

Title (en)
Improved circulation system

Title (de)
Verbesserter Flüssigkeitströmungskreis

Title (fr)
Circuit de circulation de fluide amélioré

Publication
EP 1813873 A1 20070801 (EN)

Application
EP 06250425 A 20060126

Priority
• EP 06250425 A 20060126
• GB 0417800 A 20040811

Abstract (en)
A heating system (10) has an expansion tank (11) which provides water to a low pressure boiler (12) for heating. Heated water is distributed around a fluid conduit (13, 16) to one or more radiators (14) then returned to the boiler. A pump (17) is connected to the outlet conduit to assist fluid flow through the system when the system is active to provide heating. Pressure control means (18, 19, 21, 21A, 26) maintains the fluid in the distribution conduit at a positive pressure during periods when the system is quiescent and includes a non-return valve means (18) in the outlet conduit (13) and a further valve means (19; 26) to prevent fluid flowing through the return conduit (16) to the expansion tank when the system is quiescent and/or when the pressure of the fluid in the distribution conduit falls below a first predetermined threshold. A pressure responsive means (21; 21A) activates the pump (17) if the pressure in the distribution conduit falls below the first or a second predetermined threshold. The arrangement ensures that the system will operate even if one or more of the radiators (14) are disposed above the level of the fluid in the tank (11) without the need to pressurise the system and may be adapted for use with air conditioning or cooling systems.

IPC 8 full level
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CPC (source: EP GB US)
F24D 3/02 (2013.01 - EP US); **F24D 3/04** (2013.01 - EP); **F24D 3/06** (2013.01 - GB); **F24D 3/1008** (2013.01 - EP); **F24D 19/1087** (2013.01 - US)

Citation (search report)
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KR102376935B1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)
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DOCDB simple family (application)
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