

Title (en)  
COOKTOP WITH A NON-METALLIC HOTPLATE

Title (de)  
KOCHFELD MIT EINER NICHTMETALLISCHEN KOCHPLATTE

Title (fr)  
SURFACE DE CUISSON AVEC UN SERPENTIN NON METALLIQUE

Publication  
**EP 0951805 A1 19991027 (DE)**

Application  
**EP 98903007 A 19980107**

Priority  
• DE 19700753 A 19970111  
• EP 9800194 W 19980107

Abstract (en)  
[origin: US6242721B1] The cooktop has a cooking zone (2), at least one electric heating unit (7, 7') assigned to the cooking zone (2) and a device for detecting a metal pot on the cooking zone (2) and determining its size when the metal pot is resting on the cooking zone (2). The device for detecting the presence and advantageously the size of the metal pot includes a measuring sensor (3) arranged near the cooking zone (2) and one or more evaluation devices (5, 5'') communicating with the measuring sensor (3). The measuring sensor (3) includes a primary measuring coil (8) and one or more secondary measuring coils. The primary measuring coil terminals (8a,8b) are electrically connected with corresponding poles of an alternating voltage generator (4) for generating an alternating current in the measuring coil (8) and a magnetic alternating testing field that interacts with the one or more secondary measuring coils to induce a voltage in them. The respective evaluation devices (5, 5'') include comparators (15,15'') for comparing the induced voltages in the corresponding secondary measuring coils (9,20) with voltage threshold values to detect the presence and advantageously the size of a metal pot placed on the cooking zone (2) as a result of eddy currents produced in the metal pot.

IPC 1-7  
**H05B 3/74**; H05B 3/68; G01V 3/10

IPC 8 full level  
**F24C 15/10** (2006.01); **G01V 3/10** (2006.01); **H05B 3/68** (2006.01); **H05B 3/74** (2006.01)

CPC (source: EP US)  
**F24C 15/106** (2013.01 - EP US); **H05B 3/746** (2013.01 - EP US); **H05B 2213/05** (2013.01 - EP US)

Cited by  
ES2178577A1

Designated contracting state (EPC)  
AT BE CH DE DK ES FR GB GR IT LI NL SE

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**US 6242721 B1 20010605**; AT E217471 T1 20020515; CA 2276304 A1 19980716; CA 2276304 C 20031209; DE 19700753 A1 19980716; DE 19700753 C2 20000914; DE 59804050 D1 20020613; DK 0951805 T3 20020729; EP 0951805 A1 19991027; EP 0951805 B1 20020508; ES 2176953 T3 20021201; WO 9831198 A1 19980716

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**US 28402999 A 19990406**; AT 98903007 T 19980107; CA 2276304 A 19980107; DE 19700753 A 19970111; DE 59804050 T 19980107; DK 98903007 T 19980107; EP 9800194 W 19980107; EP 98903007 A 19980107; ES 98903007 T 19980107