

Title (en)

ANTENNA WITH AT LEAST ONE VERTICAL RADIATOR

Title (de)

ANTENNE MIT WENIGSTENS EINEM VERTIKALSTRAHLER

Title (fr)

ANTENNE COMPORTANT AU MOINS UN RADIATEUR VERTICAL

Publication

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Application

EP 00935045 A 20000517

Priority

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Abstract (en)

[origin: DE19922699A1] In an antenna having at least one vertical radiator, preferably a vehicle mobile radiotelephone antenna, the at least one vertical radiator is connected to the ground on one end and to a vertical conductor fed against the ground on the other end by means of an impedance transforming device having an electrical length which is approximately one fourth the mean operating wavelength or an uneven multiple thereof. Said structure makes it possible for the at least one vertical radiator to have a uniform current occupancy over its entire length. By cooperating with the vertical conductor fed in a co-radiating manner, said occupancy exhibits high radiation power comparable to that of a lambda /4 monopole antenna despite the fact that the at least one vertical radiator has a smaller length which is approximately 1/10 of the mean operating wavelength. The invention also describes advantageous embodiments or configurations of said antenna and practical arrangements of said antenna in vehicles.

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