Title (en)

METHOD FOR PRODUCING CIRCUIT BOARDS AND CIRCUIT BOARDS PRODUCED ACCORDING TO THE METHOD

Title (de)

VERFAHREN ZUR LEITERPLATTENHERSTELLUNG SOWIE GEMÄß DEM VERFAHREN HERGESTELLTE LEITERPLATTEN

Title (fr)

PROCÉDÉ DE FABRICATION DE CARTES DE CIRCUITS IMPRIMÉS, ET CARTES DE CIRCUITS IMPRIMÉS FABRIQUÉES SELON LE PROCÉDÉ

Publication

EP 3994963 A1 20220511 (DE)

Application

EP 20734156 A 20200618

Priority

- DE 102019209889 A 20190704
- EP 2020067042 W 20200618

Abstract (en)

[origin: WO2021001167A1] In order to produce a circuit board, a base substrate (101) designed as a film or plate and having a first substrate side (101a) and a second substrate side is provided, which at least partially consists of a electrically non-conductive organic polymer material, and wherein the first substrate side (101a) is covered with a metal cover layer (102). The metal cover layer (102) is at least partially removed by dividing the first substrate side (101a) into at least one first sub-region (104), in which the first substrate side (101a) is free of the metal cover layer (102), and into at least one second sub-region (105) in which the first substrate side (101a) is covered with the metal cover layer (102). By applying a plasma to the first substrate side (101a), the polymer material is removed in the at least one first sub-region (104), forming at least one depression (106). Subsequently, the at least one depression (106) is filled with a filling metal (108) and the metal cover layer (102) is removed in the at least one second sub-region (105), forming the conductor structure (109) or a part of a conductor structure. If required, the first substrate side (101a) with the filled at least one depression (106) is then planarised. The method is suitable for the production of single- and multi-layer circuit boards.

IPC 8 full level

H05K 3/10 (2006.01); **H05K 3/00** (2006.01); **H05K 3/46** (2006.01)

CPC (source: CN EP KR US)

H05K 1/0298 (2013.01 - CN US); **H05K 1/11** (2013.01 - CN); **H05K 1/115** (2013.01 - US); **H05K 3/0041** (2013.01 - CN EP KR US); **H05K 3/107** (2013.01 - CN EP KR US); **H05K 3/465** (2013.01 - CN EP KR US); **H05K 3/4661** (2013.01 - CN); **H05K 3/4679** (2013.01 - CN); H05K 3/4661 (2013.01 - EP KR); H05K 3/4679 (2013.01 - EP KR); H05K 2201/0376 (2013.01 - CN EP KR); H05K 2201/09036 (2013.01 - CN EP KR); H05K 2201/09563 (2013.01 - CN EP KR US); H05K 2201/09845 (2013.01 - CN EP KR); H05K 2203/0554 (2013.01 - CN EP KR); H05K 2203/0585 (2013.01 - CN EP KR); H05K 2203/0733 (2013.01 - CN EP KR)

Citation (search report)

See references of WO 2021001167A1

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)

DE 102019209889 A1 20210107; CN 114009154 A 20220201; EP 3994963 A1 20220511; JP 2022537656 A 20220829; KR 20220030279 A 20220310; TW 202109622 A 20210301; US 2022361341 A1 20221110; WO 2021001167 A1 20210107

DOCDB simple family (application)

DE 102019209889 A 20190704; CN 202080048922 A 20200618; EP 2020067042 W 20200618; EP 20734156 A 20200618; JP 2021572092 A 20200618; KR 20227003720 A 20200618; TW 109122330 A 20200702; US 202017624082 A 20200618