

Title (en)
Coupled multiband antennas

Title (de)
Gekoppelte Mehrbandantennen

Title (fr)
Antennes multibandes couplées

Publication
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Application
EP 10167660 A 20020910

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Abstract (en)
The present invention consists of an antenna comprising at least two radiating structures, said radiating structures taking the form of two arms, said arms being made of or limited by a conductor, superconductor or semiconductor material, said two arms being coupled to each other through a region on first and second superconducting arms such that the combined structure of the coupled two-arms forms a small antenna with a broadband behavior, a multiband behavior or a combination of both effects. According to the present invention, the coupling between the two radiating arms is obtained by means of the shape and spatial arrangement of said two arms, in which at least one portion on each arm is placed in close proximity to each other (for instance, at a distance smaller than a tenth of the longest free-space operating wavelengths) to allow electromagnetic fields in one arm being transferred to the other through said specific close proximity regions Said proximity regions are located at a distance from the feeding port of the antenna (for instance a distance larger than 1/40 of the free-space longest operating wavelength) and specifically exclude said feeding port of the antenna.

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