Title (en)

APPARATUS FOR OBTAINING MULTILAYER SHEETS FOR PRINTED CIRCUITS AND RELATIVE METHOD

Title (de)

VORRICHTUNG FÜR GEWINNUNG MEHRSCHICHTIGER FOLIEN FÜR GEDRUCKTE SCHALTUNGEN UND ENTSPRECHENDES VERFAHREN

Title (fr)

APPAREIL PERMETTANT D'OBTENIR DES FEUILLES MULTICOUCHES POUR CIRCUITS IMPRIMÉS ET PROCÉDÉ ASSOCIÉ

Publication

EP 3170377 A1 20170524 (EN)

Application

EP 14799026 A 20140910

Priority

- IT MI20141303 A 20140717
- IT 2014000241 W 20140910

Abstract (en)

[origin: WO2016009455A1] The invention refers to an apparatus for obtaining multilayer sheets for printed circuits comprising a two-level press by means of which it is possible to exert a vacuum pressure on a stack of mutually superimposed multilayer packs with the interposition of separation sheets made of anodized aluminum. The packs in- clude dielectric layers variously metalized on at least one face, alternated with prepreg layers. The metallization elements present on the two sides of each pack are portions of a copper band repeatedly folded at 180° around each pack and each separation sheet. In the copper band, a strong current circulates which heats the band via Joule effect. The heat thus generated causes the close fixing of the various layers in each pack. A PLC, connected to several thermal probes assisted by a PC, controls the current generator in order to make the temperature of the stack increase according to a pre-established gradualness, consequently obtaining about the same temperature in all the packs of the stack. The apparatus, object of the invention, also comprises a ventilation apparatus by means of which it is possible to accelerate the cooling of the stack of packs at the end of the pressing process. In particular, the PLC, assisted by the PC, controls the ventilation apparatus in order to make the tem- perature of the stack decrease according to a pre-established gradualness.

IPC 8 full level

H05K 3/02 (2006.01); **H05K 3/46** (2006.01)

CPC (source: EP KR)

B32B 7/12 (2013.01 - EP KR); **B32B 15/14** (2013.01 - EP KR); **B32B 15/20** (2013.01 - EP KR); **H05K 3/022** (2013.01 - EP KR); **H05K 3/4652** (2013.01 - EP KR); B32B 2260/021 (2013.01 - EP KR); B32B 2260/046 (2013.01 - EP KR); B32B 2262/101 (2013.01 - EP KR); B32B 2307/206 (2013.01 - EP KR); B32B 2307/304 (2013.01 - EP KR); B32B 2457/08 (2013.01 - EP); H05K 2203/068 (2013.01 - EP KR); H05K 2203/1121 (2013.01 - EP)

Citation (search report)

See references of WO 2016009455A1

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 2016009455 A1 20160121; CN 106664799 A 20170510; CN 106664799 B 20200410; EP 3170377 A1 20170524; JP 2017525148 A 20170831; KR 20170033368 A 20170324; TW 201604023 A 20160201

DOCDB simple family (application)

IT 2014000241 W 20140910; CN 201480080692 A 20140910; EP 14799026 A 20140910; JP 2017500860 A 20140910; KR 20177004216 A 20140910; TW 103142280 A 20141205