

ABSTRACT

Patent of Invention: **"METHODS FOR CONTROLLING A COMPRESSOR WITH DOUBLE SUCTION FOR REFRIGERATION SYSTEMS"**.

The present invention refers to methods for controlling a double
5 suction compressor for application in refrigeration systems, capable of meeting the different demands for cost, efficiency and control of temperatures by means of techniques of complexity levels and different configurations of the elements from the control loop (temperature sensors, actuators, controllers, etc.). The proposed solutions include the description of a method for controlling and adjusting the refrigeration capacities of a refrigeration system
10 equipped with a double suction compressor, the refrigeration system comprising compartments to be refrigerated and comprising at least two evaporators (20) positioned in the compartments to be refrigerated (60,70), the double suction compressor (10) being controllable to alternate its compression capacity, the method comprising steps of (i) Continuously measuring at least
15 a temperature coming from a temperature sensor (SET,SCT) associated with at least one of the evaporators (20) and (ii) acting in the compressor's (10) compression capacity, from the measurement of step (i).