

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 35

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte SHUICHI KIKUCHI, DAIKI KOBAYASHI, and KENJI OGISU

Appeal No. 2003-2020
Application No. 08/944,208

ON BRIEF

Before BARRETT, DIXON, and GROSS, ***Administrative Patent Judges***.
GROSS, ***Administrative Patent Judge***.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 3, 4, and 9 through 15, which are all of the claims pending in this application.

Appellants' invention relates to a disk cartridge formed from two types of thermoplastic resins with different heat deforming temperatures, an antistatic polymer, and an inorganic filler. As a result, the cartridge is antistatic and has excellent heat-resistance and rigidity. Claim 13 is illustrative of the claimed invention, and it reads as follows:

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13. A disk cartridge loaded with a disk, wherein said cartridge is made from a composite synthetic resin consisting of:

- at least two types of thermoplastic resin;
- an antistatic polymer; and
- an inorganic filler,

wherein the heat-deforming temperature of said two thermoplastic resins are mutually different.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Yamamoto et al. (Yamamoto)	5,106,912	Apr. 21, 1992
Kato et al. (Kato)	5,432,662	Jul. 11, 1995

Claim 15 stands rejected under 35 U.S.C. § 112, first paragraph, as being nonenabled.

Claims 3, 4, and 9 through 15 stand rejected under 35 U.S.C. § 103 as being unpatentable over Kato in view of Yamamoto.

Reference is made to the Final Rejection (Paper No. 17, mailed January 29, 2001) and the Examiner's Answer (Paper No. 26, mailed December 19, 2001) for the examiner's complete reasoning in support of the rejections, and to appellants' Brief (Paper No. 25, filed September 24, 2001) and Reply Brief (Paper No. 28, filed February 28, 2002) for appellants' arguments thereagainst.

OPINION

As a preliminary matter, we note that appellants indicate on page 5 of the Brief that the claims "should not stand or fall together." However, appellants have presented separate arguments in accordance with 37 C.F.R. § 1.192(c)(8) (which was in effect at the time of the Brief) only for claim 15. Therefore, we will treat claims 3, 4, and 9 through 14 as one group, with claim 13 as representative, and we will treat claim 15 as a second group.

We have carefully considered the claims, the applied prior art references, and the respective positions articulated by appellants and the examiner. As a consequence of our review, we will reverse both the enablement rejection and the obviousness rejection of claim 15 and affirm the obviousness rejection of claims 3, 4, and 9 through 14.

Regarding the enablement rejection of claim 15, the examiner states (Final Rejection, page 2) that the claim language "consisting of" limits the antistatic polymer to the polyether ester-amide recited in the claim. On the other hand, the examiner asserts that the specification states that the antistatic polymer contains polyether ester-amide, which "means that the anti-static polymer is not composed of merely polyether

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ester-amide, and contains more elements." The examiner concludes that claim 15 is not enabled by the specification.

The examiner's position appears to be that the term "contains" requires additional elements other than those recited immediately following the word contains. However, that interpretation is incorrect. The terms "include," "comprise," and "contain" allow for additional elements, but do not require such. In other words, the portion of the specification referenced by the examiner discloses antistatic polymers of polyether ester-amide alone and of polyether ester-amide combined with other elements. Therefore, claim 15 is enabled by the specification, and we will reverse the enablement rejection.

Regarding the obviousness rejection of claims 3, 4, and 9 through 14, representative claim 13 recites a disk cartridge, made of at least two types of thermoplastic resins with different heat-deforming temperatures, an antistatic polymer, and an inorganic filler. Kato discloses a data recording cartridge (see the abstract) which is made of a polymer alloy of styrol resin and polycarbonate resin (see column 12, lines 29-30). Kato discloses (column 12, lines 31-34) that the styrol resin may be ABS resin. We note that appellants (specification page 8) use polycarbonate as a first component with high heat-deforming temperature and ABS

resin as a second component with lower heat-deforming temperature. Therefore, Kato discloses a disk cartridge made of at least two types of thermoplastic resins with different heat-deforming temperatures.

Kato further discloses (column 14, lines 33-35) that an inorganic filler may be added to the polymeralloys described above (which includes the styrol/polycarbonate polymeralloy relied upon by the examiner). Kato states (column 16, lines 31-36) that calcium carbonate (one of the fillers used by appellants on page 11 of the specification) is one of the preferred inorganic fillers. In addition, Kato explains (column 16, line 62-column 17, line 4) that the benefit of using filler, provided the weight percent is within a particular range, is increased rigidity.

As recognized by the examiner (Final Rejection, page 3), the only limitation that Kato fails to teach is the addition of an antistatic polymer. The examiner applies Yamamoto to remedy this deficiency. Specifically, Yamamoto's objective is an antistatic material having a high reliability for a container or package for electronic packages (see column 1, lines 56-63). Yamamoto teaches (column 2, line 62-column 3, line 17) that for the base polymer, ABS resin or polycarbonate resin, among others, may be

used, or a mixture of two or more of the disclosed polymers, including the ABS resin and polycarbonate resin, may be used. Yamamoto discloses (column 3, lines 44-47) adding an anionic monomer to the thermoplastic resin as the antistatic property-imparting component. Since Yamamoto and Kato disclose the same base polymers, it would have been obvious to add the antistatic component of Yamamoto to Kato's disk cartridge composition to give the disk cartridge antistatic properties.

