

Title (en)  
HEAT EXCHANGER AND HOT-WATER SUPPLY DEVICE USING SAME

Title (de)  
WÄRMETAUSCHER UND DIESEN VERWENDENDE HEISSWASSERVERSORGUNGSVORRICHTUNG

Title (fr)  
ÉCHANGEUR DE CHALEUR ET DISPOSITIF DE PRODUCTION D EAU CHAUDE L UTILISANT

Publication  
**EP 2282140 B1 20140903 (EN)**

Application  
**EP 09729622 A 20090401**

Priority  
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• JP 2008191924 A 20080725

Abstract (en)  
[origin: EP2282140A1] Disclosed are a heat exchanger which can effectively prevent circulation blockage due to scale deposits without forming all of the outer tubes (52) or only the downstream side thereof by large-diameter tubes; and a hot water supply system using the same. The number of first inner tubes (51) on the downstream side of hot water supply water is smaller than the number of second inner tubes (52) on the upstream side thereof. Thereby, the circulation cross-sectional area can be secured such that the circulation cross-sectional area between a first outer tube (53) and each of the first inner tubes (51) is larger than the circulation cross-sectional area between a second outer tube (54) and each of the second inner tubes (51). Thus, circulation blockage inside the outer tube (53) on the downstream side due to scale deposits can be effectively prevented without forming all of the outer tubes (53 and 54) or only the outer tube (53) on the downstream side by large-diameter tubes. In this case, the number of second inner tubes (52) on the upstream side of the hot water supply water is larger than the number of first inner tubes (51) on the downstream side thereof, and thus the hot water supply water can be sufficiently heated by each of the second inner tubes (52).

IPC 8 full level  
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