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## Datasheet for the decision of 24 September 2015

Case Number: T 0391/11 - 3.5.07

05750427.6 Application Number:

Publication Number: 1756735

IPC: G06F17/30, H04N1/00

Language of the proceedings: ΕN

## Title of invention:

System and method for disseminating color ink and colorant formulas

## Applicant:

Sun Chemical Corporation

#### Headword:

Disseminating colour formulas/SUN CHEMICAL

## Relevant legal provisions:

EPC Art. 54, 123(2) RPBA Art. 13(3)

## Keyword:

Late-filed request - admitted (yes) Novelty - (yes) Amendments - added subject-matter (no)

## Decisions cited:

T 1273/04, T 0282/05

#### Catchword:



# Beschwerdekammern Boards of Appeal Chambres de recours

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Case Number: T 0391/11 - 3.5.07

D E C I S I O N
of Technical Board of Appeal 3.5.07
of 24 September 2015

Appellant: Sun Chemical Corporation

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Parsippany, NJ 07054 (US)

Representative: Vossius & Partner

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Decision under appeal: Decision of the Examining Division of the

European Patent Office posted on 27 August 2010

refusing European patent application No. 05750427.6 pursuant to Article 97(2) EPC.

## Composition of the Board:

Chairman R. Moufang

Members: P. San-Bento Furtado

M. Rognoni

- 1 - T 0391/11

## Summary of Facts and Submissions

- The appeal lies from the decision of the Examining Division to refuse European patent application No. 05750427.6, which was filed as international application PCT/US2005/017662 published as WO 2005/114482. The application concerns the electronic selection of colour ink and colourant formulas.
- II. The application was refused for lack of novelty,
  Article 54(1) and (2) EPC, of the subject-matter of
  claim 1 of a main request, and for lack of inventive
  step, Article 56 EPC, of the subject-matter of claim 1
  of an auxiliary request. The Examining Division
  considered the closest prior art to be document D1:

D1: WO-A-03/017144, published on 27 February 2003.

It found that this document disclosed all the features of claim 1 of the then main request and cited several passages. In reply to the applicant's argument that in the method of D1 formulas were not provided and there was no electronic matching of the selected colour and the selected criterion to allow for the selection of a colour formula, the Examining Division referred to page 16, lines 4 to 25, of the document.

Additionally, the Examining Division found that claim 1 of the auxiliary request was unclear.

Under the section "Additional remarks" of the decision the Examining Division explained that the subject-matter of the other independent claims of both requests was either not novel or not inventive, and that the features of the dependent claims were either known from document D1 or obvious.

- 2 - T 0391/11

III. With the statement of grounds of appeal the appellant submitted the claims of a main request and of two auxiliary requests. Claims 1 of these requests were directed to a method for providing an electronic selection of a colour ink or colourant formula. The appellant requested that the decision be set aside and that a patent be granted on the basis of the main request or of one of the first and second auxiliary requests.

The appellant argued essentially that the invention, by providing the electronic selection of a colour ink formula, eliminated the iterative process and dispensed with the need for the formulator mentioned in pages 24 to 26 of document D1.

IV. In a communication accompanying the summons to oral proceedings, the Board expressed the view that none of the requests appeared allowable. In the preliminary opinion of the Board, the claims of each of the requests infringed Article 84 and Rule 43(2) EPC. The subject-matter of claim 1 of the main request appeared to lack novelty over the disclosure of D1, and that of claim 1 of the two auxiliary requests did not seem to be inventive.

The Board referred mainly to passages of pages 15 and 16 in document D1 and noted that its novelty analysis was not based on the embodiment of pages 24 to 26 focused upon by the appellant, but on the distinct embodiment of page 16. In that embodiment the colour formula was not chosen in an iterative process where a single formula was suggested at each stage, but instead a plurality of formulas could be suggested

- 3 - T 0391/11

simultaneously, as could be read from page 16, second full paragraph.

The Board explained that, according to the disclosure on page 16, in the method of D1 the colour matches and associated data were sent to the parties for approval. Other data was "preferably transmitted with the color approval data, for example sales and formula codes, color formulas, costs or price information, various illuminants and metamerisms". The Board interpreted "color approval data" as the data associated with the colour matches sent for approval and was hence of the opinion that the method of document D1 also provided a plurality of colour formulas for selection.

Furthermore, the Board could not find a basis in the application as filed for the combination of features of claim 1 of the second auxiliary request (Article 123(2) EPC).

V. With a letter of reply the appellant filed new sets of claims as auxiliary requests 3 to 8.

Whereas claims 1 of the requests submitted as auxiliary requests 4 to 8 were directed to a method for providing an electronic selection of a colour ink or colourant formula, claim 1 of the request submitted as auxiliary request 3 was directed to a method for electronically providing a database for colour ink formulas corresponding to the method of Figure 5 of the application and did not include any of the features recited in the independent claims of the previous requests.

