

Title (en)

Method and device for producing cooled products

Title (de)

Verfahren und Vorrichtung zum Herstellen gekühlter Produkte

Title (fr)

Procédé et dispositif de fabrication de produits refroidis

Publication

EP 2657630 A3 20171227 (DE)

Application

EP 13163580 A 20130412

Priority

DE 102012008591 A 20120427

Abstract (en)

[origin: EP2657630A2] The method involves bringing a to-be refrigerated product in direct thermal contact with a cryogenic coolant, particularly by mixing the product with the coolant. The cryogenic coolant, particularly solid nitrogen, is separated from the product. The solid nitrogen is produced from liquid nitrogen by reducing the pressure or the nitrogen partial pressure in a gas phase present over the liquid nitrogen. The pressure is reduced to a value below a triple point pressure of the nitrogen. The to-be refrigerated product and the solid nitrogen are supplied to a pressure vessel (2). An independent claim is included for a device for manufacturing the refrigerated products with a mixing device integrated in a pressure vessel.

IPC 8 full level

F25D 3/10 (2006.01); **F25D 3/12** (2006.01)

CPC (source: EP)

F25D 3/10 (2013.01); **F25D 3/12** (2013.01)

Citation (search report)

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- [IY] US 2006266078 A1 20061130 - MACHIDA AKITO [JP], et al
- [A] DE 102010017928 A1 20111027 - LINDE AG [DE]
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CN113834234A

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)

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DOCDB simple family (application)

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