ABSTRACT

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.