

Title (en)

Mobile device having reconfigurable antenna and associated methods

Title (de)

Mobile Vorrichtung mit umkonfigurierbarer Antenne und zugehörige Verfahren

Title (fr)

Dispositif mobile doté d'une antenne reconfigurable et procédés associés

Publication

EP 2568529 A1 20130313 (EN)

Application

EP 11180638 A 20110908

Priority

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Abstract (en)

A mobile wireless communications device (10) includes a wireless transceiver (18), and a reconfigurable antenna (11) coupled to the wireless transceiver. The reconfigurable antenna has a dielectric substrate (22), with a plurality of electrical conductors on the dielectric substrate laterally adjacent a ground plane (16) and arranged in a series of spaced apart antenna loops (14a, 14b, 14c) with each successive outer antenna loop surrounding an adjacent inner loop, each antenna loop having a pair of endpoints (23a, 23b, 23c, 25a, 25b, 25c). A plurality of switches (22a, 22b, 22c, 24a, 24b, 24c) are associated with respective endpoints of the antenna loops. A processor (20) is adapted to reconfigure the reconfigurable antenna and couple the wireless transceiver thereto via the plurality of switches. The reconfigurability of the reconfigurable antenna (11) provides frequency, pattern, and polarization reconfigurability.

IPC 8 full level

H01Q 1/24 (2006.01); **H01Q 7/00** (2006.01); **H01Q 9/42** (2006.01); **H01Q 21/30** (2006.01)

CPC (source: EP)

H01Q 7/00 (2013.01); **H01Q 21/30** (2013.01)

Citation (search report)

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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

Designated extension state (EPC)

BA ME

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