

Title (en)

VOLTAGE SENSITIVE ENERGY REGULATOR USING PARALLEL CONTROL

Title (de)

SPANNUNGSEMPFINDLICHER ENERGIE REGLER MIT PARALLELSTEUERUNG

Title (fr)

REGULATEUR D'ENERGIE SENSIBLE A LA TENSION UTILISANT UNE COMMANDE PARALLELE

Publication

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Application

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Abstract (en)

[origin: WO9824104A1] The invention is an infinite switch (100) for controlling heat output of a heater element by controlling a time duration that the heater element receives current. The switch has a bi-metal strip (106) and a strip heater (105). The bi-metal strip (106) exerts a force by bending in the direction of the low expansion metal. The force of the bending is proportional to a duration of activation of the strip heater (105). The switch (100) has a set of cycling contacts for making and breaking current flow through the strip heater (105) and the heat element. The switch (100) also has a cycling arm (112) for adjusting the time duration that the cycling contacts (115, 116) are opened and closed. The switch (100) also has a pivot arm (110) that contacts the cycling arm (112) on one side, and contacts the bi-metal strip (106) on the other side. The force from the bi-metal strip (106) rotates the pivot arm (110) about a pivot point (143) until the pivot arm (110) engages the cycling arm (112). The cycling arm (112) prevents any further rotation, and thus, the force from the bi-metal strip (106) laterally shifts the pivot arm (110) to engage a snap spring (109) which opens the cycling contacts (115, 116).

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