Title (en)

Double impeller for stirring sterile liquids.

Title (de)

Doppel-Impeller zum Rühren von sterilen Flüssigkeiten

Title (fr)

Agitateur double pour remuer des liquides steriles

Publication

EP 0599010 B1 19980121 (DE)

Application

EP 93115169 A 19930921

Priority

DE 4232934 A 19921001

Abstract (en)

[origin: JPH07789A] PURPOSE: To prevent the generation of a low pressure region by producing an additional flow in a tank by arranging a stirring wing formed as a propeller on an impeller head and further a flow generation section in a lower region. CONSTITUTION: An impeller head rotating by non-contact type drive using magnetic force is externally fitted and held to a conical body 6 projectingly provided inside a tank 4. A propeller type stirring wing 3 is arranged on the impeller head 2 so as to produce an upwardly directing flow and a flow generating section is arranged in a lower region of the impeller head 2 so as to produce a flow directing downward or to the side. Consequently, although a liquid in the tank 4 is stirred by the stirring wing 3, and falls in the center and rises in the peripheral by centrifugal force, the liquid is transferred upwardly by a rotation into torsion direction, improving a lower pressure region, preventing a drawing action of gas and preventing generation of bubbles. A groove 13 is formed as a flow generation section to clean a liquid in a hollow section 15 by extracting and to add a downward axial force of the impeller head 2.

IPC 1-7

B01F 13/08

IPC 8 full level

B01F 13/08 (2006.01); B01F 15/00 (2006.01)

CPC (source: EP US)

B01F 33/453 (2022.01 - EP US); B01F 33/4535 (2022.01 - EP US); B01F 35/4112 (2022.01 - EP US)

Designated contracting state (EPC)

BE CH FR GB LI NL SE

DOCDB simple family (publication)

DE 4232934 A1 19940407; **DE 4232934 C2 19960328**; EP 0599010 A1 19940601; EP 0599010 B1 19980121; JP H07789 A 19950106; US 5407272 A 19950418

DOCDB simple family (application)

DE 4232934 A 19921001; EP 93115169 A 19930921; JP 24581693 A 19931001; US 12944293 A 19930930