

Title (en)

Antenna arrangement, method for tuning an antenna arrangement and apparatus with antenna arrangement

Title (de)

Antennenanordnung, Verfahren zum Anpassen einer Antennenanordnung und Vorrichtung mit Antennenanordnung

Title (fr)

Arrangement d'antennes, procédé de réglage d'un arrangement d'antennes et appareil avec arrangement d'antennes

Publication

EP 2256859 A1 20101201 (EN)

Application

EP 09160029 A 20090512

Priority

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Abstract (en)

Two antennas are described operating in different frequencies, e.g. GPS and Bluetooth frequency, form a combo antenna consisting of two antenna elements that are capacitive coupled. Each of the antenna elements has two connecting ports, one ground element and one feeding element. Both ground elements are closer to each other than the distance between the feeding elements, while the ground elements are close to the capacitive coupling position. Any suitable antenna may be used in the arrangement like a PIFA-type, a F-type or a loop-type. The antennas are located in a separate plane, which can be overlapping with the ground plane, or can be located aside of the ground plane forming an angle with it. According to an embodiment of the invention, a feeding structure is provided that has tuning elements suitable for tuning an impedance load as well as an inductive load on the respective antenna elements, and thereby allowing it to adapt the antenna arrangement to various mobile devices. Furthermore a method is provided that allows to adjust the input impedance and the resonating frequency of a respective antenna.

IPC 8 full level

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Citation (applicant)

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Citation (search report)

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