



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/981,633	07/25/2013	Yuuki Matsusaki	SAIKYO-PT038	2626
3624	7590	05/22/2014	EXAMINER	
VOLPE AND KOENIG, P.C. UNITED PLAZA 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103			TRAN, HUAN HUU	
			ART UNIT	PAPER NUMBER
			2853	
			NOTIFICATION DATE	DELIVERY MODE
			05/22/2014	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



Art Unit: 2853

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

### **DETAILED ACTION**

#### ***Priority***

2. Receipt is acknowledged of certified copies of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Claim Objections***

1. Claim 3 objected to because of the following informalities: “the first coverage layer” should be changed to “the first covering layer” for consistency of claim terminology. Appropriate correction is required.

#### ***.Claim Rejections - 35 USC § 102***

2. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

3. 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:

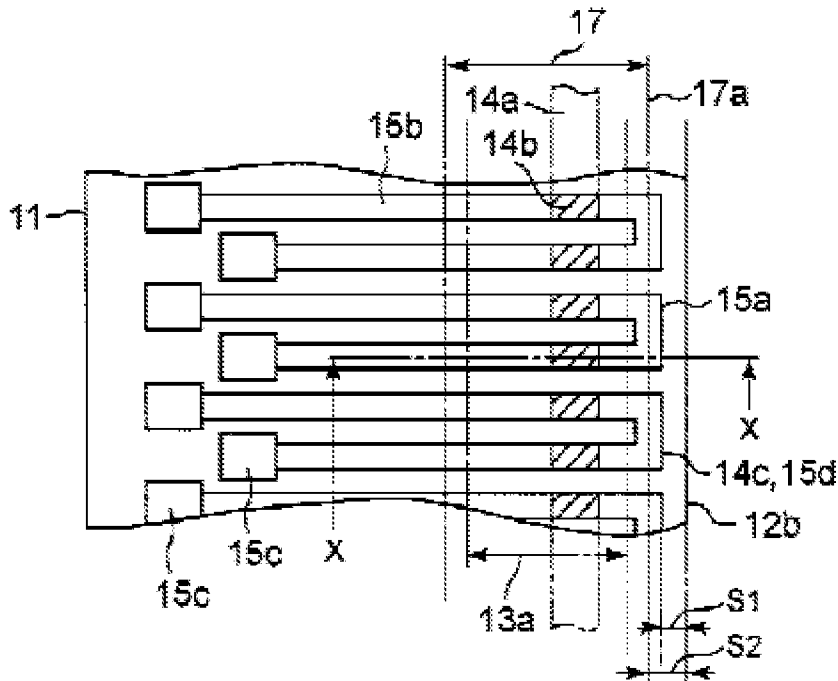
A person shall be entitled to a patent unless –

(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.

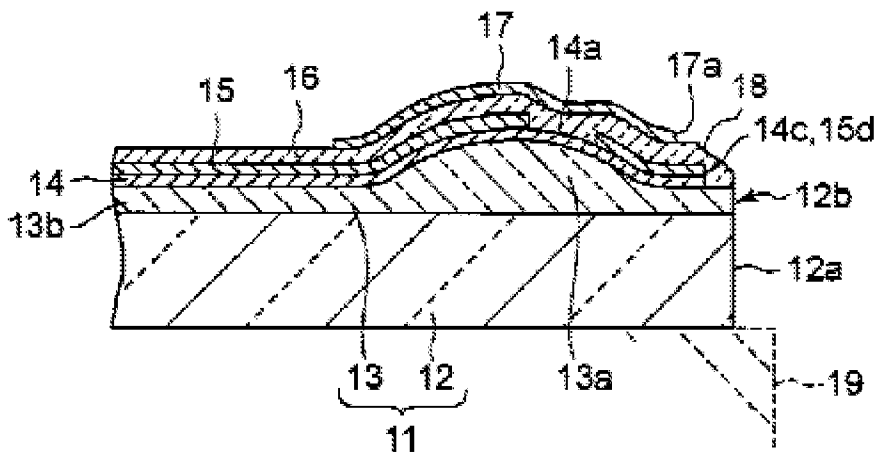
4. Claim 1 is rejected under pre-AIA 35 U.S.C. 102(b) as being anticipated by Komori (JP 2008-230126).

Art Unit: 2853

【~~図~~ 1】



【~~図~~ 2】



As to claim 1, Komori discloses a thermal head, comprising:  
 a substrate (12) ;  
 a thermal storage layer (13) disposed on one main surface of the substrate so as to

Art Unit: 2853

extend to an edge (12b) of the substrate, the thermal storage layer being formed of glass;  
electrodes (14) disposed on or above the thermal storage layer apart from the edge of the substrate (note end 15d);  
heat-generating resistors (14a) disposed above the thermal storage layer apart from the edge of the substrate, the heat-generating resistors being connected to the electrodes;  
and  
a first covering layer (16) disposed on or above the electrodes and the heat-generating resistors;

the first covering layer extending from atop the electrodes and the heat-generating resistors toward atop the thermal storage layer on the edge of the substrate, a protection film (17) being disposed on or above the first covering layer

disposed on or above the electrodes and the heat-generating resistors and an edge of the protection film being not disposed above the edge of the substrate.

### ***Claim Rejections - 35 USC § 103***

5. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

6. The following is a quotation of pre-AIA 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 10 is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Komori in view of Akamatsu et al.

Art Unit: 2853

Komori discloses the claimed thermal head but is silent regarding the limitations relating to the conveyance mechanism and the platen roller recited in claim 10.

However, it is submitted that the missing features are old and well known in the thermal printing art as shown in Akamatsu et al. See Fig. 4.

Therefore it would have been obvious to one in the art to use the thermal head of Komori in the printer of Akamatsu et al. so that the end of the electrode layer is sealed by the covering layer, thus preventing cracks from occurring.

***Allowable Subject Matter***

8. Claims 2-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUAN TRAN whose telephone number is (571)272-2261. The examiner can normally be reached on at work on Tuesday-Friday from 6:30am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2853

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.

/HUAN TRAN/  
Primary Examiner, Art Unit 2853