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**Datasheet for the decision
of 23 September 2019**

Case Number: T 0584/16 - 3.4.02

Application Number: 05755549.2

Publication Number: 1754034

IPC: G01J3/46

Language of the proceedings: EN

Title of invention:

SYSTEM AND METHOD FOR CONTROLLING METAMERISM

Patent Proprietor:

Sun Chemical Corporation

Opponent:

Siegwerk Benelux SA

Headword:

Relevant legal provisions:

EPC Art. 123(2)

EPC 1973 Art. 83, 100(b)

Keyword:

Oral proceedings - Declaration of non-attendance and reliance on written arguments amounts to withdrawal of request for oral proceedings

Main request - Sufficiency of disclosure (no)

Auxiliary request - Amendments - Added subject-matter (yes)

Decisions cited:

Catchword:



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Case Number: T 0584/16 - 3.4.02

D E C I S I O N
of Technical Board of Appeal 3.4.02
of 23 September 2019

Appellant: Sun Chemical Corporation
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Respondent: Siegwerk Benelux SA
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Representative: Hepp Wenger Ryffel AG
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Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 16 February
2016 revoking European patent No. 1754034
pursuant to Article 101(3) (b) EPC.**

Composition of the Board:

Chairman R. Bekkering
Members: C. Kallinger
G. Decker

Summary of Facts and Submissions

- I. The appellant (patent proprietor) lodged an appeal against the decision of the opposition division revoking European Patent No. 1 754 034.
- II. In its decision the opposition division held that
 - the patent as granted did not fulfill the requirements of Article 83 EPC 1973;
 - the patent as amended by the proprietor did not meet the requirements of Article 123(2) EPC and/or Article 83 EPC 1973.
- III. The appellant requested to set aside the opposition division's decision and as a
 - main request that a patent be maintained on the basis of the claims according to the main request filed with the grounds of appeal dated 27 June 2016,
 - "revised main request" that the patent be maintained as granted,
 - first auxiliary request that the patent be maintained on the basis of the claims according to the first auxiliary request filed with the grounds of appeal dated 27 June 2016.
- IV. The respondent (opponent) requested that the appeal be rejected, i.e. that the opposition division's decision revoking the patent be upheld.
- V. Both parties requested oral proceedings in case the board did not follow their requests.
- VI. In case the board should intend to allow the appeal in respect of the ground of opposition according to

Article 100(b) EPC 1973, i.e. that the patent fulfilled the requirements of Article 83 EPC 1973, both parties requested to remit the case to the opposition division for a decision on the other grounds of opposition according to Article 100(a) and (c) EPC 1973 which have been raised by the respondent in the opposition proceedings.

- VII. By communication dated 15 July 2019, the parties were summoned to attend oral proceedings on 16 October 2019. In a communication annexed to the summons, the board provided its provisional opinion on the merits of the appeal.
- VIII. With a letter dated 5 September 2019, the appellant informed the board that it would not be attending the oral proceedings and that it relied on its previously-filed written submissions. No further requests or arguments were submitted.
- IX. With a letter dated 16 September 2019, the respondent stated that, should the board follow its provisional opinion that the appeal should be rejected, oral proceedings could be cancelled and a decision revoking the patent be issued. No further requests or arguments were submitted.
- X. The oral proceedings scheduled for 16 October 2019 were cancelled and, by a communication of the board's registrar dated 20 September 2019, the parties were informed accordingly.
- XI. Claim 1 of the main request reads as follows (the amendments in comparison to the patent as granted have been marked by the board by underlining and strike-through).

"1. A method for controlling metamerism by providing a plurality of formulas that ~~as~~ are suitable for producing a color for at least two colored materials, the method comprising:

electronically providing color choices, the color choices selectable to represent the color;

electronically providing criteria choices, the criteria choices selectable to represent at least a characteristic of colored materials;

electronically receiving a color selection (S100) from the color choices;

electronically receiving a first ~~material~~ material criteria selection from the criteria choices (S104);

electronically receiving a second material criteria selection (S104) from the criteria choices;

electronically matching (S110) the color selection and the first material criteria selection and providing a first formula (S112) suitable to produce the color represented by the color selection for a first of the at least two colored materials;

electronically matching (S112) the color selection and the second material criteria selection and providing a second formula (S112) suitable to produce the color for a second of the at least two colored materials;

CHARACTERISED BY:

electronically optimizing (S118) the first formula and the second formula to control metamerism between the first colored material and the second colored material, wherein the electronically optimizing of the first formula and the second formula comprises:

i setting a variable X to 1, wherein the variable X represents a stored formula ~~or~~ for reproducing a selected color for a selected material criteria (S200);

