Title (en)

FERRITE DEVICE FOR POWER APPLICATION AND MANUFACTURING METHOD OF DEVICE

Title (de)

FERRITBAUTEIL FÜR LEISTUNGSVERWENDUNG UND HERSTELLUNGSVERFAHREN DES BAUTEILS

Title (fr)

COMPOSANT FERRITE POUR APPLICATION DE PUISSANCE ET PROCEDE DE FABRICATION DU COMPOSANT

Publication

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Application

EP 14745161 A 20140801

Priority

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- EP 2014066622 W 20140801

Abstract (en)

[origin: WO2015022207A1] The invention relates to an inductive component comprising a stack of layers, said stack comprising layers based on magnetic ferrite, characterised in that: - the magnetic ferrite respects the chemical formula: NixMgyZnzCuvCowFe2-δO4 where v is nonzero, 0<δ<0.1 and x+y+z+v+w = 1; and - said component comprises: # tracks made of noble metal, possibly silver, gold or palladium/silver, distributed over the various levels formed by the surfaces of the layers, in order to form in each level a turn, the turns from one level to another level possibly being electrically connected or not; # dielectric elements of amagnetic ferrite, which elements are positioned on at least some of said noble metal tracks between at least two layers of magnetic ferrite material, so that said dielectric elements are incorporated in the magnetic ferrite material; and # a stack of said metal tracks forming said turns, in which each metal track is separated from the metal track of the layer above or below by a dielectric material made of amagnetic ferrite. The invention also relates to a process for manufacturing an inductive component according to the invention, comprising the production of tape casts and a co-sintering operation.

IPC 8 full level

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