

Title (en)  
ESTIMATION METHOD

Title (de)  
SCHÄTZVERFAHREN

Title (fr)  
METHODE D'ESTIMATION

Publication  
**EP 1609232 A1 20051228 (EN)**

Application  
**EP 04720782 A 20040315**

Priority  
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Abstract (en)  
[origin: WO2004082105A1] A field current estimator for estimating the field current in a brushless excited synchronous apparatus comprising an exciter having a stator part and an rotor part comprising a rectifier, and a machine having a stator part and a rotor part and a field winding. The field current estimator comprises: a first calculating unit, calculating the voltages (Vra,Vrb,Vrc) of the exciter rotor part based on measured values of the current (is) and voltage (us) of the exciter stator part, by means of a mathematical model of the exciter, a second calculating unit, calculating the voltage (vff) of the field winding based on the calculated voltage (Vra,Vrb,Vrc) of the exciter rotor part, by means of a mathematical model of the rectifier, and a third calculating unit, calculating the field current (iff) of the field winding based on the calculated voltage (vff) of the field winding, by means of a mathematical model of the field winding.

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