

Title (en)  
TRANSFORMER-FREE WAVEGUIDE CIRCULATOR

Title (de)  
TRANSFORMATORLOSER WELLENLEITER-ZIRKULATOR

Title (fr)  
CIRCULATEUR À GUIDE D'ONDES SANS TRANSFORMATEUR

Publication  
**EP 1730808 A4 20080903 (EN)**

Application  
**EP 05726000 A 20050318**

Priority

- US 2005009401 W 20050318
- US 55431604 P 20040318

Abstract (en)  
[origin: WO2005114775A1] An improved waveguide circulator that eliminates the need for quarter-wave dielectric transformers or impedance steps in the interface waveguide for broadband operation is described. The circulator designs in the prior art all require impedance matching elements outside of the ferrite element in order to achieve acceptable performance. Through the use of this new invention, broadband circulator performance can be achieved without the addition of impedance matching elements in order to minimize the cost, size, mass, and loss of the circulator.

IPC 8 full level  
**H01P 1/39** (2006.01)

CPC (source: EP)  
**H01P 1/39** (2013.01)

Citation (search report)

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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 MC NL PL PT RO SE SI SK TR

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**WO 2005114775 A1 20051201**; CA 2560555 A1 20051201; CA 2560555 C 20121218; EP 1730808 A1 20061213; EP 1730808 A4 20080903

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