

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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 CARSTEN WOERNER, URSULA ZIEGLER, KURT WITAN
and KLAUS KURZ

Appeal No. 2006-0338
Application No. 10/088,656

ON BRIEF

Before KIMLIN, TIMM and FRANKLIN, Administrative Patent Judges.
KIMLIN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 11-14 and 16-27. Claims 11 and 16 are illustrative:

11. A polyoxymethylene composition comprising
 - A from 84 to 99.79% by weight of at least one polyoxymethylene homo- or copolymer,
 - B from 0.1 to 5% by weight of at least one polyalkylene glycol,
 - C from 0.1 to 10% by weight of zinc oxide, and
 - D from 0.01 to 1% by weight of one or more nitrogen-containing costabilizer and wherein the

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nitrogen-containing costabilizer comprises at least one amino compound, amide compound, hydrazine compound, urea compound or a hindered amine.

16. The polyoxymethylene as claimed in claim 14, wherein the nitrogen-containing costabilizer comprises melamine.

The examiner relies upon the following reference in the rejection of the appealed claims:

Kurz et al. (Kurz) 6,489,388 Dec. 3, 2002

Appellants' claimed invention is directed to a polyoxymethylene composition comprising, inter alia, one or more nitrogen-containing costabilizers selected from an amino compound, an amide, a hydrazine compound, a urea compound or a hindered amine.

Appealed claims 11-15, 17, 19-22 and 24-26 stand rejected under the judicially created doctrine of obviousness-type double patenting over claims 1-9 of Kurz. Claims 11-14 and 16-27 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Kurz.

We have thoroughly reviewed the respective positions advanced by the appellants and the examiner. In so doing, we will sustain the examiner's obviousness-type double patenting rejection. We will also sustain the Section 102 rejection of claims 11-14, 17 and 19-27 for essentially those reasons

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expressed by the examiner. However, we will not sustain the examiner's Section 102 rejection of claims 16 and 18.

We consider first the examiner's obviousness-type double patenting rejection. Appellants do not dispute the examiner's factual findings set forth at page 3 of the answer with respect to claim 1 of Kurz, namely, that Kurz discloses a polyoxymethylene composition comprising the claimed homo- or copolymer, the claimed polyalkylene glycol, the claimed zinc oxide, and a stabilizer. Appellants also do not take issue with the examiner's determination that Kurz discloses that the stabilizer can be a polyamide, an amide, a hydrazine, or a urea, as presently claimed. Accordingly, based on claim 1 of Kurz, as well as the supporting specification, we find no error in the examiner's legal conclusion that the claimed polyoxymethylene compositions would have been obvious to one of ordinary skill in the art.

Appellants, while conceding that Kurz discloses the claimed amide, hydrazine and urea stabilizing compounds, maintain that the "claimed invention is a **selection invention over Kurz**" (page 6 of brief, penultimate sentence). However, it is well settled that it is a matter of prima facie obviousness for one with ordinary skill in the art to select one or some of components

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disclosed by the prior art as being effective for the disclosed purpose. In order to gain patentability for selecting one or a number of components disclosed by the prior art, it is incumbent upon the applicant to demonstrate that the selection achieves an unexpected result. However, in the present case, the appellants have proffered no objective evidence which establishes that the selection of at least one amino compound, amide compound, hydrazine compound, urea compound or a hindered amine from the list of stabilizers disclosed by Kurz produces an unexpected result, particularly since Kurz teaches that amides, hydrazines, and ureas are, in particular, suitable stabilizers (see col. 2, lines 43 et seq.).

