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Lawrence Livermore National Security, LLC LAWRENCE LIVERMORE NATIONAL LABORATORY PO BOX 808, L-703 LIVERMORE, CA 94551-0808			WEST, PAUL M	
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE
THE PATENT TRIAL AND APPEAL BOARD

Ex parte JOE H. SATCHER JR.,¹
Philip F. Pagoria, Richard E. Whipple, and M. Leslie Carman

Appeal 2015-003588
Application 13/028,072
Technology Center 2800

Before MARK NAGUMO, CHRISTOPHER C. KENNEDY, and
MONTÉ T. SQUIRE, *Administrative Patent Judges*.

NAGUMO, *Administrative Patent Judge*.

DECISION ON APPEAL

Joe H. Satcher Jr., Philip F. Pagoria, Richard E. Whipple, and
M. Leslie Carman (“LLNS”) timely appeal under 35 U.S.C. § 134(a) from
the Final Rejection² of claims 15 and 21, which are all of the pending
claims. We have jurisdiction. 35 U.S.C. § 6. We affirm.

¹ The real party in interest is identified as Lawrence Livermore National Security, LLC (“LLNS”) and the United States of America as represented by the United States Department of Energy. (Appeal Brief, filed 23 September 2014 (“Br.”), 2.)

² Office Action mailed 15 July 2014 (“Final Rejection”; cited as “FR”).

OPINION

A. Introduction³

The subject matter on appeal relates to a thin-layer chromatography (“TLC”) plate and associated method for identifying explosive materials in a sample. The ’072 Specification explains that a sample is collected by contacting a solvent-wetted swab to an object of interest. The collected sample is spotted on a TLC plate that bears a reference standard sample. The plate is developed, a marked registration guide card is placed on the developed plate, and the plate is read by observing the plate illuminated with ultraviolet light. According to LLNS, the claimed invention satisfies the need for a portable, field-ready TLC system for detecting and identifying explosive compounds. (Spec. 1 [0003].)

Claim 15 is representative and reads:

A thin-layer chromatography plate for identification of explosives present in a sample, *consisting of*

a thin-layer chromatography plate,

a pre-spotted standard lane on said thin-layer chromatography plate,

a pre-spotted standard in said pre-spotted standard lane wherein said pre-spotted standard is a pre-spotted standard for explosives,

a sample lane on said thin-layer chromatography plate, and

a location for the sample in said sample lane, and

³ Application 13/028,072, *Rapid identification of explosives using thin-layer chromatography and colorimetric techniques*, filed 15 February 2011, claiming the benefit of a provisional application filed 1 April 2010. We refer to the “’072 Specification,” which we cite as “Spec.”

a marked registration guide card adapted to be positioned over said thin-layer chromatography plate wherein said marked registration guide card is a marked registration guide for explosives.

(Claims App., Br. 34; some indentation, paragraphing, and emphasis added.)

Claim 21, which is also limited by a “consisting of” transitional phrase, is drawn to a process of thin-layer chromatography using the TLC plate. (Claims App., Br. 34–35.)

The Examiner maintains the following grounds of rejection⁴:

- A. Claim 15 stands rejected under 35 U.S.C. § 103(a) in view of the combined teachings of Haas '601⁵ and Itokawa.⁶
- A1. Claim 21 stands rejected under 35 U.S.C. § 103(a) in view of the combined teachings of Haas '601, Novak,⁷ Gold,⁸ Haas '205,⁹ and Itokawa.

⁴ Examiner's Answer mailed 15 January 2015 (“Ans.”).

⁵ Jeffrey S. Haas, *System for analysis of explosives*, U.S. Patent Application Publication 2005/0064601 A1 (2005), originally assigned to LLNS, the real party in interest in this appeal; now U.S. Patent No. 7,745,227 (issued 29 June 2010).

⁶ Hideji Itokawa, *Chromatogram reading instrument*, U.S. Patent No. 3,812,586 (1974).

⁷ Thaddeus John Novak, *Microspot test kit and method for chemical testing*, U.S. Patent No. 6,787,366 B1 (2004).

⁸ Mark S. Gold et al., *Devices and methods for the collection and detection of substances*, U.S. Patent Application Publication 2009/0197283 A1 (2009).

⁹ Jeffrey S. Haas et al., *Hand portable thin-layer chromatography system*, U.S. Patent No. 6,096,205 (2000), assigned to LLNS, the real party in interest in this appeal.

B. Discussion

Findings of fact throughout this Opinion are supported by a preponderance of the evidence of record.

LLNS argues that the closed transitional term “consisting of” “provides a specific combination of claim elements . . . enumerated in claim 15,” and that the obviousness rejection must be reversed because, e.g., “[t]he proposed combination of the Haas and Itokawa references includes many elements in addition to the specific combination of elements of Appellant’s claim 15.” (Br. 8, ll. 3–7.) These arguments are repeated for numerous specific limitations recited in the claims (Br. 9–32), the additional material being identified, and the conclusion stated in each case: e.g., “[s]ince the Gold reference includes the above identified step in addition to Appellant’s claim 21 steps, the Gold reference does not support a 35 USC §103(a) rejection of claim 21 and the rejection should be reversed.” (*Id.* at 28, 2d para., last sentence.)

These arguments are not persuasive of harmful error for the reasons stated by the Examiner. (FR 7–11; Ans. 2 (detailed statements at 3–23).) In particular, the rejections are for obviousness (not anticipation), and the Examiner has made findings and presented reasons why it would have been obvious to combine the teachings of the additional references to provide elements or steps not taught by Haas ’601, and why it would have been obvious to omit additional elements, e.g., because the additional standard lanes and sample lanes described by Haas ’601 would have been recognized as a convenience, and not essential to the chromatographic analysis. (FR 8, ¶ 19; *see id.* ¶ 20 for similar analysis of elements taught by Itokawa.) LLNS

does not challenge these findings of fact. Nor does LLNS explain in any further detail why the Examiner's analysis is faulty.

In the Reply,¹⁰ LLNS raises several more general arguments (e.g., that the Examiner failed to establish a reasonable expectation of success (Reply 6–7), and that the Examiner failed to provide reasons for modifying the references (*id.* at 7). The additional arguments are belated, good cause not having been shown why they were not presented in the principal Brief on Appeal in response to the Final Rejection, and they are not entitled to consideration under the Regulations governing appeals to this Board.¹¹ In any event, LLNS does not address with reasonable specificity and evidence the arguments presented in the Final Rejection, summarized *supra*. The bulk of the Reply is devoted to the arguments of the principal Brief (Reply 8–35), which we have already rejected.

¹⁰ Reply Brief (“Reply”) filed 28 January 2015.

¹¹ See 37 C.F.R. § 41.37(c)(1)(iv) (2014) (“Except as provided for in §§ 41.41 [Reply brief], 41.47 [Oral hearing] and 41.52 [Rehearing], any arguments or authorities not included in the appeal brief will be refused consideration by the Board for purposes of the present appeal”); and 37 C.F.R. §41.41(b)(2) (“[a]ny argument raised in the reply brief which was not raised in the appeal brief, or is not responsive to an argument raised in the examiner’s answer, including any designated new ground of rejection, will not be considered by the Board for purposes of the present appeal, unless good cause is shown.”)

Appeal 2015-003588
Application 13/028,072

C. Order

It is ORDERED that the rejection of claims 15 and 21 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED