

Title (en)

Device and method for manufacturing circuit boards of varying thicknesses

Title (de)

Verfahren und Vorrichtung zum Herstellen von Platinen mit unterschiedlichen Dicken

Title (fr)

Procédé et dispositif de fabrication de platines de différentes épaisseurs

Publication

EP 2540405 A3 20130911 (DE)

Application

EP 12173868 A 20120627

Priority

DE 102011051345 A 20110627

Abstract (en)

[origin: EP2540405A2] The method involves manufacturing printed circuit boards (10) from a strip material, where the printed circuit boards generate multiple regions (11,12) at different temperatures according to region-wise change of the temperature of the printed circuit boards. The partially temperature-changed printed circuit boards are rolled in a rolling tool (40) in a rolling gap position. The rolling gap of the printed circuit boards is kept constant during the rolling gap position. An independent claim is also included for an apparatus for manufacturing of printed circuit boards with different thickness of a metal material.

IPC 8 full level

B21B 37/74 (2006.01)

CPC (source: EP US)

B21B 1/26 (2013.01 - US); **B21B 37/74** (2013.01 - EP US); **B21B 37/16** (2013.01 - EP US); **B21B 2261/02** (2013.01 - EP US)

Citation (search report)

- [XY] JP S6340604 A 19880222 - SUMITOMO METAL IND
- [YD] DE 19846900 A1 20000427 - THYSSENKRUPP STAHL AG [DE]

Cited by

CN107257762A; CN103551397A; US10226809B2; WO2016146107A1

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)

EP 2540405 A2 20130102; EP 2540405 A3 20130911; EP 2540405 B1 20180425; DE 102011051345 A1 20121227;
US 2013283881 A1 20131031

DOCDB simple family (application)

EP 12173868 A 20120627; DE 102011051345 A 20110627; US 201213533208 A 20120626