

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 KATSUTOSHI YOKOYAMA and KAZUYA TSUJIMURA

Appeal 2007-0491
Application 10/495,074
Technology Center 1700

ON BRIEF

Before ADAMS, MILLS, and GRIMES, *Administrative Patent Judges*.

GRIMES, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 involving claims to a curable composition. The Examiner has rejected the claims as anticipated or obvious. We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

BACKGROUND

The specification describes a curable composition comprising specified first and second monomers. (Specification 2-3.) The specification states that this composition can be cured to provide an organic glass, particularly, a plastic lens. (*Id.* at 4.)

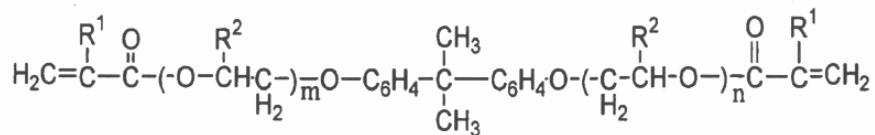
DISCUSSION

1. CLAIMS

Claims 17-25 are pending and on appeal. The claims have not been argued separately and therefore stand or fall together. 37 C.F.R. § 41.37(c)(1)(vii). We will focus on claim 17, which is representative and reads as follows:

17. A curable composition consisting essentially of:

(a) a first monomer represented by the chemical formula (1):



wherein each of R¹ and R² is hydrogen or a methyl group, and the total of m and n is from 0 to 30, and

(b) a second monomer represented by the chemical formula (2):



wherein R is hydrogen or a methyl group, and n is from 1 to 10.

Thus, claim 17 is directed to a curable composition “consisting essentially of” a first monomer having a specified chemical formula and a second monomer having a specified chemical formula.

“By using the term ‘consisting essentially of,’ the drafter signals that the invention necessarily includes the listed ingredients and is open to unlisted ingredients that do not materially affect the basic and novel properties of the invention.” *PPG Indus. Inc. v. Guardian Indus. Corp.*, 156 F.3d 1351, 1354, 48 USPQ2d 1351, 1353-54 (Fed. Cir. 1998). Thus, claim 17 is open to ingredients other than the specifically recited monomers that do not materially affect the basic and novel properties of the invention.

“It is axiomatic that claims are given their broadest reasonable construction consistent with the specification. . . . Therefore, in construing the phrase ‘consisting essentially of’ in appellants’ claims, it is necessary and proper to determine whether their specification reasonably supports a construction that would include additives such as [those in the prior art].” *In re Herz*, 537 F.2d 549, 551, 190 USPQ 461, 463 (CCPA 1976).

The specification states that an “object of the present invention is to provide a curable resin composition which can provide an optical material (a plastic lens) having good balanced optical properties (such as a refractive index and an Abbe number), and mechanical and thermal properties (such as thermal resistance and impact resistance) and improved colorless transparency and resin brittleness.” (Specification 2.) Thus, we find that the “consisting essentially of” language of claim 17 excludes ingredients that materially affect the ability of the composition to provide an optical material having good balanced optical, mechanical, and thermal properties.

2. ANTICIPATION

Claims 17-25 stand rejected under 35 U.S.C. § 102(b) as anticipated by Satoshi.¹ The Examiner argues that Satoshi “discloses a curable composition comprising the first monomer (designated in the reference as C) . . . and the second monomer (designated in the reference as A),” which “can be formed in[to] optical components by curing the composition, expressly listing optical lenses and disks as possible end products. See [0040].” (Answer 3.)

The Examiner also argues that “the mercapto compounds disclosed in [Satoshi] are not excluded from the claimed compositions by the transitional phrase ‘consisting essentially.’” (*Id.*) In particular, the Examiner argues that the above-quoted statement on page 2 of the specification regarding the object of the invention “is a clear indication [of] what is considered to be the basic and novel characteristics” of the invention. (Answer 5.) The Examiner argues that “[w]hile some of the characteristics of any composition would be affected by the presence of ANY additional component, addi[ng] mercapto compound clearly does not affect the characteristics regarded by the applicants as basic and novel characteristics of the claimed compositions as evident from the discussion in paragraph [0026] of the supplied translation.” (Answer 5-6.)

We conclude that the Examiner has set forth a *prima facie* case that claim 17 is anticipated by Satoshi. Satoshi describes a resin composition

¹ Satoshi et al., Japanese Patent Document No. JP 11-223703, published August 17, 1999. The record contains an English-language abstract, a partial translation, and a full computer-generated translation of Satoshi. We cite to each of these documents at different points.

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comprising components (A), (B), and (C) (abstract). Component A is a (meth)acrylate that corresponds to formula (2) of claim 17 (full translation ¶ 0007). Component B is a mercapto compound (full translation ¶ 0008). Component C is a (meth)acrylate that corresponds to formula (1) of claim 17 (full translation ¶ 0014). Satoshi states that component (B) is included in an amount of from 0.1 to 8 parts by weight (abstract).

