

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* STANLEY JOHN BECKER, TIMOTHY CRISPIN BRISTOW,  
ROBERT WILLIAM CLARKE, DEREK ALAN COLMAN, DAVID  
NEWTON, IAN ALLAN BEATTIE REID and BRUCE LEO WILLIAMS

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Appeal 2008-3069  
Application 09/877,249  
Technology Center 1700

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Decided: August 28, 2008

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Before THOMAS A. WALTZ, CATHERINE Q. TIMM, and  
JEFFREY T. SMITH, *Administrative Patent Judges*.

SMITH, *Administrative Patent Judge*.

COMBINED ORDER REMANDING TO THE EXAMINER AND  
ORDER UNDER 37 C.F.R. § 41.50(d)(1)

Appellants appeal the Examiner's final rejection of claims 1, 2, 5, 6, 10-16, 18-20, 47, 48, 51, 52, 54-60 and 62-64. Because the issues are not ripe for appeal, we remand this application to the Examiner.

We order both the Examiner and the Appellants to take appropriate action consistent with the views expressed below. We return this application to the Examiner's jurisdiction for purposes of properly interpreting the claims on appeal and reevaluating the Examiner's § 103 rejections based on the properly interpreted claims.

The subject matter on appeal relates to an apparatus for introducing a molecular oxygen-containing gas into a reactor containing a solid catalyst for a heterogeneous gas phase reaction and to processes in which a molecular oxygen-containing gas is introduced into a reactor containing a solid catalyst for a heterogeneous gas-phase reaction. (Spec. 1). Further details of the appealed subject matter are provided in independent claims 1 and 47 which are reproduced below, as presented in the Brief:

1. A reactor for containing a solid catalyst for a heterogeneous gas-phase reaction said reactor being a fluid bed reactor comprising:
  - a grid;
  - more than one inlet pipes for a molecular oxygen-containing gas extending into said reactor;
  - surround means for surrounding a substantial portion of said inlet pipes in said reactor with an inert gas; and
  - means for detecting a change in pressure of said inert gas surrounding said inlet pipes;
  - wherein the surround means are provided with a supply of an inert gas, and further wherein the inert gas surrounding the inlet pipes is sealed.
47. A reactor for containing a solid catalyst for a heterogeneous gas-phase reaction said reactor being a fluid bed reactor comprising:
  - a grid;
  - more than one inlet pipes for a molecular oxygen-containing gas extending into said reactor;

surround means for surrounding a substantial portion of said inlet pipes in said reactor with an inert gas; and  
means for detecting a change in pressure of said inert gas surrounding said inlet pipes;  
wherein the surround means is provided with a limited supply of inert gas sufficient to replace minor leaks.

Any initial inquiry into the propriety of the Examiner's prior art rejection requires the determination the precise scope of the claimed subject matter. *In re Paulsen*, 30 F.3d 1475, 1479 (Fed. Cir. 1994). Generally, we give the broadest reasonable interpretation to the terms in the claims consistent with the Appellants' Specification. *In re Morris*, 127 F.3d 1048, 1054-55 (Fed. Cir. 1997). When the claim terms are written in a "means-plus-function" format, however, we interpret them as limited to the corresponding structures described in the Specification or equivalents thereof consistent with § 112, sixth paragraph. *In re Donaldson Co., Inc.*, 16 F.3d 1189, 1193 (Fed. Cir. 1994) (en banc). This interpretation is appropriate only if the claimed means-plus-function elements do not include sufficient structural limitations for performing the claimed functions, thus invoking § 112, paragraph 6. *Al-Site Corp. v. VSI Int'l, Inc.*, 174 F.3d 1308, 1319 (Fed. Cir. 1999).

As stated by our reviewing court in *B. Braun Med., Inc., v. Abbott Labs.*, 124 F.3d 1419, 1424 (Fed. Cir. 1997):

[S]tructure disclosed in the specification is 'corresponding' structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim. This duty to link or associate structure to function is the *quid pro quo* for the convenience of employing § 112, 6.

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In *Atmel Corp. v. Info. Storage Devices, Inc.*, 198 F.3d 1374, 1382 (Fed. Cir. 1999), our reviewing court further stated that the particularity requirement of 35 U.S.C. § 112, second paragraph, requires that

the corresponding structure(s) of a means-plus-function limitation . . . [is] disclosed in the written description in such a manner that one skilled in the art will know and understand what structure corresponds to the means limitation. Otherwise, **one does not know what the claim means.** (Emphasis added.)

