

Title (en)
CORE FOR A TRANSFORMER

Title (de)
KERN FÜR EINEN TRANSFORMATOR

Title (fr)
NOYAU POUR UN TRANSFORMATEUR

Publication
EP 3738133 A1 20201118 (DE)

Application
EP 19710339 A 20190301

Priority
• DE 102018203087 A 20180301
• EP 2019055188 W 20190301

Abstract (en)
[origin: CA3092514A1] The invention relates to a core for a transformer. Said core comprises a multiplicity of bent metal sheets bonded together to form a structure surrounding a core opening and forming the core. Said metal sheets comprise sheet ends not touching one another within the core, causing the core with said metal sheets to form at least one air gap at said sheet ends within the core or at a periphery of the core. Said air gap forms magnetic resistance that increases with the width of said air gap. This causes no-load losses. An object of the invention is to minimize those no-load losses in the transformers through the lowest possible magnetic resistances. A lacquer is provided which contains magnetic particles. Said lacquer impregnates or coats the core at least at said sheet ends of said metal sheets and fills each air gap between said sheet ends of said metal sheets.

IPC 8 full level
H01F 27/245 (2006.01); **H01F 3/02** (2006.01); **H01F 41/02** (2006.01)

CPC (source: EP US)
H01F 3/02 (2013.01 - EP); **H01F 3/14** (2013.01 - US); **H01F 27/2455** (2013.01 - EP US); **H01F 27/255** (2013.01 - US);
H01F 41/024 (2013.01 - EP US)

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)
DE 102018203087 A1 20190905; BR 112020016616 A2 20201215; BR 112020016616 A8 20230425; CA 3092514 A1 20190906;
CN 111801751 A 20201020; CN 111801751 B 20240524; CO 2020009898 A2 20200821; EP 3738133 A1 20201118; EP 3738133 B1 20230712;
EP 3738133 C0 20230712; ES 2959476 T3 20240226; PL 3738133 T3 20231227; US 2021065944 A1 20210304; WO 2019166645 A1 20190906

DOCDB simple family (application)
DE 102018203087 A 20180301; BR 112020016616 A 20190301; CA 3092514 A 20190301; CN 201980016259 A 20190301;
CO 2020009898 A 20200812; EP 19710339 A 20190301; EP 2019055188 W 20190301; ES 19710339 T 20190301; PL 19710339 T 20190301;
US 201916977170 A 20190301