

Title (en)

Induction hob and method for operating an induction hob

Title (de)

Induktionskochfeld und Verfahren zur Bedienung eines Induktionskochfelds

Title (fr)

Plaque de cuisson à induction et procédé pour faire fonctionner une telle plaque

Publication

**EP 2999303 A1 20160323 (EN)**

Application

**EP 14185258 A 20140918**

Priority

EP 14185258 A 20140918

Abstract (en)

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) and a control unit (11) providing an enabling signal (P) to the switching element (20) for enabling said current flow through said induction element (21). The induction hob further comprises a trigger generation unit (12), said trigger generation unit (12) receiving an oscillating voltage (Vc) provided at a first monitoring point (23) of the power stage (10) and a reference voltage (Vdc) provided at a second monitoring point (24) of the power stage (10), the trigger generation unit (12) being adapted to derive a trigger signal (TS) based on the oscillating voltage (Vc) and the reference voltage (Vdc). In addition, the trigger generation unit (12) is coupled with the control unit (11) for transmitting said trigger signal (TS) to the control unit (11). The control unit (11) comprises a delay unit (11.1), said delay unit (11.1) being triggered by the trigger signal (TS), wherein the delay unit (11.1) is configured to control the provision of an enabling signal (P) to the switching element (20) after elapsing of a delay time (#t).

IPC 8 full level

**H05B 6/06** (2006.01)

CPC (source: EP)

**H05B 6/062** (2013.01)

Citation (search report)

- [X] EP 2209197 A1 20100721 - WHIRLPOOL CO [US], et al
- [X] US 4151387 A 19790424 - PETERS PHILIP H JR [US]
- [A] EP 1592285 A1 20051102 - LG ELECTRONICS INC [KR]
- [A] US 2008179312 A1 20080731 - TERAOKA KYOZO [JP]
- [A] US 5329100 A 19940712 - LEE MIN K [KR]
- [A] GB 2025094 A 19800116 - MATSUSHITA ELECTRIC IND CO LTD

Designated contracting state (EPC)

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Designated extension state (EPC)

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**EP 2999303 A1 20160323**; **EP 2999303 B1 20181114**; EP 2999306 A1 20160323

DOCDB simple family (application)

**EP 14185258 A 20140918**; EP 15176584 A 20150714