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PPG INDUSTRIES, INC.  
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One PPG Place  
Pittsburgh, PA 15272

EXAMINER
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BAND, MICHAEL A

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PAPER

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* JAMES P. THIEL

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Appeal 2012-004927  
Application 10/841,986  
Technology Center 1700

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Before CHARLES F. WARREN, TERRY J. OWENS, and  
CATHERINE Q. TIMM, *Administrative Patent Judges*.

OWENS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

The Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1-8, 10-13 and 18, which are all of the pending claims. We have jurisdiction under 35 U.S.C. § 6(b).

*The Invention*

The Appellant claims a method for coating a substrate with a metal layer and a metal oxide layer in a single zone of a magnetron sputtered vacuum deposition (MSVD) coater. Claim 1 is illustrative:

1. A method of coating a substrate with a metal layer and a metal oxide layer in a single zone of a MSVD coater, comprising:

providing a first bay of a zone including a first target comprising a first metal to deposit a metal coating layer;

providing a second bay of the zone including a second target comprising one or more metals to provide a metal oxide coating layer; and

pumping a reactive gas selected from oxygen or nitrogen into the zone;

wherein the second target has a  $\Delta G$  of equal to or less than -160 kcal/mole O<sub>2</sub> or the difference in  $\Delta G$  between the first target and the second target is at least 60 kcal/mole O<sub>2</sub>.

*The References*

Iida	US 5,085,926	Feb. 4, 1992
Lemmer	US 6,336,999 B1	Jan. 8, 2002
Arbab	US 6,495,251 B1	Dec. 17, 2002

MERRIAM-WEBSTER DICTIONARY (2011), at <http://www.merriam-webster.com/dictionary/bay?show=2&t=1297792640> (hereinafter Merriam-Webster).

*The Rejections*

The claims stand rejected as follows: claims 1-3 and 13 under 35 U.S.C. § 102(b) over Lemmer, claim 10 under 35 U.S.C. § 102(b) over Lemmer as evidenced by Merriam-Webster, claim 4 under 35 U.S.C. § 103 over Lemmer, claims 5-8 under 35 U.S.C. § 103 over Lemmer in view of Arbab, claims 11 and 12 under 35 U.S.C. § 103 over Lemmer in view of Merriam-Webster and Iida, and claim 18 under 35 U.S.C. § 103 over Lemmer in view of Iida.

OPINION

We reverse the rejections. We need to address only the independent claims, i.e., claims 1 and 18.<sup>1</sup>

*Claim 1*

The Examiner argues that Lemmer's targets made of silver (28) and silicon (30) correspond, respectively, to the Appellant's first and second targets in a single zone (Ans. 4).

As stated and illustrated by Lemmer, targets 28 and 30 are in different zones, i.e., target 28 is in zone 2 and target 30 is in zone 3 (col. 5, ll. 3-5; Fig. 5).

The Examiner states, without providing supporting evidence, that "a common definition of 'zone' is a region or area set off as distinct from surrounding or adjoining parts" (Ans. 12). The Examiner argues that Lemmer's coating line (58) which includes three zones (col. 5, l. 6; Figs. 4,

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<sup>1</sup> The Examiner does not rely upon Merriam-Webster or Arbab for any disclosure that remedies the deficiency in the references applied to the independent claims (Ans. 5-8).

5) is a large zone and that both targets 28 and 30 are in that large zone (Ans. 12).

“ “[D]uring examination proceedings, claims are given their broadest reasonable interpretation consistent with the specification.” *In re Translogic Tech. Inc.*, 504 F.3d 1249, 1256 (Fed. Cir. 2007) (quoting *In re Hyatt*, 211 F.3d 1367, 1372 (Fed. Cir. 2000)). The Examiner’s argument is not persuasive because the Examiner has not addressed the Appellant’s Specification and explained how the broadest reasonable interpretation of the Appellants’ claim term “zone” consistent with the Specification includes a coating line containing multiple zones.

*Claim 18*

The Examiner’s rejection of claim 18, which requires silver, titanium and aluminum/silicon targets in a single zone, is deficient for the reason given above regarding the rejection of claim 1.

Accordingly, we reverse the Examiner’s rejections.

DECISION/ORDER

The rejections of claims 1-3 and 13 under 35 U.S.C. § 102(b) over Lemmer, claim 10 under 35 U.S.C. § 102(b) over Lemmer as evidenced by Merriam-Webster, claim 4 under 35 U.S.C. § 103 over Lemmer, claims 5-8 under 35 U.S.C. § 103 over Lemmer in view of Arbab, claims 11 and 12 under 35 U.S.C. § 103 over Lemmer in view of Merriam-Webster and Iida, and claim 18 under 35 U.S.C. § 103 over Lemmer in view of Iida are reversed.

It is ordered that the Examiner’s decision is reversed.

REVERSED

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