Title (en)

METHOD FOR REGULATING A CRYOGENIC COOLING SYSTEM

Title (de)

VERFAHREN ZUR STEUERUNG EINES TIEFTEMPERATURKÜHLSYSTEMS

Title (fr)

PROCÉDÉ DE RÉGULATION D'UN SYSTÈME DE REFROIDISSEMENT CRYOGÉNIQUE

Publication

EP 2791595 A1 20141022 (FR)

Application

EP 12813127 A 20121204

Priority

- FR 1161483 A 20111212
- IB 2012056952 W 20121204

Abstract (en)

[origin: WO2013088303A1] Method for regulating a cryogenic cooling system comprising: a cryogenic bath (BC) provided with a pipe (HP) conveying a cryogenic fluid in the liquid, diphasic or supercritical state, and with a discharge pipe (BP) that discharges the cryogenic fluid in the vapour state, said pipes being connected to a cryogenic cooler (RL); - a fluid circuit referred to as the primary fluid circuit (CFP), through which there circulates a coolant, comprising a first exchanger (X1) for extracting heat from a heat source (ST) operating cyclically, and a second exchanger (X2) for surrendering said heat to said cryogenic bath; and - a heating means (MCB) for heating said cryogenic bath; characterized in that said regulating method involves: slaving the flow rate of fluid through said cryogenic bath discharge pipe to a setpoint value M2, said slaving being obtained by action both on a flow regulating means and on said cryogenic bath heating means; and adjusting said setpoint value M2 to keep the mean power dissipated by said heating means within a predefined range. System for implementing such a method.

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

See references of WO 2013088303A1

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