

Title (en)

SMART CARD, CONNECTION ARRANGEMENT AND METHOD OF PRODUCING A SMART CARD

Title (de)

CHIPKARTE, VERBINDUNGSANORDNUNG UND VERFAHREN ZUM HERSTELLEN EINER CHIPKARTE

Title (fr)

CARTE A PUCE, SYSTEME DE CONNEXION ET PROCEDE DE PRODUCTION D'UNE CARTE A PUCE

Publication

EP 0976104 A2 20000202 (DE)

Application

EP 97914230 A 19970312

Priority

- DE 19610044 A 19960314
- DE 19633936 A 19960822
- DE 19633937 A 19960822
- DE 19633938 A 19960822
- DE 19637214 A 19960912
- DE 19637215 A 19960912
- EP 9701256 W 19970312

Abstract (en)

[origin: WO9734247A2] The invention concerns a smart card, a connection arrangement and a method of producing a smart card, a semiconductor chip located on a module being inserted into a recess (24) in a card carrier so as to be connected electrically and mechanically. According to a first feature of the invention, during the milling-out of the recess, a contact bump section is exposed (22, 23) such that a reliable connection is provided between the module and induction or antenna coil (11). According to a second and third feature, the required electrical contacts are produced by soldering and the required mechanical contacts are produced by heat-sealing or fusion adhesives. Furthermore, the adhesive is provided with conductive particles and is compressed when the connection is made, such that the necessary electrical contact is brought about. According to a fourth feature, a special reinforcement frame comprising insulating sections is provided. The reinforcement frame is used to increase mechanical stability and absorb torsion forces and stresses which can occur when the card is used. At the same time, the reinforcement frame permits easy contact with strip conductors inside the card, e.g. for inductive elements which form an antenna for contactless data-transmission.

IPC 1-7

G06K 19/077

IPC 8 full level

G06K 19/077 (2006.01); **H05K 1/14** (2006.01); **H05K 3/32** (2006.01); **H05K 3/34** (2006.01); **H05K 1/02** (2006.01); **H05K 1/18** (2006.01); **H05K 3/00** (2006.01); **H05K 3/28** (2006.01); **H05K 3/30** (2006.01); **H05K 3/36** (2006.01)

CPC (source: EP)

G06K 19/07728 (2013.01); **G06K 19/07745** (2013.01); **G06K 19/07749** (2013.01); **G06K 19/0775** (2013.01); **G06K 19/07779** (2013.01); **G06K 19/07781** (2013.01); **G06K 19/07783** (2013.01); **H05K 1/142** (2013.01); **H05K 3/321** (2013.01); **H05K 3/3436** (2013.01); **H01L 2224/48091** (2013.01); **H01L 2224/48227** (2013.01); **H01L 2924/00011** (2013.01); **H01L 2924/01004** (2013.01); **H01L 2924/01077** (2013.01); **H05K 1/0212** (2013.01); **H05K 1/182** (2013.01); **H05K 1/183** (2013.01); **H05K 3/0044** (2013.01); **H05K 3/28** (2013.01); **H05K 3/305** (2013.01); **H05K 3/3494** (2013.01); **H05K 3/368** (2013.01); **H05K 2201/0394** (2013.01); **H05K 2201/10477** (2013.01); **H05K 2201/10666** (2013.01); **H05K 2201/10719** (2013.01); **H05K 2201/10727** (2013.01); **H05K 2201/10818** (2013.01); **H05K 2201/10977** (2013.01); **H05K 2203/0228** (2013.01); **H05K 2203/0285** (2013.01); **H05K 2203/107** (2013.01); **Y02P 70/50** (2015.11)

Citation (search report)

See references of WO 9734247A2

Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 9734247 A2 19970918; **WO 9734247 A3 19980108**; AU 2155697 A 19971001; EP 0976104 A2 20000202

DOCDB simple family (application)

EP 9701256 W 19970312; AU 2155697 A 19970312; EP 97914230 A 19970312