

Title (en)
Turbine-vibrator

Title (de)
Turbinenvibrator

Title (fr)
Vibrateur à turbine

Publication
EP 1110624 A3 20030205 (DE)

Application
EP 00125963 A 20001128

Priority
DE 29922369 U 19991221

Abstract (en)
[origin: US2001004438A1] With the aim of enhancing the efficiency of pneumatically driven vibrators, with an essentially closed casing (2), in whose operating space (3) a cylindrically-shaped, unbalanced rotor (1) is mounted in bearings in such a way as to be capable of rotation, and which exhibits a channel for inflow and outflow (4, 5) that is at least tangentially directed in relation to this rotor (1), so as to allow for an air-driven mode of operation, it is intended-in accordance with this invention-that the cross-section of the pneumatic stream that flows from every inflow channel (4), between the exterior surface of the rotor (1) and the inner wall of the operating space (3), should first be steadily reduced-in the direction of the current-down to the narrowest cross-section, and then be steadily increased, up to the corresponding outflow channel (5). A cross-section of pneumatic current that is formed in this fashion, with a cylindrically-shaped operating space (3), can be achieved through the arrangement of the axis (6) of the rotor (1) eccentrically relative to the axis (7) of the operating space (3). This can also be accomplished by the adaptation of the operating space of the housing, either by means of an insert or through an opening correspondingly opposite to the cylinder-shaped fundamental form. In a manner that is altogether familiar per se, the rotor is equipped with axial bore holes [drillings] (13), that can be utilized for the purpose of setting, as well as for the alteration of, its unbalance.

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B06B 1/16; B06B 1/18

IPC 8 full level
B06B 1/18 (2006.01)

CPC (source: EP US)
B06B 1/186 (2013.01 - EP US)

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• [XAY] GB 1359087 A 19740710 - ATHAWES W A
• [XA] CH 132996 A 19290515 - KUENG EMIL [CH]
• [YD] DE 4307483 A1 19930923 - FINDEVA AG [CH]

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