Title (en)

Heating water flow circulation and instantaneous hot sanitary water supply apparatus in a combi-boiler

Title (de)

Gerät zur Heizwasserumwaltzung und Brauchwasserheizung in einem Kombikessel

Title (fr)

Appareil pour circuler l'eau de chauffage et pour le chauffage instantané de l'eau sanitaire dans une chaudière mixte

Publication

**EP 0981031 A2 20000223 (EN)**

Application

**EP 98124821 A 19981230**

Priority

KR 19980033525 A 19980818

Abstract (en)

Disclosed is a heating water flow circulation and hot sanitary water supply apparatus in a combi-boiler which preheats cold water during heating and instantaneously supplies hot water when turning a tap on for use in the kitchen and bath room, etc. The apparatus comprises a water-to-water heat exchanger, in which sanitary water layers and heating flow layers are alternately multilayer-formed to perform heat exchange between heating flow and sanitary water, and a heating flow diverting unit controls the five direction of the heating flow circulation according to a heating mode or a hot sanitary water supply mode. Also, the apparatus rapidly supplies the hot sanitary water by circulating part of the heating flow to the heating flow layers of the water-to-water heat exchanger during the supplied heating flow is circulated for heating. Accordingly, the heating water flow circulation and instantaneous hot water supply apparatus of the present invention can shorten a outflow time of cold water when using hot sanitary water and simplify many components in a boiler including a heating flow bypass valve, which is integrated in a single module. <IMAGE>

IPC 1-7

**F24H 1/52**

IPC 8 full level

**F24H 1/52** (2006.01)

CPC (source: EP)

**F24H 1/52** (2013.01); **F24H 9/144** (2013.01)

Cited by

CN115751432A; EP1650506A1; CN107076461A; RU2676172C2; FR2813950A1; EP1188991A1

Designated contracting state (EPC)

DE ES FR GB IT NL

DOCDB simple family (publication)

**EP 0981031 A2 20000223**; **EP 0981031 A3 20020731**

DOCDB simple family (application)

**EP 98124821 A 19981230**