

Title (en)
POWDER SPRAY BOOTH

Publication
EP 0100932 A3 19850529 (DE)

Application
EP 83107084 A 19830720

Priority
DE 3229756 A 19820810

Abstract (en)
[origin: US4504292A] A powder spray booth wherein the workpieces are moved through a coating space and coated by powder coming from an electrostatic spray gun at a spray opening. An aspiration blower is used for forcing the air coming in through the spray opening through a cyclone unit with a battery of cyclone separators and through a filter unit with a filter bag. The air is moved upwards along upwards sloping lines of flow to the aspiration duct, and the powder is moved downwardly under the effect of gravity. Only a part of the powder reaches the cyclone separators and is removed from them through airlocks. The part of the powder not separated in this way deposits in the filter space, a part of it only after cleaning the filter. This part of the powder is removed on opening an outlet door and is taken up on the screen of the powder car and then mixed with the powder from the cyclone separators or, by opening the outlet door, run into a space, where a second powder car may be placed. By designing the cyclone units as part of the booth or booths the overall structure is made simpler and the time needed for cleaning down on changing the color of the powder is decreased.

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IPC 8 full level
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CPC (source: EP US)
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Citation (search report)
• US 2259626 A 19411021 - HARRY ERIKSON
• DE 2839540 A1 19800320 - SCHAAD HANS J
• US 3473561 A 19691021 - SVENSON BERT N, et al
• US 4277260 A 19810707 - BROWNING JESSE H
• DE 918193 C 19540920 - HEINRICH AUSSEREHL

Cited by
EP0698421A1; DE4203948A1; EP0223660A1; FR2588780A1; US4770118A; US4913085A; IT201900024985A1; WO2014169992A1; WO8603994A1; WO2021124183A1

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