

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 meet-
ing 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 control-
10 ling and adjusting the refrigeration capacities of a refrigeration system
equipped with a double suction compressor, the refrigeration system com-
prising compartments to be refrigerated and comprising at least two evapora-
tors (20) positioned in the compartments to be refrigerated (60,70), the
double suction compressor (10) being controllable to alternate its compres-
15 sion capacity, the method comprising steps of (i) Continuously measuring at
least a temperature coming from a temperature sensor (SET,SCT) asso-
ciated with at least one of the evaporators (20) and (ii) acting in the compres-
sor's (10) compression capacity, from the measurement of step (i).