

Title (en)

POWDER CHARGING APPARATUS AND ELECTROSTATIC POWDER COATING APPARATUS

Publication

EP 0230723 A3 19871014 (EN)

Application

EP 86308890 A 19861114

Priority

JP 25828985 A 19851118

Abstract (en)

[origin: EP0230723A2] It is described a novel powder charging apparatus, wherein a high voltage is applied between a couple of electrodes, consisting of a plasma electrode of required polarity and a plasma electrode of opposite polarity, to form plasma at tip of each of electrodes, an eventually finely dispersed powder is made to pass only through an area wherein mainly ones of negative and positive ions derived of said plasma, that is, ions of required polarity exist, and thereafter the charged powder is discharged. In this apparatus, the adhesion of powder to each electrode is prevented and charging performance is maintained for a long time. It is also described an electrostatic powder coating apparatus comprising the above-described novel powder charging apparatus, which is excellent in performance for making thick coating, depositing efficiency and throwing power.

IPC 1-7

B05B 5/02; **B05B 7/14**

IPC 8 full level

B05B 5/025 (2006.01); **B05B 5/03** (2006.01); **B05B 5/053** (2006.01); **B05B 5/057** (2006.01); **H01T 19/00** (2006.01); **H01T 19/04** (2006.01)

CPC (source: EP)

B05B 5/032 (2013.01)

Citation (search report)

- [X] DE 2646798 A1 19780420 - HAUG & CO KG
- [A] GB 2029271 A 19800319 - ONODA CEMENT CO LTD
- [A] US 4135667 A 19790123 - BENEDEK GYORGY, et al
- [A] PATENT ABSTRACTS OF JAPAN, vol. 8, no. 260 (C-254)[1697], 29th November 1984; & JP-A-59 139 956 (YANMAR NOKI K.K.) 11-08-1984

Cited by

DE19542863A1; DE102005045176A1; GB2312298A; US5907469A; GB2312298B

Designated contracting state (EPC)

CH DE FR GB LI SE

DOCDB simple family (publication)

EP 0230723 A2 19870805; **EP 0230723 A3 19871014**; **EP 0230723 B1 19910717**; DE 3680316 D1 19910822; JP H0636890 B2 19940518; JP S62117651 A 19870529

DOCDB simple family (application)

EP 86308890 A 19861114; DE 3680316 T 19861114; JP 25828985 A 19851118