VI. Oral proceedings were held on 24 September 2015. During the oral proceedings the appellant changed the requests

- 4 - T 0391/11

on file. Initially the request previously submitted as auxiliary request 3 became the appellant's main request. This request was not admitted into the proceedings because it strongly diverged from previous requests.

- VII. As a final request, the appellant submitted an amended set of claims as a new main request and requested that the contested decision be set aside and that a patent be granted on the basis of this new main request. It withdrew all other requests on the condition that the Board intended to remit the case for further prosecution. At the end of the oral proceedings, the chairman pronounced the Board's decision.
- VIII. Claim 1 of the new main request reads as follows:

"Method for providing an electronic selection of at least one colorant formula that is suitable to produce a color for a colored product, wherein the producing the color is based on at least one criteria [sic], the method comprising in the following order:

- (a) presenting a user interface to a user that enables the user to identify a color for displaying colorant formulas for producing the identified color (S200),
- (b) providing an electronic color palette as part of the user interface that displays a plurality of electronic colors represented by color information stored in an electronic library and identifying color selections that are available to the user (S202),
- (c) after the user identifies the color for production, a selection is made and the color

- 5 - T 0391/11

- information is retrieved that is linked to the selected color (S204),
- (d) retrieving all colorant formulas that are stored in the electronic library that are associated with the retrieved color information (S206),
- (e) presenting a selection of the colorant formulas that correspond with the selected color for the user (S208),
- (f) selecting by the user one or more colorant formulas associated with the selected color and corresponding to a criteria previously identified in the electronic library as having an impact on the colorant formula (S210),
- (g) transmitting the selected colorant formula to a specialist (S212); and
- wherein the electronic library is provided by a method with the following steps:
- (b1) receiving a physical sample of the color (S100) by reading a visible spectrum of the color sample and generating data directed to measured amounts of light absorbed or reflected at particular points in a spectrum;
- (b2) generating electronic color information from the physical sample (S102), the electronic color information representing the color, wherein the electronic color information is formatted as at least one of spectral data, CIEXYZ, CIELAB, CIELUV, CIEUVW, color space, chromaticity coordinates xy, u"v" and uv, computer graphics triplets including RGB, CMYK, HLS, HIS, HSV and HVC, Munsell notation, Swedish Natural Color System notation, ColorCurve notation, RAL notation, Pantone color number, DIC color number, opal tone, DIN color notation, Color Marketing Group color name, and Color Association of the United States color name;

- 6 - T 0391/11

- (b3) associating the generated electronic color information with a name (S104);
- (b4) storing the generated electronic color information with associated name in the electronic library (S106), wherein the stored electronic color information is made retrievable by displaying an electronic color palette that includes a visual representation and associated name of the color;
- (b5) identifying and receiving a substrate for the color or at least one criteria that may have an impact on the colorant formula required to create the color (S108);
- (b6) receiving a colorant formula capable of creating the color either on the identified and received (i) substrate or (ii) corresponding with the impact of the at least one criteria selected in step b5 (S110), wherein the colorant formula is determined by (ia) manual mixing of colorants followed by visual or instrumental confirmation of the color or (iia) using a computer assisted color matching ("CCM") software application;
- (b7) associating the colorant formula with the color (S112);
- (b8) prompting the user for another substrate or another criteria to associate with the color and looping to step b5 (S108) when another substrate or another criteria is provided (S114); and
- (b9) terminating the method for providing the electronic library when the user does not wish to associate another substrate or another criteria with the respective color (S116)."

- 7 - T 0391/11

#### Reasons for the Decision

1. The appeal complies with the provisions referred to in Rule 101 EPC and is therefore admissible.

#### The invention

- 2. The application relates to electronic communication, coordination and dissemination of data related to colour ink and colourant formulas between a plurality of parties for the creation of colour-related products or the production of colour ink (see title and paragraphs [0001] and [0007] of the international publication).
- The "color ink formula dissemination system" of the invention includes one or more site processors coupled with user terminals across a communication network. The system provides, preferably in the site processor(s), databases to store data regarding development of colours and colour products. The user terminals provide user access to the site processors for receiving and providing such data (paragraphs [0024] to [0026], Figure 1, paragraph [0031]).
- In a preferred embodiment the database includes five tables. The "color library table" contains records regarding the creation of a colour, for example names of colours and associated spectral data and colour ink formulas. The "other criteria table" stores data about elements that affect colour, such as substrates or a colour's resistance. The "color format table" contains data regarding the plurality of colour representations (e.g. RGB, CMYK and CIE XYZ) used by the various devices in the system. The "printing techniques table" stores data about a plurality of printing methods.

