

Title (en)
INTERLEAVED LLC CONVERTER

Title (de)
VERSCHACHTELTER LLC-WANDLER

Title (fr)
CONVERTISSEUR LLC ENTRELACÉ

Publication
EP 3739601 B1 20221228 (EN)

Application
EP 19175151 A 20190517

Priority
EP 19175151 A 20190517

Abstract (en)
[origin: EP3739601A1] An inductive component is described herein. In accordance with one example, the inductive component includes a magnetic core assembly comprising at a first portion and a second portion, which is magnetically separated from the first portion of the magnetic core assembly via two or more air gaps. The inductive component further includes an inductor with a variable inductance including a first coil that is arranged on the first portion of the magnetic core assembly, a second coil arranged on the second portion of the magnetic core assembly and configured to generate a bias magnetic field in the second portion of the magnetic core assembly. The first coil is configured to generate a magnetic flux in a magnetic path that includes the first portion of the magnetic core assembly, the two or more air gaps and a part of the second portion of the magnetic core assembly. Furthermore, multiphase LLC switching converter, which includes the above-mentioned inductive component is described herein.

IPC 8 full level
H01F 3/10 (2006.01); **H01F 27/28** (2006.01); **H01F 27/40** (2006.01)

CPC (source: EP)
H01F 3/10 (2013.01); **H01F 27/2866** (2013.01); **H01F 27/40** (2013.01); **H01F 2027/408** (2013.01)

Cited by
US11502614B2; WO2021146047A1; WO2023130253A1

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)
EP 3739601 A1 20201118; EP 3739601 B1 20221228

DOCDB simple family (application)
EP 19175151 A 20190517