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(54) **CONTROL METHOD FOR BRAKING AN ELECTRIC MOTOR, CONTROL METHOD FOR CONTROLLING AN ELECTRIC DRIVE UNIT AND COMPUTER PROGRAM PRODUCT**

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(57) **ABSTRACT**

Control method for braking an electric motor (**7**) of an electric handheld power tool (**1**), the electric motor (**7**) including a stator winding (**12**) and a rotor winding (**14**), wherein the method includes a) switching (S**1**) the electric motor (**7**) from motor operation to braking operation, b) reversing the polarity (S**2**) of an input voltage applied to the rotor winding (**14**) compared to motor operation, c) limiting (S**3**) a rotor current ($I_R(t)$) of the rotor winding (**14**) as a function of a predetermined threshold value (I_L), and d) regulating (S**4**) a stator current ($I_S(t)$) of the stator winding (**12**) as a function of a current rotation speed (n(t)) of the electric motor (**7**).