

Title (en)

Method for heating heat transfer media and supercritical heat pump

Title (de)

Verfahren zum Erwärmen von Wärmeübertragungsmedien und überkritische Wärmepumpe

Title (fr)

Procédé de chauffage de milieux de transmission de chaleur et pompe à chaleur surcritique

Publication

**EP 2518423 A3 20150121 (DE)**

Application

**EP 12164077 A 20120413**

Priority

- DE 102011002277 A 20110427
- DE 102011052776 A 20110817

Abstract (en)

[origin: EP2518423A2] The method involves setting inlet temperature greater than 70[deg] C and outlet temperature greater than 120[deg] C by a joule process. The pressure in the low pressure side is adjusted to the value equal to or twice the value of the critical pressure of the used working material. The pressure value in the low pressure side is set in range of 74-110 bar. An independent claim is included for supercritical heat pump.

IPC 8 full level

**F25B 9/00** (2006.01); **F25B 9/06** (2006.01); **F25B 30/02** (2006.01)

CPC (source: EP)

**F25B 9/008** (2013.01); **F25B 9/06** (2013.01); **F25B 30/02** (2013.01); **F25B 2309/061** (2013.01); **F25B 2400/054** (2013.01)

Citation (search report)

- [I] US 4498289 A 19850212 - OSGERBY IAN [US]
- [I] US 2006059945 A1 20060323 - CHORDIA LALIT [US], et al
- [I] JP 2004108683 A 20040408 - MITSUBISHI ELECTRIC CORP
- [I] EP 1808653 A1 20070718 - DAIKIN IND LTD [JP]
- [I] JP 2008101837 A 20080501 - MATSUSHITA ELECTRIC IND CO LTD

Cited by

DE102015110994A1; DE102015110994B4; CN107850350A; DE102014206474A1; WO2017005643A1; US10690384B2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 2518423 A2 20121031; EP 2518423 A3 20150121**; DE 102011052776 A1 20121031; DE 102011052776 B4 20161229

DOCDB simple family (application)

**EP 12164077 A 20120413**; DE 102011052776 A 20110817