Title (en)

POWDER SPRAY GUN WITH ELECTROCINETIC CHARGING

Publication

EP 0314049 A3 19900131 (DE)

Application

EP 88117691 A 19881024

Priority

DD 30830087 A 19871027

Abstract (en)

[origin: EP0314049A2] The invention relates to a spray gun with electrokinetic charging of powder material for the purpose of electrostatically coating workpieces with a powder coating. The plastic powder to be applied is charged whilst flowing through, by pneumatic means, an annular gap- shaped insulating channel, by superimposing ionisation processes on tribo-electrical effects, the said ionisation processes being triggered by the said effects at a passive ionisation electrode. <??>According to the invention, the elongate flow baffle arranged in the insulating material channel has one or more sections which consist of electrically semi-conductive material, or have such a surface, and are electrically insulated from the ionisation electrode and from one another. As a result, the effective range of the influencing ioniser is extended, the powder charge is increased and spark-like sliding discharges in the flow channel as well as flashovers of the channel wall are prevented. <IMAGE>

IPC 1-7

B05B 5/02; B05B 7/14

IPC 8 full level

B05B 5/047 (2006.01)

CPC (source: EP US)

B05B 5/047 (2013.01 - EP US)

Citation (search report)

- [X] DE 3600808 A1 19870716 - ESB VOEHRINGER [DE]
- [YD] DD 134841 A1 19790328 - DRESSLER PETER
- [Y] DE 3420325 A1 19851205 - GEMA RANSBURG AG [CH]
- [AD] DD 232595 A3 19860205 - VERKEHRSWESEN HOCHSCHULE [DD]
- [A] DE 2555547 B2 19780727

Cited by

CN113000238A; DE29500914U1; US5011085A; EP0818245A1; FR2750897A1; CN109647644A; EP0592137A1; CN1051033C; EP1090689A3; EP1254720A3; EP1254720A2; WO9211949A1; FR2820344A1; US6959884B2

Designated contracting state (EPC)

AT CH DE FR GB IT LI SE

DOCDB simple family (publication)

EP 0314049 A2 19890503; **EP 0314049 A3 19900131**; CA 1336130 C 19950704; DD 271611 A3 19890913; HU 198406 B 19891030; HU T48134 A 19890529; JP H01148354 A 19890609; US 4979680 A 19901225

DOCDB simple family (application)

EP 88117691 A 19881024; CA 581368 A 19881026; DD 30830087 A 19871027; HU 503588 A 19880928; JP 26962488 A 19881027; US 26327488 A 19881027