

Title (en)
ADHESIVE POWDER

Title (de)
KLEBSTOFFPULVER

Title (fr)
POUDRE ADHESIVE

Publication
EP 1151053 A1 20011107 (DE)

Application
EP 99960999 A 19991125

Priority

- DE 19856254 A 19981207
- EP 9909098 W 19991125

Abstract (en)
[origin: DE19856254A1] The invention relates to an adhesive powder for assembling flat, non-porous or porous substrates, whereby, in a first step, the adhesive powder is applied onto a first substrate, and an intermediate product is produced which is non-adherent at room temperature and which is stable in storage. The first substrate is joined with a second substrate in a second step by applying an increased temperature and pressure and while using a combination of the following components: i) a thermoplastic polymer with a proportion ranging from 25 to 95 wt. %, and ii) at least one epoxy resin which is solid at room temperature and which has a proportion ranging from 5 to 75 wt. %, and optionally iii) at least one prepolymer which is comprised of epoxy resins and polyamines, is solid at room temperature, and which has a proportion of no more than 25 wt. %. A physical binding occurs when the adhesive powder is applied to the first substrate in the first step, and both substrates are joined to one another in the second step by a chemical cross linking or post-cross linking of the powder constituents and by a subsequent cooling.

IPC 1-7
C09J 163/00; C08G 59/18

IPC 8 full level
B32B 7/12 (2006.01); **B32B 37/00** (2006.01); **C09J 201/00** (2006.01); **C09J 5/06** (2006.01); **C09J 11/08** (2006.01); **C09J 157/00** (2006.01);
C09J 163/00 (2006.01); **C09J 163/02** (2006.01); **C09J 163/04** (2006.01); **C09J 167/00** (2006.01); **C09J 167/02** (2006.01); **C09J 175/04** (2006.01);
C09J 177/00 (2006.01); **C09J 177/02** (2006.01); **C09J 177/06** (2006.01); **C09J 179/02** (2006.01); **C08L 63/00** (2006.01)

CPC (source: EP KR US)
C08L 63/00 (2013.01 - KR); **C09J 5/06** (2013.01 - EP KR US); **C09J 9/00** (2013.01 - KR); **C09J 11/04** (2013.01 - KR);
C09J 11/08 (2013.01 - EP KR US); **C09J 201/00** (2013.01 - KR); **C08L 63/00** (2013.01 - EP US); **C09J 2463/00** (2013.01 - EP US)

Designated contracting state (EPC)
CH DE ES FR GB IT LI

DOCDB simple family (publication)
US 6515048 B1 20030204; AR 020018 A1 20020327; AU 1776800 A 20000626; CN 1329651 A 20020102; DE 19856254 A1 20000608;
EP 1151053 A1 20011107; HU P0105051 A2 20020429; HU P0105051 A3 20040428; JP 2002531679 A 20020924; KR 100491844 B1 20050527;
KR 20010089552 A 20011006; RU 2221699 C2 20040120; TR 200101657 T2 20011221; TW 502057 B 20020911; WO 0034406 A1 20000615

DOCDB simple family (application)
US 85756201 A 20010606; AR P990106174 A 19991203; AU 1776800 A 19991125; CN 99814200 A 19991125; DE 19856254 A 19981207;
EP 9909098 W 19991125; EP 99960999 A 19991125; HU P0105051 A 19991125; JP 2000586845 A 19991125; KR 20017007087 A 20010607;
RU 2001119158 A 19991125; TR 200101657 T 19991125; TW 88120658 A 19991126