

Title (en)  
Dual frequency radiating device.

Title (de)  
Doppelfrequenz strahlende Vorrichtung.

Title (fr)  
Dispositif rayonnant bifréquence.

Publication  
**EP 0377155 B1 19940921 (FR)**

Application  
**EP 89123208 A 19891215**

Priority  
FR 8817184 A 19881226

Abstract (en)  
[origin: JPH02222203A] PURPOSE: To obtain a compact constitution by allowing two radiating elements to have the same symmetrical axis, and allowing signals radiated by the two elements to have the same radiation opening. CONSTITUTION: This device is constituted of two radiating elements having the same vertical axis, for example, two guides 10 and 11, and the first guide 10 is excited with a high frequency, and interrupted against a low frequency generated in the second guide 11. In the first guide 10, a radio wave is excited by an attached or printed antenna 12, for example, resonator, and the second guide 11 is excited with a low frequency by a plane annular antenna 13 electrically connected (for example, welded) to the first waveguide 10. Then, only a basic mode is added to the radiation of the opening of the second waveguide 11 in each frequency band. Thus, the device can be made compact.

IPC 1-7  
**H01Q 25/04**; **H01P 1/16**

IPC 8 full level  
**H01P 1/16** (2006.01); **H01P 1/17** (2006.01); **H01Q 5/00** (2006.01); **H01Q 5/10** (2015.01); **H01Q 5/45** (2015.01); **H01Q 13/02** (2006.01); **H01Q 13/08** (2006.01); **H01Q 21/24** (2006.01); **H01Q 25/04** (2006.01)

CPC (source: EP US)  
**H01P 1/16** (2013.01 - EP US); **H01Q 5/45** (2015.01 - EP US); **H01Q 25/04** (2013.01 - EP US)

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**EP 0377155 A1 19900711**; **EP 0377155 B1 19940921**; CA 2006291 A1 19900626; CA 2006291 C 19940208; DE 68918426 D1 19941027; DE 68918426 T2 19950119; FR 2641133 A1 19900629; FR 2641133 B1 19910517; JP 2953721 B2 19990927; JP H02222203 A 19900905; US 5001444 A 19910319

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