Title (en)

METHOD FOR CONTROLLING AN ELECTRONICALLY COMMUTATED DC MOTOR

Title (de)

VERFAHREN ZUR STEUERUNG EINES ELEKTRONISH KOMMUTIERTEN GLEICHSTROMMOTORS

Title (fr)

PROCEDE DE COMMANDE D'UN MOTEUR A COURANT CONTINU A COMMUTATION ELECTRONIQUE

Publication

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Application

**EP 02757707 A 20020129**

Priority

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- DE 10115873 A 20010330

Abstract (en)

[origin: WO02080348A1] The invention relates to a method for controlling an electronically commutated DC motor (10) with an even-numbered multiphase stator winding (11) whose winding phases (111-114) are connected in parallel relative to one another and in series with one controllable semiconductor switch (12) each. In a lower output range of the DC motor (10), the semiconductor switches (12) are clocked within the power feed times that are subsequent in the individual winding phases (111-114) in a pulse-duty factor that can be determined based on speed. In order to reduce a maximum power loss occurring in a certain speed range in the semiconductor switches (12), a desired pulse-duty factor required for the speed lying within said speed range is adjusted by alternately adjusting a respective smaller or greater pulse-duty factor and by varying the timing of the two pulse-duty factors in such a manner as to provide a voltage on the stator winding (11) that adjusts the desired speed (nsoll)on a time average.

IPC 1-7

**H02P 6/08**; H02P 6/14

IPC 8 full level

**H02P 6/08** (2016.01); **H02P 6/14** (2016.01)

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