Title (en)

Improved magnetic core coupling in a current transformer with integrated magnetic actuator

Title (de)

Verbesserte Magnetkernkopplung in einem Stromwandler mit integriertem Magnetaktuator

Title (fr)

Couplage de noyau magnétique amélioré dans un transformateur de courant doté d'un actionneur intégré

Publication

**EP 2535916 A3 20130313 (EN)**

Application

**EP 12172356 A 20120618**

Priority

US 201113162852 A 20110617

Abstract (en)

[origin: EP2535916A2] A system comprising a magnetic actuator, a current transformer and operational electronics in a dual-coil circuit breaker. The system includes an inline, but non concentric, implementation of the primary and secondary coils to maintain a narrow width suitable for retrofitting in standard industrial rack mounted enclosures. The system further comprises an I-shaped lamination stack that is designed to abut on the ends of an upper and lower plate of the current transformer. The I-shaped lamination stack significantly increases the overlap between the lamination and the upper and lower plates, which results in lower magnetic reluctance and improves magnetic coupling.

IPC 8 full level

**H01H 71/12** (2006.01); **H01H 71/24** (2006.01); **H01H 83/20** (2006.01)

CPC (source: EP)

**H01H 71/125** (2013.01); **H01H 71/2454** (2013.01); **H01H 83/20** (2013.01); H01H 71/2463 (2013.01); H01H 2071/124 (2013.01)

Citation (search report)

- [XYI] EP 0841670 A1 19980513 - SCHNEIDER ELECTRIC SA [FR]
- [XY] US 2712043 A 19550628 - EMILE MAUPAS CHARLES FRANCOIS
- [XY] US 4134089 A 19790109 - CHISMAR MICHAEL T
- [Y] US 2010332046 A1 20101230 - LIBERTO SANDRO [CH], 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

DOCDB simple family (publication)

**EP 2535916 A2 20121219**; **EP 2535916 A3 20130313**; **EP 2535916 B1 20160330**; CN 102969208 A 20130313; CN 102969208 B 20160406

DOCDB simple family (application)

**EP 12172356 A 20120618**; CN 201210207725 A 20120618