Title (en)

Electric heater assembly

Title (de)

Elektrische Heizungsanordnung

Title (fr)

Dispositif de chauffage électrique

Publication

EP 1049358 A2 20001102 (EN)

Application

EP 00303417 A 20000425

Priority

GB 9909636 A 19990427

Abstract (en)

An electric heater assembly comprises at least one electric heater, each of which incorporates at least one sensing means (8) for use in detecting a cooking vessel (9) on a cooking plate (7) overlying the heater. The sensing means (8) is provided for the purpose of effecting selective energising and/or de-energising of one or more electric heating elements (3) in the or each heater. The or each sensing means (8) comprises an electrically conductive sensor loop. The or each sensor loop is connected to a circuit (100) comprising a non-oscillatory resonant circuit (102, 103), for the or each sensor loop, driven by an oscillatory circuit (101) such that the or each resonant circuit is operated at within +/- 15 percent of its resonant frequency, the resonant circuit not forming part of the oscillatory circuit (101). A transformer (104, 105, 106), associated with the or each sensor loop (8), has a first winding (105) connected in the resonant circuit and a second winding (106) connected to, or integral with, its associated sensor loop (8). Means (110, 111) is provided to monitor change in a parameter associated with electric current in and voltage across the or each resonant circuit (102, 103) as a result of placement and/or removal of a cooking vessel (9) on and/or from the cooking plate (7) and to effect selective energising and/or de-energising of one or more electric heating elements (3) in the or each heater. <IMAGE>

IPC 1-7

H05B 3/74

IPC 8 full level

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CPC (source: EP)

H05B 3/746 (2013.01); H05B 2213/05 (2013.01)

Cited by

EP1460386A3; EP1392081A3; EP1791397A3; EP1460386A2; US7368688B2

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