

Title (en)

IMPROVED METHOD AND APPARATUS FOR FORMING CORRUGATED BOARD

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ERZEUGUNG EINES GEWELLTEN BRETTES

Title (fr)

PROCÉDÉ ET APPAREIL AMÉLIORÉS POUR LA FORMATION DE CARTON ONDULÉ

Publication

EP 2552686 A4 20150304 (EN)

Application

EP 11763109 A 20110331

Priority

- US 31955510 P 20100331
- NZ 2011000044 W 20110331

Abstract (en)

[origin: WO2011122968A1] The present invention relates to an apparatus for, and method of, bonding a substantially planar porous sheet material to a porous corrugated sheet material in a continuous process, the apparatus comprising a linear corrugator module (300) comprising a corrugating roller (306); an endless fluted conveyor belt (301) wherein the fluted surface (302) of the conveyor belt intermeshes with the teeth on the corrugating roller; a glue applicator (308); and an endless tensioned belt assembly which holds the planar and corrugated sheets together so a bond is formed between them. The production rate (and therefore the dimensions of the corrugating roll) is governed by the formula $RP=DHT/BT$, where RP is the rate of production in metres/minute; DHT is the distance in metres for which the respective sheets are held together; and BT is the bond time of the adhesive in minutes.

IPC 8 full level

B31F 1/28 (2006.01); **B31F 1/30** (2006.01); **B32B 7/12** (2006.01); **B32B 29/08** (2006.01)

CPC (source: EP KR)

B31F 1/28 (2013.01 - KR); **B31F 1/2818** (2013.01 - EP); **B31F 1/2895** (2013.01 - EP); **B31F 1/30** (2013.01 - EP); **B32B 3/26** (2013.01 - EP); **B32B 7/12** (2013.01 - EP); **B32B 29/005** (2013.01 - EP); **B32B 29/08** (2013.01 - EP KR); **B32B 2250/26** (2013.01 - EP); **B32B 2255/12** (2013.01 - EP); **B32B 2255/26** (2013.01 - EP)

Citation (search report)

- [XY] US 2166749 A 19390718 - BURRILL HAROLD G
- [XY] US 3912573 A 19751014 - KUNZ BERNARD P
- [XY] DE 4236981 A1 19940505 - ALPHA IND DESIGN GMBH [DE]
- [XY] FR 1284907 A 19620216 - WELLPAPPE WIESLOCH G M B H & C
- [XY] WO 2009022102 A2 20090219 - RKVO TRUST [GB], et al
- [XY] NL 6511380 A 19660301
- [XY] US 3972763 A 19760803 - WOLVIN ARTHUR DALE, et al
- See references of WO 2011122968A1

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 2011122968 A1 20111006; BR 112012024867 A2 20160614; CL 2012002694 A1 20130301; CL 2013002595 A1 20140411; CL 2013002596 A1 20140411; CN 102821936 A 20121212; CN 102821936 B 20141203; CN 104129105 A 20141105; CN 104476827 A 20150401; EP 2552686 A1 20130206; EP 2552686 A4 20150304; HK 1178489 A1 20130913; HK 1200773 A1 20150814; JP 2013523492 A 20130617; JP 2015178279 A 20151008; JP 2017124630 A 20170720; KR 20130114562 A 20131017; MX 2012010703 A 20121106; MX 348400 B 20170609; RU 2012146351 A 20140510; RU 2015156631 A 20190117; SG 10201501317W A 20150429; SG 10201501327Y A 20150528; SG 184242 A1 20121030; ZA 201208145 B 20140326; ZA 201307972 B 20151125

DOCDB simple family (application)

NZ 2011000044 W 20110331; BR 112012024867 A 20110331; CL 2012002694 A 20120927; CL 2013002595 A 20130910; CL 2013002596 A 20130910; CN 201180015633 A 20110331; CN 201410250869 A 20110331; CN 201410610783 A 20110331; EP 11763109 A 20110331; HK 13105575 A 20130509; HK 15101300 A 20130509; JP 2013502518 A 20110331; JP 2015117509 A 20150610; JP 2017041446 A 20170306; KR 20127028685 A 20110331; MX 2012010703 A 20110331; RU 2012146351 A 20110331; RU 2015156631 A 20110331; SG 10201501317W A 20110331; SG 10201501327Y A 20110331; SG 2012070884 A 20110331; ZA 201208145 A 20121029; ZA 201307972 A 20131024