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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/499,382	05/29/2012	Ken Yamamoto	SAIKYO-PT006	1808
3624	7590	05/21/2014	EXAMINER	
VOLPE AND KOENIG, P.C. UNITED PLAZA 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103			PELHAM, JOSEPH MOORE	
			ART UNIT	PAPER NUMBER
			3742	
			NOTIFICATION DATE	DELIVERY MODE
			05/21/2014	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

eoffice@volpe-koenig.com

## Office Action Summary

**Application No.**

13/499,382

**Applicant(s)**

YAMAMOTO, KEN

**Examiner**

JOSEPH M. PELHAM

**Art Unit**

3742

**AIA (First Inventor to File)**Status  
No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1)  Responsive to communication(s) filed on \_\_\_\_\_.  
 A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on \_\_\_\_\_.
- 2a)  This action is **FINAL**.    2b)  This action is non-final.
- 3)  An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims\***

- 5)  Claim(s) 1-8 is/are pending in the application.  
5a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 6)  Claim(s) \_\_\_\_\_ is/are allowed.
- 7)  Claim(s) 1-8 is/are rejected.
- 8)  Claim(s) \_\_\_\_\_ is/are objected to.
- 9)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

\* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see [http://www.uspto.gov/patents/init\\_events/pph/index.jsp](http://www.uspto.gov/patents/init_events/pph/index.jsp) or send an inquiry to [FPHfeedback@uspto.gov](mailto:FPHfeedback@uspto.gov).

**Application Papers**

- 10)  The specification is objected to by the Examiner.
- 11)  The drawing(s) filed on 3/30/12 is/are: a)  accepted or b)  objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

**Priority under 35 U.S.C. § 119**

- 12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

**Certified copies:**

- a)  All    b)  Some\*\*    c)  None of the:
1.  Certified copies of the priority documents have been received.
  2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1)  Notice of References Cited (PTO-892)
- 2)  Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b)  
Paper No(s)/Mail Date 3/30/12, 9/17/13, 10/17/13.
- 3)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 4)  Other: \_\_\_\_\_.

The present application is being examined under the pre-AIA first to invent provisions.

***Claim Rejections - 35 USC § 112***

Claims 5 and 7 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

Claim 5 recites “a contour of the transverse section of the ceramic base body... bears no geometric similarity to a shape of a region lying between wall surfaces of the recesses,” which is per se indefinite. “[A] contour of the transverse section” can be **any** part of the transverse section, interior or exterior; “a shape of a region lying between wall surfaces of the recesses” can be **any** shape since the scope of this limitation includes any region or sub-region between the recesses. And since the criterion of “geometric **similarity**” is a subjective determination, that “a contour” is recited to bear “no geometric similarity” to “a shape of a region” is therefore virtually non-limiting.

Claim 7 recites “other sections” of the heat generating resistor; however, aside from the power leads, sections of the resistor other than the section which generates heat have not been recited, rendering the contemplated identity of such “other sections” unclear.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of pre-AIA 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 3742

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 8 are rejected under pre-AIA 35 U.S.C. 102(b) as being anticipated by JP 10-110951 (A).

Referring to Figs. 1(A) and 1(B) and the abstract and translation, JP'951 discloses the ceramic heater as claimed, including a ceramic body 11, a heat generating resistor 2 comprising two straight portions in whose transverse cross section are recessed, and acute inner sides opposed to each other and correspondingly acute outer sides.

***Claim Rejections - 35 USC § 103***

Claims 4 and 6 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over JP'951 in view of JP 2005-340034 (A).

The claims differ substantively from JP'951 only in calling for a “crescentic” shaped section. JP'034 discloses, in the abstract and Figs. 2 & 3, the subject cross section of a heat generating resistor which tapers at its extremities so as to form a crescent shape. It would have been obvious to adopt such a crescent shape since JP'034 teaches such to enhance heat response time. Moreover, while JP'951 is silent about the cross section of the connecting part joining the two straight portions, the recited shape is either inherent or immediately obvious, since manufacturing the resistor to be uniformly shaped is more economical than varying its shape along its length.

Claims 5 and 7 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over JP'951 in view of JP 2007-265893.

Claim 5 differs from JP'951 only in apparently calling for, by implication rather than expressly recited limitation, an exterior side of the base body cross section having a shape different from the geometrical shape *suggested* by the interior sides of the heat generating resistor cross section, and in calling for "other sections" 21 of lower resistance than the heat generating section.

Referring to Figs. 10(c) – 10(e), 12(a) – 12(f), or 13(a) – 13(i), JP'893 discloses an analogous heat generating resistor comprising two straight portions 12a, 12b whose transverse cross sectional areas, and ***therefore whose resistance values***, are *different*, with interior sides entailing (or *suggesting*) a geometrical shape by of the heat generating resistor cross section different from an exterior side of the base body cross section. It would have been obvious to adopt different cross sectional areas of the two straight portions since JP'893 discloses such to afford a still more rapid temperature rise.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSEPH M. PELHAM whose telephone number is (571)272-4786. The examiner can normally be reached on M-F 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu Hoang can be reached on 571-272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3742

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JOSEPH M PELHAM/  
Primary Examiner, Art Unit 3742  
5/18/14