



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.
14/639,083	03/04/2015	SERGIY VASYLYEV		4100

25945 7590 11/20/2018
SERGIY VASYLYEV
3204 East Pintail Way
ELK GROVE, CA 95757

EXAMINER

SANTIAGO, MARICELI

ART UNIT	PAPER NUMBER
----------	--------------

2879

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

11/20/2018

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):

svasilyev@yahoo.com
svasilyev@svvti.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte SERGIY VASYLYEV

Appeal 2018-000940
Application 14/639,083¹
Technology Center 2800

Before CATHERINE Q. TIMM, JEFFREY B. ROBERTSON, and
SHELDON M. McGEE, *Administrative Patent Judges*.

McGEE, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134, Appellant seeks our review of the
Examiner's rejections of claims 1–17. Br. 6.

We have jurisdiction. 35 U.S.C. § 6.

We affirm.

¹ Appellant identifies SVV TECHNOLOGY INNOVATIONS INC. (DBA LUCENT OPTICS) as the real party in interest. Br. 3.

BACKGROUND

The subject matter on appeal is directed to light directing films used to redirect light. Spec. ¶ 6.

Figure 2 illustrates the claimed subject matter of sole independent claim 1 and is copied below from Appellant's Specification:

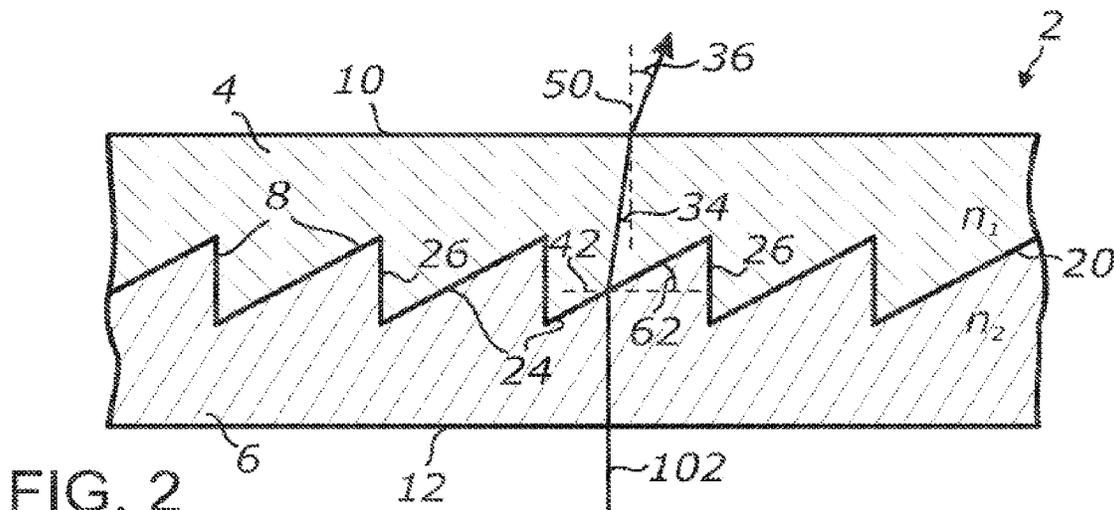


Figure 2 “depicts a schematic cross-section of a portion of light directing film 2.” Spec. ¶52.

Sole independent claim 1 is illustrative of the appealed subject matter, and is copied below from the Claims Appendix to the Appeal Brief, with emphasis added to the limitation central to this appeal:

1. A light directing structure defined by two opposing broad-area surfaces, comprising:
 - a first layer [4] of an optically transmissive solid material having a first refractive index;
 - a second layer [6] of an optically transmissive solid material having a second refractive index different than the first refractive index; and
 - a corrugated optical interface [20] formed between said first and second layers and characterized by a stepped change in a refractive index,

wherein said corrugated optical interface comprises a plurality of facets [24, 26] adjacent to each other and forming different dihedral angles *between 0° and 90°* with respect to a prevailing plane of said first layer, wherein at least one of said facets is configured to redirect light by means of at least refraction or a total internal reflection.

Br. 11 (emphasis added).

REJECTIONS

- I. Claims 1–10, 13, 14, 16, and 17 are rejected under 35 U.S.C. § 102(b) as anticipated by Hatazawa.² Final 2–5.
- II. Claims 1–3, 5–8, 10–12, 14, 15, and 17 are rejected under 35 U.S.C. § 102(b) as anticipated by Okabe.³ Final 5–6.
- III. Claim 15 is rejected under 35 U.S.C. § 103(a) as unpatentable over Hatazawa. Final 7.

OPINION

Appellant focuses its argument on a single limitation appearing in independent claim 1. Br. 6–8. Thus, the anticipation rejection of dependent claims 2–10, 13, 14, 16, and 17 over Hatazawa stands or falls with our disposition of independent claim 1 over Hatazawa. 37 C.F.R. § 41.37(c)(1)(iv). Similarly, the anticipation rejection of dependent claims 2, 3, 5–8, 10–12, 14, 15, and 17 over Okabe, stands or falls with our disposition of the anticipation rejection of independent claim 1 over Okabe. *Id.* We address the anticipation rejections together because Appellant presents the same argument for each anticipation rejection. Br. 6–8.

