

Title (en)
DUAL INTERFACE METAL CARDS AND METHODS OF MANUFACTURING

Title (de)
DOPPELSCHNITTSTELLEN-METALLKARTEN UND HERSTELLUNGSVERFAHREN

Title (fr)
CARTES MÉTALLIQUES DOUBLE INTERFACE ET PROCÉDÉS DE FABRICATION

Publication
EP 4028946 A1 20220720 (EN)

Application
EP 20853008 A 20200812

Priority

- US 201962885327 P 20190812
- US 201962889555 P 20190820
- US 201962891308 P 20190824
- US 201962894976 P 20190903
- US 202062960178 P 20200113
- US 202062969034 P 20200201
- US 202062971927 P 20200208
- US 202062979422 P 20200221
- US 202063040544 P 20200618
- US 202063053559 P 20200717
- US 2020045840 W 20200812

Abstract (en)
[origin: WO2021030383A1] (i) Smartcards (SC) manufactured from a web of metal inlays (MI; FIGs. 12-14) with the coupling frame (CF) forming the metal card body (MCB) supported by metal struts (struts). In the production of smartcards having a coupling frame (CF) with a slit (S), the slit may form part of graphic elements (FIGs. 10-12). (ii) Printing and coating techniques may be used to camouflage the slit (FIGs. 9A-9D). (iii) Surface currents may be collected from one location in a card body (CB) and transported to another location (FIGs. 15AB). A flexible circuit (FC) may be connected to termination points (TP) across the slit (S), or may couple via a patch antenna (PA) with the slit (S). The flexible circuit may couple, via an antenna structure (AS) with the module antenna (MA) of a transponder chip module (TCM).

IPC 8 full level
G06K 19/077 (2006.01); **B23K 26/362** (2014.01); **B23K 26/40** (2014.01)

CPC (source: EP)
G06K 19/02 (2013.01); **G06K 19/07722** (2013.01); **G06K 19/07728** (2013.01); **G06K 19/07743** (2013.01); **G06K 19/07745** (2013.01); **G06K 19/07747** (2013.01); **G06K 19/07749** (2013.01); **G06K 19/07769** (2013.01); **G06K 19/07773** (2013.01); **G06K 19/07783** (2013.01); **G06K 19/07794** (2013.01)

Citation (search report)
See references of WO 2021030383A1

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 2021030383 A1 20210218; EP 4028946 A1 20220720

DOCDB simple family (application)
US 2020045840 W 20200812; EP 20853008 A 20200812