

Title (en)
Voltage transformer with amorphous coil

Title (de)
Leistungstransformator mit amorphem Kern

Title (fr)
Transformateur de performance doté d'un noyau amorphe

Publication
EP 2239745 B1 20130410 (DE)

Application
EP 09005285 A 20090411

Priority
EP 09005285 A 20090411

Abstract (en)
[origin: EP2239745A1] The three-phase transformer (10) in dry construction, comprises a core made of amorphous material, which is sensitive to mechanical stresses, three winding assemblies (12) surrounding the core and formed from a primary winding and secondary winding in each case, and a holding device for fixing the primary winding and secondary winding. Each core is tubularly formed as wrapping tape core made of tape material with rectangular or oval or round outline, where two wrapping tape cores are arranged to each other in its longitudinal shank and are wrapped to its mechanical connection. The three-phase transformer (10) in dry construction, comprises a core made of amorphous material, which is sensitive to mechanical stresses, three winding assemblies (12) surrounding the core and formed from a primary winding and secondary winding in each case, and a holding device for fixing the primary winding and secondary winding. Each core is tubularly formed as wrapping tape core made of tape material with rectangular or oval or round outline, where two wrapping tape cores are arranged to each other in its longitudinal shank and are wrapped to its mechanical connection by tape materials from amorphous material, and all shanks have same winding cross-section. The holding device is formed from two tensioning elements (25), which are connected to each other and subject the winding assembly at each of its front side. The tensioning elements consist of ferromagnetic material, where each core is connected with the tensioning elements in magnetic conductive manner and is equipped at its front side with a support from insulating materials. Carriers are equipped on the front ends, are connected to each other and guide along at the longitudinal side of the core. An independent claim is included for a method for the production of a transformer.

IPC 8 full level
H01F 27/06 (2006.01); **H01F 27/30** (2006.01); **H01F 41/02** (2006.01)

CPC (source: EP KR US)
H01F 27/06 (2013.01 - EP KR US); **H01F 27/306** (2013.01 - EP KR US); **H01F 30/12** (2013.01 - KR); **H01F 41/0226** (2013.01 - EP KR US); **H01F 30/12** (2013.01 - EP US); **Y10T 29/49073** (2015.01 - US)

Cited by
DE102011081337A1; CN114883107A

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 MK MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 2239745 A1 20101013; EP 2239745 B1 20130410; BR PI1010257 A2 20160322; BR PI1010257 B1 20190702; CA 2758282 A1 20101014; CA 2758282 C 20160126; CN 102388424 A 20120321; CN 102388424 B 20150520; ES 2404823 T3 20130529; KR 101695345 B1 20170113; KR 20110137353 A 20111222; US 2012068800 A1 20120322; US 8786390 B2 20140722; WO 2010115516 A1 20101014

DOCDB simple family (application)
EP 09005285 A 20090411; BR PI1010257 A 20100323; CA 2758282 A 20100323; CN 201080017086 A 20100323; EP 2010001796 W 20100323; ES 09005285 T 20090411; KR 20117023776 A 20100323; US 201113248645 A 20110929