

Title (en)

FILLING DEVICE FOR FILLING A COOLANT-RECEIVING COMPARTMENT ASSOCIATED WITH A COOLING TANK WITH A CRYOGENIC COOLANT

Title (de)

FÜLLVORRICHTUNG ZUM BEFÜLLEN EINES EINEM KÜHLBEHÄLTER ZUGEORDNETEN KÄLTEMITTEL-AUFNAHMEFACHS MIT EINEM KRYOGENEN KÄLTEMITTEL

Title (fr)

DISPOSITIF PERMETTANT DE REMPLIR UN COMPARTIMENT À RÉFRIGÉRANT, ATTRIBUÉ À UN CONTENANT FRIGORIFIQUE, AVEC UN AGENT CRYOGÉNIQUE

Publication

EP 3325900 A1 20180530 (DE)

Application

EP 16741631 A 20160722

Priority

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- EP 2016067494 W 20160722

Abstract (en)

[origin: WO2017016999A1] In order to fill cooling tanks comprising a compartment for receiving the products to be cooled and a separate coolant-receiving compartment, filling devices are used, with which devices liquid carbon dioxide is injected into the coolant-receiving compartment in a liquefied state and once there is partially transformed into gaseous carbon dioxide and partially into solid carbon dioxide. The filling guns used comprise, in addition to an expansion nozzle, means for drawing off gaseous carbon dioxide, electrical connection means and detectors, in addition to at least one control valve for controlling the supply of the liquid carbon dioxide, and are therefore of a complex design with a high service weight, such that for their operation, they require the assistance of a crane mounting. According to the invention, a filling device is disclosed comprising only one expansion valve for supplying liquid carbon dioxide, one vent opening for drawing off gaseous carbon dioxide, and optionally, non-electrical detector elements. All valves and electrical components for controlling the filling process are integrated into a supply unit that is associated with the filling gun and connected to the latter via flexible conduits. The filling gun according to the invention is extremely lightweight and can be operated without using mechanical mounting means.

IPC 8 full level

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CPC (source: EP)

F25D 3/125 (2013.01)

Citation (search report)

See references of WO 2017016999A1

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Designated extension state (EPC)

BA ME

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