

Title (en)
PNEUMATIC LINEAR VIBRATOR

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Application
EP 88907143 A 19880823

Priority
CH 349287 A 19870909

Abstract (en)
[origin: WO8902514A1] A pneumatic linear vibrator comprises a piston guide sealed at least on one side and delimited by detachable end parts (14, 16), a piston (10), a sound-absorbing pipe (52) which forms the housing, and means for supplying and removing a gaseous or vaporized pressure medium. Relative motion between the guide with the end parts and the piston is ensured by automatic alternating delivery of the pressure medium to a working to a working volume (V, V1, V2) located on one face of the piston. The piston (10) has a longitudinal axial bore (22) with a snap ring groove (26) in the region of the ends or close to either side of the longitudinal median plane of the piston. The snap ring grooves are connected to a face of the piston (10) by at least two axisymmetric channels (27) which run in the axial direction (A) and are sealed off from the longitudinal axial bore (22) of the piston (10). A guide pipe (18) for delivery of the pressure medium, which is closed at one end, penetrates the end part (14) or end parts (14, 16) and the longitudinal axial bore (22) of the piston (10) in a sealed manner. The guide pipe (18) serves as a piston guide and has radially disposed axisymmetric outlet openings (32) for the pressure medium corresponding to the snap ring grooves (26) in the longitudinal axial bore (22) of the piston (10). The vibrator has a slim, elongated shape and can be used for example for sieves, conveying channels compacting installations and for driving tools.

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