

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. 32

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte UWE NUMRICH, MICHAEL WICKER,
KLAUS ALBRECHT,
HEINZ VETTER,
HERMANN JAKSCH,
and ERNST MOHR

Appeal No. 2003-1625
Application No. 09/341,669

HEARD: DECEMBER 9, 2003

Before GARRIS, WALTZ, and JEFFREY T. SMITH, Administrative Patent Judges.

GARRIS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the final rejection of claims 14-16, 18, 19, 21, 22, 24, 25, 28, 29 and 32. The only other claims remaining in the application, which are claims 17, 20, 23, 26, 27, 30 and 31, stand withdrawn from further consideration by the examiner.

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The subject matter on appeal relates to a method for producing a molding composition (and to the molding composition itself) consisting essentially of (1) a polymer comprised of 80-100 weight percent of methyl methacrylate monomer units and 0-20 weight percent of C1 to C4-alkyl ester of acrylic acid monomer units and (2) 0.0005 to 0.005 weight percent of a reducing inorganic phosphorous compound. According to the appellants' specification, the presence of the aforementioned phosphorous compound results in an improvement in the yellow index of a molding prepared from the molding composition. Further details of this appealed subject matter are set forth in representative independent claims 14, 28 and 32 which read as follows:

14. A method for producing a molding composition consisting essentially of a polymer comprised of 80-100 weight-percent of methyl methacrylate monomer units and 0-20 weight-percent of C1-to C4-alkyl ester of acrylic acid monomer units and a reducing inorganic phosphorus compound, wherein the method comprises:

adding to said polymer 0.0005 to 0.005 weight-percent, based on the weight of said polymer, of one or more reducing inorganic phosphorus compounds selected from the group consisting of phosphinic acid, phosphonic acid, alkali metal salts of phosphinic acid, alkali metal salts of phosphonic acid, alkaline earth salts of phosphinic acid, alkaline earth salts of phosphonic acid, aluminum salts of phosphinic acid, aluminum salts of phosphonic acid, ammonium salts of phosphinic acid, and ammonium salts of phosphonic acid, wherein the ammonium salts may be substituted with up to four C1- to C4-alkyl and/or C5- to C8-cycloalkyl groups, and

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wherein a molding of 100 mm thickness prepared from said molding composition has a transmission of 89-92%, and

wherein the yellow index according to DIN 6167 (D65/10E) or according to ASTM D 1925 of a molding of 100 mm thickness prepared from said molding composition is at least 40% lower than a molding of 100 mm thickness prepared from said molding composition without said one or more reducing inorganic phosphorus compounds.

28. A method for producing a molding composition consisting essentially of a polymer and one or more reducing inorganic phosphorus compounds, comprising:

adding to said polymer, wherein said polymer is comprised of 80-100 weight-percent of methyl methacrylate monomer units and 0-20 weight-percent of C1- to C4-alkyl ester of acrylic acid monomer units, 0.0005 to 0.005 weight-percent, based on the weight of said polymer, said one or more reducing inorganic phosphorus compounds selected from the group consisting of phosphinic acid, phosphonic acid, alkali metal salts of phosphinic acid, alkali metal salts of phosphonic acid, alkaline earth salts of phosphinic acid, alkaline earth salts of phosphonic acid, aluminum salts of phosphinic acid, aluminum salts of phosphonic acid, ammonium salts of phosphinic acid, and ammonium salts of phosphonic acid, wherein the ammonium salts may be substituted with up to four C1- to C4-alkyl and/or C5- to C8-cycloalkyl groups.

32. A method for producing a molding composition consisting essentially of a polymer which is not a core/shell polymer and which is comprised of 80-100 weight-percent of methyl methacrylate monomer units and 0-20 weight-percent of C1- to C4-alkyl ester of acrylic acid monomer units and a reducing inorganic phosphorus compound, wherein the method comprises:

adding to said polymer 0.0005 to 0.005 weight-percent, based on the weight of said polymer, of one or more reducing inorganic phosphorus compounds selected from the group consisting of phosphinic acid, phosphonic acid, alkali metal salts of phosphinic acid, alkali metal salts of phosphonic acid, alkaline earth salts of phosphinic acid, alkaline

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earth salts of phosphonic acid, aluminum salts of phosphonic acid, aluminum salts of phosphonic acid, ammonium salts of phosphonic acid, and ammonium salts of phosphonic acid, wherein the ammonium salts may be substituted with up to four C1- to C4-alkyl and/or C5- to C8-cycloalkyl groups, and

wherein a molding of 100 mm thickness prepared from said molding composition has a transmission of 89-92%, and

wherein the yellow index according to DIN 6167 (D65/10E) or according to ASTM D 1925 of a molding of 100 mm thickness prepared from said molding composition is at least 40% lower than a molding of 100 mm thickness prepared from said molding composition without said one or more reducing inorganic phosphorus compounds.

The references set forth below are relied upon by the examiner in the Section 102 and Section 103 rejections before us:

Wanat	5,063,259	Nov. 5, 1991
Numrich et al. (Numrich)	5,726,245	Mar. 10, 1998

Claim 32 stands rejected under the first paragraph of 35 U.S.C.

