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(57) Abstract :
The present invention relates to an electromagnetic eddy current brake assembly (100) to be employed in automobiles that reduce sliding friction of brakes. The assembly (100) includes a conductor plate (102) coupled to an axle (104) of the vehicle, an electromagnet unit (108) configured adjacent to the conductor plate and comprising a solenoid (110), an electric current source configured such that, upon pressing a brake pedal of the vehicle the solenoid (110) of the electromagnet unit (108) generate a magnetic field upon flow of the electric current, and the magnetic field produced by the eddy current slowdown the rotation of the conductor plate, thereby reducing the speed of the axle, also when speed of the axle (104) is slow, a pair of drum brakes (120) are applied.

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