

Title (en)

TANK ARRANGEMENT AND METHOD FOR CONTROLLING THE FILLING LEVEL

Title (de)

TANKANORDNUNG UND VERFAHREN ZUR FÜLLSTANDSREGELUNG

Title (fr)

SYSTÈME DE RÉSERVOIR ET PROCÉDÉ DE RÉGULATION DU NIVEAU DE REMPLISSAGE

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Application

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Abstract (en)

[origin: WO2019193206A1] Method and tank arrangement for controlling the filling level of cryogenic media, comprising: a tank (6) having an inflow line (10) and an outflow line (12), a differential pressure measuring device (16) which is connected, via a connection line (26), to a lower tank region (28) in which the liquid portion of the medium is present and is also connected, via a further connection line (20), to an upper tank region (22) in which the gaseous portion of the medium is present, an absolute pressure measuring device (18) and/or a temperature sensor (18) for measuring the pressure and/or the temperature in the upper tank region (22), an evaporator (38) in a branch line (36) between the inflow line (10) and the upper tank region (22), a gas pressure control valve (34) which is suitable for controlling the pressure, is downstream of the evaporator (38) in the branch line (36) and is intended to control the pressure in the upper tank region (22), a bottom pressure controller (32) which is connected to the differential pressure measuring device (16) and to the absolute pressure measuring device (18) and/or to a temperature sensor (18) and is intended to control the gas pressure control valve (34), wherein the bottom pressure controller (32) is configured to control the pressure in the gaseous portion of the medium in the tank (6) to a constant bottom pressure on the basis of the filling level of the liquid portion of the medium.

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