

Title (en)
REFRIGERATING CIRCUIT AND METHOD FOR SELECTIVELY DEFROSTING COLD CONSUMER UNITS OF A REFRIGERATING CIRCUIT

Title (de)
KÄLTEKREIS UND VERFAHREN ZUR SELEKTIVEN ENTFROSTUNG VON KÄLTEVERBRAUCHEREINHEITEN EINES KÄLTEKREISES

Title (fr)
CIRCUIT DE RÉFRIGÉRATION ET PROCÉDÉ DE DÉGIVRAGE SÉLECTIF D'UNITÉS CONSOMMATRICES DE FROID D'UN CIRCUIT DE RÉFRIGÉRATION

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EP 2496893 B1 20190102 (EN)

Application
EP 09752337 A 20091106

Priority
EP 2009064773 W 20091106

Abstract (en)
[origin: WO2011054397A1] A refrigerating circuit (2) according to exemplary embodiments of the invention comprises a first compressor unit (4), a condenser/gas cooler (6), and a collecting container (10), a normal refrigeration branch coupled between the collecting container (10) and the suction side of the at least one first compressor unit (4), the normal refrigeration branch comprising at least one cold consumer having an evaporator (18) with an expansion device (16) arranged before it; and a freezing branch coupled between the collecting container (10) and the suction side of the first compressor unit (4), the freezing branch comprising at least one cold consumer having an evaporator (24) with an expansion device (22) arranged before it, a second compressor unit (28) and a desuperheating device (32), the refrigerant circuit (2) further comprising refrigerant conduits for connecting said elements and for circulating a refrigerant therethrough, a defrosting line (36) connected between a branching-off point in the pressure line (6) after the first compressor unit (4) and at least one attaching point between the expansion device (16; 22) and the evaporator (18; 24) of one of the cold consumer units, wherein a pressure reduction valve (38) is arranged in the defrosting line (36), a control unit being configured to operate at least one of the evaporators (18, 24) in a defrosting mode, in which a partial flow of the pressurized gaseous refrigerant leaving the first compressor unit (4) is led to the respective evaporator (18, 24) through the defrosting line (36), wherein the pressure of the refrigerant is reduced by the pressure reduction valve (38) and the refrigerant defrosts the respective evaporator (18, 24) while maintaining its gaseous state and flows back to the respective compressor unit (4, 28).

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Citation (examination)
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