

Title (en)

METHOD FOR PRODUCING A MONOLITHIC ELECTROMAGNETIC COMPONENT

Title (de)

VERFAHREN ZUR HERSTELLUNG EINER MONOLITHISCHEN ELEKTROMAGNETISCHEN KOMPONENTE

Title (fr)

PROCÉDÉ DE FABRICATION D'UN COMPOSANT ÉLECTROMAGNÉTIQUE MONOLITHIQUE

Publication

EP 3039694 B1 20211222 (FR)

Application

EP 14753101 A 20140821

Priority

- FR 1358177 A 20130826
- EP 2014067852 W 20140821

Abstract (en)

[origin: WO2015028389A1] A method for producing a monolithic electromagnetic component comprising a plurality of elements including a base made from spinel ferrite and at least one planar coil comprising a plurality of windings. The method comprises the following series of steps: - during an initial step (110), obtaining a precursor (32) of the ferrite, - during a preparation step (120), in a mould, embedding the elements of the monolithic electromagnetic component including said at least one coil and other than the ferrite in the precursor (32), and - during a co-sintering step (130), rigidly connecting said precursor (32) to the other elements of the monolithic electromagnetic component including said at least one coil by co-sintering under load by means of a pulsed electric current.

IPC 8 full level

H01F 41/02 (2006.01); **H01F 1/34** (2006.01); **H01F 27/255** (2006.01); **H01F 27/28** (2006.01); **H01F 27/32** (2006.01)

CPC (source: EP US)

H01F 41/02 (2013.01 - US); **H01F 41/0246** (2013.01 - EP US); **H01F 1/344** (2013.01 - EP US); **H01F 27/255** (2013.01 - EP US); **H01F 27/2871** (2013.01 - EP US); **H01F 27/324** (2013.01 - EP US)

Citation (examination)

JP 2004022814 A 20040122 - ALPS ELECTRIC CO LTD

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

DOCDB simple family (publication)

FR 3009884 A1 20150227; **FR 3009884 B1 20161209**; EP 3039694 A1 20160706; EP 3039694 B1 20211222; JP 2016529727 A 20160923; JP 6568072 B2 20190828; US 10490347 B2 20191126; US 2016203908 A1 20160714; WO 2015028389 A1 20150305

DOCDB simple family (application)

FR 1358177 A 20130826; EP 14753101 A 20140821; EP 2014067852 W 20140821; JP 2016537240 A 20140821; US 201414914599 A 20140821