

Title (en)

APPARATUS FOR REDUCING A MAGNETIC UNIDIRECTIONAL FLUX COMPONENT IN THE CORE OF A TRANSFORMER

Title (de)

VORRICHTUNG ZUR VERRINGERUNG EINES MAGNETISCHEN GLEICHFLUSS-ANTEILS IM KERN EINES TRANSFORMATORS

Title (fr)

DISPOSITIF DE RÉDUCTION D'UNE PARTIE DU FLUX MAGNÉTIQUE CONTINU DANS LE NOYAU D'UN TRANSFORMATEUR

Publication

**EP 3103125 A1 20161214 (DE)**

Application

**EP 14815679 A 20141217**

Priority

- EP 14154070 A 20140206
- EP 2014078173 W 20141217

Abstract (en)

[origin: WO2015117708A1] The invention relates to an apparatus for reducing a magnetic unidirectional flux component in the core of a transformer with at least three legs, in particular a three-phase transformer comprising at least one compensation winding per transformer leg, wherein the compensation windings are magnetically coupled to the core of the transformer. The apparatus is characterized in that - two compensation windings (K1-1, K1-2; K2-1, K2-2; K3-1, K3-2) are provided per leg, in each case the first compensation windings (K1-1, K2-1, K3-1) of a leg are connected together electrically in a first delta connection (1), - in each case the second compensation windings (K1-2, K2-2, K3-2) of a leg are connected together electrically in a second delta connection (2), - wherein the compensation windings (K1-1, K1-2; K3-1, K3-2) of at least one leg have different numbers of windings, - and wherein at least one switching unit (T) is arranged in series with the compensation windings for phase angle control.

IPC 8 full level

**H01F 27/38** (2006.01); **H01F 27/42** (2006.01); **H01F 29/14** (2006.01); **H03H 7/01** (2006.01); **H03H 7/09** (2006.01)

CPC (source: EP US)

**H01F 27/28** (2013.01 - US); **H01F 27/38** (2013.01 - EP US); **H01F 27/42** (2013.01 - EP US); **H01F 29/14** (2013.01 - EP US); **H01F 2029/143** (2013.01 - EP US)

Citation (search report)

See references of WO 2015117708A1

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)

**EP 2905792 A1 20150812**; **EP 2905792 B1 20160921**; CN 105993056 A 20161005; CN 105993056 B 20180119; EP 3103125 A1 20161214; US 10424435 B2 20190924; US 2017213643 A1 20170727; WO 2015117708 A1 20150813

DOCDB simple family (application)

**EP 14154070 A 20140206**; CN 201480075006 A 20141217; EP 14815679 A 20141217; EP 2014078173 W 20141217; US 201415117138 A 20141217