Appellants argue (Brief, page 6) that Kato and Yamamoto "do not suggest the inventive cartridges" since they do not suggest that a disk cartridge made as recited in claim 13 "would exhibit excellent heat-resistance, rigidity and anti-static properties." We disagree. As explained *supra*, Kato discloses a disk cartridge using two resins for better heat-resistance along with an inorganic filler for rigidity. Thus, Kato discloses all of the claimed elements and their properties except for the antistatic component. However, Yamamoto teaches adding an antistatic component to a mixture of resins like those used by Kato. Therefore, the combination does suggest that a disk cartridge made as recited in claim 13 would exhibit the above properties.

Appellants contend (Brief, page 7) that the claimed mixture provides an added feature of remaining fluid at low temperatures,

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which is not suggested by Kato and Yamamoto. However, this feature is not recited in the claims. Nonetheless, since the combination of Kato and Yamamoto uses the same thermoplastic resins as disclosed by appellants, the combination would be expected to exhibit the same properties.

Appellants assert (Brief, pages 7-8) that the examiner ignored the claim limitation that the heat deforming temperatures of the two resins must be different. However, since Kato discloses the same resins as used by appellants, the heat deforming temperatures must be different. Furthermore, Kato discloses (column 2, lines 16-22) that ABS does not have high heat resistance, which is a problem to be solved. Since Kato combines ABS with polycarbonate to obtain a composition that does have high heat resistance, Kato at the very least implies that the polycarbonate is added because it has a higher heat resistance than the ABS.

Appellants argue (Brief, page 8) that Kato does not disclose antistatic elements. That, of course, is why the examiner rejected the claims under 35 U.S.C. § 103 and used a secondary reference, Yamamoto. Similarly, appellants argue that Yamamoto does not discuss inorganic fillers or rigidity. Again, the rejection is under 35 U.S.C. § 103, and Kato teaches using an

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inorganic filler for rigidity. Appellants argue (Brief, page 10) that Yamamoto is silent as to heat-deforming temperatures. However, the materials of both Kato and Yamamoto would be expected to have different heat-deforming temperatures as they are the same materials as those used by appellants. Appellants should remember that an obviousness rejection cannot be overcome by attacking the references individually. **See *In re Keller***, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Appellants contend (Brief, page 8) that in view of failures in the prior art, the skilled artisan "would not know if adding the antistatic polymer to the compositions provided in Kato would adversely affect the rigidity as one would not know how they would interact with the inorganic filler." Appellants point to Yamamoto as suggesting that mixing components does not lead to satisfactory results in this art. Further, appellants state that the skilled artisan would expect that the addition of an antistatic polymer would adversely affect rigidity because of an approach described in their specification whereby the addition of an antistatic polymer to a low heat-resistant thermoplastic resin decreased structural rigidity.

One of ordinary skill in the art might not know for sure if adding the antistatic polymer to Kato's compositions would

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adversely affect the rigidity. However, the skilled artisan would not expect an adverse affect since the inorganic filler is added by Kato specifically to improve the rigidity in a combination of resins just like those disclosed by Yamamoto. Further, Kato discloses that to improve rigidity, inorganic filler should be added. The skilled artisan would expect that additional filler could be provided to overcome any reductions in rigidity due to the addition of an antistatic polymer. Appellants should not underestimate the level of the skilled artisan. **See In re Sovish**, 769 F.2d 738, 743, 226 USPQ 771, 774 (Fed. Cir. 1985). As appellants' arguments have been unpersuasive, we will sustain the obviousness rejection of claims 3, 4, and 9 through 14.

We reach the opposite conclusion as to claim 15. Appellants argue (Brief, page 10) that Yamamoto does not teach the claim limitation of an antistatic polymer of polyether ester-amide. The examiner responds (Answer, page 6) that "[a]s claim 15 is worded, it is not enabled. Even if enabled it would still be one of many obvious alternatives in a list of potential anti-static polymers."

First, enablement has nothing to do with whether a claim limitation would have been obvious. Second, we found **supra** that

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claim 15 is enabled. Third, a factual inquiry whether to modify a reference must be based on objective evidence of record, not merely conclusory statements of the examiner. ***See In re Lee***, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002). The examiner merely stated that polyether ester-amide is one of many obvious alternatives for an antistatic polymer, citing no evidence as support. Therefore, the examiner's statement is the very type precluded by the court. Consequently, we cannot sustain the obviousness rejection of claim 15.

CONCLUSION

The decision of the examiner rejecting claim 15 under 35 U.S.C. § 112, first paragraph, is reversed. The decision of the examiner rejecting claims 3, 4, and 9 through 15 under 35 U.S.C. § 103 is affirmed as to claims 3, 4, and 9 through 14, but reversed as to claim 15.

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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-IN-PART

LEE E. BARRETT)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
JOSEPH L. DIXON)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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ANITA PELLMAN GROSS)	
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APG:clm

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