For essentially the same reasons, we will sustain the examiner's Section 102 rejection of claims 11-14, 17 and 19-27. Inasmuch as Kurz, as noted above, describes polyamides, amides, hydrazines and ureas at the beginning of a relatively small list of suitable stabilizers against the effect of heat, we concur with the examiner that Kurz provides a description of the claimed polyoxymethylene compositions within the meaning of Section 102. We are not persuaded by appellants' arguments that the appealed claims recite that the stabilizer is in an amount of from 0.01 to 1%. Kurz describes that the stabilizer may be present in an

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amount of 0.1% by weight, which amount falls directly within the claimed range (column 2, lines 57-58). Ex parte Lee, 31 USPQ2d 1105, 1106 (Bd. Pat. App. & Int. 1993).

We are also not persuaded by appellants' argument that "[t]he examples in Kurz did not contain any costabilizers" (page 7 of brief, second paragraph). It is not necessary that the description of the claimed stabilizers appears in the examples of a reference but, rather, it is sufficient that Kurz describes the use of the claimed stabilizers at column 2, lines 43 et seq.

Appellants also contend that "Kurz focuses on resistance against diesel fuel and against gasoline while this patent application focuses on acid resistance" (page 7 of brief, last paragraph). However, it is not necessary for a finding of anticipation or obviousness that the prior art describe all of the properties of a claimed composition. Also, as pointed out by the examiner, appellants' argument is not commensurate in scope with the claims which should not recite any property of acid resistance. Moreover, it would appear that since the compositions of Kurz are essentially the same as the claimed compositions, they would exhibit the same properties.

We will not sustain the examiner's Section 102 rejection of claims 16 and 18 which define the nitrogen-containing

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costabilizer as melamine. The examiner, in acknowledging that Kurz does not disclose melamine as a stabilizer, sets forth the following explanation:

Applicants are correct in sense that KURZ does not teach melamine. However melamine is not a component of the independent claims. The prior art of KURZ therefore applies to the rest of the claims. [Page 6 of the answer, 5th paragraph.]

Manifestly, the examiner's rationale is legally deficient in supporting the rejection of claims 16 and 18 under Section 102. Kurz must describe melamine as a stabilizer to support a rejection under Section 102. It would seem that the examiner has not considered the merits of separately argued 16 and 18.

In conclusion, based on the foregoing, the examiner's obviousness-double patenting rejection of claims 11-15, 17, 19-22 and 24-26 is sustained, as is the examiner's Section 102 rejection of claims 11-14, 17 and 19-27. The examiner's Section 102 rejection of claims 16 and 18 is reversed. Accordingly, the examiner's decision rejecting the appealed claims is affirmed-in-part.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv)(2004).

AFFIRMED-IN-PART

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EDWARD C. KIMLIN)	
Administrative Patent Judge)	BOARD OF PATENT
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BEVERLY A. FRANKLIN)	
Administrative Patent Judge)	

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TIMM, Administrative Patent Judge, Concurring-In-Part,
Dissenting-In-Part.

With regard to the obviousness-type double patenting rejection, I concur with my colleagues' determination of no reversible error in the examiner's legal conclusion. I add that appellants' own specification indicates that the amino, amide, hydrazine, and urea costabilizers listed in appellants' claim 11 and described in column 2, lines 43-45 of Kurz were customary for polyacetals (specification, p. 4, l. 37 to p. 5, l. 2; see also p. 1, l. 33 to p. 2, l. 12). The use of these customary stabilizers in the composition of the claims of Kurz would have been obvious to one of ordinary skill in the art. Moreover, the claims of Kurz disclose concentrations that are the same, encompass, or overlap those presently claimed. Such a situation is supportive of a conclusion of obviousness in a case such as this wherein there is no showing of secondary considerations such as unexpected results. See In re Peterson, 315 F.3d 1325, 1329, 65 USPQ2d 1379, 1382 (Fed. Cir. 2003); In re Geisler, 116 F.3d 1465, 1469, 43 USPQ2d 1362, 1365 (Fed. Cir. 1997). The record as a whole supports the examiner's determination that the composition of appealed claims is merely an obvious variation of what appellants previously claimed in the Kurz patent. See In re

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Longi, 759 F.2d 887, 893, 225 USPQ 645, 648 (Fed. Cir. 1985) (The public should be able to act on the assumption that upon the expiration of the patent it will be free to use not only the invention claimed in the patent but also modifications or variants which would have been obvious to those of ordinary skill in the art at the time the invention was made, taking into account the skill of the art and prior art other than the invention claimed in the issued patent).

