

Title (en)

A device having a quadrature near field communication antenna

Title (de)

Vorrichtung mit Quadratur-Nahfeld-Kommunikationsantenne

Title (fr)

Dispositif comportant une antenne de communication de champ proche alimentée en quadrature

Publication

EP 2683032 A1 20140108 (EN)

Application

EP 12175229 A 20120706

Priority

EP 12175229 A 20120706

Abstract (en)

A device having a quadrature near field communication antenna is provided. The device comprises: a housing; a first NFC (near field communication) antenna comprising a coil about parallel to a given side of the housing enabled to produce a first magnetic field that extends from the given side of the housing; a second NFC antenna about parallel with the first NFC antenna, the second NFC antenna comprising at least one respective coil forming two opposing current loops enabled to produce a second magnetic field perpendicular to the first magnetic field; and, a circuit for operating the first NFC antenna and the second NFC antenna in quadrature phase.

IPC 8 full level

H01Q 7/00 (2006.01); **H01Q 21/28** (2006.01)

CPC (source: EP)

H01Q 1/2208 (2013.01); **H01Q 1/243** (2013.01); **H01Q 7/00** (2013.01); **H01Q 21/28** (2013.01)

Citation (search report)

- [YA] EP 0186483 A2 19860702 - SENELCO LTD [GB]
- [YA] US 2008303673 A1 20081211 - OUNG HARRY [US], et al
- [YA] EP 2293383 A2 20110309 - PANASONIC CORP [JP]
- [YA] EP 1953862 A1 20080806 - MURATA MANUFACTURING CO [JP]

Cited by

CN105609936A; CN106685485A; CN109361058A

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)

EP 2683032 A1 20140108; EP 2683032 B1 20151118; CA 2819720 A1 20140106; CA 2819720 C 20160607

DOCDB simple family (application)

EP 12175229 A 20120706; CA 2819720 A 20130702