

Title (en)

Induction hob and method for measuring electrical currents of an induction hob

Title (de)

Induktionskochfeld und Verfahren zur Messung elektrischer Ströme eines Induktionskochfelds

Title (fr)

Plaque de cuisson à induction et procédé pour mesurer des courants électriques de plaque à induction

Publication

EP 2999305 B1 20170802 (EN)

Application

EP 14185266 A 20140918

Priority

EP 14185266 A 20140918

Abstract (en)

[origin: EP2999305A1] The invention relates to an induction hob comprising a power stage (10) with at least one switching element (20) for enabling an alternating current flow through an induction element (21), a control unit (11) for controlling the current flow through the induction element (21) and a current measurement unit (12). The current measurement unit (12) comprises a first and a second transistor (T1, T2), the bases or gates of the first and second transistors (T1, T2) directly coupled with each other. The current measurement unit (12) is further coupled with a shunt resistor (R shunt) for providing an input signal (IS) to the current measurement unit (12), the shunt resistor (R shunt) being coupled with the emitter path of said first transistor (T1). In addition, the base or gate of the first transistor (T1) is directly coupled with the collector of said first transistor (T1). Based on the input signal (IS), a measuring signal (MS) is obtained at the collector of the second transistor (MS), said measurement signal (MS) being indicative for the energy consumption of one or more induction elements (21) of the induction hob.

IPC 8 full level

H05B 6/06 (2006.01)

CPC (source: EP)

H05B 6/062 (2013.01)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 2999305 A1 20160323; EP 2999305 B1 20170802

DOCDB simple family (application)

EP 14185266 A 20140918