

Title (en)

PROCESS AND DEVICE FOR PRODUCING A STRUCTURE ON ONE OF THE FACES OF A GLASS RIBBON

Title (de)

VERFAHREN UND VORRICHTUNG ZUR HERSTELLUNG EINER STRUKTUR AUF EINER DER FLÄCHEN EINES GLASBANDS

Title (fr)

PROCEDE ET DISPOSITIF DE REALISATION D'UNE STRUCTURE SUR L'UNE DES FACES D'UN RUBAN DE VERRE.

Publication

**EP 2326600 A1 20110601 (FR)**

Application

**EP 09786486 A 20090630**

Priority

- IB 2009052828 W 20090630
- FR 0804344 A 20080730

Abstract (en)

[origin: WO2010013149A1] Process for producing a structure on one of the faces of a glass ribbon, carried out continuously using a printing device, in which: the printing device (8) is placed in a zone (A) in which the ribbon (B) is at an average temperature T1 insufficient for printing the pattern of the printing device onto the ribbon according to the nature of the pattern to be printed, to the pressure between the printing device and the ribbon and to the time during which the ribbon is in contact with the printing device; that face to be etched, upstream of the printing device (8), is heated so as to bring a limited and sufficient thickness of the ribbon to a temperature T2>T1 necessary for printing the pattern of the printing device onto the ribbon according to the nature of the pattern to be etched, to the pressure between the printing device and the ribbon and to the time during which the ribbon is in contact with the printing device, while still keeping the rest of the ribbon at a temperature close to T1; the heat flux transmitted through the ribbon by the heating means is such that the "printing number" is between 0.05 mm<sup>-1</sup> and 2.00 mm<sup>-1</sup> and preferably 0.3 mm<sup>-1</sup>.

IPC 8 full level

**C03B 18/14** (2006.01); **C03B 23/00** (2006.01); **C03B 23/02** (2006.01); **C03C 23/00** (2006.01)

CPC (source: EP KR US)

**C03B 18/14** (2013.01 - KR); **C03B 23/02** (2013.01 - EP US); **C03B 25/08** (2013.01 - KR); **C03B 29/08** (2013.01 - EP US);  
**C03B 32/00** (2013.01 - US); **C03C 17/00** (2013.01 - KR); **C03C 17/002** (2013.01 - US)

Citation (search report)

See references of WO 2010013149A1

Designated contracting state (EPC)

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 SE SI SK TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

**WO 2010013149 A1 20100204**; AU 2009275776 A1 20100204; AU 2009275776 B2 20150319; AU 2009278020 A1 20100204;  
AU 2009278020 B2 20150409; BR PI0916821 A2 20160210; BR PI0916848 A2 20160210; CA 2732162 A1 20100204; CA 2732367 A1 20100204;  
CN 102112405 A 20110629; CN 102112405 B 20150429; CN 102112407 A 20110629; CN 102112407 B 20140409; EP 2321232 A2 20110518;  
EP 2326600 A1 20110601; FR 2934587 A1 20100205; FR 2934587 B1 20111007; FR 2934588 A1 20100205; FR 2934588 B1 20110722;  
JP 2011529433 A 20111208; JP 2011529435 A 20111208; JP 5564500 B2 20140730; JP 5647117 B2 20141224; KR 101661485 B1 20160930;  
KR 101661487 B1 20160930; KR 20110049816 A 20110512; KR 20110049817 A 20110512; MX 2011000900 A 20110330;  
MX 2011001142 A 20110329; MY 154705 A 20150715; MY 159092 A 20161215; TW 201008885 A 20100301; TW 201022171 A 20100616;  
TW I477460 B 20150321; TW I501930 B 20151001; US 2011162411 A1 20110707; US 2011259052 A1 20111027; US 8661851 B2 20140304;  
US 9139463 B2 20150922; WO 2010012890 A2 20100204; WO 2010012890 A3 20100422; WO 2010012890 A4 20100617

DOCDB simple family (application)

**IB 2009052828 W 20090630**; AU 2009275776 A 20090724; AU 2009278020 A 20090630; BR PI0916821 A 20090630;  
BR PI0916848 A 20090724; CA 2732162 A 20090724; CA 2732367 A 20090630; CN 200980129747 A 20090724;  
CN 200980129753 A 20090630; EP 09784299 A 20090724; EP 09786486 A 20090630; FR 0804344 A 20080730; FR 0805930 A 20081024;  
FR 2009000922 W 20090724; JP 2011520547 A 20090724; JP 2011520616 A 20090630; KR 20117004132 A 20090724;  
KR 20117004133 A 20090630; MX 2011000900 A 20090630; MX 2011001142 A 20090724; MY PI2011000333 A 20090724;  
MY PI20110334 A 20090630; TW 98123767 A 20090714; TW 98125569 A 20090729; US 200913056601 A 20090630;  
US 200913056610 A 20090724