

Title (en)
Ultrasonic sprayer

Title (de)
Ultraschallzerstäuber

Title (fr)
Pulvérisateur ultrasonique

Publication
EP 0657226 B1 19980204 (DE)

Application
EP 94118689 A 19941128

Priority
DE 4342372 A 19931210

Abstract (en)
[origin: EP0657226A1] In the spraying of liquids, especially of small volumes, the ultrasound emitted by a piezoceramic is transmitted via a sealing medium into a housing part receiving the liquid to be sprayed. There, if the sealing material is arranged near the centre of emission, the ultrasound leads to a destruction of the housing part. If the sealing material is arranged further away, this leads, in the gap region then obtained, to an accumulation of liquid and bacteria. For this purpose, provision is made, according to the invention, for an elastic material (20) having gas inclusions to seal off an interspace (22) between the housing part (8) and the piezoceramic (16) against the liquid (10) to be sprayed. As a result of the elasticity of the material having gas inclusions, this brings about a sealing-off relative to the liquid to be sprayed. On account of the gas inclusions, an input of ultrasound into the housing part is avoided, because the ultrasound is reflected on the gas inclusions. Such ultrasonic sprays are suitable for the spraying of liquids, especially for the spraying of medicines and cosmetics. <IMAGE>

IPC 1-7
B05B 17/06

IPC 8 full level
B05B 17/06 (2006.01)

CPC (source: EP)
B05B 17/0615 (2013.01)

Cited by
CN112144246A; US5950619A; DE19962280A1; US5970974A; CN105960287A; RU2676981C1; WO2015091564A1; DE202009005729U1; EP1990170A2; US11224767B2; US11331520B2

Designated contracting state (EPC)
AT CH DE IT LI

DOCDB simple family (publication)
EP 0657226 A1 19950614; EP 0657226 B1 19980204; AT E162963 T1 19980215; DE 59405227 D1 19980312

DOCDB simple family (application)
EP 94118689 A 19941128; AT 94118689 T 19941128; DE 59405227 T 19941128