

Title (en)
MOTOR-COMPRESSOR UNIT

Publication
EP 0277382 B1 19910306 (EN)

Application
EP 87202579 A 19871218

Priority
NL 8603295 A 19861224

Abstract (en)
[origin: EP0277382A1] A motor-compressor unit comprising a vibration motor having two or more coils around a stator core (1), parallel to which is arranged a magnet (3,4) with a stator part (2A,2B) above it, one of the poles of this magnet being directed to the core and circularly bent air gaps being present between the stator core and the stator part, while slide elements (7,8,9,10) of an armature (11,12) traverse in these air gaps a part of an arc of a circle and the armature is rotatable about a motor shaft (13), this armature (11,12) being coupled with a piston body (16) linearly movable in a cylinder (17), which piston body (16) can vary with one side the volume of a compression space (21) with inlet and outlet valves and can vary with its other side the volume of a gas spring space (24), the gas spring space (24) being solely provided with an inlet valve (23), which adjoins the same medium supply as the inlet valve (19) of the compression space (21) and at nominal power and nominal delivery pressure and suction pressure the volume of the gas spring space (24) exceeds that of the compression space (21) by such an amount that the spring stiffness of the gas in the gas spring space (24) is equal to the spring stiffness of the gas in the compression space (21), while the piston body (16) performs during operation a vibration about a central position corresponding to the central position of the armature (11,12).

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CPC (source: EP)
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Cited by
EP0428212A1; EP0436999A1; WO2007098987A1

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