§ 112 as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. According to the examiner, the subject matter in question constitutes the negative claim limitation "which is not a core/shell polymer" vis-à-vis the polymer encompassed by claim 32.

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Claims 28 and 29 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Wanat.

Claims 28 and 29 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Numrich.

Claims 14-16, 18, 19 and 21 stand rejected under 35 U.S.C. § 102(b) as being anticipated by, or alternatively under 35 U.S.C. § 103(a) as being obvious over, Wanat.

Finally, claims 14-16, 18, 19, 21, 22, 24 and 25 stand rejected under 35 U.S.C. § 102(e) as being anticipated by, or alternatively under 35 U.S.C. § 103(a) as being obvious over, Numrich.

On page 3 of the brief, the appellants indicate that the appealed claims do not stand or fall together. However, as correctly indicated by the examiner on page 2 of the answer, the appellants have failed to present separate arguments as to why commonly rejected claims are individually patentable as required by 37 CFR § 1.192(c)(7) and (8) (2002). See In re Dance, 160 F.3d 1339, 1340 n.2, 48 USPQ2d 1635, 1636 n.2 (Fed. Cir. 1998) and Ex parte Schier, 21 USPQ2d 1016, 1018 (Bd. Pat. App. & Int. 1991). In this regard, it is significant that the examiner's position on this matter has not been contested by the appellants in the reply brief filed April 18, 2003 in response to the examiner's answer.

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Under these circumstances, we will focus on independent claims 14, 28 and 32 as respectively representing the claims involved in the rejections advanced on this appeal. Rather than reiterate the respective positions advocated by the appellants and by the examiner concerning the above noted rejections, we refer to the brief and reply brief and to the answer for a complete exposition thereof.

OPINION

For the reasons well stated in the answer, we will sustain each of the rejections before us. We add the following comments for emphasis and completeness.

With respect to all of the rejections, it is the appellants' fundamental position that their specification disclosure descriptively supports the claim 32 requirement that the recited polymer "is not a core/shell polymer" and further that this disclosure requires the other appealed claims to be interpreted as excluding a core/shell polymer. As a consequence of this position, the appellants consider the appealed claims to comply with the written description requirement in Section 112, first paragraph, and to patentably distinguish over the Wanat and Numrich references since the molding compositions of these

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references include core/shell polymers. The appellants' position is not well founded.

The written description requirement in the first paragraph of Section 112 demands that an applicant must convey with reasonable clarity to those skilled in the art that the applicant, as of the filing date sought, was in possession of the presently claimed invention. Vas-Cath, Inc. v . Mahurkar, 935 F.2d 1555, 1563-64, 19 USPQ2d 1111, 1116-17 (Fed. Cir. 1991). In the context of claimed subject matter which is defined by way of negative limitations, such limitations must not introduce new concepts and thereby violate the written description requirement of Section 112, first paragraph. See In re Anderson, 471 F.2d 1237, 1244, 176 USPQ 331, 336 (CCPA 1973) and Ex Parte Grasselli, 231 USPQ 393, 394 (Bd. App. 1983).

We fully share the examiner's view that the claim 32 recitation "which is not a core/shell polymer" introduces new concepts the possession of which by the appellants would not have been conveyed via the original specification disclosure to those skilled in the art. In support of their opposing view, the appellants argue that "[t]he description in the specification on page 8 [and] in the examples are considered to be sufficient basis for this [claim 32] limitation since a core/shell polymer

presupposes a core and a layer or layers having different physical or chemical properties . . . while the description in the specification in page 8 and in the examples indicates that only a homopolymer or single copolymer of methyl methacrylate is used in the present invention and this disclosure would preclude the formation of a core/shell polymer, because there would be no differentiation between core and shell, unless there was a difference in physical or chemical properties between the core material and the shell material" (brief, page 4).

Like the examiner, however, we do not consider page 8 or any other portion of the subject specification to limit the polymer used in the appellants' invention to "only a homopolymer or single copolymer of methyl methacrylate" (id.).¹ Even if the appellants' polymers were restricted to those based on methyl methacrylate as argued, this restriction would not preclude formation of a core/shell polymer. This is because the homopolymer or copolymer specifically described in the appellants' specification may vary in physical properties such as

¹Certainly claim 32 (as well as the other independent claims on appeal) is not so limited since the recitation "a polymer . . . comprised of . . ." is open to the inclusion of polymers other than those explicitly recited. See In re Baxter, 656 F.2d 679, 686, 210 USPQ 795, 802 (CCPA 1981).

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molecular weight (e.g., compare specification examples 1-4 with examples 5-8), and a core and shell may be differentiated via a difference in physical properties as the appellants themselves concede in their aforequoted argument. Moreover, as correctly explained by the examiner in the answer, this last mentioned viewpoint is supported by the disclosure in column 4, lines 52-57, of Wanat that his "[p]referred particles [i.e., core/shell polymer particles] are those in which the core layer and the outer layer thereof comprise resins which are made from the same monomer(s) that are used to prepare the matrix resin of the composition, that is, homopolymers of methyl methacrylate or random copolymers of methyl methacrylate" (emphasis added).

