

Title (en)
Dual-band planar antenna and apparatus including such an antenna device

Title (de)
Dualband Planarantenne und diese enthaltendes Gerät

Title (fr)
Antenne planaire et dispositif de transmission bi-bande incluant cette antenne

Publication
EP 1225655 B1 20160330 (FR)

Application
EP 01403150 A 20011206

Priority
FR 0100139 A 20010105

Abstract (en)
[origin: JP2002271132A] PROBLEM TO BE SOLVED: To provide a planar antenna and a dual band transmitter including this. SOLUTION: This dual-band transmitter is provided with a microstrip antenna, and a patch 6 is provided with a short circuit for setting quarter-wave resonant modes. A separator slot 17 penetrates from its periphery into the patch 6 near the short circuit, and separates a first region from a second region, while the second region remains connected through a passage to the first region. Two resonant modes are obtained, one in the first region and the other in the first region, that is, the passage and the second region. The two resonance is excited from a common connecting line. The center frequencies and pass bands of the two modes are adjusted, by using a reactive component such as a capacitor CR which couples the first region to the second region near the origin of the slot. Especially, the dual-band transmitter is applied to the manufacturing of a dual mode portable telephone system conforming to the GMS and DCS standards.

IPC 8 full level
H01Q 9/04 (2006.01); **H01Q 21/30** (2006.01); **H01Q 1/24** (2006.01); **H01Q 5/00** (2006.01); **H01Q 5/10** (2015.01); **H01Q 5/321** (2015.01); **H01Q 5/364** (2015.01); **H01Q 13/08** (2006.01); **H01Q 13/10** (2006.01); **H04B 1/03** (2006.01)

CPC (source: EP US)
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Citation (examination)
US 5926139 A 19990720 - KORISCH ILYA A [US]

Cited by
US6621455B2

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EP 1225655 A1 20020724; **EP 1225655 B1 20160330**; CN 100433451 C 20081112; CN 1363968 A 20020814; FR 2819346 A1 20020712; FR 2819346 B1 20040618; JP 2002271132 A 20020920; JP 4249411 B2 20090402; US 2002196191 A1 20021226; US 6606062 B2 20030812

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