Title (en)

Installation producing cold by means of accumulating and de-accumulating the output of a motor compressor.

Title (de)

Anlage für Kälteproduktion durch Auf- und Entladen eines Speichers für Motorkompressorarbeit.

Title (fr)

Installation de production de froid à moyen de stockage et de destockage du travail des motocompresseurs.

Publication

EP 0156702 A1 19851002 (FR)

Application

EP 85400399 A 19850301

Priority

FR 8403423 A 19840306

Abstract (en)

1. Refrigeration plant having in its refrigerant circuit motor compressors (2) mounted in parallel and having a common inlet manifold, a condenser (5), a liquid refrigerant container (6), cooling stations (7) and a unit (8) for storing the work of the motor compressors by establishing a reserve of cooling energy or cold made up by ice or a cooled or frozen eutectic mixture, referred to as accumulator fluid (17), and for releasing this reserve of cooling energy or accumulated cold or accumulator fluid (17), characterized in that the unit for storing and releasing the energy of the motor compressors (8) comprises an "exchanger-accumulator fluid-sub-cooler" (9) wherein the exchanger formed by an evaporating coil (14) feeding the compressors and the sub-exchanger formed by a sub-cooling coil of the liquid refrigerant supplied to the cooling stations (7) are immersed into an accumulator fluid (17) and both operate continuously in operation of the plant, the sub-cooler (15) continuously receiving liquid refrigerant from the liquid refrigerant container (6) and the exchanger (14) receiving liquid refrigerant from this container (6) through an expander (12) during the storing of work of the motor compressors (8) and receiving liquid refrigerant from the outlet of this sub-cooler (15) during release of work of the motor compressors (8).

Abstract (fr)

Une installation de production de froid ayant plusieurs motocompresseurs (2) montés en parallèle, aspirant du réfrigérant venant d'un réservoir de réfrigérant liquide (6) et détendu dans les postes de froid (7), le comprimant et le refoulant dans ce réservoir (6), comprend dans son circuit frigorifique un ensemble (8) de stockage du travail des motocompresseurs par constitution d'une réserve de l'énergie frigorifique ou de froid sous forme de glace ou de mélange eutectique refroidi ou congelé appelé fluide accumulateur et de déstockage de cette réserve ou fluide accumulateur, monté entre le collecteur commun d'aspiration (3) des motocompresseurs (2) et la sortie du réservoir de réfrigérant liquide (6), en amont de ces postes de froid (7), le déstockage étant effectué par le sous-refroidissement du réfrigérant à l'état liquide et le réchauffement du fluide accumulateur.

IPC 1-7

F25B 1/00

IPC 8 full level

F25B 1/00 (2006.01); F25B 5/02 (2006.01); F25B 40/02 (2006.01); F25B 41/04 (2006.01)

CPC (source: EP US)

F25B 1/00 (2013.01 - EP); F25B 5/02 (2013.01 - EP US); F25B 40/02 (2013.01 - EP); F25B 41/22 (2021.01 - EP US); F25B 2400/075 (2013.01 - EP); F25B 2400/13 (2013.01 - EP); F25B 2400/16 (2013.01 - EP); F25B 2400/22 (2013.01 - EP); F25B 2400/24 (2013.01 - EP); F28D 20/021 (2013.01 - EP)

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