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BSH Home Appliances Corporation  
100 Bosch Boulevard  
NEW BERN, NC 28562

EXAMINER
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LAFLAME JR, MICHAEL A

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* OSCAR LUIS ALDANA ARJOL,  
PABLO JESUS HERNANDEZ BLASCO,  
IGNACIO MILLAN SERRANO, FERNANDO MONTERDE AZNAR,  
and DANIEL PALACIOS TOMAS

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Appeal 2014-007863  
Application 13/063,781  
Technology Center 3700

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Before MICHAEL C. ASTORINO, CYNTHIA L. MURPHY, and  
AMEE A. SHAH, *Administrative Patent Judges*.

MURPHY, *Administrative Patent Judge*.

DECISION ON APPEAL

The Appellants<sup>1</sup> appeal under 35 U.S.C. § 134 from the Examiner's rejections of claims 16–23 and 26–38.<sup>2</sup> We have jurisdiction over this appeal under 35 U.S.C. § 6(b).

We REVERSE.

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<sup>1</sup> The Appellants identify the real party in interest as “BSH Bosch und Siemens Hausgeräte GmbH.” (Appeal Br. 3.)

<sup>2</sup> Claims 16–38 “are pending in the application,” claims 24 and 25 “are allowed.” (Final Action 1.)

STATEMENT OF THE CASE

The Appellants' invention relates to a "cooktop" and a "method for operating" a cooktop. (Spec. ¶ 1.)

*Illustrative Claim*

16. A cooktop, comprising:

a plurality of heating elements combined to form a heating zone;

a power supply to generate a heating current, the heating current to operate the plurality of heating elements;

a switch to open and close a power circuit, the power circuit having the power supply and one of the plurality of heating elements; and

a controller to determine a characteristic variable of the heating current separately for each heating element; to actuate the switch as a function of a power level selected to operate the heating zone; and to activate, in a first operating state, two of the plurality of heating elements, which are combined to form the heating zone, in different phases of a heating period.

*References*

Cornec	US 2001/0025848 A1	Oct. 4, 2001
Akel	US 6,528,770 B1	Mar. 4, 2003
Bocchiola	US 2005/0105313 A1	May 19, 2005
Haag	US 2008/0087661 A1	Apr. 17, 2008
Pinilla	US 2008/0121633 A1	May 29, 2008
Pastore	EP 1 951 003 A1	July 30, 2008

*Rejections*

The Examiner rejects claims 16, 17, 19, 22, 23, and 31–33 under 35 U.S.C. § 103(a) as unpatentable over Akel, Pinilla, and Haag. (Final Action 3.)

The Examiner rejects claim 18 under 35 U.S.C. § 103(a) as unpatentable over Akel, Pinilla, Haag, and Pastore. (*Id.* at 6.)

The Examiner rejects claims 20 and 21 under 35 U.S.C. § 103(a) as unpatentable over Akel, Pinilla, Haag, and Cornec. (*Id.* at 7.)

The Examiner rejects claims 26 and 27 under 35 U.S.C. § 103(a) as unpatentable over Akel, Pinilla, Haag, and Bocchiola. (*Id.* at 8.)

The Examiner rejects claim 28 under 35 U.S.C. § 103(a) as unpatentable over Akel and Haag. (*Id.* at 2.)

The Examiner rejects claim 29 under 35 U.S.C. § 103(a) as unpatentable over Akel, Haag, and Pinilla. (*Id.* at 3.)

The Examiner rejects claim 30 under 35 U.S.C. § 103(a) as unpatentable over Akel, Haag, and Pastore. (*Id.* at 6.)

The Examiner rejects claims 34–37 under 35 U.S.C. § 103(a) as unpatentable over Akel, Pinilla, and Haag. (*Id.* at 9.)

The Examiner rejects claim 38 under 35 U.S.C. § 103(a) as unpatentable over Akel, Pinilla, Haag, and Pastore. (*Id.* at 11.)

