

Title (en)

DEVICE FOR REGULATING THE VOLTAGE IN GENERATORS BY MEANS OF COIL TAPPING AND A CONTROL RELAY

Title (de)

VORRICHTUNG ZUR SPANNUNGSREGELUNG AN ELEKTRISCHEN STROMERZEUGERN MITTELS WICKLUNGSAZAPFUNG UND STEUERRELAIS

Title (fr)

DISPOSITIF DE REGULATION DE TENSION SUR DES GENERATRICES ELECTRIQUES AU MOYEN D'UNE PRISE D'ENROULEMENT ET D'UN RELAIS DE COMMANDE

Publication

**EP 1516423 A1 20050323 (DE)**

Application

**EP 03738024 A 20030613**

Priority

- DE 10228226 A 20020625
- EP 0306220 W 20030613

Abstract (en)

[origin: WO2004001951A1] The invention relates to a device for automatically regulating the voltage of a generator according to the load current. Said device comprises a first couple of clamps which can be connected to a couple of generator clamps carrying the load current and taps a first generator voltage from the generator coil, a second couple of clamps which can be connected to the couple of generator clamps and picks up a second generator voltage that is smaller than the first generator voltage from the generator coil, a third couple of clamps that supplies a control voltage to a control circuit which is provided with a control relay (9) having a switch for switching the connection between the couple of generator clamps and the first couple of clamps or the second couple of clamps. The couple of generator clamps, which is connected to the first couple of clamps by means of the switch, is connected to the second couple of clamps if the control voltage is greater than or equal to an upper threshold voltage of the control relay while the couple of generator clamps, which is connected to the second couple of clamps by means of the switch, is connected to the first couple of clamps if the control voltage is less than or equal to a lower threshold voltage of the control relay. The inventive device also comprises a bridging element that bridges the connection established by the switch between the couple of generator clamps and the first couple of clamps and is provided with a varistor, the on-state voltage of which lies above the difference between the two generator voltages but below the first generator voltage.

IPC 1-7

**H02P 9/04; H02P 9/02; H02P 9/00**

IPC 8 full level

**H02P 9/00** (2006.01); **H02P 9/02** (2006.01); **H02P 9/04** (2006.01)

CPC (source: EP KR)

**H02P 9/00** (2013.01 - EP); **H02P 9/02** (2013.01 - EP); **H02P 9/04** (2013.01 - EP KR); **H02P 21/00** (2013.01 - KR)

Citation (search report)

See references of WO 2004001951A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2004001951 A1 20031231**; AU 2003245937 A1 20040106; CN 1663109 A 20050831; DE 10228226 A1 20040129;  
DE 10228226 B4 20050210; EP 1516423 A1 20050323; JP 2005531272 A 20051013; KR 20050012795 A 20050202;  
RU 2004134334 A 20050827

DOCDB simple family (application)

**EP 0306220 W 20030613**; AU 2003245937 A 20030613; CN 03814982 A 20030613; DE 10228226 A 20020625; EP 03738024 A 20030613;  
JP 2004514708 A 20030613; KR 20047020400 A 20030613; RU 2004134334 A 20030613