

*Abstract*

*An electric safety braking device*

An electric safety braking device for an electric track-bound vehicle comprising an electric permanent magnet machine (2) has a resistive braking torque production assembly comprising a connection (17) of terminals (14-16) of the electric machine through rectifying diodes (7) of a converter (4) including a dissipative resistor (18). A control unit (26) is configured to control means configured to vary the resistance of the connection (17) to keep this resistance infinitely high when not braking through said device and to accomplish braking through the device by varying this resistance to control the intensity of the current from the electric machine through said diodes and by that the braking torque applied to wheels through the device.

(Fig 1).