

Title (en)

TEMPERATURE SENSOR APPARATUS FOR A WATER STORAGE APPARATUS

Title (de)

TEMPERATURSENSORVORRICHTUNG FÜR WARMWASSERSPEICHER

Title (fr)

APPAREIL DE CAPTATION DE TEMPERATURE POUR BALLON D'EAU CHAUGE

Publication

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Application

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Priority

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- EP 08775884 A 20080707
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Abstract (en)

A temperature sensor apparatus for a water storage apparatus in which an amount of hot water stored can be determined by the vertical position of a hot/cold water boundary, the apparatus comprising: a plurality of temperature sensors for installation at different height levels in the water storage apparatus, and a control unit, wherein the control unit is arranged to determine sensor location, in use, based on the order in which the sensors detect a temperature change during operation of the water storage apparatus.

IPC 8 full level

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F24D 2220/042 (2013.01 - EP); **F24D 2240/26** (2013.01 - EP)

Citation (search report)

- [A] AT 7954 U1 20051115 - LOGOTHERM REGELSYSTEME GMBH [AT]
- [A] EP 1045127 A2 20001018 - HONDA MOTOR CO LTD [JP]
- [A] GB 2228069 A 19900815 - GLEDHILL WATER STORAGE [GB]
- [A] US 2005022542 A1 20050203 - SAKAKIBARA HISAYOSHI [JP]
- [A] US 2004065148 A1 20040408 - HAM ERIC R [CA]
- [A] GB 2353346 A 20010221 - ECO THERM [GB]
- [A] JP 2005283024 A 20051013 - TOTO LTD
- [A] JP 2006010116 A 20060112 - GASTAR CORP
- [A] JP 2002075392 A 20020315 - TOYOTA IND CORP
- [A] WO 0058668 A1 20001005 - COHEN MENACHEM [IL], et al

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GB 2485311 B 20121226; RU 2010103526 A 20110820; RU 2012101085 A 20130727; RU 2459154 C2 20120820;
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