

Title (en)

Electric radiant heater with active sensor for cooking vessel detection

Title (de)

Elektrischer Strahlungsheizkörper mit aktiven Sensor zur Kochgefäßerkennung

Title (fr)

Radiateur électrique avec un capteur actif pour la détection d'un récipient de cuisson

Publication

EP 0788293 A3 19980107 (DE)

Application

EP 97100766 A 19970118

Priority

DE 19603845 A 19960205

Abstract (en)

[origin: EP0788293A2] The heater (11) is provided with an inductive detector (31) which operates on the principle of detuning of an oscillatory circuit by the presence of e.g. a saucepan. One or more heating zones (18,19) are switched-on accordingly for a smaller or a larger vessel. The sensor (30) is a single turn of thick wire extending over the heating zones close to the underside of the hotplate. For a twin-circuit heater the loop has precisely shaped peripheral regions (37,38) in these zones so that the signal exhibits a stepped transition between them.

IPC 1-7

H05B 3/74; **H05B 1/02**

IPC 8 full level

H05B 3/00 (2006.01); **H05B 1/02** (2006.01); **H05B 3/68** (2006.01); **H05B 3/74** (2006.01)

CPC (source: EP US)

H05B 3/746 (2013.01 - EP US); **H05B 2213/05** (2013.01 - EP US)

Citation (search report)

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- [A] DE 3733108 C1 19890223 - BOSCH SIEMENS HAUSGERAETE
- [A] DE 4235085 A1 19930422 - KLASCHKA IND ELEKTRONIK [DE]
- [A] DE 4224934 A1 19940203 - BOSCH SIEMENS HAUSGERAETE [DE]

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EP 0788293 A2 19970806; **EP 0788293 A3 19980107**; **EP 0788293 B1 20010808**; AT E204114 T1 20010815; AT E263475 T1 20040415; DE 19603845 A1 19970807; DE 19603845 B4 20100722; DE 59704217 D1 20010913; DE 59711476 D1 20040506; EP 0982973 A2 20000301; EP 0982973 A3 20000503; EP 0982973 B1 20040331; EP 0982973 B2 20090211; EP 1379105 A2 20040107; EP 1379105 A3 20041103; ES 2162136 T3 20011216; ES 2218941 T3 20041116; ES 2218941 T5 20090601; JP H09223572 A 19970826; US 5893996 A 19990413

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EP 97100766 A 19970118; AT 97100766 T 19970118; AT 99123892 T 19970118; DE 19603845 A 19960205; DE 59704217 T 19970118; DE 59711476 T 19970118; EP 03022466 A 19970118; EP 99123892 A 19970118; ES 97100766 T 19970118; ES 99123892 T 19970118; JP 3257297 A 19970203; US 79238397 A 19970203