Turning to the rejection under 35 U.S.C. § 102(e), I concur with my colleagues' decision to reverse the examiner's decision to reject claims 16 and 18 as anticipated. I, however, respectfully dissent from my colleagues' decision to affirm the examiner's decision to reject claims 11-14, 17, and 19-27 on the basis of anticipation. In my opinion, the facts herein support a prima facie case of obviousness within the meaning of 35 U.S.C. § 103(a), but do not rise to the level of anticipation under 35 U.S.C. § 102. I would, therefore, reverse with respect to all the claims and remand the application to the examiner for the entry of a rejection under 35 U.S.C. § 103(a).

The difference in statutory ground in this case may be more than academic. Kurz and the present application have common assignees and overlapping inventive entities. A rejection under

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35 U.S.C. § 103(a) based on Kurz could be overcome if appellants show that the claimed invention and the subject matter of Kurz were commonly owned or assigned at the time of the invention in accordance with the requirements of 37 CFR § 1.130. See 35 U.S.C. § 103(c) (2004) and MPEP § 804.03 (8th ed. rev.4, Oct. 2005). Rejections under 35 U.S.C. § 102(e) cannot be overcome in this way. See the words "under this section" in 35 U.S.C. § 103(c) (1) and MPEP § 804.03(IIA). Moreover, a rejection under 35 U.S.C. § 103(a) can be overcome by a showing of secondary considerations such as unexpected results whereas a rejection under 35 U.S.C. § 102 cannot. See In re Malagari, 499 F.2d 1297, 1303, 182 USPQ 549, 553 (CCPA 1974).

The key difference between the polyoxymethylene composition of appellants' claims on appeal and the polyoxymethylene composition of Kurz resides in the difference between the concentration range limitations of the claims and the disclosure of concentrations in Kurz. Focusing on claim 11 for illustrative purposes, this claim requires the presence of four ingredients in particular ranges of concentration. There is no question that Kurz describes a composition having the first three claimed ingredients of claim 11. The fourth claimed ingredient is a nitrogen-containing costabilizer comprising at least one amino

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compound, amide compound, hydrazine compound, urea compound, or a hindered amine. I agree with my colleagues and the examiner that there is an explicit description in Kurz of using a nitrogen-containing stabilizer from the claimed group in a polyoxymethylene composition. The list of polyacetal stabilizers provided by Kurz is short and at least four of the six recited stabilizers are within the scope of the claim. Arguably, a fifth is also within the scope of the claim. Poly(N-vinyl lactams) are cyclic amides and, therefore, "amide compounds." There is a description in Kurz of using a composition containing all the ingredients of the claim. Were it not for the concentration limitations, claim 11 would be anticipated.

There is no question that Kurz would anticipate if the reference contained a working example of the composition with all the ingredients in concentrations within the claimed ranges or a more general description of a composition having concentrations of ingredients corresponding to the claimed ranges. It is well settled that in either of these circumstances, there is anticipation. But neither such disclosure is present in Kurz. See In re Schreiber, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997) ("To anticipate a claim, a prior art reference must disclose every limitation of the claimed invention, either

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explicitly or inherently."). See also Titanium Metals Corp. of Am. v. Banner, 778 F.2d 775, 782, 227 USPQ 773, 779 (Fed. Cir. 1985) (Disclosure of a discrete embodiment of an alloy composition with metal concentrations within the claimed ranges anticipated the claim); In re Slayter, 276 F.2d 408, 411, 125 USPQ 345, 347 (CCPA 1960) ("It is well settled that a generic claim cannot be allowed to an applicant if the prior art discloses a species falling within the claimed genus.").

