

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

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CPC (source: EP KR)

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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 20080615 - 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

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