

Title (en)

Powder coating method and system for can bodies

Title (de)

System und Verfahren zur Pulverbeschichtung von Behälterkörpern

Title (fr)

Procédé et système de revêtement par pulvérisation pour corps de boîtes

Publication

EP 2002897 A1 20081217 (EN)

Application

EP 07252414 A 20070614

Priority

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Abstract (en)

A system and method for powder coating of cans such as aluminium beverage cans. The system includes a powder booth (14), one or more robotic arms (20) carrying groups of cans (40), and powder guns (26,24) for applying powder to the interior and exterior of the cans. A conveyor (64) system receives the cans from the robotic arm(s). The conveyor system carries the cans through a curing oven (60). A further set of powder guns (28) applies powder to the portion of the can which was attached to the robotic arm (20), e.g., the bottom of the can in an embodiment where the arm uses vacuum to hold the cans (40).

IPC 8 full level

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CPC (source: EP)

B05B 13/0221 (2013.01); **B05B 13/0609** (2013.01); **B05B 16/20** (2018.01); **B05B 7/0884** (2013.01); **B05B 7/1486** (2013.01)

Citation (applicant)

- US 3989001 A 19761102 - BRIGHAM ROGER S, et al
- US 4094760 A 19780613 - SMITH DAVID A, et al
- US 5997643 A 19991207 - WILSON TIMOTHY EDWARD [US], et al
- US RE33482 E 19901211 - MULDER DOUGLAS C [US], et al
- US 5173325 A 19921222 - KNOBBE ALAN J [US], et al
- US 6176927 B1 20010123 - NUSSBAUMER HANS-JOERG [CH], et al
- US 5612096 A 19970318 - MULDER DOUGLAS C [US], et al
- US 4180844 A 19791225 - PECK RICHARD O [US]
- US 4291640 A 19810929 - PAYNE ROBERT D, et al
- US 4210507 A 19800701 - DAVIDSON JOHN J [US], et al

Citation (search report)

- [XY] US 3989001 A 19761102 - BRIGHAM ROGER S, et al
- [Y] US 5335682 A 19940809 - YOSHIMURA TAKAYUKI [JP], et al
- [Y] US 5271164 A 19931221 - YOSHIMURA TAKAYUKI [JP], et al
- [A] US 3952698 A 19760427 - BEYER ARNOLD D, et al

Cited by

CN109351516A; CN105268580A; CN113560076A; EP3015176A1; CN107930944A; WO2021184585A1; WO2014108242A1; US9487857B2

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