

ABSTRACT

SELF COOLING DEVICE FOR BEVERAGES

5 A self-cooling device to cool a beverage, the device comprising a miniaturised
scroll compressor, a heat sink, an electric motor, an expansion valve allowing
passage of a refrigerant into the network of capillaries before entering back
into the reservoir, a power source of electrical energy, several temperature
gauging devices, a micro-processor, a simple user interface for temperature
10 setting, and an on/off switch.

The miniaturised scroll compressor pumps the refrigerant through itself and
then through a heat sink (the second heat exchange) and then through an
expansion valve through the network of capillaries running inside the walls of
15 the container, whereby a first heat exchange takes place. The refrigerant then
returns to the reservoir.

20 [Fig. 1]