Title (en)

Apparatus and method for influencing the temperature in a building

Title (de)

Tafel und Verfahren zur Beeinflussung der Temperatur in einem Gebäude

Title (fr)

Appareil et procédé pour influencer la température dans un bâtiment

Publication

EP 2685176 A1 20140115 (EN)

Application

EP 12005194 A 20120713

Priority

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Abstract (en)

The present invention relates to an apparatus for influencing the temperature in a building, comprising: a central heat pump unit (2) with a warm liquid outlet (12) to a warm liquid piping (38), a cold liquid outlet (14) to a cold liquid piping (40) and a liquid inlet (16) connected with a return liquid piping (42), a condenser (4), an evaporator (6) and a compressor (8), a heat exchanger (10) as a part of the central heat pump unit (2), a refrigerant piping (18) as a part of the central heat pump unit (2) being connected with the condenser (4), the evaporator (6), the compressor (8) and the heat exchanger (10), which distributes the refrigerant in the central heat pump unit (2), and at least one indoor unit (36) being connected with the warm liquid outlet (12) by the warm liquid piping (38), the cold liquid outlet (14) by the cold liquid piping (40) and the liquid inlet (16) by the return liquid piping (42). It also refers to a method for operating an apparatus for influencing the temperature in a building comprising a central heat pump unit (2) with a condenser (4), an evaporator (6), a compressor (8), a heat exchanger (10) and an electronic control unit, which operates the flow of a refrigerant within a refrigerant piping (18) for the refrigerant inside of the central heat pump unit (2), the central heat pump unit (2) being connected to a piping for distributing liquid through the building from the central heat pump unit (2) to at least one indoor unit (36) and back. By the specific design of the three pipe-system the apparatus and method are very energy efficient, cheap to manufacture and easy to operate.

IPC 8 full level

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Citation (applicant)

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