

Title (en)
ELECTRICAL MACHINE WITH A CONDUCTOR ARRANGEMENT AND INSULATION THEREFORE

Title (de)
ELEKTRISCHE MASCHINE MIT EINER LEITERANORDNUNG UND ISOLIERUNG DAFÜR

Title (fr)
MACHINE ÉLECTRIQUE DOTÉE D'UN SYSTÈME CONDUCTEUR ET ISOLATION ASSOCIÉE

Publication
EP 3635849 A1 20200415 (EN)

Application
EP 17728853 A 20170609

Priority
EP 2017064116 W 20170609

Abstract (en)
[origin: WO2018224163A1] An electrical machine (100) having a conductor arrangement (200) is proposed. The wound conductor arrangement includes: an electrical conductor and an electrical insulation at least partially provided around the conductor. The electrical machine is adapted for applying a voltage up to a rated voltage Vmax to the conductor arrangement. The electrical insulation comprises a diamond containing insulation layer, the diamond containing insulation layer comprising diamond particles having a diameter of at least 1 µm in a direction substantially parallel to the conductor surface. The diamond containing insulation layer provides the highest dielectric strength and/or discharge resistance of the electrical insulation; and the diamond containing insulation layer having a thickness td in a range depending on Vmax.

IPC 8 full level
H02K 3/30 (2006.01); **H01B 3/00** (2006.01)

CPC (source: EP)
H02K 3/30 (2013.01); **H02K 3/40** (2013.01); **H02K 2213/03** (2013.01)

Citation (search report)
See references of WO 2018224163A1

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)
WO 2018224163 A1 20181213; CN 110915107 A 20200324; EP 3635849 A1 20200415

DOCDB simple family (application)
EP 2017064116 W 20170609; CN 201780093761 A 20170609; EP 17728853 A 20170609