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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte FREDRIC S. MAXIK, DAVID E. BARTINE, and ROBERT R. SOLER

Appeal 2019-003056
Application 13/465,781
Technology Center 3700

Before CHARLES N. GREENHUT, MICHAEL J. FITZPATRICK, and MICHAEL L. WOODS, *Administrative Patent Judges.*

GREENHUT, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellants,[1] Fredric S. Maxik et al., appeal from the Examiner's decision to reject claims 1, 2, and 5–47. Final Act. 1. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

[1] We use the word "Appellants" to refer to "Applicants" as defined in 37 C.F.R. § 1.42. Appellants identify the real party in interest as Biological Illumination, LLC, having a place of business at 1227 South Patrick Drive, Building 2A, Satellite Beach, FL 32937. Appeal Br. 2.

CLAIMED SUBJECT MATTER

The claims are directed to a dynamic wavelength adapting device to affect physiological response and associated methods. Claim 1, reproduced below, is illustrative of the claimed subject matter:

> 1. A wavelength converting device for adapting light that includes a source light, the wavelength converting device comprising:
>
> a wavelength conversion material to convert the source light into a converted light, wherein the source light includes a first level of affective light within a biological affective wavelength range that affects a physiological response, and wherein the converted light includes a second level of the affective light within the biological affective wavelength range; and
>
> a controller to control operation between a normal mode and an altered mode, wherein the normal mode is defined by the second level of the affective light being *similar* to the first level of the affective light, and wherein the altered mode is defined by the second level of the affective light differing from the first level of the affective light;
>
> wherein the source light including the first level of the affective light is defined by a first chromaticity;
>
> wherein the converted light including the second level of the affective light is defined by a second chromaticity;
>
> wherein the first chromaticity is a measure of a quality of color of the first level of affective light;
>
> wherein the second chromaticity is a measure of a quality of color of the second level of affective light; and
>
> wherein the first chromaticity is *nearly indistinguishable* from the second chromaticity.

Appeal Br. 13.

REJECTIONS

Claim 1–2 and 5–47 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. Final Act. 4.

Claims 1–2 and 5–47 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Final Act. 6.

OPINION

Indefiniteness

In rejecting the claims under 35 U.S.C. § 112, second paragraph, the Examiner correctly stated:

> The terms "similar" and "nearly indistinguishable" in claim 1 (lines 10 and 21, respectively) and claim 26 (lines 13 and 24, respectively) are relative terms which render the claims indefinite. The term "similar" and "nearly indistinguishable" are not *objectively* and/or *subjectively* defined by the claim, the specification does not provide an *objective* and/or *subjective* standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The limitations "the first level of the affective light," "the second level of the affective light," "first chromaticity," and "second chromaticity" have been rendered indefinite by the use of the terms "similar" and "nearly indistinguishable."

Final Act. 6–7.

There is nothing wrong with using relative terminology and terms of degree in claims, per se, so long as the Specification provides some standards for ascertaining the meaning of those terms and reasonably apprises one skilled in the art of the objective boundaries of the claims. *See*

MPEP § 2173.05(b); *Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1370 (Fed. Cir. 2014). Thus, the terms in question may be perfectly acceptable in an appropriate context. However, Appellants do not explain how this is such a context.

Appellants' response on this point is reproduced below in its entirety:

> Appellants respectfully suggest that the similarity between the first level of affective light and the second level of affective light in the normal mode, as well as the first and second chromaticities being "nearly indistinguishable," are sufficiently definite within the context of the present application so as to be understood by one of ordinary skill in the art. Additionally, a person having skill in the art, particularly one knowing the teaching of the MacAdam reference as described hereinabove, would understand that the term "nearly indistinguishable" is to be understood in the ability of the populace to perceive differences in chromaticities, i.e. color, in light.

Br. 11–12.

The process of patent prosecution is an interactive one, where claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarified. *In re Zletz*, 893 F. 2d 319, 321 (Fed. Cir. 1989). By rejecting the claims as indefinite, the Examiner has invited Appellants to either produce an explanation as to how, based on the Specification, or the knowledge generally available to the skilled artisan, the claim terms would be understood to set objective limits on the claim scope, or enter an amendment to clarify the claim language in question. Appellants have done neither.

Merely stating a counter position, that the claims "*are* sufficiently definite within the context of the present application so as to be understood by one of ordinary skill in the art" (Br. 11 (emphasis added)) does nothing to

explain *how* the claims are definite or clarify *how* they would be understood by the skilled artisan. Appellants do not provide any further discussion of the term "similar" in the context of light levels.

