

Title (en)  
Transformer with current sensing means

Title (de)  
Transformator mit Strommessung

Title (fr)  
Transformateur avec dispositif de mesure de courant

Publication  
**EP 1783788 A2 20070509 (EN)**

Application  
**EP 06405455 A 20061026**

Priority  
• EP 05405619 A 20051102  
• EP 06405455 A 20061026

Abstract (en)  
A power transformer (131) for a power converter includes a magnetic core, a primary winding (132) and two serially connected secondary windings (133, 134). In order to sense the output current to generate therefrom a control signal for controlling a switching of the synchronous rectifiers of the power converter (131), the power transformer (131) includes an integrated current transformer (160) with a ring-type core (164) and a secondary winding (163). The primary windings of the current transformer (160) are formed by the end portions (133.3, 134.3) of the secondary windings (133, 134) that are fed through the ring-type core (164). Accordingly, the end portions (133.3, 134.3) form a turn of the secondary windings (133, 134) of the main transformer (131) as well as a turn of the primary winding of the current transformer (160). Accordingly, only one current transformer is needed, which means lower costs and less space required, and the losses due to the wiring to and from the current transformer can be eliminated.

IPC 8 full level  
**H01F 27/40** (2006.01); **H01F 38/30** (2006.01)

CPC (source: EP)  
**H01F 27/402** (2013.01); **H01F 38/30** (2013.01)

Cited by  
EP2493063A1; CN101997416A; CN102636668A; GB2475262A; GB2475262B; CN102684506A; EP3982381A1; US9035736B2; US9171667B2; WO2022073658A1; US9214869B2

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA HR MK YU

DOCDB simple family (publication)  
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