

Title (en)

AN INTEGRATED PLANAR VARIABLE TRANSFORMER WITH EMBEDDED MAGNETIC CORE

Title (de)

INTEGRIERTER PLANARER VARIABLER TRANSFORMATOR MIT EINGEBETTEM MAGNETKERN

Title (fr)

TRANSFORMATEUR VARIABLE PLANAR INTÉGRÉ À NOYAU MAGNÉTIQUE INCORPORÉ

Publication

**EP 2370981 B1 20121010 (EN)**

Application

**EP 09799200 A 20091201**

Priority

- US 2009006346 W 20091201
- US 20417808 P 20081231
- US 20080908 P 20081203

Abstract (en)

[origin: WO2010065113A1] The current invention provides an integrated planar transformer and electronic component that includes at least one wideband planar transformer disposed in a planar substrate, where each wideband planar transformer includes a planar substrate in a fully-cured and rigid state, a ferrite material embedded in the planar substrate, where the ferrite material is enveloped in an elastic and non-conductive material, inter-wound conductors disposed around the embedded ferrite material, where top and bottom conductors are bonded by an insulating adhesive. The top and bottom conductors are connected in an inter-connected pattern by conductive vias disposed on each side of the ferrite material and span through the layers to the conductors. The planar transformer further includes at least one center tap connected to at least one inter-wound conductor. The integrated planar transformer and electronic component further includes at least one electronic component connected to at least one terminal of the wide-band planar transformer.

IPC 8 full level

**H01F 17/00** (2006.01); **H01F 21/12** (2006.01); **H01R 13/66** (2006.01); **H01R 13/719** (2011.01)

CPC (source: EP KR)

**H01F 17/0033** (2013.01 - EP KR); **H01F 21/12** (2013.01 - EP KR); **H01F 27/22** (2013.01 - KR); **H01R 13/6675** (2013.01 - EP KR);  
**H01R 13/719** (2013.01 - EP KR); H01F 27/22 (2013.01 - EP); **H01F 2019/085** (2013.01 - EP KR); **H01F 2027/328** (2013.01 - EP KR)

Cited by

US10553347B2; US10418165B2

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

DOCDB simple family (publication)

**WO 2010065113 A1 20100610**; CN 102308346 A 20120104; CN 102308346 B 20140129; EP 2370981 A1 20111005; EP 2370981 B1 20121010;  
JP 2012510725 A 20120510; KR 101189369 B1 20121009; KR 20110079770 A 20110707; TW 201036006 A 20101001

DOCDB simple family (application)

**US 2009006346 W 20091201**; CN 200980156070 A 20091201; EP 09799200 A 20091201; JP 2011539504 A 20091201;  
KR 20117012321 A 20091201; TW 98141208 A 20091202