

Title (en)  
ULTRASOUND ACTUATOR FOR CLEANING OBJECTS

Title (de)  
ULTRASCHALLAKTOR ZUR REINIGUNG VON OBJEKTEN

Title (fr)  
ACTIONNEUR À ULTRASON DESTINÉ AU NETTOYAGE D'OBJETS

Publication  
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Application  
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Abstract (en)  
[origin: WO2007093153A1] The present invention relates to an ultrasound actuator for cleaning objects, having a propagation volume (3, 4, 13) for ultrasound, on which one or more ultrasonic transducers (5) are arranged. The propagation volume (3, 4, 13) is delimited by an acoustic coupling-out window (8) with a coupling face for acoustically coupling an object (1, 12) to be cleaned and by one or more reflection faces (6, 7) for coupled-in ultrasound. The ultrasonic transducers (5) are arranged on the propagation volume (3, 4, 13) such that the coupled-in ultrasound exits the propagation volume (3, 4, 13) via the coupling-out window (8) only after one or more reflections at the reflection faces (6, 7). The reflection faces are designed such that a predeterminable distribution of the ultrasound energy without intensity peaks results at the coupling-out window (8). The present ultrasound actuator is used to achieve gentle cleaning of the objects with economic use of cleaning liquid.

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