

Title (en)

High mechanic resistance loop antenna for a passport

Title (de)

Mechanisch widerstandfähige Schleifenantenne für einen Reisepass

Title (fr)

Antenne boucle mécaniquement résistante pour passeport

Publication

EP 2579389 A1 20130410 (FR)

Application

EP 11306276 A 20111003

Priority

EP 11306276 A 20111003

Abstract (en)

The magnetic field antenna comprises a flat base (4) with a longitudinal edge (2), an electromagnetic coupling receiving antenna (14) placed on the base, and parallel and perpendicular coils that extend to the longitudinal edge. The longitudinal edge is intended to be parallel to a booklet binder, and is adjacent to a hinge booklet. The parallel coils have close-together inter-coil spacing (ES) of 0.1-0.5 mm with respect to an inter-coil spacing (EL) (0.5-2 mm) of the perpendicular coils, and are localized in an area (7) located at a support medium that is perpendicular to the edge. The magnetic field antenna comprises a flat base (4) with a longitudinal edge (2), an electromagnetic coupling receiving antenna (14) placed on the base, and parallel and perpendicular coils that extend to the longitudinal edge. The longitudinal edge is intended to be parallel to a booklet binder, and is adjacent to a hinge booklet. The parallel coils have close-together inter-coil spacing (ES) of 0.1-0.5 mm with respect to an inter-coil spacing (EL) (0.5-2 mm) of the perpendicular coils, and are localized in an area (7) located at a support medium that is perpendicular to the edge. The antenna is made of wire having a diameter of 50-150 μ m. The parallel coils of the area are located at a distance (B) of the longitudinal edge that is higher than a distance (A) for portions of parallel coils located apart from the area. An independent claim is included for a portable electronic object.

Abstract (fr)

L'invention concerne une antenne pour transpondeur radiofréquence comportant un support plan (4) avec un bord longitudinal (2), une antenne de réception (14) par couplage électromagnétique sur le support, ledit bord étant destiné à être parallèle à une reliure de livret, ladite antenne comportant des spires parallèles et perpendiculaires s'étendant respectivement parallèlement et perpendiculairement au bord longitudinal (2) ; Le transpondeur se distingue en ce que lesdites spires parallèles présentent un espacement inter-spires rapproché (ES) par rapport à l'espacement inter-spires (EL) des spires perpendiculaires. L'invention concerne également un objet portable électronique comprenant ledit transpondeur

IPC 8 full level

H01Q 7/00 (2006.01); **H01Q 1/22** (2006.01)

CPC (source: EP KR US)

H01Q 1/22 (2013.01 - KR); **H01Q 1/2225** (2013.01 - EP US); **H01Q 7/00** (2013.01 - EP KR US)

Citation (search report)

- [X] WO 2005045754 A1 20050519 - PHILIPS INTELLECTUAL PROPERTY [DE], et al
- [Y] WO 2007105607 A1 20070920 - SEMICONDUCTOR ENERGY LAB [JP], et al
- [Y] FR 2890502 A1 20070309 - GEMPLUS SA [FR]
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EP3168789A1; WO2017085023A1; EP2876583A1; WO2015074963A1; US10599971B2

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)

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DOCDB simple family (application)

EP 11306276 A 20111003; EP 12769411 A 20121002; EP 2012069409 W 20121002; JP 2014532438 A 20121002; KR 20147011855 A 20121002; PT 12769411 T 20121002; SG 10201602444T A 20121002; SG 11201400756X A 20121002; TR 201802317 T 20121002; US 201214349204 A 20121002