

Title (en)
STANDING ULTRASONIC WAVE SPRAYING ARRANGEMENT

Title (de)
ULTRASCHALL-STEHWELLEN-ZERSTÄUBERANORDNUNG

Title (fr)
SYSTEME DE PULVERISATION A ONDES ULTRASONORES STATIONNAIRES

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Application
EP 04739475 A 20040529

Priority
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Abstract (en)
[origin: WO2004110649A1] The invention relates to a standing ultrasonic wave spraying arrangement (10, 20) for creating a spray mist of lacquer used for lacquering a workpiece. Said standing ultrasonic wave spraying arrangement comprises a sonotrode (12, 22), a structural part (14, 24) that is located across from the sonotrode (12, 22), a standing ultrasonic field being generated in the intermediate space between the at least one sonotrode (12, 22) and the structural part (14, 24) during operation, and at least one nozzle-shaped lacquer delivering device (18) which is disposed perpendicular to the central axis of the sonotrode (12, 22) and feeds the lacquer into the intermediate space at least at one lacquer discharge point for the spraying process. The structural part located across from the sonotrode (22) is embodied as a coaxially aligned reflector (24). The side (26) of the structural part, which faces the sonotrode (22), is provided with a step-shaped recess (28), the depth of said recess (28) corresponding to a multiple of half the wavelength < of the airborne sound vibrations generated in the sonotrode (22).

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