DE C I S I O N
of 10 December 2001

Case Number: W 0010/01 - 3.3.1
Application Number: PCT/EP 00/05873
Publication Number: -
IPC: C09B 67/04
Language of the proceedings: EN

Title of invention:
Pigments having improved colouristic properties and process for their preparation

Applicant:
CIBA SPECIALTY CHEMICALS HOLDING INC.

Opponent:
-

Headword:
Pigments/CIBA

Relevant legal provisions:
EPC Art. 155(3)
PCT Art. 17(3)(a)
PCT R. 13.1 and 2, 40.1 and 2

Keyword:
"Lack of unity - a priori (yes) - claimed process does not inherently result in the claimed product"

Decisions cited:

Catchword:
-
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International Application No. PCT/EP 00/05873

DE C I S I O N
of the Technical Board of Appeal 3.3.1
of 10 December 2001

Applicant: CIBA SPECIALTY CHEMICALS HOLDING INC.
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Representative: CIBA SPECIALTY CHEMICALS HOLDING INC.
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Subject of the Decision: Protest according to Rule 40.2(c) of the Patent Cooperation Treaty made by the applicants against the invitation (payment of additional fees) of the European Patent Office (International Searching Authority) dated 20 November 2000.

Composition of the Board:
Chairman: A. Nuss
Members: P. P. Bracke
B. Günzel
Summary of Facts and Submissions

I. International patent application PCT/EP 00/05873 was filed on 23 June 2000 with 27 claims.

II. On 20 November 2000 the European Patent Office (EPO), acting as an International Search Authority (ISA), informed the applicant that the ISA had carried out a partial international search on those parts of the international application which related to the invention mentioned in claims Nos. 1 to 11, 21 to 27 (partially) and that the application did not comply with the requirement of unity of invention since there were four inventions claimed. The international search report on the other parts of the international application would be established only if, and to the extent to which, additional fees were paid. Thereby the ISA invited the applicant to pay 3 additional search fees pursuant to Article 17(3)(a) and Rule 40.1 PCT within a period of 30 days.

In an annex to this invitation the ISA submitted that the application related to four inventions, namely:

(i) Claims 1 to 11, 21 to 27 (partially) relating to a two step process for preparing a pigment, the application of this process to CI Pigment Violet 23 (I) and the use of pigments prepared with the claimed process;

(ii) Claims 12 to 15, 21 to 27 (partially) relating to a pigment (I) characterized by colouristic values in a gravure printing ink and its use;
(iii) Claims 16 to 18, 21 to 27 (partially) relating to pigments from various families, e.g. a specific pigment (II), characterized by particles parameters and the use thereof; and

(iv) Claims 19 to 20, 21 to 27 (partially) relating to a pigment of formula (II) characterized by parameters of a dispersion of this pigment in a methacrylic resin and its use.

In the group of Claims 1 to 11, the independent claims read as follows:

"1. A process for preparing a pigment, which comprises

subjecting a crude pigment or mixture of crude pigments and a crystalline inorganic salt or mixture of crystalline inorganic salts together, essentially in the absence of other constituents, to the action of a rotor having a tangential speed of at least 10 m/s, so that a temperature of at least 80°C is attained by means of friction effects; and subsequently

kneading the product of this treatment with an organic liquid, during which it is possible if desired to add additional substances selected from the group consisting of inorganic salts, inert additives and colorants."

"3. A process for converting a crude pigment into an substantially amorphous fine-particled form, which comprises subjecting a crude pigment and a crystalline inorganic salt or mixture of crystalline inorganic salts together, essentially in the absence of other components, to the action of a rotor having a
tangential speed of at least 10 m/s, so that by means of frictional effects a temperature of at least 80°C is reached."

"5. A process for preparing a pigment by kneading a composition consisting essentially of a compound of formula

\[
\begin{align*}
\text{H}_5\text{C}_2\text{N} & \quad \text{N} \\
\text{N} & \quad \text{O} \\
\text{Cl} & \quad \text{O} \\
\text{NC}_2\text{H}_5 & \quad \text{Cl}
\end{align*}
\]

a crystalline inorganic salt or mixture of crystalline inorganic salts and an organic liquid, wherein

- at the beginning of kneading, the compound of the formula (I) is in substantially amorphous form;
- the organic liquid contains at least one oxo group in its molecule; and
- the proportion of organic liquid to inorganic salt is from 1 ml:6 g to 3 ml:7 g, and the proportion of organic liquid to the overall weight of inorganic salt and compound of the formula (I) is from 1 ml:2.5 g to 1 ml:7.5 g."

"10. A pigment obtainable by a process according to claim 2."

