

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

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* JOANN H. SQUIER

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Appeal 2006-2814  
Application 10/331,582  
Technology Center 1700

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Decided: January 10, 2007

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Before EDWARD C. KIMLIN, THOMAS A. WALTZ, and LINDA M. GAUDETTE, *Administrative Patent Judges*.

GAUDETTE, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal involves claims 1, 3-7, 11-15, and 17, the only claims pending in this application. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 134.

## INTRODUCTION

The invention relates to die cut or patch metallized labels for use with cold glue, and to films for making such labels. According to the specification, cold glue adhesives are widely used for application of labels to containers. Specification, para. [0004]. The labels are generally multi-layer structures as shown, for example, in Figure 1.

Claims 1 and 4 are illustrative:

1. A metallized thermoplastic label comprising:

(a) a first skin layer comprising a thermoplastic and a first cavitating agent, wherein the first skin layer has a first side and a second side, the first skin layer is cavitated, and the first side of the first skin layer is adapted to be used in contact with a cold glue adhesive;

(b) a core layer comprising polypropylene and a second cavitating agent, wherein the core layer has a first side and a second side, and the first side of the core layer is adjacent to the second side of the first skin layer; and

(c) a second skin layer comprising polypropylene, wherein the second skin layer has a first side and a second side, the first side of the second skin layer is adjacent to the second side of the core layer, and the second side is metallized,

wherein said second cavitating agent has a median particle size of 1.5 microns or less and said metallized surface has a bright mirrored appearance.

4. A metallized thermoplastic label comprising:

(a) a first skin layer comprising a thermoplastic and a first cavitating agent, wherein the first skin layer has a first side and a second side, the first skin layer is cavitated, and the first side of the first skin layer is adapted to be used in contact with a cold glue adhesive;

(b) a core layer comprising polypropylene and a second cavitating agent, wherein the core layer has a first side and a second side, and the first side of the core layer is adjacent to the second side of the first skin layer; and

(c) a second skin layer comprising polypropylene, wherein the second skin layer has a first side and a second side, the first side of the second skin layer is adjacent to the second side of the core layer, and the second side is metallized,

wherein said second cavitating agent has a median particle size of 2 microns or more,

and further wherein, prior to metallization, said second skin layer has a surface roughness  $R_a$  of from 0.3 to 1.3 microns, and wherein said metallized surface has a less bright mirrored appearance than a comparative metallized thermoplastic label of identical structure, except that the comparative metallized thermoplastic label has a second cavitating agent with a median particle size of 1.5 microns or less, and except that the comparative metallized thermoplastic label, prior to metallization, has a second skin layer with a surface roughness  $R_a$  of from 0.1 to 0.3 microns.

The Examiner relies on the following prior art references to show unpatentability:

Marotta	US 5,888,640	Mar. 30, 1999
Marks	US 2001/0036542 A1	Nov. 1, 2001

The rejections as presented by the Examiner are as follows:

1. Claims 4 and 5 are rejected under 35 U.S.C. § 112, ¶ 1.
2. Claims 1, 3-7, 11-15, and 17 are rejected under 35 U.S.C. § 103(a) as unpatentable over Marks in view of Marotta.

We reverse as to both grounds of rejection.

## OPINION

### *Rejection of claims 4 and 5 under 35 U.S.C. § 112, ¶ 1*

According to the Examiner, the specification, as originally filed, does not provide support for the recitation "surface roughness  $R_a$  of from 0.3 to 1.3 microns" in claim 4. Answer 3. In particular, the Examiner maintains that while the ranges of 0.3 to 0.8 microns and 1.0 to 1.3 microns for the surface roughness  $R_a$  are clearly shown in paragraph [0023] of the Specification, there is no support for the range of 0.8 to 1.0 microns.

Answer 12.

Paragraph [0023] reads:

When the surface roughness of the second skin layer, before metallization, has an  $R_a$  value of from 0.1 to 0.3 microns, the metallized surface has a highly bright mirrored appearance. When the surface roughness of the second skin layer, before metallization, has an  $R_a$  value of from 0.3 to 0.8 microns, the metallized surface has a less bright mirrored appearance. When the surface roughness of the second skin layer, before metallization, has an  $R_a$  value of from 1.0 to 1.3 microns, the metallized surface has an even less bright mirrored appearance.

The test for determining compliance with the written description requirement is whether the disclosure of the application as originally filed reasonably conveys to the artisan that the inventor had possession at that time of the later claimed subject matter, rather than the presence or absence of *literal support* in the specification for the claim language. *In re Kaslow*, 707 F.2d 1366, 1375, 217 USPQ 1089, 1096 (Fed. Cir. 1983)(citations omitted). Claim 4 recites, in relevant part:

said second skin layer has a surface roughness  $R_a$  of from 0.3 to 1.3 microns, and wherein said metallized surface has a less bright mirrored appearance than a comparative metallized thermoplastic label of identical structure. Claim 4.

Appellant argues, and we agree, that one of ordinary skill in the art would have understood that the  $R_a$  values at paragraph [0023] represent a continuum. One of ordinary skill in the art would further have understood that a label having a second skin layer with an  $R_a$  value of 0.8 to 1.0 microns would be similar in appearance to a label having a second skin layer with an  $R_a$  value of slightly less than 0.8 microns or slightly greater than 1.0 microns. Given the specification disclosure that the metallized surface of a label has a less bright mirrored appearance when the second skin layer, before metallization, has an  $R_a$  value of from 0.3 to 0.8 microns and from 1.0 to 1.3 microns, we are confident that one of ordinary skill in the art would have understood that an  $R_a$  value between these two ranges, i.e., 0.8 to 1.0 microns, would likewise yield a metallized surface having “a less bright mirrored appearance than a comparative metallized thermoplastic label of identical structure.”

