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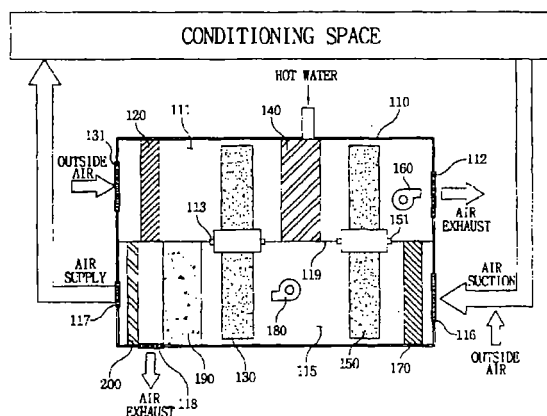
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(54) Title: DEHUMIDIFYING COOLING DEVICE FOR DISTRICT HEATING



(57) Abstract: Disclosed is a dehumidifying cooling device for district heating which comprises; a case having a partition to divide the interior of the case into a wet channel and a dry channel, a rotatable sensible heat exchanger to heat exchange outside air in the wet channel with circulated air in the dry channel, a heating coil for raising the temperature of the outside air, a rotatable dehumidifying wheel for adsorbing and removing moisture contained in the circulated air in the dry channel and being regenerated by evaporating the adsorbed moisture, and a regenerative-evaporative cooler for cooling the circulated air in the dry channel. With this configuration, the device can carry out an air cooling operation by use of hot water supplied by district heating systems and gas or oil boilers installed in individual households, thereby achieving a reduced device size via the implementation of the cooling operation under the atmospheric pressure state and low manufacturing costs by virtue of a simplified system configuration.

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