

Title (en)

DEVICE AND METHOD FOR ALIGNING A HAIRPIN WINDING

Title (de)

VORRICHTUNG UND VERFAHREN ZUR AUSRICHTUNG EINER HAIRPINWICKLUNG

Title (fr)

DISPOSITIF ET PROCÉDÉ D'ORIENTATION D'UN ENROULEMENT EN ÉPINGLE À CHEVEUX

Publication

EP 3782268 A1 20210224 (DE)

Application

EP 19718121 A 20190411

Priority

- DE 102018206003 A 20180419
- EP 2019059229 W 20190411

Abstract (en)

[origin: WO2019201731A1] The present invention relates to a device for aligning the contact ends (4) of hairpins of a hairpin winding, wherein the contact ends (4) of the hairpin winding are arranged in double layers extending in the circumferential direction and in a number of radially running rows (KR), said number corresponding to a number of grooves, wherein at least two double layers are present, and wherein two contact ends (4), which are adjacent in a double layer of a row (KR), form a contact pair. The invention is characterized in that a spreader (1) is provided, by which at least a part of the contact ends (4) can be covered, in that the spreader (1) has at least one wedge element (2) which extends in the tangential direction, in that the wedge element (2) has a tip (3) at its axial end facing the contact ends (4), wherein the tip (3) has a width in the radial direction, which is smaller than half the width of a contact end (4), in that the width of the wedge element (2) increases in the radial direction starting from the tip (3), and in that the wedge element (2) has at least a width of 3 mm to 6 mm over a length in the axial direction, which corresponds to the length of a non-insulated region (4.1) of the contact end (4), and in that the spreader (1) can be moved in the axial direction. Further aspects of the invention are a method therefor and an electrical machine produced thereby.

IPC 8 full level

H02K 15/00 (2006.01)

CPC (source: EP)

H02K 15/0056 (2013.01); **H02K 15/0081** (2013.01); **H02K 15/0087** (2013.01); **H02K 2213/03** (2013.01)

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 2019201731 A1 20191024; DE 102018206003 A1 20191024; EP 3782268 A1 20210224

DOCDB simple family (application)

EP 2019059229 W 20190411; DE 102018206003 A 20180419; EP 19718121 A 20190411