

Title (en)

Method and device for monitoring a coolant fill level

Title (de)

Verfahren und Vorrichtung zum Überwachen einer Kältemittelfüllmenge

Title (fr)

Procédé et dispositif destinés à la surveillance d'une quantité de remplissage de produit réfrigérant

Publication

EP 2725312 A3 20160615 (DE)

Application

EP 13189217 A 20131018

Priority

- DE 102012110183 A 20121025
- DE 102013100410 A 20130116

Abstract (en)

[origin: EP2725312A2] The method involves detecting a cooling agent dependent variable at preset period. An actual frequency distribution of measured values of measured variable is created. The filling amount of cooling agent (5) in refrigeration system (2) is evaluated based on the determined offset of the actual frequency distribution. The measured variable is obtained from the cooling agent level measured by a level sensor (7) at a cooling agent reservoir (1) or from the cooling agent temperature measured by a temperature sensor at an ejection portion of a condenser of the refrigeration system. An independent claim is included for a refrigeration system.

IPC 8 full level

F25B 49/00 (2006.01)

CPC (source: EP)

F25B 49/005 (2013.01); **F25B 2700/04** (2013.01); **F25B 2700/21163** (2013.01)

Citation (search report)

- [AD] DE 4139064 A1 19930609
- [A] US 2010300129 A1 20101202 - BEAN JR JOHN H [US], et al
- [A] US 2006021362 A1 20060202 - SADEGH PAYMAN [US], et al
- [A] US 2006059924 A1 20060323 - HORAN CHRISTOPHER J [US], et al
- [A] US 2011308267 A1 20111222 - TAMAKI SHOGO [JP], et al
- [A] DE 102008052210 A1 20100422 - DENSO CORP [JP], et al
- [A] US 5724822 A 19980310 - JONSSON NILS GUSTAF HJALMAR WI [SE], et al

Cited by

US11085683B2

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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