

ABSTRACT

An energy-saving hot water-heating device includes a coolant circulation coil pipe, a plurality of heating pipes fixed in the coolant circulation coil pipe, communicating pipes connected between the heating pipes, and a running water channel formed between the heating pipes and heat-dissipating pipes. The coolant circulation coil pipe is connected to an air conditioning system. The heating pipes are connected to a water source. Water in the running water channel is heated up by waste heat generated by the coolant circulation coil pipe to produce household or industrial hot water. A system applicable to the energy-saving hot water-heating device includes an automatic circulation water tank, a hot water canister, and a heating boiler, to heat up cool water in the automatic circulation water tank and then store resultant hot water in the hot water canister.

Fig. 1