The structures equivalent to the corresponding structures described in the Specification include those which

- 1) perform substantially the same function in substantially the same way to produce substantially the same result, *Odetics, Inc. v. Storage Tech. Corp.*, 185 F.3d 1259, 1267 (Fed. Cir. 1990);
- 2) have insubstantial differences, *Valmount Indus., Inc. v. Reinke Mfg. Co., Inc.* 983 F.2d 1039, 1042-44 (Fed. Cir. 1993);
- 3) are structurally equivalent, *In re Bond*, 910 F.2d 831 (Fed. Cir. 1990); and
- 4) a person having ordinary skill in the art would have recognized as interchangeable, *Al-Site Corp. v. VSI Int'l, Inc.*, 174 F.3d at 1316.

Here, the appealed claims recite various means plus function limitations including “surround means” for surrounding a substantial portion of said inlet pipes in said reactor with an inert gas; and “means for detecting a change in pressure.”

On the present record, Appellants, when addressing claims 1 and 47, have argued the specific means-plus-function limitation (Br. 9). The record is not clear whether the means-plus-function limitations invoke § 112, paragraph 6. While the Appellants have identified the “means” clauses in

the claim and pointed to disclosure with respect thereto in the specification in the Summary of Claimed Subject Matter in the Brief (Br. 7), the disclosure pointed to does not identify the corresponding structures. *See* 37 C.F.R. § 41.37(c)(1)(v) (2005). Thus, the Examiner is left to interpret the claims with respect to the corresponding structures described in the Specification or equivalents thereof. If these means-plus-function limitations must be interpreted as the corresponding structures described in the Specification or equivalents thereof, the Examiner and the Appellants must indicate what structures in the Specification, if any, correspond to the above means-plus-function limitations, and the Examiner must further indicate what prior art structures, if any, are equivalent to the above means-plus-function limitations.

Implicit in these requirements is that both the Examiner and the Appellants must indicate whether the “corresponding” structures in the specification are described in a manner that would satisfy the definiteness requirement of 35 U.S.C. § 112, second paragraph.

Therefore, pursuant to 37 C.F.R. § 41.50(d)(1) (2004), we order the Appellants to file a supplemental paper to explain whether or not the claimed means-plus-function limitations invoke §112, paragraph 6, and if invoked, specify what the structures in the Specification are encompassed by the means-plus-function limitations. The Appellants shall specify a portion of the Specification relied upon to show the structures corresponding to the claimed means-plus-function limitations and shall explain why the structures relied upon are considered “corresponding” within the meaning of *B. Braun Med., Inc., supra* and *Atmel Corp., supra*.

Upon receiving the Appellants' supplemental paper (if submitted), the Examiner is to determine whether the claimed means-plus-function limitations invoke §112, paragraph 6, and if invoked, what structures, if any, in the Specification correspond to the claimed means-plus-function limitations. This evaluation necessarily requires the Examiner to determine whether the claim language and the corresponding structures described in the Specification are in compliance with the definiteness requirement of 35 U.S.C. 112, second paragraph. In other words, the Examiner must ascertain the correctness of the Appellants' response to our Order pursuant to 37 C.F.R. § 41.50(d) (2004).

Once the claim scope is properly defined, the Examiner must reevaluate the content of the applied prior art and determine whether it still renders the claimed subject matter unpatentable within the meaning of 35 U.S.C. §§ 102 and/or 103. The Examiner must determine whether the prior art structures are identical or "equivalent" to the corresponding structures described in the Specification. The Examiner is authorized to submit a supplemental examiner's answer containing the above analyses if such analyses do not constitute a new ground of rejection.

If the Examiner determines that such analyses change the thrust of the Examiner's § 102 and § 103 rejections or determine that the claims are indefinite and/or obvious under different statutory grounds, the Examiner must reopen the prosecution of this application to include such new grounds of rejection so that Appellants are given an opportunity to respond pursuant to the procedural due process requirement

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## CONCLUSION

In summary, the Appellants are given **a non-extendable time period of two (2) months** from the mailing date of this order to file a Supplemental Paper. **FAILURE TO RESPOND WITHIN THE GIVEN TIME PERIOD WILL RESULT IN THE DISMISSAL OF THE APPEAL.**

The instant application is remanded to the Examiner to consider the aforementioned issues and act accordingly.

This Remand to the Examiner pursuant to 37 C.F.R. § 41.50(a)(1) (2004) is made for further consideration of a rejection. Accordingly, 37 C.F.R. § 41.50(a)(2) applies if a supplemental examiner's answer is written in response to this remand by the Board.

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

**REMANDED AND**  
**ORDER UNDER 37 C.F.R. § 41.50(d)(1)**

tc/cam

NIXON & VANDERHYE, PC  
901 NORTH GLEBE ROAD, 11<sup>TH</sup> FLOOR  
ARLINGTON, VA 22203