

Title (en)

METHOD AND DEVICE FOR REGULATING A DEAD TIME IN SWITCHING POWER SUPPLY UNITS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR TOTZEITREGELUNG IN SCHALTNETZTEILEN

Title (fr)

PROCÉDÉ ET DISPOSITIF DE RÉGULATION DU TEMPS DE RETARD DANS DES ALIMENTATIONS À DÉCOUPAGE

Publication

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Application

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Abstract (en)

[origin: WO2016026594A1] The invention relates to a method for adapting a dead time (t_{dead}) between the beginning of the opening process of a first switching element (1.5.1) and the beginning of the closing process of a second serially connected switching element (1.5.2) in a switching regulator (1.5) of a switching power supply unit (1), having the following steps: - a measurement voltage (U_{out}) across the second switching element (1.5.2) is measured, - the dead time (t_{dead}) is varied such that the deviation of the measured measurement voltage (U_{out}) from a target value (U_{target}) of the measurement voltage is minimized or limited, and - the first and second switching elements (1.5.1, 1.5.2) are actuated using the thus ascertained dead time (t_{dead}). The invention further relates to a device for carrying out such a method, comprising a measuring unit (2), a processing unit (3), and a control unit (4).

IPC 8 full level

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CPC (source: EP US)

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