Title (en)

A DRAINWATER HEAT RECOVERY DEVICE

Title (de)

ABWASSERWÄRMERÜCKGEWINNUNG

Title (fr)

DISPOSITIF DE RÉCUPÉRATION DE CHALEUR D'EAUX USÉES

Publication

EP 2179225 A1 20100428 (EN)

Application

EP 08779426 A 20080708

Priority

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- SE 0701667 A 20070709

Abstract (en)

[origin: WO2009008826A1] A Heat Exchanger for domestic drain water heat recovery is described which reduces energy consumption in a domestic or light-duty commercial application, such as a shower, shower-in-bath, or other appliance where hot and cold water are to be mixed just before use. The drain water heat energy is reclaimed in order to preheat cold water before being mixed with hot water. The hot and cold water are supplied in separate hot and cold supply lines. The cold water supply is first directed through the heat exchanger where drain water heat is absorbed. The heat exchanger embodiment facilitates installation in several possible locations such that the end user has several options in order to reduce installation costs by opting for a simple hook up, or install the unit in a more hidden location to improve aesthetics. The embodiment utilizes the counter flow method, in a concentric tube type heat exchanger, employing plastic tubes, baffles, fins (in addition to other methods), in attempts to achieve the highest possible efficiency per cost ratio. This directly affects the payback period of the product. The embodiment is self draining to reduce fouling and anti-clogging by means of allowance for internal overflow.

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

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