

Title (en)

ROTOR OF AN ELECTRIC MACHINE HAVING A SQUIRREL CAGE PRODUCED FROM A GRANULATE

Title (de)

ROTOR EINER ELEKTRISCHEN MASCHINE MIT EINEM AUSGEHEND VON GRANULAT HERGESTELLTEN KURZSCHLUSSKÄFIG

Title (fr)

ROTOR D'UNE MACHINE ÉLECTRIQUE DOTÉ D'UNE CAGE D'ÉCUREUIL PRODUITE À PARTIR DE GRANULÉS

Publication

EP 2979349 A1 20160203 (DE)

Application

EP 14707991 A 20140228

Priority

- EP 13165691 A 20130429
- EP 2014053959 W 20140228
- EP 14707991 A 20140228

Abstract (en)

[origin: CA2910502A1] The invention relates to a method for producing a rotor of an electric machine, wherein the rotor has a rotor core (1) which is made of a core material and is disposed concentrically with respect to the rotor axis, wherein the rotor core (1) has grooves (2) which extend substantially in the axial direction, wherein the rotor core (1) has at each axial end of the grooves (2) a respective annular recess (3) which is disposed concentrically with respect to the rotor axis and connects the grooves (2), wherein the rotor core (1) has a diffusion layer (4) which comprises a diffusion material and which at least partially covers at least the respective surface of the grooves (2) and/or the respective annular recess (3). The invention further relates to such a rotor and an electric machine having such a rotor. In order to improve the aforementioned method or the aforementioned rotor such that the rotor can be produced more cost-effectively and has improved mechanical characteristics, according to the invention a granulate (5) of an electrically conductive material is introduced into the grooves (2) and/or the respective annular recess (3) and, while heat being supplied and while pressure being exerted, is connected by cohesive bonding to the rotor core (1).

IPC 8 full level

H02K 15/00 (2006.01)

CPC (source: EP RU US)

H02K 3/02 (2013.01 - US); **H02K 15/0012** (2013.01 - EP US); **H02K 17/20** (2013.01 - EP US); **H02K 3/02** (2013.01 - RU); **H02K 15/02** (2013.01 - RU); **H02K 17/16** (2013.01 - RU)

Cited by

EP3629452A1; WO2020064413A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2800254 A1 20141105; AU 2014261727 A1 20151105; AU 2014261727 B2 20160714; BR 112015027232 A2 20170725; CA 2910502 A1 20141106; CA 2910502 C 20181113; CN 105191082 A 20151223; CN 105191082 B 20180216; EP 2979349 A1 20160203; RU 2015150982 A 20170607; RU 2633382 C2 20171012; SA 515370078 B1 20180708; US 2016079821 A1 20160317; WO 2014177303 A1 20141106

DOCDB simple family (application)

EP 13165691 A 20130429; AU 2014261727 A 20140228; BR 112015027232 A 20140228; CA 2910502 A 20140228; CN 201480024168 A 20140228; EP 14707991 A 20140228; EP 2014053959 W 20140228; RU 2015150982 A 20140228; SA 515370078 A 20151029; US 201414787690 A 20140228