The harder question is whether there is anticipation in a case such as this where the range of concentrations varies from those of the claim and, in particular, where one of the ranges merely overlaps. This question was raised, but not decided, in In re Malagari, 499 F.2d 1297, 1302-03, 182 USPQ 549, 553 (CCPA 1974). In that case the court discussed the issue as follows:

Appellant has raised an interesting question, however, by his citation of several cases wherein the prior art taught a broad range and the inventor was held entitled to claims limited to a narrow range within the broad range by showing criticality of and the existence of unexpected properties within the claimed range. Appellant's argument seems to be that if such an invention is patentable on the basis of such a showing, then his invention, which only touches or narrowly overlaps the range of the prior art, ought likewise to be patentable. Appellant's arguments suggest that the disclosure of the end point of the

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range of the prior art ought to be given no greater significance as prior art than individual points within the range disclosed by a prior art reference, there being no specific disclosure of working examples or specific analyses in either of the principal references of carbon contents within appellant's claimed range.

Because of the view we take of the rejection for obviousness under § 103 and because of appellant's failure to recognize in his arguments the difference between § 102 and § 103, we find it unnecessary to, and do not, deal with the rejection under § 102.

The cases cited by the appellant, *Malagari*, in support of the argument were *Becket v. Coe*, 98 F.2d 332, 38 USPQ 26 (24 CCPA 992) (App.D.C. 1938); *Ex parte Selby*, 153 USPQ 476 (Pat. Off. Bd. App. 1966); and *Ex parte Thumm*, 132 USPQ 66 (Pat. Off. Bd. App. 1960)). Since the time that *Malagari* was decided, many more cases have held that a showing of criticality or unexpected results can overcome a prima facie case of obviousness in cases where the prior art teaches a range encompassing or overlapping claimed ranges. See e.g., *In re Harris*, 409 F.3d 1339, 1343, 74 USPQ2d 1951, 1953-54 (Fed. Cir. 2005); *In re Peterson*, 315 F.3d 1325, 1329, 65 USPQ2d 1379, 1382 (Fed. Cir. 2003); *In re Geisler*, 116 F.3d 1465, 1469, 43 USPQ2d 1362, 1365 (Fed. Cir. 1997); *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (CCPA 1976).

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On the other hand, a panel of our current reviewing court has affirmed a District Court finding of anticipation based on references teaching overlapping ranges of concentration for an explosive composition. See Atlas Powder Co. v. IRECO Inc., 190 F.3d 1342, 1346, 51 USPQ2d 1943, 1946 (Fed. Cir. 1999). In this case, however, the court did not consider the question posed in Malagari.

In my opinion, unless the prior art reference somehow indicates that a value within the range or an endpoint of the range is representative of a discrete embodiment or of specific significance, there is no anticipation. Where the prior art merely discloses a range, there is no reason to think any particular value is different from any other value within the range in terms of expected results. In such a circumstance, an applicant should have the opportunity to show that they have found unexpected results for values within or overlapping the range of the prior art. Such a showing should not be precluded by a rejection under 35 U.S.C. § 102 unless the prior art specifically directs the ordinary artisan to select a value within the claimed range over the other values of the prior art range or otherwise discloses a discrete embodiment or working example meeting all the requirements of the claim. If unexpected

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results show that a range within, or overlapping, a prior art range is not obvious, then that broader, or overlapping, prior art range cannot be the basis for anticipation. It is, likewise, inconsistent to find anticipation in such a situation and foreclose disqualification of a reference under § 103(c) based on a broader or overlapping range disclosed in a reference. I realize that the analysis above is at odds with the holding of the plurality in Ex parte Lee, 31 USPQ2d 1105, 1106 (Bd. Pat. App. & Int. 1993). According to the three member majority of Lee, a prior art reference describing the claimed invention except for a claimed range will anticipate if the reference describes an end point which is within the claimed range. I, like the dissent in Lee, cannot agree that such a bright line rule exists. As stated by the dissent:

