Title (en)

METHOD OF DETERMINING OPTIMAL COEFFICIENT OF PERFORMANCE IN A TRANSCRITICAL VAPOR COMPRESSION SYSTEM

Title (de)

VERFAHREN ZUR ERMITTLUNG DES OPTIMALEN LEISTUNGSKOEFFIZIENTEN IN EINEM TRANSKRITISCHEN DAMPFKOMPRESSIONSSYSTEM

Title (fr)

PROCEDE DE DETERMINATION DE COEFFICIENT OPTIMAL DE PERFORMANCE DANS UN SYSTEME DE COMPRESSION DE VAPEUR TRANSCRITIQUE

Publication

EP 1869375 A4 20100901 (EN)

Application

EP 06735014 A 20060214

Priority

- US 2006005158 W 20060214
- US 10642205 A 20050414

Abstract (en)

[origin: US2006230773A1] The high side pressure of a vapor compression system is selected to optimize the coefficient of performance by measuring the gas cooler exit temperature with a temperature sensor. For any gas cooler exit temperature, a single optimal high side pressure optimizes the coefficient of performance. The optimal high side pressure for each gas cooler exit temperature is preset into a control and is based on data obtained by previous testing. A temperature sensor measures the gas cooler exit temperature. The control determines the optimal high side pressure based solely on the gas cooler exit temperature and the data preset into the control.

IPC 8 full level

F25B 13/00 (2006.01)

CPC (source: EP US)

F25B 9/008 (2013.01 - EP US); F25B 2309/061 (2013.01 - EP US); F25B 2600/17 (2013.01 - EP US); F25B 2600/2513 (2013.01 - EP US); F25B 2700/2102 (2013.01 - EP US)

Citation (search report)

- [X] US 2004261435 A1 20041230 - CHEN YU [US], et al
- [X] US 2004069011 A1 20040415 - NISHIDA SHIN [JP], et al
- [X] US 2005066675 A1 20050331 - MANOLE DAN M [US], et al
- [X] US 6505476 B1 20030114 - NISHIDA SHIN [JP], et al
- See references of WO 2006112924A2

Designated contracting state (EPC)

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DOCDB simple family (publication)

US 2006230773 A1 20061019; CA 2597572 A1 20061026; CN 101160496 A 20080409; DK 1869375 T3 20151214; EP 1869375 A2 20071226; EP 1869375 A4 20100901; EP 1869375 B1 20151021; WO 2006112924 A2 20061026; WO 2006112924 A3 20070920

DOCDB simple family (application)

US 10642205 A 20050414; CA 2597572 A 20060214; CN 200680012543 A 20060214; DK 06735014 T 20060214; EP 06735014 A 20060214; US 2006005158 W 20060214