

Title (en)  
VIBRATOR

Publication  
**EP 0058131 B1 19850515 (DE)**

Application  
**EP 82810015 A 19820115**

Priority  
CH 81581 A 19810206

Abstract (en)  
[origin: US4548123A] An oscillator is proposed which comprises a pair of cylinders having a common, circular-cylindrical outer wall (100) and two sealingly guided pistons (120, 122) each having one piston rod (121, 123), which are likewise guided in a sealing manner to the outside through the closure walls of the cylinder. The cylinder is divided by the pistons (120, 122) into outer chambers (124, 125) and inner chambers combined into one common chamber (126). The chamber (126) is filled with fluid. The outer chambers (124, 125) have two openings (102, 103) offset from one another by 180 DEG. A control cylinder (101) having axially offset, oppositely disposed holes (104, 105, 106, 107) connects the outer chambers in alternation with an annular high-pressure chamber (113, 115) and an equalization chamber (114) whenever the control cylinder (101) is rotated. The two pistons (120, 122) thereby execute movements in common toward the left or right, respectively. The stroke is determined by the quantity of fluid capable of flowing out of the high-pressure chamber and into the equalization chamber, and the frequency is determined by the speed of rotation of the control cylinder. A direct control of an oscillator is thus realized, without additional connecting lines and the delay associated with such lines. Frequencies of up to 7000 Hz and strokes up to 10 mm can be generated.

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IPC 8 full level  
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