We recognize that in cases involving an overlap of a claimed invention and applied prior art, anticipation under 35 U.S.C. 102 can arise even though an applied reference does not exemplify a species falling within the overlap. Anticipation under 35 U.S.C. 102 in such cases would appear to depend upon the extent of overlap which determines the amount of picking and choosing necessary to arrive at the claimed invention. In situations involving virtually little or no selectivity, a reference may be considered to describe the overlapping portion of a claimed invention within the meaning of 35 U.S.C. 102. In re Sivaramakrishnan, 673 F.2d 1383, 213 USPQ 441 (CCPA 1982); In re Schaumann, 572 F.2d 312, 197 USPQ 5 (CCPA 1978); In re Petering, 301 F.2d 676, 133 USPQ 275 (CCPA 1962).

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However, where a prior art disclosure is extremely broad, a prima facie case of obviousness under 35 U.S.C. 103 may not even arise. In *re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). Between these extremes, as in the situation before us, the overlap would have rendered the claimed invention prima facie obvious under 35 U.S.C. 103. *Merck & Co., Inc. v. Biocraft Laboratories, Inc.*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir. 1989); *In re Malagari*, supra; *In re Susi*, supra. Thus, patentability under 35 U.S.C. 102 and 35 U.S.C. 103 must be resolved on a case-by-case basis, not by a litmus test determined by an end point (Plurality Opinion) or any overlap whatsoever (Concurring Opinion).

In the present case, Kurz places no particular emphasis on any value within the range or on the end point of the range. In fact, the range end points are not hard and fast in nature. Discussion of the range is followed by the sentence: "Depending on the composition, however, amounts which deviate from this may also be necessary." (col. 2, ll. 60-61). Moreover, the disclosed ranges 0.1 to 5% and 0.5 to 3% are ranges of concentration for stabilizer generally, not any particular stabilizer, and there are a number to choose from. Under this circumstance, one of ordinary skill in the art would view the range as a guideline and conduct routine experimentation to find the workable or optimal range for a particularly selected stabilizer. This is the type of activity that, while within the skill in the art and

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supportive of a rejection based on obviousness, does not reflect a "description" of any particular concentration value sufficient to support anticipation.

I find, in the present case, that the examiner has not established anticipation because the description of the polyoxymethylene composition presented in Kurz is not sufficiently specific to support the examiner's finding of anticipation. See In re Schaumann, 572 F.2d 312, 317, 197 USPQ 5, 8 (CCPA 1978) (In order to anticipate, a reference must identify something falling within the claimed subject matter with sufficient specificity to constitute a description thereof within the purview of § 102.). Put in another way, Kurz contains no discrete embodiment or other detailed description such that each and every limitation of the claimed composition is taught, either explicitly or inherently. In re Schreiber, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997) ("To anticipate a claim, a prior art reference must disclose every limitation of the claimed invention, either explicitly or inherently.") and Richardson v. Suzuki Motor Co. Ltd., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir.), cert. denied, 493 U.S. 853 (1989) ("The identical invention must be shown in as complete detail as is contained in the . . . claim.").

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I, however, conclude that there is a basis for a rejection under 35 U.S.C. § 103(a) because the selection of the ingredients in the concentrations claimed would have been within the capabilities of one of ordinary skill in the art as evidenced by Kurz. See In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

For the above reasons, I dissent from the majority's affirmance of the examiner's decision to reject claims 11-14, 17, and 19-27 under 35 U.S.C. § 102(e) as anticipated by Kurz. I agree with my colleagues with respect to the reversal of the anticipation rejection of claims 16 and 18. Therefore, I would reverse the rejection under 35 U.S.C. § 102(e) with regard to all the claims on appeal. Because there is a basis for a rejection under 35 U.S.C. § 103(a) based on Kurz, I would remand the application to the examiner so that the appropriate rejection under 35 U.S.C. § 103(a) could be entered by the examiner.

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