

Title (en)

HOT WATER CIRCULATION SYSTEM AND METHOD FOR OPERATING THE SAME

Title (de)

WARMWASSER-ZIRKULATIONSSYSTEM UND VERFAHREN ZU DESSEN BETRIEB

Title (fr)

SYSTÈME DE CIRCULATION D'EAU CHAUDE ET SON PROCÉDÉ DE FONCTIONNEMENT

Publication

**EP 4244539 A4 20240501 (EN)**

Application

**EP 21892441 A 20211116**

Priority

- SE 2051338 A 20201116
- SE 2021051147 W 20211116

Abstract (en)

[origin: WO2022103323A1] Hot water circulation system (200) for a building, said system comprising a hot tap water circulation circuit (210); a circulation pump (211); water taps (220-224); a cold water inlet (240) to said circulation circuit; a heat exchanger (230), arranged to heat the water using an externally provided heat medium; a first conduit (213), leading a first share of water from said pump to said taps via said heat exchanger; a temperature sensor (251), arranged downstream of said heat exchanger; and a control device (250), arranged to control a flow of said heat medium. The invention is characterised in that the circulation circuit comprises a second conduit (214), leading a second share of water from said pump to said taps in parallel to said first conduit, in that the first share is at least smaller than said second share as long as no cold water is provided to the circulation circuit, and in that the circulation system further comprises a heat pump (260), heating the water. The invention also relates to a method.

IPC 8 full level

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CPC (source: EP SE)

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Citation (search report)

- [Y] DE 3342273 A1 19850530 - KABELMETAL ELECTRO GMBH [DE]
- [Y] FR 2936042 A1 20100319 - HELIOPAC [FR]
- [A] EP 2966384 A1 20160113 - BETTER PLACE GMBH [DE]
- [A] EP 3705789 A1 20200909 - GEBR KEMPER GMBH + CO KG METALLWERKE [DE]
- [A] EP 3569936 A1 20191120 - DANFOSS AS [DK]
- [A] US 10132507 B2 20181120 - DEIVASIGAMANI SRIDHAR [US], et al
- See also references of WO 2022103323A1

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