

Title (en)
CONDENSATE DRAIN PUMP FOR AN AIR CONDITIONER

Title (de)
KONDENSATABLASSPUMPE FÜR EINE KLIMAANLAGE

Title (fr)
POMPE DE PURGE DE CONDENSÂT POUR CONDITIONNEUR D'AIR

Publication
EP 2284448 A4 20130320 (EN)

Application
EP 09762622 A 20090605

Priority
• KR 2009003006 W 20090605
• KR 20080054774 A 20080611

Abstract (en)
[origin: EP2284448A2] The present invention is related to a drain pump for discharging condensate of an air conditioner. A conventional drain pump for discharging condensate generated from an air conditioner has a merit that much waters are discharged for a short time, but had shortcomings that big noises are generated and a drain pressure is low. Therefore, the present invention is devised in order to solve these problems, and is related to a drain pump for discharging condensate of an air conditioner comprising a condensate discharge hose including two check valves which are formed in neighboring places, respectively and are extended to a storage tank where generated condensate is stored and a place where the condensate is discharged, so that inhaled condensate can be discharged via a check valve if a piston moves toward only a direction to which the condensate is discharged in the middle between the storage tank and the place, and the inhaled condensate cannot be discharged to the storage tank by the check valve; a pumping device including a cylinder having one opened end and the other end connected to a position between said two check valves, and the piston inserted from an open position of the cylinder for executing reciprocating motions while maintaining water tightness; and a driving device including a crank axis rotated by a low speed motor, and a connecting rod having one end connected to the crank axis and the other end connected to the piston for converting rotation movements of the low speed motor into rectilinear reciprocating movements of the piston.

IPC 8 full level
F24F 13/22 (2006.01); **F04B 9/04** (2006.01); **F04B 53/00** (2006.01); **F24F 13/24** (2006.01)

CPC (source: EP KR)
F04B 53/002 (2013.01 - EP); **F24F 1/00** (2013.01 - KR); **F24F 13/22** (2013.01 - KR); **F24F 13/222** (2013.01 - EP); **F24F 13/24** (2013.01 - EP); **F24F 2013/227** (2013.01 - EP)

Citation (search report)
• [Y] US 2845875 A 19580805 - CORBETT THOMAS H
• [Y] DE 20004814 U1 20001214 - BVC FLUID & TECHNIK GMBH [DE]
• [A] CH 695513 A5 20060615 - GOTEC S A [CH]
• [A] US 6386835 B1 20020514 - KALPAKOFF JEFFREY J [US]
• [A] US 3519065 A 19700707 - KITRILAKIS SOTIRIS S
• [A] US 2008099275 A1 20080501 - SEEL ROBERT VAUGHAN [US]
• See references of WO 2009151235A2

Cited by
US11285520B2

Designated contracting state (EPC)
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 SE SI SK TR

DOCDB simple family (publication)
EP 2284448 A2 20110216; EP 2284448 A4 20130320; CN 102099635 A 20110615; KR 100909071 B1 20090723; WO 2009151235 A2 20091217; WO 2009151235 A3 20100311

DOCDB simple family (application)
EP 09762622 A 20090605; CN 200980121803 A 20090605; KR 20080054774 A 20080611; KR 2009003006 W 20090605