

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte BRIAN A. VAARTSTRA

Appeal 2007-0918
Application 10/931,868
Technology Center 1700

Decided: June 19, 2007

Before CHUNG K. PAK, THOMAS A. WALTZ, and
JEFFREY T. SMITH, *Administrative Patent Judges*.

SMITH, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from a final rejection of claims 1-30. We have jurisdiction under 35 U.S.C. § 6 (2006).

According to Appellant, the invention is directed to a chemical vapor deposition system including a deposition chamber, and a vessel containing a precursor composition (Br. 2). Claim 1 is illustrative of the invention and is reproduced below:

1. A chemical vapor deposition system comprising:

a deposition chamber;

a vessel comprising a precursor composition comprising two or more miscible liquid complexes of the formula;



wherein:

M is a metal;

each L group is independently a neutral ligand containing one or more Lewis-based donor atoms;

each Y group is independently an anionic ligand;

y= a nonzero integer; and

z= a nonzero integer corresponding to the valence state of the metal; and further wherein there are at least two different L groups present in the precursor composition.

The Examiner has relied upon the following prior art reference as evidence of unpatentability:

Baum US 5,919,522 Jul. 6, 1999

Claims 1-30 stand rejected under 35 U.S.C. § 102(e) as anticipated by Baum (Answer 3).

Appellant contends that the chemical vapor deposition apparatus of Baum does not include a vessel comprising a precursor composition as specified in the claimed invention (Br. 5).

The Examiner contends that, for the purposes of this invention, the “claims are drawn to an apparatus and have been treated as apparatus claims during prosecution of the instant application” (Answer 3).

The Examiner contends that Baum teaches an apparatus for vapor deposition that consists of a deposition chamber with the substrate and a vessel outside of the chamber that connects to the chamber for the precursor composition.

Accordingly, we determine that the issue presented on the record in this appeal is as follows: Has the Examiner established that the Baum reference describes a chemical vapor deposition system that comprises a deposition chamber and a vessel containing a precursor composition as specified in the independent claims?

We determine that the Examiner has not established a *prima facie* case of anticipation. Therefore, we REVERSE the rejection on appeal essentially for the reasons stated in the Briefs, as well as those reasons set forth below.

Implicit in our review of the Examiner’s anticipation analysis is that the claim must first have been correctly construed to define the scope and meaning of each contested limitation. *See Gechter v. Davidson*, 116 F.3d 1454, 1457, 43 USPQ2d 1030, 1032 (Fed. Cir. 1997). During prosecution before the Examiner, the claim language should be given its broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account any definitions or enlightenment contained in the written description of Appellant’s specification.

We determine that the claims on appeal are directed to a system which is a combination of a deposition chamber and a vessel containing a precursor

composition.¹ The Examiner incorrectly asserts that the claimed invention is directed to an apparatus (Answer 3).

The Examiner has found that Baum describes a chemical vapor deposition apparatus comprising a deposition chamber and in communication with the chamber a vessel outside of the chamber for holding a precursor composition (Answer 3). The Examiner does not make any factual determination regarding the components of the precursor composition which is part of the claimed system.² Moreover, the Baum reference does not describe the same precursor composition specified in the independent claims.³ As such, we determine that the Examiner has failed to identify all the limitations of the appealed claims and has not established a *prima facie* case of anticipation.⁴

For the foregoing reasons and those stated in the Briefs, we determine that Baum does not describe every limitation recited in the independent claims on appeal. Therefore, we reverse the rejection of claims 1 to 30 under § 102(e) over Baum.

¹ The preamble of the independent claims and the Specification indicate that the vessel containing the claimed precursor composition is in fluid communication with the deposition chamber.

² The Examiner contends that the type of material in the vessel does not impart any changes to the apparatus (Answer 3).

³ Appellant contends that the chemical vapor deposition system of Baum differs in the precursor composition (See Briefs generally).

⁴ A claimed invention is anticipated under 35 U.S.C. § 102 when all of the elements of the claimed invention are found in one reference. *See Scripps Clinic & Research Found. v. Genentech Inc.*, 927 F.2d 1565, 1576, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991). The prior art reference must disclose every limitation of the claimed invention, either explicitly or inherently. *In re Schreiber*, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1432-33 (Fed. Cir. 1997).

New Ground of Rejection

We exercise our authority pursuant to 37 C.F.R. § 41.50(b) to enter the following new ground of rejection:

Claims 1-30 are rejected under obviousness-type double patenting as unpatentable over claims 1-28 of US Patent 6,273,951 (Vaartstra ‘951) in view of Baum and claims 1-28 of US Patent 6,821,341 (Vaartstra ‘341) in view of Baum.

The claims of both Vaartstra ‘951 and Vaartstra ‘341 describe (1) a method of manufacturing a semiconductor structure utilizing a chemical vapor deposition precursor composition and (2) chemical vapor deposition precursor compositions. The precursor composition of the Vaarstra patents is the same as the precursor composition utilized in the system of the present application. As indicated above, Baum describes a chemical vapor deposition system that differs from the claimed invention in the description of the precursor composition.

Given the above teachings, a person of ordinary skill in the art would have reasonably expected that (1) the apparatus described by Baum would have been useful for the method of manufacturing a semiconductor structure as described in Vaartstra ‘951 and Vaartstra ‘341 and (2) the chemical vapor deposition precursor composition of Vaartstra ‘951 and Vaartstra ‘341 would have been suitable for use in the system of Baum. Consequently, we determine that claims 1-30 are patentably indistinct from the claims of Vaartstra ‘951 and Vaartstra ‘341.⁵

⁵ We note that Appellant acknowledges that a restriction requirement was not made in the prosecution of the applications that led to the Vaartstra ‘951 and Vaartstra ‘341 patents (Reply Br. 3).

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This decision contains a new ground of rejection pursuant to 37 C.F.R. § 41.50(b). 37 C.F.R. § 41.50(b) provides that, “A new ground of rejection shall not be considered final for purposes of judicial review.”

37 C.F.R. § 41.50(b) also provides that the Appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination:

(1) Reopen prosecution. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . .

(2) Request rehearing. Request that the proceedings be reheard under § 41.52 by the Board upon the same record. . . .

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv) (2006).

REVERSED/37 C.F.R. § 41.50(b)

clj

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