

Title (en)
Transformer coil with cooling channel

Title (de)
Transformatorwicklung mit Kühlkanal

Title (fr)
Enroulement de transformateur doté d'un canal de refroidissement

Publication
EP 2472533 A1 20120704 (DE)

Application
EP 11000018 A 20110104

Priority
EP 11000018 A 20110104

Abstract (en)
The winding (10) has a common winding axis (16) that is extended through the winding modules (12,14). A hollow-cylindrical cooling channel (18) is formed between the winding modules and spaced apart from the winding modules by insulating strips (20,22,24,26,28,30,32). The insulating strips are radially arranged in the cooling channel and comprised with a cross-sectional shape having a surface profile which is spaced apart from the winding axis. An independent claim is included for transformer.

Abstract (de)
Die Erfindung betrifft eine Transformatorwicklung (10, 40) mit wenigstens zwei hohlzylindrisch ineinandergeschachtelten sich um eine gemeinsame Wickelachse (16) erstreckenden Wicklungsmodulen (12, 14, 42, 44), wobei diese innerhalb wenigstens eines dazwischen angeordneten hohlzylindrischen Kühlkanals (18, 46) mittels Isolationsleisten (20, 22, 24, 26, 28, 30, 32, 48) radial (32, 62) voneinander beabstandet sind. Die Isolationsleisten (20, 22, 24, 26, 28, 30, 32, 48) weisen eine Querschnittsform auf, welche einen Oberflächenverlauf (50, 52, 54) radial (32, 62) zur Wickelachse (16) überwiegend vermeidet.

IPC 8 full level
H01F 27/08 (2006.01); **H01F 27/32** (2006.01)

CPC (source: EP US)
H01F 27/085 (2013.01 - EP US); **H01F 27/2876** (2013.01 - EP US); **H01F 27/322** (2013.01 - EP US); **H01F 2027/328** (2013.01 - EP US)

Citation (search report)
• [XI] US 3748616 A 19730724 - WEBER H, et al
• [XYI] US 2904760 A 19590915 - JOHNSTON GORMAN J
• [Y] FR 1278093 A 19611208
• [A] US 3447112 A 19690527 - BROVERMAN ALVIN Y, et al

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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 2472533 A1 20120704; CN 103270560 A 20130828; CN 103270560 B 20160420; EP 2661756 A1 20131113; US 2013293329 A1 20131107;
US 9208939 B2 20151208; WO 2012092941 A1 20120712

DOCDB simple family (application)
EP 11000018 A 20110104; CN 201180064188 A 20111129; EP 11790876 A 20111129; EP 2011005969 W 20111129;
US 201313934750 A 20130703