#### ANALYSIS

Claims 16, 28, and 34 are the independent claims on appeal, with the rest of the claims on appeal (i.e., claims 17–23, 26, 27, 29–33, and 35–38) depending therefrom. (Appeal Br., Claims App.) Independent claims 16, 28, and 34 each requires the activation of two heating elements “in different phases of a heating period.” (*Id.*) A foremost issue in this appeal is whether the claim limitation “different phases of a heating period” pertains to “frequency currents” that are “out of phase with each other.” (Answer 3.) We determine that it does not.

We give the claim limitation “different phases of a heating period” its broadest reasonable interpretation consistent with the Specification as it

would be interpreted by one of ordinary skill in the art.<sup>3</sup> Here, the Specification conveys that “phases of a heating period” pertains to portions of a time period, not current-frequency characteristics. For example, the Specification describes Figure 4 as “a schematic diagram of the activation of heating elements in different phases of heating period” and Figure 4 depicts these phases as portions of time. (Spec. ¶ 25, Fig. 4.) The Specification also discusses “[a] ratio of the duration of the phases in which a heating element is switched on to the overall duration of the heating period.” (*Id.* ¶ 5.) The Specification further contrasts activation of the heating elements “in different phases of the heating period” to “simultaneous switching on and off of the heating elements in the same phases of the heating period.” (*Id.* ¶ 9.)

Accordingly, we agree with the Appellants that, in the context used in the independent claims on appeal, “phases” are “portions of a time period” and “different phases means different portions of a time period.” (Appeal Br. 7.) Thus, independent claims 16, 28, and 34 require two heating elements to be activated in different time portions of a time period.

Turning now to the Examiner’s rejections, Akel is relied upon to disclose two heating elements that are activated “in different phases of a heating period.” (*See* Final Action 2–3, 4, 9–10.) Akel discloses a heater F1 having two inductors wherein one inductor is fed by a generator G1 and the other inductor is fed by a generator G2. (*See* Akel, col. 5, ll. 17–21, col. 6, ll. 1–4, Figs. 1, 1A.) The Examiner finds that Akel discloses adjusting the

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<sup>3</sup> *See, e.g., In re Suitco Surface, Inc.*, 603 F.3d 1255, 1259-60 (Fed. Cir. 2010); *In re Translogic Tech. Inc.*, 504 F.3d 1249, 1256 (Fed. Cir. 2007); *In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004); *In re Morris*, 127 F.3d 1048, 1054-55 (Fed. Cir. 1997); *In re Zletz*, 893 F.2d 319, 321-22 (Fed. Cir. 1989).

relative phase of the currents supplied by generators G1 and G2 whereby the inductors are activated in “different phases of a heating period” as “frequency currents” are “out of phase with each other and applied to the inductors.” (Answer 3.) The Examiner further finds that “[i]n order to adjust from one degree to another some time must pass” and “[t]herefore there is also a time associated with the adjustment of a phase in Akel.” (*Id.* at 4.)

We are persuaded by the Appellants’ position that the Examiner does not sufficiently establish that Akel shows or suggests the activation of two heating elements as required by independent claims 16, 28, and 34. (*See* Appeal Br. 6–8; Reply Br. 2–4.) We are persuaded because the Examiner does not adequately explain how or why Akel teaches that its two inductors are activated at different time portions of a heating period (e.g., a time period associated with phase adjustments). The Examiner’s further findings and determinations with respect to the secondary prior art references (Pinilla and/or Haag) relied upon to reject independent claims 16, 28, and 34 do not compensate for this shortcoming. (*See* Final Action 4, 10.) Thus, we do not sustain the Examiner’s rejections of independent claims 16, 28, and 34.

Additionally, the Examiner’s further findings and determinations with respect to the dependent claims and the additional prior art references relied upon to reject them (Pastore, Cornec, Bocchiola) do not compensate for the shortcomings in the rejections of independent claims 16, 28, and 34. (*See* Final Action 3, 5–9, 11–12.) Thus, we also do not sustain the Examiner’s rejections of dependent claims 17–23, 26, 27, 29–33, and 35–38.

Appeal 2014-007863  
Application 13/063,781

DECISION

We REVERSE the Examiner's rejections of claims 16–23 and 26–38.

REVERSED