² US 6,239,851 B1, issued May 29, 2001.

³ US 6,545,827 B1, issued April 8, 2003.

Claim 1

The rejections of claim 1 turn on the broadest reasonable construction of the term “between.” Namely, the dispositive issue is whether the Examiner’s construction of the recited phrase “angles between 0° and 90° with respect to a prevailing plane of said first layer” — which *includes* the endpoints of 0° and 90° — is unreasonably broad in light of the specification. Based on our review of the appeal record, we determine that the Examiner’s claim construction is not unreasonably broad, and thus affirm each of the anticipation rejections of claim 1. Our reasoning follows.

The Examiner finds that each of Hatazawa and Okabe discloses a light directing structure that meets the disputed limitation recited in claim 1. Final 2–3, 5. Specifically, the Examiner finds that Hatazawa’s structure has “adjacent facets [] positioned at two different angles, 90° and at less than 90° due to the facets forming an inequilateral triangle, with respect to the prevailing plane of the first layer.” Final 2 (citing Fig. 17). Similarly, the Examiner finds that Okabe’s structure represented in Figure 10 evinces the recited “dihedral angles between 0° and 90° with respect to a prevailing plane of said first layer.” Final 5.

Appellant’s sole argument is that the structures disclosed in Hatazawa and Okabe do not anticipate claim 1 because the Examiner applied the wrong claim construction to the term “between.” Br. 6–8. Namely, Appellant urges that the Examiner should have applied the “ordinary and customary meaning of the word ‘between’” which dictates that the phrase “between 0° and 90°” excludes the endpoints, leaving only angles “greater than 0° and less than 90°.” Br. 6, 7. Appellant relies on extrinsic evidence to support its position. *Id.* at 6.

In response, the Examiner points to Appellant's Figure 2 and finds that facets 24 and 26 are "adjacent to each other and form[] different dihedral angles (angle 62 *and an angle of 90°*) with respect to a prevailing plane of" the first layer. Ans. 6 (emphasis added). Significantly, this finding goes uncontested by Appellant, i.e., no Reply Brief was filed.

During examination, "the PTO must give claims their broadest reasonable construction *consistent with the specification.*" *In re ICON Health and Fitness, Inc.*, 496 F.3d 1374, 1379 (Fed. Cir. 2007) (emphasis added). While the use of extrinsic dictionary definitions — such as those provided by Appellant (Br. 6) — is appropriate in some circumstances, such extrinsic evidence should not be relied upon to the exclusion of intrinsic evidence, e.g., the Specification itself. Rather, "[s]uch intrinsic evidence is the most significant source of the legally operative meaning of disputed claim language." *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). "[T]he specification is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term." *Id.* In fact, it has been held that "[i]n most situations, an analysis of the intrinsic evidence alone will resolve any ambiguity in a disputed claim term. In such circumstances, it is improper to rely on extrinsic evidence." *Vitronics*, 90 F.3d at 1583.

That is precisely the case here. The Examiner undisputedly finds that the Figure 2 embodiment contained in Appellant's Specification includes two "facets [24, 26] adjacent to each other and forming different dihedral angles" — of which one is a 90° angle — to the prevailing plane of a first layer. Ans. 6. Therefore, it is reasonable for the Examiner to construe the phrase "plurality of facets adjacent to each other and forming different

dihedral angles between 0° and 90° with respect to a prevailing plane of said first layer” as including the 90° endpoint.

For these reasons, and those provided by the Examiner, Appellant has failed to identify reversible error in the Examiner’s anticipation rejections of claim 1 over Hatazawa and Okabe. We, therefore, sustain the Examiner’s anticipation rejections of claim 1, as well as the anticipation rejections of claims 2–17 not separately argued.

Claim 15

Claim 15 depends from claim 1 and additionally requires “the lower of the two refractive indices of said first and second layers [to be] less than 1.49.” Br. 12.

We begin by observing that our affirmance of the anticipation rejection of claim 15, *supra*, compels us to conclude that claim 15 is also obvious, for “[i]t is well settled that ‘anticipation is the epitome of obviousness.’” *In re McDaniel*, 293 F.3d 1379, 1385 (Fed. Cir. 2002) (quoting *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548 (Fed. Cir. 1983)). However, the anticipation rejection of claim 15 sustained above involves Okabe, not Hatazawa as relied on by the Examiner. Final 7.

Appellant argues that Hatazawa does not disclose the limitation requiring the lower refractive index to be “less than 1.49.” Br. 10. This argument is unpersuasive, however, for the well-stated reasons given by the Examiner in the Answer, unaddressed by Appellant. Ans. 6.

We, therefore, sustain the Examiner’s obviousness rejection of claim 15 over Hatazawa.

Appeal 2018-000940
Application 14/639,083

DECISION

The Examiner's final decision to reject claims 1–17 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