

Title (en)  
HIGH FREQUENCY SPRAYING DEVICE

Title (de)  
HOCHFREQUENZZERSTÄUBUNGSVORRICHTUNG

Title (fr)  
DISPOSITIF DE PULVERISATION HAUTE FREQUENCE

Publication  
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Application  
**EP 05700704 A 20050105**

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Abstract (en)  
[origin: WO2005065843A1] The invention relates to a high frequency spraying device which is suitable for coating substrates with a coating fluid. According to the invention, coating is carried out with the aid of spray unit (1) which, for example is excited with a piezoceramic element at frequent vibrations, whereby the coating fluid undergoes capillary wave excitation and extremely fine coating agent drops are pinched off at the nodal points thereof. The inventive high-frequency atomization device also comprises a substrate holder (8) enabling the substrate (14) which is to be coated to be maintained in a position which is suitable for coating and to be subsequently moved into the area of a drying device (6) where the freshly coated substrate (14) can be dried. Preferably, the inventive device comprises a suction device (10) which is used to suction the overspray, a device for tempering the application chamber or parts of the application chamber and/or the used coating solutions, in addition to an anode and pole flange plate system for producing magnetic fields and/or electrostatic or ionizing fields in order to influence the distribution of coating solutions and/or the geometric orientation of particle components of said coating solutions.

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