

Title (en)
AIR MANAGEMENT APPARATUS OR DEVICE

Title (de)
GERÄT ODER VORRICHTUNG ZUR LUFTVERWALTUNG

Title (fr)
APPAREIL OU DISPOSITIF DE GESTION D'AIR

Publication
EP 3835668 A1 20210616 (EN)

Application
EP 20203242 A 20201022

Priority
KR 20190163424 A 20191210

Abstract (en)
An air management device may include three independently operated primary impellers 131, 131', 131", and drawn-in air is discharged through discharge ports 15'-1, 15'-2, 15'-3 provided in the front plate 15 of the housing 10. Louvers 141, 142, 143 installed downstream of the air flow passing through a primary air flow passage 102 provided in the primary space 20 of the housing 10 and discharge ports 15'-1, 15'-2, 15'-3 may be independently opened or closed to provide discharge of the air to the surrounding environment. Further, at least one retractable or pop-up fan 200, 200' may be provided. The air management allows customization of air flow. Further, the air management device may include a humidifier 400 installed in a first secondary space 22 partitioned from the primary space 20. The air in the primary air flow passage 102 is sucked through the air inlet duct 401 is mixed with vapors generated by a steam generator 407 using liquid stored in a bucket 419 to generate humidified air. The humidified air may be exhausted through the at least one retractable or pop-up fan 200, 200', which may be located in the first secondary space 22.

IPC 8 full level
F24F 1/0007 (2019.01); **F24F 1/0029** (2019.01); **F24F 1/0071** (2019.01); **F24F 1/0087** (2019.01); **F24F 6/00** (2006.01); **F24F 13/20** (2006.01)

CPC (source: CN EP KR)
F24F 1/0007 (2013.01 - EP); **F24F 1/0014** (2013.01 - KR); **F24F 1/0029** (2013.01 - EP); **F24F 1/0071** (2019.01 - EP);
F24F 1/0087 (2019.01 - EP KR); **F24F 6/00** (2013.01 - EP); **F24F 6/025** (2013.01 - KR); **F24F 6/08** (2013.01 - CN); **F24F 13/072** (2013.01 - KR);
F24F 13/20 (2013.01 - EP); **F24F 13/30** (2013.01 - CN); **F24F 6/10** (2013.01 - EP); **F24F 6/12** (2013.01 - EP); **F24F 2006/008** (2013.01 - KR)

Citation (applicant)
• KR 20050023790 A 20050310 - WINIAMANDO INC
• KR 20150082967 A 20150716 - SAMSUNG HEAVY IND [KR]
• KR 20090038555 A 20090421 - WINIAMANDO INC [KR]

Citation (search report)
• [X] WO 2019177414 A1 20190919 - LG ELECTRONICS INC [KR]
• [X] US 2018335221 A1 20181122 - CHO SUNG-JUNE [KR], et al
• [A] CN 107143958 A 20170908 - LU'AN RONGYAO INNOVATION INTELLIGENT TECH CO LTD
• [A] JP 2016031163 A 20160307 - SHINKO KOGYO KK
• [A] KR 20180123642 A 20181119 - SM ELECTRONICS CO LTD [KR]

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3835668 A1 20210616; CN 112944524 A 20210611; KR 20210073006 A 20210618

DOCDB simple family (application)
EP 20203242 A 20201022; CN 202010350289 A 20200428; KR 20190163424 A 20191210