

Title (en)
An active part of a dry distribution transformer

Title (de)
Aktiver Teil eines Trockenverteilungstransformators

Title (fr)
Partie active d'un transformateur de distribution sec

Publication
EP 2784791 B1 20150729 (EN)

Application
EP 13460018 A 20130329

Priority
EP 13460018 A 20130329

Abstract (en)
[origin: EP2784791A1] The present invention relates to an active part of a dry-type distribution transformer having an insulation system with electrical field control. An active part of the dry transformer comprising a core (1) with yokes (2) and limbs (3) having an a longitudinal axis (A) around which LV coils (4) and winding bobbin (5) is placed concentrically. The bobbin (5) has a shape of a longitudinal cylinder (5a) which is ended with annular discs (5b). The bobbin (5) is made of material having a dielectric permittivity which is two to five times higher more the dielectric permittivity of the insulating body (8) surrounding the limb (3) around the axis (A), in which the LV coils (4) and HV coils (6) are embedded. The external facial surfaces of the insulating body (8) is provided with a metallic layer (10) having such electric conductivity that the part of the insulating body (8) between an internal surface of the metallic layer (10) and an external surface of the annular disc (5b) has a thickness (d3) which is sufficient for insulation. A side surface of the cylinder (5a) is covered with a resistive layer (7) being a control shield of an electric field around the limb (3) of the core (1) and the HV coils (6) and the LV coils (4).

IPC 8 full level
H01F 27/32 (2006.01); **H01F 27/36** (2006.01)

CPC (source: EP US)
H01F 27/324 (2013.01 - EP); **H01F 27/325** (2013.01 - EP); **H01F 27/36** (2013.01 - EP); **H01F 27/363** (2020.08 - EP US)

Cited by
DE102018213661A1; EP3770931A1

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

DOCDB simple family (publication)
EP 2784791 A1 20141001; EP 2784791 B1 20150729; WO 2014154320 A1 20141002

DOCDB simple family (application)
EP 13460018 A 20130329; EP 2014000567 W 20140305