

Title (en)

PACKAGED ELECTRONIC MODULE AND MANUFACTURING METHOD THEREOF

Title (de)

VERPACKTES ELEKTRONISCHES MODUL UND DESSEN HERSTELLUNGSVERFAHREN

Title (fr)

MODULE ÉLECTRONIQUE MIS SOUS BOÎTIER ET SON PROCÉDÉ DE FABRICATION

Publication

EP 3939084 A4 20230111 (EN)

Application

EP 20885861 A 20200311

Priority

- US 201916299037 A 20190311
- US 2020022198 W 20200311

Abstract (en)

[origin: WO2021091587A2] The present invention is a packaged electronic module with embedded electronics for use in smart cards. This invention assembles a plurality of electronics components on a flexible printed circuit, together with an integrated circuit chip and a contact plate, into a module. This module can then be embedded into a plastic card, using regular milling techniques, by a card manufacturer. This method packages the plurality of electronics components into a module. The present invention provides a business with the capability to avoid additional capital expenditure required for special equipment and enables all existing card manufacturers to manufacture smart cards with embedded electronics.

IPC 8 full level

H01L 27/14 (2006.01); **G06K 19/07** (2006.01); **G06K 19/077** (2006.01)

CPC (source: EP IL KR)

G06K 19/0718 (2013.01 - IL KR); **G06K 19/07707** (2013.01 - EP IL KR); **G06K 19/07709** (2013.01 - IL KR); **G06K 19/07743** (2013.01 - EP); **G06K 19/07747** (2013.01 - EP); **G06K 19/07749** (2013.01 - IL KR); **G06K 19/0718** (2013.01 - EP); **G06K 19/07709** (2013.01 - EP); **G06K 19/07749** (2013.01 - EP)

Citation (search report)

- [X] EP 2426627 A1 20120307 - OBERTHUR TECHNOLOGIES [FR]
- [AD] US 2019012588 A1 20190110 - LALO CYRIL [US], et al
- [A] DE 10221214 A1 20031127 - ORGA KARTENSYSTEME GMBH [DE]
- [A] DE 102013102003 A1 20140828 - BUNDESDRUCKEREI GMBH [DE], et al

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

WO 2021091587 A2 20210514; **WO 2021091587 A3 20210624**; **WO 2021091587 A9 20210715**; AU 2020380119 A1 20210923; BR 112021017785 A2 20211123; CA 3132334 A1 20210514; CN 114175258 A 20220311; EP 3939084 A2 20220119; EP 3939084 A4 20230111; IL 286170 A 20211031; JP 2022525135 A 20220511; KR 20210134665 A 20211110; MA 55326 A 20220119; MX 2021010237 A 20211210; SG 11202109820R A 20211028; ZA 202106107 B 20220727

DOCDB simple family (application)

US 2020022198 W 20200311; AU 2020380119 A 20200311; BR 112021017785 A 20200311; CA 3132334 A 20200311; CN 202080020267 A 20200311; EP 20885861 A 20200311; IL 28617021 A 20210905; JP 2021555069 A 20200311; KR 20217029208 A 20200311; MA 55326 A 20200311; MX 2021010237 A 20200311; SG 11202109820R A 20200311; ZA 202106107 A 20210824