

Title (en)

VERTICAL-STRATIFICATION WINDING MACHINE FOR ELECTRIC TRANSFORMERS

Title (de)

SPULMASCHINE MIT VERTIKALER SCHICHTUNG FÜR STROMWANDLER

Title (fr)

MACHINE D'ENROULEMENT A STRATIFICATION VERTICALE POUR TRANSFORMATEURS ÉLECTRIQUES

Publication

EP 2139801 A1 20100106 (EN)

Application

EP 08735362 A 20080423

Priority

- EP 2008003235 W 20080423
- IT VI20070124 A 20070427

Abstract (en)

[origin: WO2008131889A1] To create medium-voltage windings for distribution transformers of both the oil-filled and cast-resin types, horizontal stratification techniques are still used, with machines being automated to a greater or lesser degree and with the necessity to isolate the various layers with dielectric film. Vertical-stratification winding machines introduce a radical modification with respect to this winding technique: coils are no longer made to rotate around a horizontal axis but are positioned vertically. With the new technique, the winding spirals are preformed by a variable geometry expander and fall under the force of gravity to form concentric spirals as illustrated in the main drawing below (Fig.1). A further important innovation lies in the fact there is no need to insert any form of insulation between layers, resulting in considerable advantages in terms of costs and the thermal dissipation of the coil.

IPC 8 full level

B65H 54/76 (2006.01); **H01F 41/06** (2006.01)

CPC (source: EP)

B65H 54/76 (2013.01); **H01F 41/082** (2016.01)

Citation (search report)

See references of WO 2008131889A1

Designated contracting state (EPC)

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

DOCDB simple family (publication)

WO 2008131889 A1 20081106; AT E500182 T1 20110315; DE 602008005287 D1 20110414; EP 2139801 A1 20100106; EP 2139801 B1 20110302; IT VI20070124 A1 20081028

DOCDB simple family (application)

EP 2008003235 W 20080423; AT 08735362 T 20080423; DE 602008005287 T 20080423; EP 08735362 A 20080423; IT VI20070124 A 20070427