

Title (en)

Multi-layer coil of plural electric wires for transformer and its winding machine

Title (de)

Mehrschichtige Spule mit mehreren elektrischen Drähten für Transformator und deren Wickelmaschine

Title (fr)

Bobine multicouche de plusieurs fils électriques pour transformateur et sa machine de bobinage

Publication

**EP 2237291 A3 20130327 (EN)**

Application

**EP 10000359 A 20100115**

Priority

JP 2009090142 A 20090402

Abstract (en)

[origin: EP2237291A2] A plurality of flat-type electric wires (1A, 1B) fed individually are coated with a bonding agent by a bonding agent coating mechanism (2) so as to be held in overlapped constraint condition, thus impersonating a single flat-type electric wire (1) which in turn is molded by a molding unit 10 and piled up in laminated disk-like form by use of a stacking unit (11) to provide a multi-layer coil using plural flat-type electric wires. The multi-layer coil can attain the effect equivalent to an increase in cross-sectional area of the single flat-type electric wire and a molded transformer of a large capacity can be realized. Thus, by additionally providing a mechanism for keeping the flat-type electric wires (1A, 1B) in overlapped condition in a winding machine, a multi-layer coil using plural electric wires can be manufactured at low costs.

IPC 8 full level

**H01F 41/06** (2006.01); **H01F 27/28** (2006.01)

CPC (source: EP)

**H01F 27/2823** (2013.01); **H01F 41/069** (2016.01); **H01F 41/074** (2016.01)

Citation (search report)

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DE102017207660A1; EP3367501A4

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 SM TR

Designated extension state (EPC)

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DOCDB simple family (publication)

**EP 2237291 A2 20101006**; **EP 2237291 A3 20130327**; **EP 2237291 B1 20151223**; CN 101859636 A 20101013; CN 101859636 B 20130213; CN 102768900 A 20121107; JP 2010245169 A 20101028; JP 5172767 B2 20130327

DOCDB simple family (application)

**EP 10000359 A 20100115**; CN 201010105449 A 20100125; CN 201210228023 A 20100125; JP 2009090142 A 20090402