

Title (en)
CONNECTION OF TRANSFORMER POWER SOURCE WITH WIDE INPUT RANGE

Title (de)
SCHALTUNG EINER TRAFQUELLE MIT GROSSEM EINGANGSBEREICH

Title (fr)
CONNEXION D'UNE SOURCE TRANSFORMATEUR AVEC UNE GAMME D'ENTRÉE ÉTENDUE

Publication
EP 3088985 A1 20161102 (EN)

Application
EP 15199276 A 20151210

Priority
CZ 2015264 A 20150420

Abstract (en)
Connection of transformer power source with wide input range solves those cases when the power supply voltage ranges between two distant limit values, while the required output voltage remains constant. The basis of the solution is a transformer (7) with windings switched between by the switches (5, 6). These switches (5, 6) are controlled by a processor (4), which always after resetting when one limit voltage turns off and the other limit voltage turns on finds out from the output of the voltage converter (3), which voltage is connected to the input of the power supply source, and accordingly it switches on the relevant switch (5, 6), thus selecting the corresponding primary winding of the transformer (7). On the secondary winding of the transformer (7) therefore always appears the voltage of the same value, which may be further processed by traditional rectifier and stabilizer. In this way, the connection allows to transform the alternating voltage with wide range of input voltages where the primary voltage value is determined even before it is brought to the transformer primary winding and only subsequently it is transformed to the required value.

IPC 8 full level
G05F 1/14 (2006.01)

CPC (source: EP)
G05F 1/14 (2013.01)

Citation (search report)

- [X] DE 2700755 A1 19780503 - MARCONI CO LTD
- [A] NL 7014860 A 19710422
- [A] WO 2008027052 A2 20080306 - OTIS ELEVATOR CO [US], et al
- [A] US 5808454 A 19980915 - CHUNG YOUNG CHOON [KR]
- [A] US 6417651 B1 20020709 - KRONBERG JAMES W [US]

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 3088985 A1 20161102; CZ 2015264 A3 20160504; CZ 305925 B6 20160504

DOCDB simple family (application)
EP 15199276 A 20151210; CZ 2015264 A 20150420