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- (71) Applicant (*for all designated States except US*): **EMPRESA BRASILEIRA DE COMPRESSORES S.A.**
- **EMBRACO** [BR/BR]; Rua Rui Barbosa, 1020, CEP-89219-901 Joinville, SC (BR).

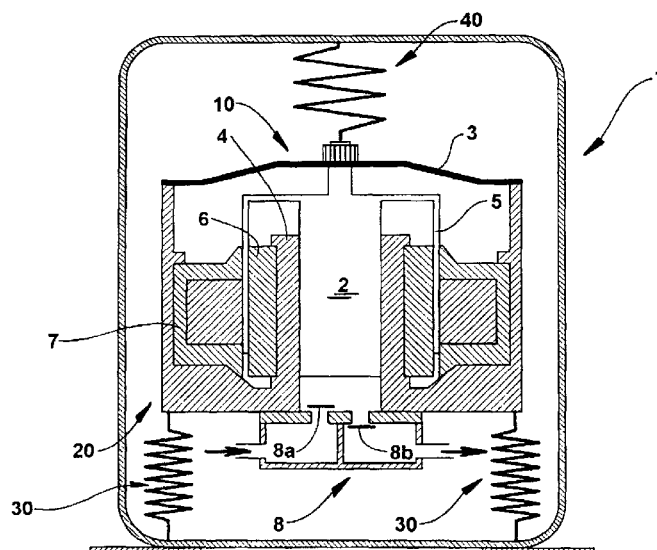
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- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): **PUFF, Rinaldo** [BR/BR]; Rua Jaó, 280, CEP-89220-160 Joinville, SC (BR). **LILIE, Dietmar, Erich, Bernhard** [BR/BR]; Rua Orestes Guimarães, 904, CEP-89204-060 Joinville, SC (BR).

(54) Title: VIBRATION DAMPENING SYSTEM FOR A RECIPROCATING COMPRESSOR WITH A LINEAR MOTOR



(57) Abstract: A vibration dampening system for a reciprocating compressor with a linear motor of the type comprising a motor-compressor assembly having a reference assembly (20) formed by a motor and a cylinder (4) and mounted inside a shell (1) and a resonant assembly (10) formed by a resonant spring (3) and a piston (2) reciprocating inside the cylinder (4), said system comprising at least one first balancing means (30) connecting the reference assembly (20) to the shell (1), and at least one second balancing means (40) connecting the resonant assembly (10) to the shell (1), both balancing means (30, 40) actuating according to the displacement direction of the piston (2), said second balancing means (40) presenting a coefficient of elasticity proportional to the coefficient of elasticity of the first balancing means (30), by a factor defined by the ratio of the masses of the resonant assembly (10) and of the reference assembly (20), respectively.