

Title (en)

Method and device for cooling

Title (de)

Verfahren und Vorrichtung zum Kühlen

Title (fr)

Procédé et dispositif destinés au refroidissement

Publication

EP 2667116 B1 20160713 (DE)

Application

EP 12168675 A 20120521

Priority

EP 12168675 A 20120521

Abstract (en)

[origin: EP2667116A1] The method involves mixing liquid carrier medium with liquid carbon-di-oxide under pressure, and providing the mixture in liquid state. The liquid carrier medium and the liquid carbon-di-oxide mixture is expanded under cooling to specific pressure at which portion of carbon-di-oxide is vaporized. The expanded mixture is fed into a separator (10) that separates the vaporized carbon-di-oxide from the liquid carrier medium. The relaxed and/or separated mixture from the carrier medium is used for heat exchange with a to-be-cooled medium by heat exchangers (9,17). An independent claim is included for a device for cooling object in low temperature range.

IPC 8 full level

F25B 9/00 (2006.01)

CPC (source: EP)

F25B 9/006 (2013.01); **F25B 9/008** (2013.01); **F25B 2400/23** (2013.01); **F25B 2600/025** (2013.01); **F25B 2700/21175** (2013.01)

Cited by

US11466903B2; DE102019127488A1; DE102015111183A1; US2020011576A1; JPWO2019187231A1; DE102021005135B4; WO2024132024A1; WO2019187231A1; DE102015111183B4; DE102020118437A1; DE102020118437B4; US11725852B2

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 2667116 A1 20131127; EP 2667116 B1 20160713

DOCDB simple family (application)

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