

Title (en)
Distributed antenna system, building structure, vehicle, and communication system thereof

Title (de)
Verteiltes Antennensystem, Gebäudestruktur, Fahrzeug und Kommunikationssystem dafür

Title (fr)
Système d'antenne distribuée, structure de bâtiment, véhicule et son système de communication

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Application
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Abstract (en)
The present invention relates to a distributed antenna system (2) for exchanging radio frequency signals between at least one user equipment (22a) and at least one transceiver unit (6, 8) coupled to the distributed antenna system (2). The distributed antenna system (2) contains at least two radiating waveguides (10, 12). Each of the at least two radiating waveguides (10, 12) comprises an inner longitudinal hollow space and forms a part of a respective radio frequency transmission channel between the at least one transceiver unit (6, 8) and the at least one user equipment (22a) and can be operated independently of further radiating waveguides. The radiating waveguides (10, 12) are configured to radiate and/or receive the radio frequency signals with a first polarization and a second polarization, respectively, and the first polarization is different from the second polarization. The invention further relates to a building structure, to a vehicle and to a communication system (3).

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Citation (applicant)
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