ABSTRACT

REFRIGERATION SYSTEM AND OIL RECOVERY METHOD FOR THE SAME

The present disclosure provides a refrigeration system, which includes: a compressor, a condenser, a throttling device, and an evaporator, all of which are connected in sequence to form a cooling circuit, in which the refrigeration system further includes an oil recovery system which includes: an operation chamber, which includes a first port communicating with an oil-containing position in the refrigeration system through a first pipeline, and a second port communicating with a bearing chamber or a bearing lubrication pipeline of the compressor through a second pipeline; and a main piston in the operation chamber, the main piston reciprocating in the operation chamber to perform an extraction stroke and a discharge stroke; in the extraction stroke, an oil-containing refrigerant in the oil-containing position in the refrigeration system is extracted to the operation chamber; and in the discharge stroke, the oil-containing refrigerant in the operation chamber is delivered to the bearing chamber or the bearing lubrication pipeline of the compressor. The device and method according to the embodiments of the present disclosure can provide refrigerant with sufficient oil content to the bearing chamber or the bearing lubrication pipeline of the compressor.

[Figure 1]