Accordingly, we find that claims 4 and 5 meet the written description requirement of 35 U.S.C. § 112, ¶ 1. The rejection is reversed.

*Rejection of claims 1, 3-7, 11-15, and 17 under 35 U.S.C. § 103(a) as unpatentable over Marks in view of Marotta*

The Examiner relies on Marks for a teaching of the invention as claimed in claim 1 with the exception of a second cavitating agent having a median particle size of 1.5 microns or less. Answer 4. The Examiner relies

on Marotta for a teaching that it is well-known in the art to utilize a cavitating agent having a median particle size of 1.5 microns or less in a core layer of a label. Answer 4. The Examiner maintains that it would have been obvious to have modified Marks' core layer to include a cavitating agent having a median particle size of 1.5 microns or less for the purpose of providing a metallized surface with a bright mirrored appearance, as taught by Marotta. Answer 4.

Appellant argues that Marks teaches away from adding a cavitating agent to the core. According to Appellant, Marks teaches that void-creating additives must be excluded from the core to obtain a label having a metallized surface with a bright mirrored appearance. Br. 14. Appellants reference several paragraphs in Marks as teaching that inclusion of an opacifying, void-creating additive in the core yields a metal layer that is dull and lacks high brilliance and gloss. For example, Appellant directs us to paragraph [0012] of Marks which reads:

It has been determined that the inclusion of as little as 1-2% calcium carbonate void-creating additive in the core adversely affects the final metal brilliance of the metallized film.

Appellant maintains that Marotta is silent with respect to brilliance or gloss, Br. 13, and both references fail to recognize the effect of surface roughness, Br. 15.

The Examiner acknowledges that Marks teaches that inclusion of a cavitating agent in the core adversely affects the final metal brilliance of the metallized film. However, the Examiner maintains that Marks "still teaches that it is well-known in the art to include a cavitating agent in the core layer." Answer 9 (citing Marks, [0002] lines 6-11). According to the

Examiner, Marks' preference for omitting cavitating agents in the core does not "constitute a teaching away from a broader disclosure or nonpreferred embodiments." Answer 10.

The Examiner bears the initial burden of establishing a *prima facie* case of obviousness. *In re Kumar*, 418 F.3d 1361, 1366, 76 USPQ2d 1048, 1050 (Fed. Cir. 2005). To meet this burden, the Examiner must provide a detailed analysis of the prior art and reasons why one of ordinary skill in the art would have possessed the knowledge and motivation to make the claimed invention. *See In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). In a patentability determination, all evidence of nonobviousness, including data in the Specification, must be considered when assessing patentability. *See In re Soni*, 54 F.3d 746, 750, 34 USPQ2d 1684, 1687 (Fed. Cir. 1995)(citing *In re Margolis*, 785 F.2d 1029, 1031, 228 USPQ 940, 941-42 (Fed. Cir. 1986)). In our view, the Examiner has not met this burden of proof because he has not provided the requisite evidentiary support for his conclusion of obviousness and has not sufficiently addressed Appellant's evidence of nonobviousness.

For example, the Examiner found that:

Marotta et al. teaches that it is old and well-known in the analogous art to have a core layer comprising a cavitating agent wherein the cavitating agent has a median particle size of 1.5 microns or less (see col. 5, lines 55-60) for the purpose of providing a metallized surface with a bright mirrored appearance. Answer 4.

While the referenced portion of Marotta teaches that a cavitating agent *may be* included in the core layer, the Examiner has not directed us to that

portion of the reference which discloses that the inclusion of the cavitating agent provides a metallized surface with a bright mirrored appearance. Nor has the Examiner explained the basis for his conclusion that Marotta's disclosure of "fine spherical particles, e.g. .2 to 2 microns" (Marotta, col. 5, ll. 59-60) renders obvious the claim limitation of a *median*<sup>1</sup> particle size of 1.5 microns. *See, e.g.*, Specification para [0048-0050].

Similarly, the Examiner argues that "[o]ne skilled in the art would have been able to provide the core layer in US '542 with a cavitating agent having a median particle size of 1.5 microns or less in order to produce a metallized surface with a bright mirrored appearance, if so desired." Answer 11. However, the Examiner has not identified any teaching or suggestion in the prior art which would have led one of ordinary skill in the art to modify Marks in this manner. *See In re Fritch*, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783-74 (Fed. Cir. 1992) (mere fact that the prior art could be modified to achieve the claimed invention does not establish obviousness absent a showing that the prior art suggested the desirability of the modification). In our view, the Examiner was further obligated to explain why one of ordinary skill in the art would have included a cavitating agent in Marks, despite Marks' statement that addition of a void-creating additive adversely affects the final metal brilliance. Marks [0012]. *See In re Gurley*, 27 F.3d 551, 553, 31 USPQ2d 1130, 1131 (Fed.Cir.1994) ("A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the

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<sup>1</sup>Median refers to a value in an ordered set of values below and above which there is an equal number of values or which is the arithmetic mean of the two middle values if there is no one middle number.

reference, or would be led in a direction divergent from the path that was taken by the applicant."). *See also, In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1599 (Fed. Cir. 1988) (citing *W.L. Gore & Assoc. v. Garlock, Inc.*, 721 F.2d 1540, 1550, 220 USPQ 303, 311 (Fed. Cir. 1983) (error to find obviousness where references "diverge from and teach away from the invention at hand")).

Accordingly, having concluded that a prima facie case of obviousness has not been established, we reverse the rejection of claims 1, 3-7, 11-15, and 17 under 35 U.S.C § 103(a) as unpatentable over Marks in view of Marotta.

REVERSED

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