For the reasons set forth above and in the answer, we hereby sustain the examiner's Section 112, first paragraph, rejection of claim 32.

Additionally, we agree with the examiner's finding that claims 28 and 29 are anticipated by either Wanat or Numrich. Contrary to the appellants' argument, the "consisting essentially of" language of these claims does not exclude from the claimed subject matter the core/shell polymer particles which are present in the respective molding compositions of Wanat and Numrich.

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The language "consisting essentially of" would exclude from claims 28 and 29 only those unrecited polymers which would materially affect the basic and novel characteristics of the molding composition defined in these claims. See Atlas Powder Co. v. E.I. Du Pont de Nemours & Co., 750 F.2d 1569, 1573-74, 224 USPQ 409, 411 (Fed. Cir. 1984); In re Herz, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976); In re Janakirama-Rao, 317 F.2d 951, 954, 137 USPQ 893, 896 (CCPA 1963).

In order to assess the basic and novel characteristics of the appellants' molding composition, we have carefully studied the subject specification including the portions referred to by the appellants. This study leads us to conclude that the basic and novel characteristics of the appellants' molding composition are at least similar to those of the Wanat and Numrich molding compositions. In each case, a molding composition based on polymethyl methacrylate is treated with a reducing inorganic phosphorus compound (in amounts which are common to each of the disclosures of appellants, Wanat and Numrich) in order to reduce the yellowness characteristic of the melted product (and concomitantly to reduce the amount of bluing agent needed in the composition). In these respects, see, for example: pages 1, 6-7 and 15-16 of the subject specification in comparison with Wanat

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at the paragraph bridging pages 2 and 3, the paragraph bridging pages 5 and 6 and examples 9-10 as well as Numrich at the abstract, lines 14-64 in column 3 and the paragraph bridging columns 7 and 8. Viewed from this perspective, the Wanat and Numrich references evince that the core/shell polymer particles thereof do not materially affect the basic and novel characteristics of molding compositions of the type under review. Rather, these core/shell polymer particles are consistent with the basic and novel characteristics of such molding compositions. It follows that, on the record before us, the claim language "consisting essentially of" cannot be regarded as excluding the core/shell polymer particles of either Wanat or Numrich.

Particularly with this last mentioned point in mind, we consider it appropriate to reiterate the examiner's view that it is the appellants' burden to establish that these prior art core/shell polymer particles are excluded from the claims under consideration by virtue of the claim language "consisting essentially of." The appellants apparent belief that they have no such burden is erroneous. See Herz, 537 F.2d at 551-52, 190 USPQ at 463; In re De Lajarte, 337 F.2d 870, 873-74, 143 USPQ 256, 258 (CCPA 1964); and Ex parte Hoffman, 12 USPQ2d 1061, 1064 (Bd. Pat. App. & Int. 1989).

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In light of the foregoing and for the reasons expressed in the answer, we also hereby sustain the examiner's Section 102 rejections of claims 28 and 29 as being anticipated by Wanat and Numrich respectively.

Finally, for reasons analogous to those discussed above and in the answer, we likewise hereby sustain the examiner's Section 102 and Section 103 rejections of claims 14-16, 18, 19 and 21 based on Wanat and of claims 14-16, 18, 19, 21, 22, 24 and 25 based on Numrich. While the Wanat and Numrich references do not expressly disclose the specific yellow index characteristic required by these claims, it is reasonable to believe that the respective molding products of Wanat and Numrich would necessarily and inherently possess this characteristic. This is because the yellow-reducing goals of Wanat and Numrich correspond to those of the appellants and because the molding compositions and molding processes of Wanat and Numrich are indistinguishable from those claimed by the appellants as previously explained.

Where, as here, the claimed and prior art products (and the processes for producing them) are identical or substantially identical, the Patent and Trademark Office can require an applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his claimed product.

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Whether the rejection is based on "inherency" under 35 U.S.C. § 102, on "prima facie obviousness" under 35 U.S.C. § 103, jointly or alternatively, the burden of proof is the same and its fairness is evidenced by the inability of the Patent and Trademark Office to manufacture products or to obtain and compare prior art products. In re Best, 562 F.2d 1252, 1254-55, 195 USPQ 430, 433-34.

On the record of this appeal, the appellants have proffered no such proof. These circumstances lead us to the determination that the claims under review do not distinguish over Wanat or Numrich in any of the respects argued by the appellants including the yellow index characteristic of the molding product which is required by these claims.

In summary, we have sustained each of the rejections advanced by the examiner on this appeal.

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The decision of the examiner is affirmed.

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

AFFIRMED

BRADLEY R. GARRIS)	
Administrative Patent Judge)	
)	
)	
)	BOARD OF PATENT
THOMAS A. WALTZ)	APPEALS AND
Administrative Patent Judge)	INTERFERENCES
)	
)	
)	
JEFFREY T. SMITH)	
Administrative Patent Judge)	

BRG/hh

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