

Title (en)  
MULTI-RESONANT MICROSTRIP DIPOLE ANTENNA

Title (de)  
MULTIRESONANZ-MIKROSTRIPDIPOLANTENNE

Title (fr)  
ANTENNE DIPÔLE À MICROBANDE À RÉSONANCES MULTIPLES

Publication  
**EP 2030285 A4 20090603 (EN)**

Application  
**EP 07840256 A 20070616**

Priority  

- US 2007071415 W 20070616
- US 42466406 A 20060616
- US 42463906 A 20060616
- US 42461406 A 20060616

Abstract (en)  
[origin: WO2007147153A2] A multi-band antenna for use in a wireless communications network provides frequency support for different wireless technologies in a single structure. This substantially reduces installation costs and can be the only solution in limited space installation sites. In one instance, the multi-band antenna has two serial feedlines carrying respective anode and cathode components of RF signals. Each, comprising serial feedline is coupled to two or more different length dipole elements. Each dipole element of a given length attached to the first serial feedline has a corresponding dipole element of approximately equal length attached to the second serial feedline and oriented, with respect to the first dipole element so as to form a dipole. Thus, at least two dipoles of differing lengths are formed, enabling performance in two different bands by the antenna. The gain of the antenna for any particular band is determined by the number of dipoles corresponding to that band contained within the antenna.

IPC 8 full level  
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CPC (source: EP)  
**H01P 1/2138** (2013.01); **H01P 11/007** (2013.01); **H01Q 1/246** (2013.01); **H01Q 1/38** (2013.01); **H01Q 9/18** (2013.01); **H01Q 21/062** (2013.01)

Citation (search report)  

- [X] US 6734828 B2 20040511 - SHOR ARIE [US]
- [X] EP 1158602 A1 20011128 - MITSUBISHI ELECTRIC CORP [JP]
- [X] US 6469677 B1 20021022 - SCHAFFNER JAMES H [US], et al
- [A] US 3016536 A 19620109 - FUBINI EUGENE G
- [A] EP 1357634 A1 20031029 - HARADA IND CO LTD [JP]
- See references of WO 2008024551A2

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
**WO 2007147153 A2 20071221; WO 2007147153 A3 20080306**; CA 2648255 A1 20071221; CA 2648256 A1 20080228; CA 2648259 A1 20071227; EP 2030284 A2 20090304; EP 2030284 A4 20090610; EP 2030285 A2 20090304; EP 2030285 A4 20090603; EP 2030377 A2 20090304; EP 2030377 A4 20091118; WO 2007149794 A2 20071227; WO 2007149794 A3 20090115; WO 2008024551 A2 20080228; WO 2008024551 A3 20081211

DOCDB simple family (application)  
**US 2007071413 W 20070616**; CA 2648255 A 20070616; CA 2648256 A 20070616; CA 2648259 A 20070616; EP 07798675 A 20070616; EP 07840256 A 20070616; EP 07845210 A 20070616; US 2007071414 W 20070616; US 2007071415 W 20070616