

Title (en)
Circuit for controlling the temperature of a hair iron

Title (de)
Schaltung zur Temperaturregelung eines Onduliereisengeräts

Title (fr)
Circuit de contrôle de température d'un fer à friser

Publication
EP 1400187 A1 20040324 (EN)

Application
EP 03255842 A 20030917

Priority
KR 20020028043 U 20020918

Abstract (en)
A temperature control circuit (100) for a hair iron in which an alternating current is applied to the hair iron and the temperature of the hair iron is uniformly maintained, is disclosed. The temperature control circuit comprises a constant voltage portion (20) for rectifying the alternating current and converting the rectified current to a constant voltage; a pulse generating portion (30) for receiving an output from the constant voltage portion (20) and generating a pulse signal for applying zero pulse frequency so as to reduce frequency noise; a temperature control portion (40) for receiving a signal from the pulse generating portion (30) and controlling the temperature of a setting heater; a comparator portion (50) for comparing the output of the constant voltage portion with the resistance of the mat of the setting heater and generating an output during a given time; a heater control portion (60) such as a silicon control rectifier (61) for receiving an output signal from the comparator portion (50) to maintain and preheat the temperature of the mat uniformly; a heating portion (70) for receiving an output signal from the heater control portion (60) to heat up the mat of the setting heater; a heater control display portion (80) for displaying a preheat condition of the mat of the setting heater; and a backward voltage prevention portion (90) for preventing breakdown of devices due to surge or backward voltage of the heater control portion. <IMAGE>

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Citation (search report)
• [X] EP 0465065 A2 19920108 - VARIAN ASSOCIATES [US]
• [X] EP 0615327 A2 19940914 - WESTINGHOUSE ELECTRIC CORP [US]

Cited by
EP2272391A1; CN105958454A; CN102469863A; CN102907872A; DE102015204611A1; WO2011004340A3; US9138038B2; WO2011004340A2; US8707969B2

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