With regard to "chromaticity,"[2] as will be discussed below with regard to the rejection under § 112, first paragraph, it is not clear why MacAdam[3] should be used in this particular context as the standard for ascertaining whether chromaticities are, or are not, "nearly indistinguishable." Appellants' Specification does not appear to contain any mention of MacAdam or discuss any of the specific procedures described by MacAdam. There is also no evidence before us that MacAdam would be

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[2] We note that the phrase "wherein the first chromaticity is nearly indistinguishable from the second chromaticity" does not specify in which mode of operation the chromaticity comparison should be made to satisfy the claim language. This may be merely a matter of breadth if, for example, *any* mode will suffice to satisfy this limitation. However, it seems both the Examiner and Appellants may be importing into this limitation the "altered mode" attribute discussed in the portion of the Specification relied on by Appellants as supporting this limitation. *See* Br. 10 (citing Spec. para. 115 ("the present invention may similarly alter the level of light in the biological affective wavelength range without significantly changing the chromaticity of the converted light")); Ans. 12 ("the instant invention allegedly ensures that the *chromaticity* of the output light is nearly indistinguishable from that of the input light by changing both the *level* and *wavelength* of the input light."). Thus, it seems possible that Appellants may have omitted a limitation necessary to precisely define the invention, namely the mode of operation in which chromaticity is compared. We have not been briefed and do not reach any particular decision on this issue at this time. We note this only so that clarification may be provided in any further prosecution. Although the Board is authorized to reject claims under 37 C.F.R. § 41.50(b), no inference should be drawn when the Board elects not to do so. *See* MPEP 1213.02.

[3] David L. MacAdam, Visual Sensitivities to Color Differences in Daylight, Research Laboratories, Eastman Kodak Company, Rochester, New York, May, 1942.

understood as an art-recognized standard. Even if MacAdam is somehow applicable, Appellants have not provided any cogent explanation as to precisely how MacAdam would be applied to make an objective determination of the necessary degree of similarity between chromaticities for one skilled in the art to regard them as "nearly indistinguishable."

For the foregoing reasons, we sustain the Examiner's rejection under 35 U.S.C. § 112, second paragraph.

Enablement

The stated basis for the Examiner's enablement rejection appears to be premised on a lack of clarity with regard to the same claim language discussed above concerning the indefiniteness rejection. Final Act. 4–5. This is an issue that is more appropriately addressed under the *second* paragraph of 35 U.S.C. § 112 as opposed to the first. *See* MPEP § 2174. The Examiner's approach appears to have been to identify certain ambiguities in the claimed subject matter based, at least in part, on the recited chromaticity comparison and resolve that ambiguity by introducing MacAdam. Final act. 4–6. If there are issues raised by the Examiner that pertain to the enablement requirement of 35 U.S.C. § 112, first paragraph, they, as best as we can understand the Examiner's explanation, appear to be premised on the absence of a disclosure teaching one skilled in the art how to make and use a device that can exhibit chromaticities as identical as those described by MacAdam while altering both light level and wavelength. Final Act. 5; Ans. 10–14. As discussed above, we are not apprised of any reason to, in this context, resort to MacAdam to resolve the uncertainties associated with the claim language in question. Thus, the Examiner's rejection under 35 U.S.C. § 112, first paragraph, is predicated on making

speculative assumptions regarding the claim scope. We do not ultimately reach the merits of the Examiner's rejection because one is not in a position to determine whether a claim is enabled under the first paragraph of 35 U.S.C. § 112 until the metes and bounds of that claim are determined under the second paragraph of this section of the statute. *In re Moore*, 439 F.2d 1232, 1235 (CCPA 1971) ("analysis [] should begin with the determination of whether the claims satisfy the requirements of the second paragraph. It may appear awkward at first to consider the two paragraphs [of § 112] in inverse order but . . . . the claims must be analyzed first in order to determine exactly what subject matter they encompass").

Accordingly, we do not sustain the Examiner's enablement rejection and do not reach the merits of that rejection at this time.

DECISION

The Examiner's indefiniteness rejection is affirmed.

The Examiner's enablement rejection is reversed.

FINALITY AND RESPONSE

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED[4]

[4] "The affirmance of the rejection of a claim on any of the grounds specified constitutes a general affirmance of the decision of the examiner on that claim, except as to any ground specifically reversed." 37 C.F.R. § 41.50(a)(1).