

ABSTRACT

Disclosed herein is a technique for reducing harmonics resulting from the rotation of a motor and generated in a power supply current. This power converter device includes a compensation current generator (52) configured to control compensation currents (I_{cr} , I_{cs} , I_{ct}) flowing between itself (52) and an AC power supply (12), and a compensation controller (60; 260) configured to obtain output voltage instruction values (V_{id} , V_{iq}) such that the compensation currents (I_{cr} , I_{cs} , I_{ct}) cancel a harmonic component in load currents (I_r , I_s , I_t) flowing from the AC power supply (12) into a rectifier (22) and resulting from the rotation of the motor (16) and a harmonic component in the load currents (I_r , I_s , I_t) and dependent on a period (T_s) of a voltage of the AC power supply (12).