

Title (en)  
PISTON CYLINDER ARRANGEMENT OF AN AEROSTATIC LINER COMPRESSOR

Title (de)  
KOLBENZYLINDERANORDNUNG EINES VERDICHTERS MIT EINER AEROSTATISCHEN AUSKLEIDUNG

Title (fr)  
ENSEMBLE PISTON ET CYLINDRE DE COMPRESSEUR LINÉAIRE AÉROSTATIQUE

Publication  
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Application  
**EP 12813252 A 20121114**

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Abstract (en)  
The present invention relates to a piston (1) and cylinder (2) assembly that can reduce efficiency losses due to the gas in a linear compressor with aerostatic bearings. The space between the piston (1) and cylinder(2) in the piston-cylinder assembly was therefore designed to decrease radial clearance (12) in the upper portion of the piston (1) when the piston approaches the headpiece (3), i.e., when the density of the gas not being used in the refrigeration process is the highest. The piston (1) and cylinder (2) assembly must exhibit such a geometric ratio that radial clearance (12) changes in inverse proportion to the density of the gas in the radial clearance (12).

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