

Title (en)

A method for temperature control of CO₂ as well as metering and filling of CO₂ systems

Title (de)

Verfahren zur Temperaturkontrolle von CO₂ und zur Messung und Füllung von CO₂-Systemen

Title (fr)

Procédé pour le contrôle de la température du CO₂ ainsi que pour la mesure et le remplissage de systèmes de CO₂

Publication

EP 2051030 A3 20100224 (EN)

Application

EP 08388037 A 20081014

Priority

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Abstract (en)

[origin: EP2051030A2] The invention relates to a method for temperature control of CO₂ as well as metering and filling of CO₂ systems by means of a system having a process unit and a filling unit, wherein CO₂ is continuously pumped through a hose (8) from the process unit (1) at a temperature below 31.1 °C and comprising a container (2), a pump (3) and a meter (4), through a circulation valve (6) in the filling unit (5), which comprises a circulation valve (6) and a filling valve (7), and back to the process unit again for cooling, following which the circulation valve (6) is closed and the filling valve (7) is opened, whereby CO₂ is metered by the passage through the meter (4) and is filled into the CO₂ system through the filling valve (7). An alternative method, wherein the process unit (1) additionally comprises a circulation valve (6) and a parallel valve (9), wherein the circulation valve (6) is closed, the parallel valve (9) and the filling valve (7) are opened, and CO₂ is metered and filled into the CO₂ system. Formation of gas is avoided hereby, so that the amount of CO₂ may be metered correctly.

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Citation (search report)

- [X] WO 2006066580 A1 20060629 - AGRAMKOW FLUID SYSTEMS AS [DK], et al
- [A] WO 9902928 A1 19990121 - ZEXEL CORP [JP], et al
- [A] JP 2004163037 A 20040610 - OSAKA GAS CO LTD
- [A] EP 1143213 A1 20011010 - BEHR GMBH & CO [DE]
- [A] "FILLING IN WORKSHOP AND PRODUCTION AGRAMKOW - THE SAFE CHOICE", VDA ALTERNATE REFRIGERANT WINTER MEETING, XX, XX, 13 February 2003 (2003-02-13), pages 1 - 34, XP001172663

Cited by

ITUA20163839A1; DE102014011051A1; US11149998B2; WO2009132836A1; WO2017203481A1

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