

Title (en)
METHOD FOR POWDER-COATING

Title (de)
VERFAHREN ZUR PULVERLACKIERUNG

Title (fr)
PROCEDE DE LAQUAGE PAR POUDRAGE

Publication
EP 1062053 B1 20020814 (DE)

Application
EP 99911798 A 19990316

Priority

- DE 19811319 A 19980316
- DE 19831781 A 19980715
- EP 9901720 W 19990316

Abstract (en)
[origin: WO9947276A1] The invention relates to a method for powder-coating a substrate (5), especially temperature-sensitive substrates such as wood, wood-fibre materials, plastic materials, rubber, woven fabric, paper or cardboard. According to said method a heat-sensitive powder is deposited as a base coat (6) on the uncoated surface of the substrate (5). The powder is then either heated continuously to cross-linking temperature by means of infrared radiation having at least fractions in the near and/or short-wave infrared range, and hardened; alternatively, the powder is continuously heated to gelling temperature, cross-linking is completed in a subsequent step and the powder is then hardened. To generate the infrared radiation the invention provides for the use of halogen lamps (7) in combination with a reflector (8) for reflecting the radiation emitted in the direction of the substrate. The halogen lamps (7) are operated in such a way that a maximum radiation flux density of the emitted radiation is in the near infrared region.

IPC 1-7
B05D 3/02

IPC 8 full level
B05D 3/02 (2006.01); **B05D 7/24** (2006.01)

CPC (source: EP KR US)
B05D 3/0263 (2013.01 - EP KR US); **B05D 2401/32** (2013.01 - EP KR US)

Cited by
EP1252938A3; US7442409B2; DE102007015261A1; DE20221980U1; WO2004031671A1

Designated contracting state (EPC)
DE ES FR GB IT

DOCDB simple family (publication)

WO 9947276 A1 19990923; AU 3035299 A 19991011; BR 9908843 A 20001121; CA 2324097 A1 19990923; CN 1203924 C 20050601; CN 1293598 A 20010502; DE 59902341 D1 20020919; EP 1062053 A1 20001227; EP 1062053 B1 20020814; ES 2182500 T3 20030301; JP 2002506725 A 20020305; KR 100685477 B1 20070223; KR 20010041912 A 20010525; US 6436485 B1 20020820

DOCDB simple family (application)

EP 9901720 W 19990316; AU 3035299 A 19990316; BR 9908843 A 19990316; CA 2324097 A 19990316; CN 99804053 A 19990316; DE 59902341 T 19990316; EP 99911798 A 19990316; ES 99911798 T 19990316; JP 2000536498 A 19990316; KR 20007010216 A 20000915; US 64632400 A 20000915