

Title (en)

Compressor oil recovering apparatus and multi-unit air conditioner equipped with the same

Title (de)

Ölrückgewinnungsvorrichtung für einen Verdichter und eine aus mehreren Einheiten zusammengesetzte Klimaanlage die damit ausgerüstet ist

Title (fr)

Récupérateur d'huile pour compresseur et climatiseur à unités multiples comprenant celui-ci

Publication

EP 1659350 A1 20060524 (EN)

Application

EP 05024548 A 20051110

Priority

KR 20040094623 A 20041118

Abstract (en)

A multi-unit air conditioner includes an outdoor unit (80) comprising at least two compressors (83,84), a plurality of indoor units connected to the outdoor unit, a plurality of oil separators (85,86) each connected to an associated one of the compressors to separate oil from a refrigerant discharged from the associated compressor, an oil storage (151) for storing the oil separated from each oil separator, a plurality of oil supplying tubes (153,154) each having one end connected to the oil storage, and the other end connected to an associated one of the compressors to supply the oil stored in the oil storage to the associated compressor, and adjusters (159,259) each arranged at an associated one of the oil supplying tubes to adjust an amount of oil supplied from the oil storage to an associated one of the compressors in accordance with an oil storage state of the associated compressor. The adjuster may comprise a float, float valve, an oil sensor and a solenoid valve.

IPC 8 full level

F25B 31/00 (2006.01)

CPC (source: EP KR US)

F24F 1/06 (2013.01 - KR); **F25B 31/004** (2013.01 - EP US); **F25B 43/00** (2013.01 - KR); **F25B 13/00** (2013.01 - EP US); **F25B 2313/006** (2013.01 - EP US); **F25B 2313/0233** (2013.01 - EP US); **F25B 2400/075** (2013.01 - EP US); **F25B 2700/03** (2013.01 - EP US)

Citation (search report)

- [XY] US 3500962 A 19700317 - KOCHER ERICH J
- [Y] US 2004159111 A1 20040819 - TAKEGAMI MASAOKI [JP], et al
- [Y] US 5675978 A 19971014 - HAMM JR FREDERIC B [US], et al
- [A] EP 0715133 A1 19960605 - DAIKIN IND LTD [JP]
- [A] US 3724231 A 19730403 - GRANT W

Cited by

EP2525170A1; ITPD20100081A1; CN103574957A; CN106091494A; EP3399254A4; EP3339765A4; WO2008101688A1; WO2017206919A1; US10801741B2

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 1659350 A1 20060524; CN 1776227 A 20060524; KR 20060055154 A 20060523; US 2006101845 A1 20060518

DOCDB simple family (application)

EP 05024548 A 20051110; CN 200510125089 A 20051118; KR 20040094623 A 20041118; US 28034805 A 20051117