

Title (en)
PIEZO-ELECTRIC TRANSFORMER CIRCUIT

Title (de)
PIEZOELEKTRISCHE TRANSFORMATOR-SCHALTUNG

Title (fr)
CIRCUIT TRANSFORMATEUR PIEZO-ELECTRIQUE

Publication
EP 1190457 A1 20020327 (EN)

Application
EP 00940592 A 20000622

Priority
• GB 0002418 W 20000622
• GB 9914516 A 19990623

Abstract (en)
[origin: GB2351389A] The invention relates to a piezo-electric transformer circuit (200) incorporating a piezo-electric transformer (10) comprising a multi-element primary region (12) and a single element secondary region (14) mutually joined together. In operation, the circuit (200) applies a drive signal to the primary region (12) to excite the primary and secondary regions (12, 14) into longitudinal resonance, thereby generating a high potential signal at the secondary region (14). The drive signal is derived from the signal at the secondary region (14) in a self oscillating feedback loop configuration. The configuration provides the advantage that the transformer (10) is driven more accurately at its resonant frequency, thereby improving efficiency of the circuit (200) when the secondary region (14) is electrically loaded.

IPC 1-7
H01L 41/107

IPC 8 full level
B06B 1/06 (2006.01); **H01L 41/04** (2006.01); **H01L 41/107** (2006.01); **H02N 2/00** (2006.01)

CPC (source: EP KR)
H02M 7/537 (2013.01 - KR); **H10N 30/40** (2023.02 - EP); **H10N 30/804** (2023.02 - EP)

Citation (search report)
See references of WO 0101500A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
GB 2351389 A 20001227; **GB 9914516 D0 19990825**; AU 5550600 A 20010131; CA 2377777 A1 20010104; EP 1190457 A1 20020327; JP 2003503185 A 20030128; KR 20020023963 A 20020329; WO 0101500 A1 20010104

DOCDB simple family (application)
GB 9914516 A 19990623; AU 5550600 A 20000622; CA 2377777 A 20000622; EP 00940592 A 20000622; GB 0002418 W 20000622; JP 2001506626 A 20000622; KR 20017016501 A 20011222