Title (en)

ENERGY EXTRACTION AND UTILIZATION CIRCUITS

Title (de)

ENERGIEEXTRAKTIONS- UND -VERWENDUNGSKREISLÄUFE

Title (fr)

CIRCUITS D'EXTRACTION ET D'UTILISATION D'ÉNERGIE

Publication

EP 3111457 A4 20170329 (EN)

Application

EP 15755670 A 20150302

Priority

- US 201461945887 P 20140228
- US 2015018368 W 20150302

Abstract (en)

[origin: WO2015131205A1] A system for extracting energy from an energy storage device configured to supply direct current (DC) energy at a nominal voltage rating comprises a first node dimensioned and arranged to receive direct current energy from the energy storage device. Embodiments include a self-oscillating circuit having primary and secondary windings wound around a ferrite core, wherein a positive terminal of the primary winding is tied to the negative terminal of the secondary winding at the first node, and wherein a positive terminal of the secondary winding is coupled to a second node, the second node being coupled to a load requiring power to be supplied at one of a voltage less than, equal to, or higher than the nominal voltage. Some embodiments further include a transistor having a base resistively coupled to a negative terminal of the primary winding and a collector coupled to the second node.

IPC 8 full level

H01F 27/42 (2006.01); **H02J 7/00** (2006.01); **H02M 3/338** (2006.01)

CPC (source: EP US)

H02J 7/00 (2013.01 - US); **H02J 7/0032** (2013.01 - EP); **H02J 7/0063** (2013.01 - EP US); **H02J 7/007182** (2020.01 - EP US); **H02M 3/338** (2013.01 - EP); H02J 2207/20 (2020.01 - EP US)

Citation (search report)

- [XI] US 2005041437 A1 20050224 - CHIAN BRENT [US], et al
- [XI] US 2004176859 A1 20040909 - CHIAN BRENT [US], et al
- [A] US 2014049223 A1 20140220 - BERGER KARL HERMANN [AU]
- See references of WO 2015131205A1

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)

WO 2015131205 A1 20150903; EP 3111457 A1 20170104; EP 3111457 A4 20170329

DOCDB simple family (application)

US 2015018368 W 20150302; EP 15755670 A 20150302