

Title (en)

Spray device with a non-circular spray pattern

Title (de)

Sprühvorrichtung mit einem nicht kreisrunden Sprühmuster

Title (fr)

Dispositif de pulvérisation avec une configuration de jet non circulaire

Publication

EP 1621841 A1 20060201 (EN)

Application

EP 05106905 A 20050727

Priority

IT MI20041530 A 20040728

Abstract (en)

The sprayer according to the present invention comprises an upstream nozzle (4) which emits an inlet jet of a liquid to be sprayed against a conical projection (6) of a deflector (5). A first fraction of the inlet jet enters the dividing aperture (11) located on the top of the conical projection (6) and is directed against a propeller (13). A second fraction of the upstream jet flows along the external sides of the conical projection (6), is diverted, by means of the base extensions (10) positioned at the base of the conical projection (6), and projected in directions transverse to the inlet jet. The propeller (13) uniformly distributes the first fraction of the inlet jet over a circular area to be sprayed, while the deflector (5) concentrates the second fraction of the inlet jet on one or more zones outside the circular area to be sprayed, thereby obtaining uniform spraying of an overall area, which can, for example, be square in shape.

IPC 8 full level

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CPC (source: EP)

B05B 1/262 (2013.01); **B05B 1/265** (2013.01); **B05B 3/0486** (2013.01); **F28F 25/06** (2013.01)

Citation (search report)

- [X] US 4091873 A 19780530 - WERNER CLEMENTS M
- [X] US 2005600 A 19350618 - BONNELL TAPPEN ALEXANDER
- [X] US 3061204 A 19621030 - MACINNES WILLIAM F, et al
- [X] US 4350302 A 19820921 - GRUBER MARTIN V, et al

Cited by

CN105973059A; CN104215116A; CN103994690A

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