

Title (en)

ANTENNA SYSTEM WITH AT LEAST TWO ANTENNAS, MAINLY FOR NFC TRANSMISSION

Title (de)

ANTENNENSYSTEM MIT ZWEI MINDESTENS ANTENNEN, INSBESONDERE FÜR NFC-ÜBERTRAGUNG

Title (fr)

SYSTÈME D'ANTENNES AVEC AU MOINS DEUX ANTENNES, PRINCIPALEMENT POUR LA TRANSMISSION NFC

Publication

**EP 3841678 A1 20210630 (EN)**

Application

**EP 19786657 A 20190802**

Priority

- SK 500372018 A 20180802
- IB 2019056595 W 20190802

Abstract (en)

[origin: WO2020026203A1] Antenna system has at least one spiral antenna (1) and at least one solenoid antenna (2) with a magnetic core. The solenoid antenna (2) is placed against the flat spiral antenna (1) in such a way that the groundplan of the solenoid antenna (2) at least partially overlaps the respective strip (3) and the respective strip (3) and the groundplan of the solenoid antenna (2) are symmetrically centered in order to achieve the match of their axes without significant deviation. The solenoid antenna (2) is placed in the plane of the flat spiral antenna (1) or on the flat spiral antenna (1) or under the flat spiral antenna (1). The antenna system can include two solenoid antennas (2, 22) where the second solenoid antenna (22) is placed on the second strip (3) and mutually they form a topology shaped "II" or "L". The output from the receiving flat spiral antenna (1) is connected to the phase modulator of the transmitting solenoid antenna (2) and the transmission of the solenoid antenna (2) is synchronized with the signal simultaneously received on the receiving flat spiral antenna (1).

IPC 8 full level

**H04B 5/00** (2006.01); **G06K 19/077** (2006.01); **H01Q 7/06** (2006.01)

CPC (source: EP)

**G06K 19/07779** (2013.01); **H04B 5/26** (2024.01); **H04B 5/43** (2024.01); **H04B 5/72** (2024.01)

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

DOCDB simple family (publication)

**WO 2020026203 A1 20200206**; EP 3841678 A1 20210630; SK 500372018 A3 20200204

DOCDB simple family (application)

**IB 2019056595 W 20190802**; EP 19786657 A 20190802; SK 500372018 A 20180802