

Title (en)  
PROCESS AND APPARATUS FOR COATING SHEET METAL WITH POWDER PAINT

Publication  
**EP 0369477 B1 19930929 (DE)**

Application  
**EP 89121340 A 19891117**

Priority  
DE 3838928 A 19881117

Abstract (en)  
[origin: EP0369477A2] For the purpose of coating sheet metal conveyed at high speed, the latter is firstly cleaned, degreased, rinsed and phosphated in a pretreatment station (5). Thereafter, the sheet metal (3) is dried in a drying station (8) by means of infrared radiation and air, before it is provided with a powder paint coating. This coating is applied immediately onto the sheet metal (3) through one or more nozzles (12) by means of an extruder (11), whereupon the powder paint coating thus applied is distributed in a largely uniform fashion and pressed onto the sheet metal (3) by means of roller pairs (14) in a powder paint distribution and surface smoothing station (13). Subsequently, the powder paint coating is heated in an aftertreatment and hardening station (14) to such an extent that the plastic material can be distributed completely uniformly. Due to the higher temperature, hardening of the powder paint takes place. Subsequently hereto, the sheet metal provided with a powder paint coating is cooled and wound up in a winding station (4) to form a strip roll, release paper being wound in by a strip roll (19).

IPC 1-7  
**B05C 5/02; B05D 1/26; B05D 1/40**

IPC 8 full level  
**B05D 1/26** (2006.01); **B05D 1/40** (2006.01); **B05D 3/02** (2006.01); **B05D 7/14** (2006.01)

CPC (source: EP)  
**B05D 1/265** (2013.01); **B05D 1/40** (2013.01); **B05D 3/0254** (2013.01); **B05D 7/14** (2013.01)

Citation (examination)  
DE 2706328 A1 19780817 - GLYCO METALL WERKE

Cited by  
ES2164607A1; EP1255617A4; US5639514A; AU688731B2; AU778541B2; KR101353241B1; WO2006049070A1; US11229925B2; US6488800B1; US8367978B2; WO9620086A1; WO0071834A3; WO9401224A3; US6485781B2; US6540829B2; KR100309392B1; WO0226406A1; WO0015357A3

Designated contracting state (EPC)  
ES FR GB IT SE

DOCDB simple family (publication)  
**EP 0369477 A2 19900523; EP 0369477 A3 19910123; EP 0369477 B1 19930929**; DE 3838928 A1 19900523; DK 575189 A 19900518; DK 575189 D0 19891116

DOCDB simple family (application)  
**EP 89121340 A 19891117**; DE 3838928 A 19881117; DK 575189 A 19891116