



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.
12/622,736	11/20/2009	Wolfgang Aderhold	014306/FEP/RTP/PJT	4939
67251	7590	10/28/2016	EXAMINER	
SERVILLA WHITNEY LLC/AMT			CAMPBELL, THOR S	
33 WOOD AVE SOUTH			ART UNIT	
SUITE 830			PAPER NUMBER	
ISELIN, NJ 08830			3742	
			NOTIFICATION DATE	
			DELIVERY MODE	
			10/28/2016	
			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):

doCKET@dsiplaw.com  
jescobar@dsiplaw.com  
lmurphy@dsiplaw.com

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

*Ex parte* WOLFGANG ADERHOLD, JOSEPH M. RANISH, and  
BLAKE R. KOELMEL

---

Appeal 2015-000009<sup>1,2</sup>  
Application 12/622,736  
Technology Center 3700

---

Before MICHAEL C. ASTORINO, PHILIP J. HOFFMANN, and  
JAMES L. WORTH, *Administrative Patent Judges*.

HOFFMANN, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from the final rejection of claims 1–12. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

---

<sup>1</sup> Our decision references Appellants’ Specification (“Spec.,” filed Nov. 20, 2009), Appeal Brief (“Appeal Br.,” filed Mar. 18, 2014), and Reply Brief (“Reply Br.,” filed Sept. 3, 2014), as well as the Examiner’s Answer (“Answer,” mailed July 3, 2014).

<sup>2</sup> According to Appellants, “[t]he real party in interest is Applied Materials, Inc.” Appeal Br. 3.

According to Appellants, “embodiments of the invention are directed to methods and [an] apparatus for enhancing the cooling of substrates[,] which have been heated through radiative processes.” Spec. ¶ 1. Claim 1 is the only independent claim. *See* Appeal Br., Claims App. We reproduce claim 1, below, as representative of the appealed claims.

1. An apparatus for processing a substrate having a front side and a back side, the apparatus comprising:

a process area within a chamber defined on one side by a window adjacent a radiant heat source located outside the process area;

a dynamic heat sink positioned in the process area and substantially transparent to light from the radiant heat source; and

a substrate support in the process area to hold the substrate adjacent the dynamic heat sink during thermal processing in a position such that at least one of the front side and back side of the substrate faces the radiant heat source and so that the dynamic heat sink couples to the substrate to absorb heat from the substrate.

*Id.*

#### REJECTIONS AND PRIOR ART

The Examiner rejects claims 1–12 under 35 U.S.C. § 102(b) as anticipated by each of Timans (US 7,358,462 B2, iss. Apr. 15, 2008) and Gat (US 7,226,488 B2, iss. June 5, 2007). *See* Answer 2–6.

#### ANALYSIS

With respect to each of the anticipation rejections based on Timans and Gat, Appellants argue, among other things, that neither reference teaches

a substrate support in the process area to hold the substrate adjacent the dynamic heat sink during thermal processing in a position such that at least one of the front side and back side of the substrate faces the radiant heat source and so that the dynamic heat sink couples to the substrate to absorb heat from the substrate.

*See* Appeal Br. 12; *see also* Reply Br. 7–8. Based on our review of the record, we agree with Appellants. Even assuming *arguendo* that we agree with the Examiner that any of Timans spectral filters 32 or 132, or Gat’s filter 32, are within a chamber and teach a heat sink (in addition to teaching the claimed window), the Examiner does not establish that any of the filters are positioned to be coupled to a substrate to absorb heat from the substrate. *See, e.g.*, Answer 2–3, 6–7; *see, e.g.*, Reply Br. 7. As explained by the Examiner, “Timans[, for example,] further discloses that the heat sink 32 includes a light absorbing agent for absorbing energy in a specific range. As the heat sink 32 absorbs radiation in a given range, it acts as a heat sink for energy in that range.” Answer 6. Be that as it may, the Examiner does not establish that Timans or Gat teaches that any of filters 32 or 132 is coupled to a substrate to absorb heat from the substrate, or that any of filters 32 or 132 is capable of absorbing heat from the substrate. Based on the foregoing, we do not sustain either anticipation rejection of independent claim 1, or either anticipation rejection of claims 2–12 that depend from claim 1.

Appeal 2015-000009  
Application 12/622,736

DECISION

We REVERSE the Examiner's anticipation rejections of claims 1–12.

REVERSED