Title (en)

MEDIA-FREE, TEMPERATURE-ASSISTED ADHESIVE CONNECTION METHOD

Title (de)

VERFAHREN ZUM MEDIENFREIEN, TEMPERATURGESTÜTZTEN ADHÄSIVEN VERBINDEN

Title (fr)

PROCÉDÉ D'ASSEMBLAGE ADHÉSIF SANS AGENT, ASSISTÉ PAR LA TEMPÉRATURE

Publication

EP 2956291 A1 20151223 (DE)

Application

EP 14703597 A 20140211

Priority

- DE 102013002432 A 20130212
- DE 102013005394 A 20130328
- EP 2014052601 W 20140211

Abstract (en)

[origin: CA2900410A1] The invention relates to a media-free, temperature-assisted adhesive connection method for connecting polypropylene (PP)-based molded parts, profiled sections, strips, and/or films in order to form a mechanically machinable multilayer arrangement on a main part with a different geometric design. According to the invention, a first molded part, profiled section, strip, or film layer (2) is first applied onto the main part (1), wherein energy is locally applied to the layer face pointing towards the main part until the lower face melts and is then immediately fixed to the main part (1) under the effect of pressure. A second layer (2) is then applied onto the main part which has been provided with the first layer in a process in which solely the lower face of the second layer is melted by locally applying energy, the second layer is immediately brought into contact with the surface of the first layer, and the first and the second layer are connected using pressure. A third layer can subsequently be applied onto the main part which has been provided with the second layer in a process in which solely the lower face of the third layer is melted by locally applying energy, the third layer is immediately brought into contact with the surface of the second layer, and the second and the third layer are connected using pressure. The aforementioned sequence of steps is repeated with a fourth to an n-th layer until the desired total layer thickness of the multilayer arrangement is reached.

IPC 8 full level

B29C 63/00 (2006.01); **A47B 96/20** (2006.01); **B29C 65/02** (2006.01)

CPC (source: EP US)

A47B 96/201 (2013.01 - EP US); **B29C 63/0026** (2013.01 - EP US); **B29C 65/02** (2013.01 - EP US); **B29C 66/112** (2013.01 - EP US); **B29C 66/114** (2013.01 - EP US); **B29C 66/1282** (2013.01 - EP US); **B29C 66/12841** (2013.01 - EP US); **B29C 66/301** (2013.01 - EP US); **B29C 66/47** (2013.01 - EP US); **B29C 66/472** (2013.01 - EP US); **B29C 66/474** (2013.01 - EP US); **B29C 66/534** (2013.01 - EP US); **B29C 66/71** (2013.01 - EP US); **B29C 66/72525** (2013.01 - EP US); **B29C 66/7487** (2013.01 - EP US); **B29C 66/8362** (2013.01 - EP US); **B29C 66/91** (2013.01 - US); **B32B 21/08** (2013.01 - US); **B32B 27/08** (2013.01 - US); **B32B 27/32** (2013.01 - US); **B32B 37/04** (2013.01 - US); **B32B 37/10** (2013.01 - US); **B32B 38/0004** (2013.01 - US); **B32B 38/0012** (2013.01 - US); B29C 65/08 (2013.01 - EP US); B29C 65/103 (2013.01 - EP US); B29C 65/1432 (2013.01 - EP US); B29C 65/1632 (2013.01 - EP US); B29C 66/712 (2013.01 - EP US); B29C 66/723 (2013.01 - EP US); B29C 66/73161 (2013.01 - EP US); B29C 2793/009 (2013.01 - EP US); B29K 2623/12 (2013.01 - US); B29K 2711/14 (2013.01 - US); B29L 2031/3005 (2013.01 - EP US); B29L 2031/44 (2013.01 - EP US); B32B 2038/0016 (2013.01 - US); B32B 2250/03 (2013.01 - US); B32B 2317/16 (2013.01 - US); B32B 2323/10 (2013.01 - US); B32B 2479/00 (2013.01 - US)

Citation (search report)

See references of WO 2014124922A1

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 102013005394 A1 20140814; AU 2014217992 A1 20151001; CA 2900410 A1 20140821; EP 2956291 A1 20151223; US 2015375449 A1 20151231; WO 2014124922 A1 20140821

DOCDB simple family (application)

DE 102013005394 A 20130328; AU 2014217992 A 20140211; CA 2900410 A 20140211; EP 14703597 A 20140211; EP 2014052601 W 20140211; US 201414767150 A 20140211