

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* SIU-PING HONG,  
STEVEN ALAN JACOBS, DAVID KALISH,  
ALBERT JOHN RITGER, and IAN A. WHITE

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Appeal 2008-3629  
Application 10/407,298  
Technology Center 1700

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Decided: January 13, 2009

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Before EDWARD C. KIMLIN, PETER F. KRATZ, and  
LINDA M. GAUDETTE, *Administrative Patent Judges*.

GAUDETTE, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1-3, 7, 9, 14, 17, and 25-28. (Second Corrected Appeal Brief “Br.” 2, III.) We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

Claim 1 is illustrative of the invention and is reproduced below:

1. Method for manufacture of a lightguide device, comprising:

directionally solidifying a solid body from a fluid across a solidifying interface between the solid body and the fluid, the device including a glass lightguide comprising a core and a cladding, and the lightguide containing a series of geometric perturbations for provoking mode coupling,

CHARACTERIZED IN THAT

the method comprises introduction of at least one acoustic wave in the fluid by means of an acoustic generator which is acoustically coupled with the fluid, whereby the acoustic wave introduces periodic deformations into the solidifying body, such deformations comprising said geometric perturbations.

Appellants request review of the sole ground of rejection: claims 1-3, 7, 9, 14, 17, and 25-28 under 35 U.S.C. § 112, second paragraph, as indefinite (Ans. 3, (9)).

ISSUE

Have Appellants shown that the Examiner reversibly erred in finding that the claim term “acoustic wave” renders the claims indefinite?

We answer this question in the affirmative.

FINDINGS OF FACT

1. The Examiner finds that the Specification contains an explicit definition of the term “acoustic wave” as an “elastic wave” (Ans. 4:1-2 (citing Spec. 9:13-14)).
2. The Specification includes a section entitled “**Terminology**” which is followed by the statement “(Meanings of terms, always consistent

- with common usage, are sometimes more specific.)” (Spec. 7:1-2.)
3. The Terminology section of the Specification includes the following statement: “**Acoustic wave** – Refers to an elastic wave, whether or not in the audible range, which may be introduced into the fluid region via ambient or solidified glass.” (Spec. 9:13-14.)
  4. The Examiner finds that “an elastic wave is a wave in a solid body.” (Ans. 4:3.)
  5. Claim 1 recites a method which includes “introduction of at least one acoustic wave in the fluid by means of an acoustic generator which is acoustically coupled with the fluid.”
  6. The Examiner contends that “one of ordinary skill would not be able to understand what the claim requires” (Ans. 4:9-10) because claim 1 “requires two inconsistent things: 1) that the wave be in a solid and 2) that [it] is in a fluid” (Ans. 4:7-8).
  7. The Examiner does not dispute Appellants’ assertion that the ordinary meaning of “acoustic wave” is “[a] longitudinal wave that [] consists of a sequence of pressure pulses or elastic displacements of the material, whether gas, liquid, or solid.” (Br. 4 (quoting Exhibit B)). (*See, e.g.*, Ans. 6 (noting that the rejection is based on Appellants’ definition “and any other definition for ‘acoustic wave’ is largely irrelevant”).)
  8. The Examiner does not respond to Appellants’ assertion that “the term [‘acoustic wave’] is used consistently throughout the specification” (Br. 6:11-12). Nor does the Examiner comment on the portions of the Specification relied on by Appellants as supporting interpretation of

- the claim 1 term “acoustic wave” in accordance with its ordinary meaning (Br. 2, ¶V<sup>1</sup>). (*See generally*, Ans. 4-8, (10).)
9. The Specification states that “[i]n accordance with the invention, an acoustic generator serves for introduction of an acoustic wave into the fluid during fabrication.” (Spec. 5:6-8.)
  10. The “**Detailed Description**” section of the Specification includes a description of generating geometric deformations “by means of an acoustic wave generator, acoustically coupled with, and introducing appropriate acoustic wave energy into the fluid region – in the instance of fiber fabrication, into the fluid draw region.” (Spec. 10:12-15.)
  11. The Specification describes Figure 1 as “showing localized acoustic coupling of wave energy in transverse direction relative to the fiber axis.” (Spec. 16:1-3.)
  12. Figure 1 shows a process in which a preform 10 undergoes heating by a heat source 11 to liquefy and permit drawing reduction of fiber in a fluid region 12. (Spec. 16:11-13.) “Alternative means for introduction of the acoustic wave – ultimately into fluid region 12 . . . are shown: 1) via ambient by means of an acoustic generator . . . 17a/18a . . . , and[] 2) via solid material – i.e., via preform 10, 20 by means of oscillator/transducer 17b/18b . . . ” (Spec. 16:15-18.)
  13. In addition to the foregoing citations to the Specification, the Specification includes additional description (in connection with the inventive process) relating to introduction of acoustic waves in fluid.

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<sup>1</sup> FF 9-12, *infra*, are among the portions of the Specification relied upon by Appellants.

## PRINCIPLES OF LAW

35 U.S.C. § 112, second paragraph, provides that “[t]he specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.” A claim is considered indefinite if it does not reasonably apprise those skilled in the art of its scope. *Amgen, Inc. v. Chugai Pharm. Co., Ltd.*, 927 F.2d 1200, 1217 (Fed. Cir. 1991); *see also, In re Venezia*, 530 F.2d 956, 958 (CCPA 1976) (relevant inquiry under § 112, second paragraph, is whether the claims delineate to a skilled artisan the bounds of the invention).

In general, words used in a claim are accorded their ordinary and customary meaning. *Honeywell Int'l Inc. v. Universal Avionics Sys. Corp.*, 488 F.3d 982, 992 (Fed. Cir. 2007). “[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc). In interpreting claim terms, we rely on the written description for guidance in ascertaining the scope and meaning of the claims. *See id.* at 1317.

A patentee “may demonstrate an intent to deviate from the ordinary and accustomed meaning of a claim term by including in the specification expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope.” *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002); *accord Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003) (“A patent applicant may consistently and clearly use a term in a manner either more or less expansive than its general usage in the relevant art, thereby expanding or limiting the scope of the term in the context of the patent claims.”) However, the scope of a claim term

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should only be limited based on an express disclaimer of a broader definition. *In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004).

### ANALYSIS

Appellants have persuasively argued that the Examiner reversibly erred in finding the appealed claims indefinite. The Examiner's position is based on a finding that the Specification provides an explicit definition for the term "acoustic wave." However, we are in agreement with Appellants that the two lines of the Specification referenced by the Examiner do not demonstrate an intent on the part of the Appellants to deviate from the ordinary and accustomed meaning of the term "acoustic wave." Rather, we find that the term "acoustic wave" has been used consistently and clearly throughout the Specification in a manner consistent with what Appellants contend is the ordinary meaning in the art.

### CONCLUSION

The decision of the Examiner rejecting claims 1-3, 7, 9, 14, 17, and 25-28 is reversed.

REVERSED

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