- ii* retrieving a formula X representing a colorant formula for the selected color and the selected material criteria from a color materials formulas table 32 (S202);
- iii* determining a degree of metameric effect on the selected color (S204);
- iv* determining the degree of metameric effect for the selected material criteria (S206);
- v* revising the formula X (S208) by adjusting a colorant type and an amount thereof to minimize metamerism;
- vi* storing the revised formula X , said revised formula X being an optimized first formula (S210);
- vii* setting the variable X to $X+1$ (S212);
- viii* repeating steps *ii*) to *vii*) for $X = X + 1$;
- ix* determining whether a further formula is provided for optimization (S214);
 - a.* wherein when a further formula is provided, steps (*ii*) to (*vii*) are repeated to optimize the further formula; and
 - b.* if no additional formula is provided for optimization, ending the method of electronically optimizing the first formula and the second formula."

XII. Claim 1 of the "revised" main request corresponds to claim 1 of the patent as granted and differs from claim 1 of the main request in that the above marked amendments are not present.

XIII. In comparison to the main request, step (v) of independent claims 1 and 9 of the auxiliary request has been amended as follows (amendments underlined):

- (v) revising the formula X (S208) by adjusting a colorant type and an amount thereof to minimize metamerism and thereby control metamerism between the first colored material and the second colored material;

Reasons for the Decision

1. The appeal is admissible.

2. With its letter dated 5 September 2019, the appellant stated that it would not be attending the oral proceedings before the board and that it relied on its previously-filed written submissions. Hence, the appellant has unequivocally expressed that it did not wish to present further arguments at the oral proceedings and that it requested a decision according to the state of the file. According to established case law of the Boards of Appeal, this amounts to a withdrawal of the appellant's request for oral proceedings.

After the board informed the parties about its provisional opinion, no new arguments have been presented by the parties.

The board sees no reason to diverge from its provisional opinion.

As the board follows the respondent's request to dismiss the appeal, the respondent's request for oral proceedings becomes obsolete. The board therefore found it appropriate to cancel the oral proceedings in the present case.

3. Main request - Sufficiency of disclosure - Article 83 EPC 1973

3.1 The opposition division came to the conclusion that the subject-matter for which protection was sought was not disclosed in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art.

3.2 The appellant stated that in the prior art there existed a problem when metamerism for different materials was optimized independently from each other. As stated in the description (see paragraph [0008] of the patent specification), *"[t]wo optimized matches to an external [color] standard may not exhibit the optimum match to each other, leaving the final product [consisting of differing materials] with an objectionable color mismatch."*

The appellant argued that the inventors recognised that it may be better to get a less good match to the standard in order to get a better match of the colour on different materials and that the invention solved this problem according to claim 1 by *"electronically optimizing (S118) the first formula and the second formula to control metamerism between the first colored material and the second colored material"*.

According to the appellant's reasoning, this knowledge alone enabled the skilled person to carry out the invention because methods of optimisation formed part of the common general knowledge of the skilled person. Similar optimisations were e.g. disclosed in the prior art. The present invention taught the skilled person that the target of the optimisation had changed from optimisation with respect to a colour standard to

optimisation between two differing materials. Therefore, the invention was disclosed in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art.

The appellant further argued that the claimed steps (i) to (ix) limited the protection of the claim to methods having those steps but did not set out the details of the optimisation (which was within the skilled person's abilities). Furthermore, there was no inconsistency in these steps and if at all, such inconsistencies would result in a lack of clarity (Article 84 EPC 1973), which was however not a ground for opposition.

- 3.3 The respondent argued that the claimed method, which aimed at optimising metamerism between a first and second coloured material, could not be carried out using the teaching of the patent as a whole. In particular, the patent lacked a teaching how the minimisation of metamerism as claimed in step (v) could be realised, because the patent failed to disclose the concept of comparing different materials with each other. Such a comparison, however, was indispensable in order to achieve the alleged aim of minimising metamerism between different materials. The respondent further argued that it was evident from independent claims 1 and 9, figure 6 and paragraph [0052] of the description that the method steps (i) to (ix) were performed for a single formula. Only in a subsequent iteration, a second formula was treated. However, such sequential optimisation of individual colourant formulas was in contrast to what the appellant described as the main idea of the invention, i.e. the comparison of formulas (for differing materials) with each other. Therefore, the alleged aim of the invention, i.e. the optimisation (=minimisation) of

metamerism between two different materials, could not be achieved in this manner.

