

Title (en)  
COMPOSITE MAGNETIC INDUCTOR ELEMENT AND FABRICATION METHOD THEREOF

Title (de)  
ZUSAMMENGESETZTES MAGNETISCHES INDUKTORELEMENT UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)  
ÉLÉMENT INDUCTEUR MAGNÉTIQUE COMPOSITE ET SON PROCÉDÉ DE FABRICATION

Publication  
**EP 4369359 A1 20240515 (EN)**

Application  
**EP 22383092 A 20221114**

Priority  
EP 22383092 A 20221114

Abstract (en)  
Method of manufacturing a composite magnetic inductor element, the method comprising obtaining powdered magnetic charges by a grinding process of at least soft-ferrite magnetic elements; obtaining a magnetic polymer by mixing a first polymer with the powdered magnetic charges, the powdered magnetic charges being in a percentage selected, between 70% and 85% by weight of the total weight of the magnetic polymer, to provide a given magnetic inductance; and obtaining the magnetic inductor element by melting and injecting the magnetic polymer into a core mold or through a die, the magnetic inductor element being a magnetic core for an inductor device or a magnetic inductor pellet.

IPC 8 full level  
**H01F 1/38** (2006.01); **H01F 1/37** (2006.01); **H01F 41/02** (2006.01)

CPC (source: EP)  
**H01F 1/37** (2013.01); **H01F 41/0246** (2013.01); **H01F 2017/048** (2013.01)

Citation (applicant)  
• EP 3089176 B1 20180509 - PREMO S L [ES]  
• EP 3192084 B1 20200108 - PREMO SA [ES]

Citation (search report)  
• [X] US 2021035734 A1 20210204 - PATEL ARPANKUMAR [DE]  
• [X] EP 2879139 A1 20150603 - NTN TOYO BEARING CO LTD [JP]  
• [A] KR 101358440 B1 20140205 - MPT CO LTD [KR]  
• [A] CN 112768221 A 20210507 - HENGDIAN GROUP DMEGC MAGNETICS 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 ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA

Designated validation state (EPC)  
KH MA MD TN

DOCDB simple family (publication)  
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