

Title (en)

Wireless device with extendable antenna

Title (de)

Drahtlose Vorrichtung mit ausziehbarer Antenne

Title (fr)

Dispositif sans fil avec antenne extensible

Publication

EP 2528158 B1 20140416 (EN)

Application

EP 11167611 A 20110526

Priority

EP 11167611 A 20110526

Abstract (en)

[origin: EP2528158A1] A wireless device has receiver circuits (23) and / or transmitter circuits supporting at least two simultaneous independent transmit paths in the same frequency band, and a multiport antenna (20) with N ports (22), for the available receiver or transmitter circuits. The multiport antenna has a compact mechanical state and an extended mechanical state, and is connected to the N ports of the receiver and / or transmitter circuits (23) by means of a 2 N -port matching and decoupling network (21). This has multiple, selectable electrical states, each corresponding to at least one of the mechanical states. One combination of the mechanical state and the electrical state allows operation in a wireless channel of rank N. A second combination of the mechanical state and the electrical state allows operation in a wireless channel of rank less than N. Better MIMO performance with the extended antenna configuration can be obtained with the convenience of retaining limited performance when the user cannot use the extended antenna.

IPC 8 full level

H01Q 1/08 (2006.01); **H01Q 21/28** (2006.01)

CPC (source: EP)

H01Q 1/08 (2013.01); **H01Q 1/084** (2013.01); **H01Q 21/28** (2013.01)

Cited by

FR3111480A1; WO2021250342A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 2528158 A1 20121128; EP 2528158 B1 20140416

DOCDB simple family (application)

EP 11167611 A 20110526