

POSITIVE DISPLACEMENT EXPANDER**Abstract**

A casing (31) houses therein an expansion mechanism (60) and a compression mechanism (50). The expansion mechanism (60) has a rear head (62) in which a pressure snubbing chamber (71) is provided. The pressure snubbing chamber (71) is divided by a piston (77) into an inflow/outflow chamber (72) which fluidly communicates with an inflow port (34) and a back pressure chamber (73) which fluidly communicates with the inside of the casing (31). The piston (77) is displaced in response to suction pressure variation whereby the volume of the inflow/outflow chamber (72) varies. This enables the inflow/outflow chamber (72) to directly perform supply of refrigerant to or suction of refrigerant from the inflow port (34) which is a source of pressure variation, thereby making it possible to effectively inhibit suction pressure variation.

[Fig. 4]