

Title (en)

SYSTEM AND METHOD OF CONTROLLING A VARIABLE-CAPACITY COMPRESSOR

Title (de)

SYSTEM UND VERFAHREN ZUR STEUERUNG EINES VERDICHTERS MIT VARIABLER KAPAZITÄT

Title (fr)

SYSTÈME ET PROCÉDÉ DE COMMANDE D'UN COMPRESSEUR À CAPACITÉ VARIABLE

Publication

EP 3800354 A1 20210407 (EN)

Application

EP 20209391 A 20150401

Priority

- US 201461973528 P 20140401
- IN 1491MU2014 A 20140429
- US 201514674980 A 20150331
- EP 15772694 A 20150401
- US 2015023889 W 20150401

Abstract (en)

A climate-control system may include a variable-capacity compressor unit and a control module controlling the compressor unit. The compressor unit may be operable in a first capacity mode and in a second capacity mode that is higher than the first capacity mode. The control module may be configured to switch the compressor unit among a shutdown state, the first capacity mode and the second capacity mode based on a demand signal and outdoor-air-temperature data.

IPC 8 full level

F04B 49/10 (2006.01); **F24F 11/00** (2018.01); **F25B 13/00** (2006.01); **F25B 49/02** (2006.01)

CPC (source: EP KR US)

F24F 11/67 (2017.12 - KR); **F24F 11/83** (2017.12 - EP US); **F24F 11/84** (2017.12 - EP KR US); **F24F 11/86** (2017.12 - KR); **F25B 13/00** (2013.01 - EP KR US); **F25B 49/022** (2013.01 - EP KR US); **F24F 11/65** (2017.12 - EP US); **F24F 11/85** (2017.12 - EP US); **F24F 2110/12** (2017.12 - EP KR US); **F25B 2313/007** (2013.01 - EP KR US); **F25B 2600/01** (2013.01 - EP); **F25B 2600/0252** (2013.01 - EP KR); **F25B 2700/2104** (2013.01 - EP KR US); **F25B 2700/2106** (2013.01 - EP KR US)

Citation (applicant)

- US 8616014 B2 20131231 - STOVER ROBERT C [US], et al
- US 6679072 B2 20040120 - PHAM HUNG M [US], et al
- US 8585382 B2 20131119 - AKEI MASAO [US], et al
- US 6213731 B1 20010410 - DOEPKER ROY J [US], et al
- US 8485789 B2 20130716 - GU YUMIN [CN], et al
- US 8459053 B2 20130611 - PHAM HUNG M [US], et al
- US 5385453 A 19950131 - FOGT JAMES F [US], et al

Citation (search report)

- [A] US 4228846 A 19801021 - SMOROL MICHAEL E
- [A] US 2006032253 A1 20060216 - LEE WON-HEE [KR], et al
- [A] US 4248053 A 19810203 - SISK FRANCIS J

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 3800354 A1 20210407; **EP 3800354 B1 20230705**; CN 106133318 A 20161116; CN 106133318 B 20180629; CN 109028496 A 20181218; CN 109028496 B 20201208; EP 3126676 A1 20170208; EP 3126676 A4 20171122; EP 3126676 B1 20210106; IN 1491MU2014 A 20151009; KR 101922958 B1 20181128; KR 20160138571 A 20161205; KR 20180078336 A 20180709

DOCDB simple family (application)

EP 20209391 A 20150401; CN 201580018201 A 20150401; CN 201810558547 A 20150401; EP 15772694 A 20150401; IN 1491MU2014 A 20140429; KR 20167030477 A 20150401; KR 20187018587 A 20150401