Title (en)
LINEAR COMPRESSOR

Title (de)
LINEARER VERDICHTER

Title (fr)
COMPRESSEUR LINÉAIRE

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Application
EP 10836180 A 20101206

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Abstract (en)
The present invention discloses a linear compressor including: a hermetic container which defines a sealed space where a refrigerant flows in and out and which has an inlet pipe and an outlet pipe; a cylinder provided in the hermetic container and having a compression space therein; a piston linearly reciprocated in the cylinder and compressing the refrigerant of the compression space; a linear motor supplying a driving force to the piston and operating the piston at a set operating frequency; a plurality of support springs elastically supporting an assembly composed of the cylinder, the piston and the linear motor on the bottom surface of the hermetic container; and a loop pipe provided to guide the refrigerant compressed in the compression space to the outlet pipe. As the exciting force exerted on the hermetic container by the loop pipe has an opposite phase to the exciting force exerted on the hermetic container by the support springs, vibration of the assembly can be offset by vibration of the loop pipe through the phase shift, and thus the overall vibration can be reduced.

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