"11. A pigment of the formula (I) obtainable by a process according to claim 5."

Claim 2 was dependent on Claim 1, Claim 4 dependent on
Claim 3 and Claims 5 to 9 were directly or indirectly dependent on Claim 5.

The sole independent claim in the group of Claims 16 to 18 read as follows:

"16. A substantially crystalline organic pigment of the quinacridone, anthraquinone, perylene, indigo, quinophthalone, indanthrone, isoindolinone, isoindolone, dioxazine, azo, phthalocyanine or diketopyrrolopyrrole series consisting of particles of average size from 0.01 µm to 0.12 µm, characterized in that the total quantity of particles of size greater than 0.12 µm and smaller than 0.01 µm is from 0 to 8% by weight, based on the weight of particles of size from 0.01 µm to 0.1 µm, and the full width at half maximum of a CuKα radiation X-ray powder diagram is from 0 to 0.68°2θ."

Claims 17 and 18 were dependent on Claim 16.

Claims 21 to 27 were related to printing ink concentrates, printing inks, colour filters, compositions for making colour filters and mass-coloured, high molecular mass organic material comprising a pigment obtained according to a claimed process or as defined in any of the previous claims. Claims 27 was related to a process for colouring high molecular mass organic material in the mass, which comprises incorporating therein a pigment according to any claim 10 to 20.

Since the inventive concept in the group (i) claims consisted in providing a process for preparing pigments with better colouristic properties and the claims in
groups (ii), (iii) and (iv) were not related to such process, the ISA was of the opinion that the four inventions were not linked by a single general inventive concept according to Rule 13.1 PCT.

III. With letter of 29 November 2000, the applicant paid one additional fee under protest pursuant to Rule 40.2(c) PCT for the group (iii) claims and in his reasoned statement he submitted that the groups (ii), (iii) and (iv) claims were closely related with the inventive concept of the group (i) claims, since Claims 12, 16 and 19 defined pigments as obtained by the process of Claim 1. Although Claims 12, 16 and 19 were written in an independent form, they could be made dependent from group (i) claims.

IV. On 24 January 2001, the ISA issued the International Search Report covering only the group (i) and (iii) claims, as only one additional search fee had been timely paid by the applicant for the group (iii) claims. The applicant was also informed that, as a result of the prior review under Rule 40.2(c) PCT, no additional fees were to be refunded. Also on 24 January 2001, the ISA issued a communication notifying the applicant that the ISA had reviewed the justification for the invitation to pay additional search fees and, as the Review Panel came to the conclusion that the invitation to pay additional fees was justified, the applicant was invited under Rule 40.2(e) PCT to pay a protest fee within one month.

V. The protest fee was paid with letter of 14 February 2001.
Reasons for the Decision

1. According to the agreement between the EPO and WIPO under the PCT (OJ EPO 1987, 515) and Article 155(3) EPC, the Board of Appeal is competent to decide upon the present protest.

2. The protest complies with the requirements of Rule 40.2(c) and (e) PCT and is therefore admissible.

3. The communication containing the result of the prior review and inviting the applicant to pay the protest fee appears not to reveal the composition of the review panel. Although this information should be available to the Applicant and to the Board in order to have a basis to see whether the review has been made by the appropriate body as prescribed by the President of the EPO (see OJ EPO 1992, 547), such invitation is to be considered correct if the correct composition has been shown otherwise (see decision W 6/96 of 15 April 1997, point 1 of the reasons). In the present case, a copy of the Review Nr. 00/SIS06/1221/13 in the search file SA(E)298034 indicating the three members of the Review Panel and bearing their signatures is available to the Board. Thus, the Review Panel was correctly composed and was competent for inviting to pay the protest fee.

4. According to Rule 13.1 and 13.2 PCT the requirement of unity of invention may only be fulfilled if a group of inventions is so linked as to form a single general inventive concept, ie if there is a technical relationship among the inventions involving one or more of the same or corresponding technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior
5. The objection of a-priori non-unity was based by the ISA on the ground that there is no common inventive concept linking the claimed process for preparing pigments having improved colouristic properties and the claimed pigments having improved colouristic properties.

Pursuant to Article 2 of the Agreement between the EPO and WIPO dated 7 October 1897 (OJ EPO 1987, 515) the international search shall be carried out in accordance with the PCT, its Regulations and the Administrative Instructions; when carrying out the international search under the PCT, the International Search Guidelines shall guide it. Chapter VII-1 of those Search Guidelines stipulates that when assessing unity of invention in accordance with the provisions laid down in Rule 13.1 to 13.4 PCT, inter alia Annex B of the Administrative Instructions under the PCT are to be observed. It follows therefrom that in the assessment of unity the Administrative Instructions are binding not only for the ISA but also for the Board acting as the "three-member board" according to Rule 40.2(c) PCT (see W 3/94 OJ EPO 1995, 775, point 10 of the reasons).

