

ABSTRACT

Patent of Invention: **“PISTON CYLINDER ARRANGEMENT OF AN AE-ROSTATIC LINER COMPRESSOR”**

5 The present invention refers to a piston (1)/cylinder (2) assembly, capable of minimizing the losses of efficiency that occur on the gas of a linear compressor with aerostatic bearing arrangement. Thus, a spacing was designed between the piston (1)/cylinder (2) assembly so as to decrease the perimeter clearance (12) at the top portion of the piston (1) when the latter is close to the head (3), that is, where there is higher gas density that is not
10 employed in the cooling process. The piston (1)/cylinder (2) assembly should have such a geometrical relationship that the dimension of the perimeter clearance (12) will vary in an inversely proportional manner with respect to the density of the gas present in the perimeter clearance (12).