

The opinion in support of the decision being entered today  
is *not* binding precedent of the Board

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* CHELLAPPA BALAN  
and DANIEL PRESTON SMITH

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Appeal 2007-0909  
Application 10/881,407  
Technology Center 1700

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Decided: July 25, 2007

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Before CHUNG K. PAK, CHARLES F. WARREN, and  
THOMAS A. WALTZ, *Administrative Patent Judges*.

WARREN, *Administrative Patent Judge*.

DECISION ON APPEAL

Applicants appeal to the Board from the decision of the Primary Examiner finally rejecting claims 10 through 15 in the Final Office Action mailed September 23, 2005. 35 U.S.C. §§ 6 and 134(a)(2002); 37 C.F.R. § 41.31(a)(2005).

We reverse the decision of the Primary Examiner.

Claim 10 illustrates Appellants' invention of a system for producing electricity, and is representative of the claims on appeal:

10. A system for producing electricity, comprising:
  - a gasifier operable to produce a fuel gas from a solid fuel for reaction in a fuel cell; and
    - a fuel cell operable to receive the fuel gas from the gasifier and to produce electricity from a reaction between the fuel gas and an oxidant, wherein unreacted fuel gas from the fuel cell is recirculated through the fuel cell;
    - wherein the unreacted fuel gas from the fuel cell is configured to exchange heat to produce steam.

The Examiner relies on the evidence in this reference:

Keefer US 2004/0131912 A1 Jul. 8, 2004

Appellants request review of the ground of rejection of claims 10 through 15 under 35 U.S.C. § 102(e) as anticipated by Keefer (Answer 3-5; Br. 4).

The primary issue in this appeal is the interpretation to be made of the limitation "wherein the unreacted gas from the fuel cell is configured to exchange heat to produce steam" in claim 10. During prosecution before the USPTO, a claim is interpreted by giving the terms thereof the broadest reasonable interpretation in their ordinary usage in context as they would be understood by one of ordinary skill in the art, in light of the written description in the Specification unless another meaning is intended by Appellants as established therein, and without reading into the claim any disclosed limitation or particular embodiment. *See, e.g., In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364, 70 USPQ2d 1827, 1830 (Fed. Cir. 2004); *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000); *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027 (Fed.

Cir. 1997); *In re Zletz*, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989). The Examiner has the burden of interpreting a claim as the first step in determining whether the subject matter as claimed satisfies statutory requirements.

The Examiner does not interpret the subject limitation in the Answer. In response to Appellants' statement in the Amendment filed August 19, 2005, that "claim 10 is amended to include the heat integration of the fuel cell anode exhaust" as explained with reference to "Fig. 1 of the present application" (Amendment 7), the Examiner states "Applicant is [sic] reminded that limitations of the specification cannot be read into the claims" (Final Office Action 5). Appellants provide the same explanation in the Brief (Br. 3 and 5). The Examiner's view of the scope of claim 10 is not apparent from the statement of the ground of rejection and indeed, Appellants contend the Examiner exhibits a "continuing pattern of misapplying the teachings of the prior art beyond its reasonable limits in order to reach subject matter taught and claimed by Appellants" (Reply Br. 1).

We agree with the Examiner that ordinarily the limitations of a particular embodiment are not read into a claim. *See, e.g., Zletz*, 893 F.2d at 321-22, 13 USPQ2d at 1322. However, the difficulty we have with claim 10 in any event is that we cannot find any basis in the claim language or in the written description in the Specification to guide our interpretation of the language "the unreacted gas . . . is *configured to exchange heat* to produce steam" (emphasis supplied). Indeed, the only language in the Specification which appears to apply to such "gas" and a means to "exchange heat" to

“produce steam” is the disclosure of transferring heat from “spent fuel 50” via “heat exchanger 54” to “liquid water 32” to form “steam 34” as illustrated in Fig. 1, which is the basis for Appellants’ statement that “claim 10 includes” the sole disclosed embodiment (Specification 6: ¶ 0021; Br. 3 and 5). This disclosure involves the flow of the “gas” through the system, not how the “gas” is “configured to exchange heat.” We fail to find language in any of dependent claims 11 through 15 which cures this matter. Appellants do not further state what, in their view, claim 10 further “includes.” Thus, on this record, Appellants have not carried their burden of defining the invention in a definite manner. *Morris*, 127 F.3d at 1055-56, 44 USPQ2d at 1029 (“It is the applicants’ burden to precisely define the invention, not the PTO’s. *See* 35 U.S.C. § 112 ¶ 2.” (statute omitted)).

Therefore, on this record, we determine that when the language of independent claim 10 and dependent claims 11 through 15 is considered as a whole as well as in view of the written description in the Specification as it would be interpreted by one of ordinary skill in the art, the claims in fact fail to set out and circumscribe a particular area with a reasonable degree of precision and particularity, *see In re Moore*, 439 F.2d 1232, 1235, 169 USPQ 236, 238 (CCPA 1971), such that “those skilled in the art would understand what is claimed when the claim is read in light of the specification.” *See The Beachcombers, Int’l. v. WildeWood Creative Prods.*, 31 F.3d 1154, 1158, 31 USPQ2d 1653, 1656 (Fed. Cir. 1994) (*quoting Orthokinetics, Inc v. Safety Travel Chairs Inc.*, 806 F.2d 1565, 1576, 1 USPQ2d 1081, 1088 (Fed. Cir. 1986)); *see also In re Warmerdam*, 33 F.3d 1354, 31 USPQ2d 1754, 1759 (Fed. Cir. 1994).

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Accordingly, on this record, the scope of claims 10 through 15 is so indefinite under § 112, second paragraph, as to require speculation as to the metes and bounds of the claimed subject matter, and thus, because the claims cannot be analyzed to determine whether they are patentable over Keefer, the ground of rejection over this reference cannot be supported. *See, e.g., In re Steele*, 305 F.2d 859, 862-63, 134 USPQ 292, 295 (CCPA 1962) (rejection over prior art cannot be based on speculation and assumptions as to the scope of the claims).

Therefore, on this record, we reverse the ground of rejection of claims 10 through 15 under 35 U.S.C. § 102(e) over Keefer *pro forma*.

The Primary Examiner's decision is reversed.

#### OTHER ISSUES

We decline to exercise our authority under 37 C.F.R. § 41.50(b) (2006) and enter a new ground of rejection of claims 10 through 15, under 35 U.S.C. § 112, second paragraph, leaving this matter to the Examiner to consider upon any further prosecution of the appealed claims subsequent to the disposition of this appeal.

REVERSED

sld/ls

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