

Title (en)
DEVICE FOR MIXING A LIQUID CONTAINED IN A TEST TUBE

Publication
EP 0035762 A3 19830309 (DE)

Application
EP 81101599 A 19810306

Priority
SE 8001912 A 19800311

Abstract (en)
[origin: US4345843A] An apparatus for oscillating a test tube so as to agitate the content thereof, comprises an annular holder from which the test tube can be hung by means of a flange located on the upper end of the test tube, in a manner such that the test tube is restricted swingable outwardly in all directions from its vertical rest position. Mounted externally of the test tube bottom is a plate of soft-magnetic material or a plate-shaped permanent magnet with its magnetic axis coinciding with the axis of the test tube. A plurality of electromagnets for example four in number, are stationarily arranged with their respective first poles located in a common horizontal plane at a distance beneath the lower end of the test tube, in a manner such that the poles lie on a circle concentric about the vertical rest position of the test tube. The opposite second poles of the electromagnets are connected to a common, soft-magnetic pole piece, and the electromagnets are energized in a predetermined sequence and in predetermined directions, so that as a result of the co-action of said first poles of the electromagnets and the soft-magnetic plate or plate-shaped permanent magnet on the test-tube, the test-tube is caused to effect a nutational rotation about the vertical rest position, with the apex of the nutational rotation located substantially in the center of the annular holder.

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B01F 11/00; **B01F 13/08**; **B01L 11/00**

IPC 8 full level
B01F 11/00 (2006.01); **B01F 13/08** (2006.01)

CPC (source: EP US)
B01F 31/27 (2022.01 - EP US); **B01F 33/45** (2022.01 - EP US)

Citation (search report)
• [Y] US 4042218 A 19770816 - MOORE ROBERT R, et al
• [Y] DE 2201204 A1 19730517 - BSB BAROMAT
• [A] DE 1638968 A1 19720224 - ZIPPERER MANFRED

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EP3027729A4; EP0052324A3; US4568195A; US6332705B1; WO9839089A1

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CH DE FR GB LI SE

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