

Title (en)  
COMPACT ELECTRIC TRANSFORMER WITH CONTROLLED LEAKAGE

Title (de)  
KOMPAKTER ELEKTRISCHER TRANSFORMATOR MIT GESTEUERTER LECKAGE

Title (fr)  
TRANSFORMATEUR ÉLECTRIQUE COMPACT À FUITE CONTRÔLÉE

Publication  
**EP 4318510 A1 20240207 (EN)**

Application  
**EP 22306176 A 20220803**

Priority  
EP 22306176 A 20220803

Abstract (en)  
An electric transformer (1) comprising left and right primary coils (20a, 20b), left and right secondary coils (22a, 22b) and a first magnetic circuit (10), the first magnetic circuit comprising left and right limbs (11a, 11b) connected together by upper and lower yokes (13, 14) so as to define an inner space (15), the left primary and secondary coils being wound around the left limb and the right primary and secondary coils being wound around the right limb, the electric transformer further comprising left and right bypass cores (31a, 31b) located inside the inner space of the first magnetic circuit, upper and lower ends of each of the left and right bypass cores being in contact with the upper and lower yokes of the first magnetic circuit, the left bypass cores being positioned radially from the left limb to be between the left primary coil and the left secondary coil and the right bypass cores being positioned radially from the right limb to be between the right primary coil and the right secondary coil.

IPC 8 full level  
**H01F 38/08** (2006.01); **H01F 3/12** (2006.01)

CPC (source: EP)  
**H01F 3/12** (2013.01); **H01F 38/08** (2013.01); **H01F 3/14** (2013.01); **H01F 2038/006** (2013.01)

Citation (applicant)  
EP 3846187 A1 20210707 - OMRON TATEISI ELECTRONICS CO [JP]

Citation (search report)  
• [XAI] US 2014049351 A1 20140220 - CARSTEN BRUCE W [US]  
• [XAI] US 2019006096 A1 20190103 - GIERAS JACEK F [US], et al  
• [XAI] GB 190934 A 19230104 - ENGLISH ELECTRIC CO LTD, et al  
• [A] US 2019362885 A1 20191128 - LU ZENGYI [TW], et al

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

Designated extension state (EPC)  
BA ME

Designated validation state (EPC)  
KH MA MD TN

DOCDB simple family (publication)  
**EP 4318510 A1 20240207**

DOCDB simple family (application)  
**EP 22306176 A 20220803**