With respect to the unity of invention relating to the particular situation involving combinations of different categories of claims, the Administrative Instructions under the PCT stipulate in part 1, (e) that the method for determining unity of invention under Rule 13 shall be construed as permitting the combination of an independent claim for a given product and an independent claim for a process specially adapted for the manufacture of the said product, it
being understood that a process is specially adapted for the manufacture of a product if it inherently results in the product.

6. Thus, in the present case, the question arises whether the processes according to the group (i) claims inherently result in the pigments according to the group (iii) claims.

Nowhere in the application in suit any indication can be found that the process according to the group (i) claims inherently results into the pigments according to the group (iii) claims. Even more, from the teaching in the paragraph bridging pages 16 and 17 of the application in suit, that the organic pigments obtained by the instant process and their use in colour filters are an object of the invention, and the teaching in the penultimate paragraph on page 17 of the application in suit, that the invention also pertains to the use of the instant pigments in colour filters, it follows that the applicant ab initio did not consider that the pigments of the group (iii) claims corresponded with those obtained by a process according to the group (i) claims. Consequently, the process of the group (i) claims do not inherently result in the pigments according to the group (iii) claims.

7. As support of his submission that the process of Claim 1 leads to the products of Claim 16, the applicant referred to the passage on page 9, line 10 to page 10, line 10 of the application and to Examples C1, C12, D1 and E2.

However, from the passage on page 9, line 10 to page 10, line 10 of the application, which concerns the
preferred pigments and pigment classes in the process according to Claim 3, it may not be deduced that the pigments according to Claim 16 are obtained according to a process as defined in Claim 3. Moreover, it is irrelevant whether Examples C1, C12, D1 and E2 describe pigments according to Claim 16, which are prepared according to a method in any of the processes according to the group (i) claims.

The only relevant question is whether the process of the group (i) claims inherently results in the pigments according to the group (iii) claims. As this is not the case here, the group (i) claims and the group (iii) claims may not be considered to be based on the same inventive concept.

8. The applicant also argued that the splitting of process and product claims which are clearly related together into different inventions would clearly be in contradiction with the principle of decision W 11/99 (OJ EPO 2000, 186).

In point 2.4 of the reasons of that decision it is said that a manufacturing process and its product may not be regarded as lacking unity of invention by virtue of the fact that the manufacturing process is not restricted to the manufacture of the claimed product. However, what is at least necessary according to the above cited Administrative Instructions (see above under 4), is, that the process according to the group (i) claims inherently results into the pigments according to the group (iii) claims, a requirement which is not fulfilled in the present case.

9. For the foregoing reasons, the Board comes to the
conclusion that the inventions according to group (i) claims and group (iii) claims do not form a single general inventive concept and, consequently, that the invitation made under Article 17(3)(a) and Rule 40.1 PCT to pay one additional fee was justified.

10. The Applicant considered that the Review Panel inadequately considered the subject-matter for which no additional search fee was paid. The protest was directed against the ISA’s finding of multiple inventions as a whole. Whereas the number of additional fees paid determined which parts of the application were searched according to Article 17(3)(a) PCT, it had no influence on the examination of the protest according to Rule 40.2(c) to (e), as only one protest and only one protest fee were foreseen by the PCT regulation, even in cases where many additional search fees are requested.

11. It is not contested that only one protest and only one protest fee are foreseen by the PCT regulation.

However, since Rule 40.2(c) PCT specifies that any applicant may pay the additional fee under protest, that is accompanied by a reasoned statement to the effect that the international application complies with the requirement of unity of invention or that the amount of the required additional fee is excessive, it follows that the examination of the protest is restricted to the examination as to whether the applicant is entitled to a refund of the additional search fees paid by him on invitation.

Since, in the present case, the applicant paid only one additional fee for the group (iii) claims, the protest
is restricted to the examination whether the invitation to pay that one additional fee is justified.
Consequently, contrary to applicant’s opinion, neither the review panel nor the Board could consider the subject-matter for which no additional search fee was paid. If the applicant wished to have all inventions searched he should have paid under protest all the additional search fees asked for in the invitation. The Review Panel and the Board would then have been entitled to examine to the full extent how far that invitation was justified.

Order

For these reasons it is decided that:

The protest according to Rule 40.2(e) PCT is dismissed.

The Registrar: The Chairman:

N. Maslin A. Nuss