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

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

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