

Title (en)

INDUCTANCE COIL FOR ELECTRIC POWER GRIDS HAVING REDUCED SOUND EMISSION

Title (de)

DROSSELSPULE FÜR ELEKTRISCHE ENERGIEVERSORGUNGSNETZE MIT REDUZIERTEN SCHALLEMISSIONEN

Title (fr)

BOBINE D'ARRET POUR RESEAUX DE DISTRIBUTION D'ENERGIE ELECTRIQUE AVEC EMISSIONS SONORES DIMINUEES

Publication

**EP 2304744 A1 20110406 (DE)**

Application

**EP 09771828 A 20090630**

Priority

- AT 2009000259 W 20090630
- AT 10352008 A 20080630

Abstract (en)

[origin: WO2010000005A1] The invention relates to an inductance coil, particularly an inductance coil without iron core for use in electric power grids, comprising at least two cylindrical winding layers (1), which are disposed concentrically with respect to a coil center line (7) and are connected electrically in parallel. Said inductance coil comprises at least one means for reducing or minimizing sound emissions developing during operation of the inductance coil. At least the outermost winding layer (1) is designed as a current-conducting, acoustic shield winding (18) with respect to the winding layer (1) adjoining in the direction of the center line (7), wherein said shield winding (18) is dimensioned electrically such that it is designed for the transmission of a current intensity which is only a fraction of the current intensity which is to be transmitted by the adjoining winding layer (1). The invention further relates to a clamp-like retaining element disposed on at least one face end of the inductance coil for reducing sound emissions.

IPC 8 full level

**H01F 27/30** (2006.01); **H01F 27/33** (2006.01); **H01F 37/00** (2006.01)

CPC (source: AT EP US)

**H01F 27/303** (2013.01 - EP US); **H01F 27/33** (2013.01 - AT EP US); **H01F 37/005** (2013.01 - EP US)

Citation (search report)

See references of WO 2010000005A1

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

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

**WO 2010000005 A1 20100107**; AT 507024 A1 20100115; AT 507024 B1 20111015; AT 507928 A1 20100915; AT 507928 B1 20150915; BR PI0913649 A2 20151124; BR PI0913649 B1 20190903; CA 2729020 A1 20100107; CA 2729020 C 20170110; CN 102203888 A 20110928; CN 102203888 B 20130123; EP 2304744 A1 20110406; EP 2304744 B1 20131120; EP 2304744 B2 20221130; HK 1161416 A1 20120824; US 2011115601 A1 20110519; US 8339234 B2 20121225

DOCDB simple family (application)

**AT 2009000259 W 20090630**; AT 10352008 A 20080630; AT 3682009 A 20080630; BR PI0913649 A 20090630; CA 2729020 A 20090630; CN 200980131649 A 20090630; EP 09771828 A 20090630; HK 12101591 A 20120217; US 73731109 A 20090630