

Title (en)  
HEATING MEDIUM CIRCULATION SYSTEM

Title (de)  
SYSTEM ZUR ZIRKULATION EINES HITZEMEDIUMS

Title (fr)  
SYSTÈME DE CIRCULATION DE MILIEU CHAUFFANT

Publication  
**EP 3540324 A4 20191113 (EN)**

Application  
**EP 16921139 A 20161110**

Priority  
JP 2016083414 W 20161110

Abstract (en)  
[origin: EP3540324A1] A heating medium circulation system 35 includes a heat pump device 7 that heats a heating medium, a heat storage tank 8 that stores the heated heating medium, supply channels 16b and 16c through which the heating medium supplied to an indoor-heating terminal 100 flows, a first flow channel 16a through which the heating medium flowing out from the heat pump device 7 is caused to flow into the supply channel 16b without passing through the heat storage tank 8, a second flow channel 15b through which the heating medium flowing out from the heat pump device 7 is caused to flow into the heat storage tank 8, a three-way valve 18 that switches between the first flow channel 16a and the second flow channel 15b, a third flow channel 10b through which the heating medium flowing out from the heat storage tank 8 is caused to flow into the supply channel 16b, and a first check valve 60 that is disposed in the third flow channel 10b.

IPC 8 full level  
**F24H 1/18** (2006.01); **F24D 3/08** (2006.01); **F24D 11/00** (2006.01); **F24D 11/02** (2006.01); **F24D 19/10** (2006.01); **F24H 4/02** (2006.01)

CPC (source: EP US)  
**F24D 3/087** (2013.01 - EP); **F24D 11/002** (2013.01 - EP); **F24D 19/1069** (2013.01 - EP US); **F24H 15/375** (2022.01 - EP US); **F24D 11/0214** (2013.01 - EP); **F24D 2200/123** (2013.01 - EP); **F24D 2220/0235** (2013.01 - EP); **F24D 2220/025** (2013.01 - EP); **F24D 2220/08** (2013.01 - EP); **F24H 15/156** (2022.01 - EP US); **F24H 15/174** (2022.01 - EP US); **F24H 15/281** (2022.01 - EP US)

Citation (search report)

- [IY] JP 2008256346 A 20081023 - MATSUSHITA ELECTRIC IND CO LTD
- [A] JP 2011257105 A 20111222 - TOKYO ELECTRIC POWER CO INC
- [A] WO 2016075741 A1 20160519 - MITSUBISHI ELECTRIC CORP [JP]
- [A] JP 2013245919 A 20131209 - MITSUBISHI ELECTRIC CORP
- [Y] EP 2077423 A1 20090708 - ESBE AB [SE]
- See references of WO 2018087867A1

Cited by  
EP3910249A1; FR3110217A1; CN112855293A; EP4390239A1; NL2033833B1

Designated contracting state (EPC)  
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Designated extension state (EPC)  
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