Title (en)

STEAM IRON COMPRISING A SCALE INDICATOR

Title (de

DAMPFBÜGELEISEN MIT VERKALKUNGSANZEIGE

Title (fr)

FER A VAPEUR COMPORTANT UN INDICATEUR D'ENTARTRAGE

Publication

EP 2002050 B1 20090812 (FR)

Application

EP 07733962 A 20070307

Priority

- IB 2007000608 W 20070307
- FR 0602828 A 20060331

Abstract (en)

[origin: FR2899246A1] The steam iron with a scaling indicator (10) comprises a radiator (3) having vaporization chamber (30) and a unit to calculate an electric power consumed by iron and to activate the scaling indicator when calculated energy exceeds a pre-determined threshold. The radiator has an electrical resistance heater (31) whose operation is controlled by a thermostat. The unit measures cumulative operating time of the heater during which the thermostat supplies electrically the heater resistance, and is integrated into an electronic circuit that receives thermostat information relating to the supply. The steam iron with a scaling indicator (10) comprises a radiator (3) having vaporization chamber (30) and a unit to calculate an electric power consumed by iron and to activate the scaling indicator when calculated energy exceeds a pre-determined threshold. The radiator has an electrical resistance heater (31) whose operation is controlled by a thermostat. The unit is used to measure cumulative operating time of the heater during which the thermostat supplies electrically the heater resistance, and is integrated into an electronic circuit that receives thermostat information relating to the supply. The unit is used to calculate the power consumption quantity by resistance heater to produce vapor in which the scaling indicator is activated when the power consumption quantity exceeds the predetermined threshold. The energy consumed to produce vapor is calculated by subtracting the energy consumed by the resistance heating. The estimated energy is necessary for pressing to dry a textile at thermostat temperature. The energy required for pressing the dry textiles to adjust a temperature of the thermostat is estimated by the determined power value from values stored in an integrated circuit memory. The activation threshold of the scaling indicator is modulated to a degree of hardness of water introduced in the vaporization chamber, which is specified by the user. A knob enables the activation when the scaling indicator is activated by resetting the calculation of consumed electric power. The knob comprises self-cleaning knob causing the sudden arrival of a large amount of water into the vaporization chamber.

IPC 8 full level

D06F 75/18 (2006.01); D06F 75/26 (2006.01)

CPC (source: EP US)

D06F 75/18 (2013.01 - EP US); D06F 75/26 (2013.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

FR 2899246 A1 20071005; FR 2899246 B1 20080509; AT E439467 T1 20090815; CN 101410567 A 20090415; CN 101410567 B 20110202; DE 602007001966 D1 20090924; EP 2002050 A1 20081217; EP 2002050 B1 20090812; ES 2331667 T3 20100112; US 2010175285 A1 20100715; WO 2007116255 A1 20071018

DOCDB simple family (application)

FR 0602828 A 20060331; AT 07733962 T 20070307; CN 200780011567 A 20070307; DE 602007001966 T 20070307; EP 07733962 A 20070307; ES 07733962 T 20070307; IB 2007000608 W 20070307; US 29520207 A 20070307