

Title (en)
NEAR-FIELD ANTENNA FOR WIRELESS POWER TRANSMISSION WITH FOUR COPLANAR ANTENNA ELEMENTS

Title (de)
NAHFELDANTENNE ZUR DRAHTLOSEN ENERGIEÜBERTRAGUNG MIT VIER KOPLANAREN ANTENNENELEMENTEN

Title (fr)
ANTENNE EN CHAMP PROCHE POUR TRANSMISSION DE PUISSANCE SANS FIL AVEC QUATRE ÉLÉMENTS D'ANTENNE COPLANAIRES

Publication
EP 3815252 A1 20210505 (EN)

Application
EP 18829606 A 20181206

Priority
• US 201816024636 A 20180629
• US 2018064289 W 20181206

Abstract (en)
[origin: WO2020005310A1] A near-field antenna is provided, which includes: a reflector and four distinct antenna elements, offset from the reflector, each of the four distinct antenna elements following respective meandering patterns. Two antenna elements of the four antenna elements form a first dipole antenna along a first axis, and another two antenna elements of the four antenna elements form a second dipole antenna along a second axis perpendicular to the first axis. The near-field antenna further includes: (i) a power amplifier configured to feed electromagnetic signals to one of the dipole antennas, (ii) an impedance-adjusting component configured to adjust an impedance of one of the dipole antennas, and (iii) switch circuitry coupled to the power amplifier, the impedance-adjusting component, and the dipole antennas. The switch circuitry is configured to switchably couple the first dipole antenna to the power amplifier and the second dipole antenna to the impedance-adjusting component, and vice versa.

IPC 8 full level
H04B 5/00 (2006.01)

CPC (source: EP KR)
H01Q 9/285 (2013.01 - KR); **H01Q 15/14** (2013.01 - KR); **H04B 5/43** (2024.01 - EP); **H04B 5/72** (2024.01 - EP KR); **H04B 5/79** (2024.01 - EP KR)

Citation (search report)
See references of WO 2020005310A1

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Designated extension state (EPC)
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