Satoshi describes polymerizing and hardening the resin composition to obtain an optical member (abstract). Therefore, we find that the Examiner has set forth a *prima facie* case that the mercapto compound does not materially affect the ability of the composition to provide an optical material having good balanced optical, mechanical, and thermal properties. Thus, we conclude that the Examiner has set forth a *prima facie* case that the mercapto compound is not excluded from claim 17 by the “consisting essentially of” language.

It is Appellants’ burden to establish that a component included in a prior art composition is excluded by the “consisting essentially of” language. *See Herz*, 537 F.2d at 551, 190 USPQ at 463 (“an applicant who has not clearly limited his claims is in a weak position to assert a narrow construction” and “[t]here is no evidence that [the prior art] dispersant would materially affect the basic and novel characteristic of [the claimed] composition”).

Appellants argue that they have submitted a Rule 132 declaration showing that if even a small amount of mercapto compound is added to the compounds recited in claim 17, “a bad smell resulted during the molding.” (Br. 4.) Appellants argue that the smell “deters a worker from handling,

molding or polishing a lens,” (*id.*) and therefore would increase “the risk of forming optical parts which do not have . . . excellent optical characteristics.” (Br. 6.)

Similarly, Appellants argue that the basic and novel characteristics of the claimed composition include good “workability” and “machinability,” and “the bad smell resulting from compositions with the mercapto compound . . . interferes with, or deters a worker from handling, molding or polishing a lens, all of which affect the ‘workability’ and ‘machinability’ of the curable composition/lens.” (Reply Br. 2.)

Thus, Appellants conclude that the “addition of the mercapto compound would materially affect the basic and novel characteristics of the claimed compositions.” (Br. 6.) Appellants argue that “it should not be required that the ‘smell’ characteristic be disclosed in the specification.” (*Id.*)

We are not persuaded by these arguments. First, as noted above, “[i]t is axiomatic that claims are given their broadest reasonable construction consistent with the specification.” *Herz*, 537 F.2d at 551, 190 USPQ at 463.

Therefore, we agree with the Examiner that it was proper to interpret the phrase “consisting essentially of” based on the characteristics of the composition identified in the specification, specifically, the ability of the composition to provide an optical material having good balanced optical, mechanical, and thermal properties.

Second, we do not agree that Appellants have shown that the mercapto compound in the prior art composition materially affects a basic

characteristic of the invention. We can accept, for argument's sake, that good "workability" and machinability" are among the basic and novel characteristics of the claimed composition.

However, Appellants have not provided any evidence that generating a bad smell during molding would materially affect the "workability" or "machinability" of the composition. In particular, the Rule 132 Declaration merely demonstrates that a "bad smell was evolved." It does not provide any evidence that the bad smell would materially affect the "workability" or "machinability" of the composition.

The workability and machinability of a composition depend on the physical properties of the composition itself. See, e.g., the specification at pages 1-2 (poor workability of prior art composition was the result of high viscosity) and page 12, lines 10-12 ("The plastic lens of the present invention . . . is excellent in various mechanical and physical properties (for example, . . . machinability).").

Appellants have pointed to no evidence of record to show that those skilled in the art considered smell generated during molding to be a factor in workability or machinability. Instead, the only indication that bad smell would materially affect a basic and novel characteristic of the invention comes from attorney argument. However, we find this attorney argument insufficient to demonstrate that a bad smell materially affects a basic and novel characteristic of the invention. *See In re Geisler*, 116 F.3d 1465, 1470, 43 USPQ2d 1362, 1365 (Fed. Cir. 1997) ("An assertion of what seems to follow from common experience is just attorney argument and not the

kind of factual evidence that is required to rebut a prima facie case of obviousness.”)

For these reasons, we do not agree that Appellants have demonstrated that the mercapto compound described in Satoshi is excluded from claim 17 by the phrase “consisting essentially of.” Appellants have not rebutted the Examiner’s prima facie case that claim 17 is anticipated by Satoshi. We therefore affirm the rejection of claim 17 under 35 U.S.C. § 102(b). Claims 18-25 fall with claim 17.

3. OBVIOUSNESS

Claims 17-25 stand rejected under 35 U.S.C. § 103 as obvious over Satoshi. We have already found that claim 17 is anticipated by Satoshi. Anticipation is the epitome of obviousness. *In re McDaniel*, 293 F.3d 1379, 1385-1386, 63 USPQ2d 1462, 1466 (Fed. Cir. 2002). Therefore, we affirm the rejection of claim 17 under 35 U.S.C. § 103. Claims 18-25 fall with claim 17.

SUMMARY

The Examiner's position is supported by the preponderance of the evidence of record. We therefore affirm the rejection of claims 17-25 under 35 U.S.C. § 102(b) and § 103.

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

AFFIRMED

Donald E. Adams)
Administrative Patent Judge)
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) BOARD OF PATENT
Demetra J. Mills)
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