

Title (en)

Volatile Substance Recovery Method and Apparatus

Title (de)

Verfahren und Vorrichtung zur Rückgewinnung einer flüchtigen Substanz

Title (fr)

Procédé de récupération de substances volatiles et appareil

Publication

EP 2397794 B1 20160420 (EN)

Application

EP 11170208 A 20110616

Priority

GB 201010219 A 20100618

Abstract (en)

[origin: EP2397794A2] Refrigerant or other volatile substance is extracted from a refrigeration system by applying a reduced pressure intermittently to it. The reduced pressure may be applied from a reservoir (2) that is evacuated substantially constantly by a vacuum pump (4), the reservoir being connected intermittently to the system. The reduced pressure may be pulsed on and off; this causes instantaneous boiling or flashing of the refrigerant or volatile substance within the system, such that it is extracted as a liquid and vapour mixture. As a result, much of the substance can be extracted largely as liquid, so that the latent heat of evaporation of the liquid is extracted outside the refrigeration system, thereby avoiding excessive cooling within the system.

IPC 8 full level

F25B 45/00 (2006.01)

CPC (source: EP GB)

F25B 43/00 (2013.01 - GB); **F25B 45/00** (2013.01 - EP GB); **F25B 2345/002** (2013.01 - EP); **F25B 2345/003** (2013.01 - EP)

Citation (examination)

US 2005097904 A1 20050512 - LIFSON ALEXANDER [US], et al

Cited by

US10352600B2; US10871317B2; WO2017205320A1

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

DOCDB simple family (publication)

EP 2397794 A2 201111221; **EP 2397794 A3 20130320**; **EP 2397794 B1 20160420**; ES 2578195 T3 20160721; GB 201010219 D0 20100721; GB 2481243 A 201111221; GB 2481243 B 20121114

DOCDB simple family (application)

EP 11170208 A 20110616; ES 11170208 T 20110616; GB 201010219 A 20100618