

Title (en)

LINEAR MOTOR COMPRESSOR AND METHOD FOR OPERATING A LINEAR MOTOR COMPRESSOR

Title (de)

VERFAHREN ZUM BETREIBEN EINES LINEARMOTORVERDICHTERS SOWIE LINEARMOTORVERDICHTER

Title (fr)

PROCÉDÉ DE FONCTIONNEMENT D'UN COMPRESSEUR DE MOTEUR LINÉAIRE ET COMPRESSEUR DE MOTEUR LINÉAIRE

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Application

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Abstract (en)

[origin: WO2020161210A1] The invention relates to a method for operating a linear motor compressor (1) comprising an electric linear motor (14), a cylinder (2), and a linearly movable free piston assembly (16) comprising a piston (3). The cylinder (2) and the piston (3) form a compression chamber (5), and a free piston assembly (16) is directly driven by the linear motor (14) and is moved back and forth between an upper dead center (XOTP) and a lower dead center (XUTP) along a stroke path (X). The compression chamber (5) is supplied with a fluid from the outside, and the supplied fluid is compressed or expanded in the compression chamber (5) and subsequently dispensed back outside. At least one state variable (Ztarget) is specified for the linear motor compressor (1), and the linear motor (14) is actuated such that the linear motor compressor (1) exhibits the specified state variable (Ztarget).

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