The respondent further argued that already in the prior art (as described in paragraph [0008] of the patent) metamerism between two materials was controlled to at least some extent by comparing both materials to a common colour standard. As the alleged invention lay in the optimisation, i.e. minimisation of metamerism between different materials and the first part of the characterising portion contained no teaching towards this end, this part of the claim would not constitute a sufficient disclosure of the invention. The respondent further argued that also the description failed to disclose how to minimise the metamerism between two colouring formulas for differing materials. In conclusion, the patent did not meet the requirements of Article 83 EPC 1973.

- 3.4 The board agrees with the opposition division's and the opponent's arguments and is of the opinion that the invention is not disclosed in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art.

The appellant's argument that the disclosure in the first part of the characterising portion was sufficient for the skilled person to carry out the invention is not convincing. In the board's view, the skilled person learns from this part of the claim only that he has to *optimize* two colourant formulas in order to *control* metamerism between two coloured materials. The term *control* is however very general and cannot be interpreted in the sense of minimising. Therefore, this part of the claim is not sufficient to enable the skilled person to carry out the invention in order to

achieve the alleged aim of minimising metamerism between different materials (at the cost of a "less minimised" metamerism in relation to external colour standards).

According to the further features of claim 1, figure 6 and paragraph [0052] of the description, the electronic optimisation of the two formulas comprises the steps (i) to (ix). However, these steps define the optimisation of an individual formula (labelled with the counter X) and do not contain any teaching relating to the comparison of differing materials. Such a comparison, however, is indispensable if the metamerism between two different materials is to be optimised, i.e. minimised as claimed in step (v). In particular, step (v) defines "*revising a formula X*" in order to "*minimize metamerism*", and contains no teaching of how the claimed minimisation can be achieved with only a single colourant formula.

The appellant's line of argument that the respondent's arguments with respect to missing essential features concerned a lack of clarity according to Article 84 EPC 1973 and thus was no ground of opposition, is not convincing either. The board understands the respondent's argument that essential features were missing as an argument that the whole application lacks a sufficient disclosure of the invention in order for the skilled person to carry it out. This is an objection of insufficient disclosure according to Article 83 EPC 1973 and therefore a valid ground of opposition according to Article 100(b) EPC 1973.

The board therefore comes to the conclusion that the patent according to the main request lacks a sufficiently clear and complete disclosure of comparing

colouring formulas for different materials with each other which would enable the skilled person to carry out the invention and achieve the alleged aim of minimising metamerism between two coloured materials.

Therefore, the European patent does not disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art (Article 100(b) EPC 1973).

4. "Revised" main request

The appellant requested as a "revised" main request the maintenance of the patent as granted if the board did not consider the corrections contained in the main request allowable.

As the amendments (or their omission) do not change the substantive content of the claimed subject-matter, the same objections as discussed above under point 3. apply.

The board therefore comes to the conclusion that also the patent according to the "revised" main request (i.e. the patent as granted) does not disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art (Article 83 EPC 1973).

5. Auxiliary request

5.1 Amendments - Article 123(2) EPC

5.1.1 In comparison to the main request, step (v) of independent claims 1 and 9 of the auxiliary request has been amended as follows (amendments underlined):

(v) revising the formula X (S208) by adjusting a colorant type and an amount thereof to minimize metamerism and thereby control metamerism between the first colored material and the second colored material;

5.1.2 The appellant argued that this amendment repeated explicitly that the minimisation of metamerism defined in step (v) controls the metamerism between the first coloured material and the second coloured material as required by the first paragraph of the characterising portion. Thus, this amendment only made explicit what was already implicitly disclosed in claim 1 as originally filed. Therefore, the requirements of Article 123(2) EPC were met.

5.1.3 The respondent argued that the appellant did not provide a basis for this amendment and that also the application as filed had no clear and unambiguous disclosure that in step (v) of claims 1 and 9 metamerism between the first coloured material and the second coloured material was controlled. As all steps (i) to (ix) related to a modification of each colourant formula individually, no minimisation of metamerism between differing materials was possible. Therefore, claims 1 and 9 of the auxiliary request violated the requirements of Article 123(2) EPC.

5.1.4 The board is of the opinion that amended claim 1 does not meet the requirements of Article 123(2) EPC because the originally filed application documents fail to disclose that the minimisation in step (v) results in a control of metamerism between the first coloured material and the second coloured material. As already argued above (see section 3.4), steps (i) to (ix) describe the sequential treatment of individual colourant formulas (each formula subsequently labelled with the counter X) and there is no disclosure of how this treatment of individual formulas can lead to the minimisation of metamerism between two coloured materials.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



M. Kiehl

R. Bekkering

Decision electronically authenticated