) for displacing the friction lining (18) so that it frictionally engages with the element to be braked. The aim of the invention is to provide a constructively and energetically improved electromechanical brake (10). For this purpose, a reversible energy accumulator (e.g. spring 42) functionally coupled to the electric actuator (26) interacts with a force multiplication device (30, 32, 36) in such a manner that when the brake (10) is actuated by means of the actuator (26), the energy stored in the energy accumulator is successively supplied to the force multiplication device with increasing actuation travel of the actuator (26) and the device convert said energy in a set manner to an actuation torque that increases with increasing actuation travel of the actuator (26), said torque being transmitted indirectly or directly onto the friction lining (18). When the brake is released, a brake-inherent restoring force which reacts upon the force multiplication device via the friction lining (18) recharges the energy accumulator.

IPC 8 full level

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