-8- T 0391/11

The "hardware devices table" contains data regarding a plurality of hardware devices involved in colour product development, for example monitors, printers and scanners (paragraphs [0046] to [0048], Figure 3).

2.3 The colour ink formula dissemination system receives colour product data from a plurality of sources, including colour measuring devices and user terminals. It also receives a plurality of colour ink formulas to create a colour (paragraphs [0050] and [0058] to [0062], Figure 5).

The system provides a user interface to let the user select among colours, substrates and other criteria, and uses the selected parameters to retrieve a plurality of colour ink formulas for transmission to colour product development specialists (paragraph [0050]).

3. Claim 1 of the new main request is directed to a method for providing an electronic selection of at least one colourant formula based on at least one criterion, comprising two parts: steps (b1) to (b9) for providing an electronic library of colour information (corresponding to the steps depicted in Figure 5), and steps (a) to (g) for allowing a user to select a colour for production, and one or more colourant formulas associated with the selected colour and corresponding to a criterion having an impact on the colourant formula (see Figure 6).

## Admission of the request

4. The present set of claims was filed at the oral proceedings before the Board. Since the request was submitted after oral proceedings had been arranged, its

- 9 - T 0391/11

admission into the appeal proceedings is subject to the provisions of Article 13(3) RPBA, and thus should not be admitted if it raises issues which the Board cannot reasonably be expected to deal with without adjournment of the oral proceedings.

- 4.1 On the other hand, it is established case law that an amendment at a late stage is justifiable if it is an appropriate reaction to unforeseeable developments in the proceedings for example, if it addresses comments or objections first raised in the proceedings (Case Law of the Boards of Appeal of the EPO, 7th edition 2013, IV.E.4.2.1 and 4.2.3).
- In addition to those principles, the criterion of clear allowability should also be taken into account when deciding whether to admit claims filed during the oral proceedings in appeal (Case Law of the Boards of Appeal of the EPO, IV.E.4.2.3). This criterion has been applied in a stricter form as admitting a request only if it is clearly allowable or in a less strict form as not admitting a request if it is clearly not allowable (T 282/05 of 3 August 2007, point 4.2).

According to established jurisprudence, claims which are *clearly not allowable* are normally not admitted at that stage of the proceedings (Case Law of the Boards of Appeal of the EPO, IV.E.4.2.3, T 1273/04 of 16 November 2007, point 3.2.3).

In case T 1273/04 the Board discussed the problem of claims which pass the hurdle of clearly not allowable but are nevertheless not clearly allowable. In the particular case at issue in that decision, where the application had been refused by the Examining Division for lack of novelty, the Board was of the opinion that

- 10 - T 0391/11

it would not be reasonable to expect that an amended claim should be clearly allowable in the sense of clearly involving an inventive step. The Board mentioned that it was however reasonable to expect that the amendments were (i) "clearly permissible under provisions of the EPC explicitly or implicitly governing amendment of the application" such as those of Articles 123(2) and 84 EPC, (ii) represented a convergent development, and (iii) defined clearly novel subject-matter (T 1273/04, point 3.2.4). It then stated that the general principle was that "in order to be admissible, an amended claim belatedly filed in oral proceedings must be clearly allowable by virtue of a clearly permissible amendment". This principle had however "to be tempered in examination appeal proceedings by having regard to the extent to which the application has been examined" (idem, 3.2.5).

- 4.3 These and other principles according to which a Board should exercise its discretion in considering whether to admit a request have been established by other decisions as well (Case Law of the Boards of Appeal of the EPO, IV.E 4.1.4 and 4.4). Some principles, for instance the need to act fairly towards the other party (idem, IV.E.4.1.4), do not apply in ex-parte proceedings.
- 5. In its communication pursuant to Article 15(1) RPBA the Board raised for the first time new issues under Articles 84 and 123(2) EPC. In the Board's opinion it is therefore in principle appropriate in the present case to admit requests filed after the oral proceedings have been arranged (see also point 4.1 above).
- 5.1 The new main request contains most of the features of previous requests considered in the contested decision

- 11 - T 0391/11

and submitted with the grounds of appeal, but adds the steps of the method of Figure 5 to those of the method for providing an electronic selection of a colour ink or colourant formula of Figure 6. In contrast to the request not admitted by the Board in the oral proceedings (see Section VI above) which contained the method steps of Figure 5 without those of Figure 6, the new main request represents a convergent development of the subject-matter of previous requests.

As explained under points 6 to 8 below, the request overcomes the objections under Article 123(2) EPC raised for the first time in the appeal proceedings, as well as the main ground for refusal, namely lack of novelty of the main request.

Moreover, the Board is convinced that the request is not clearly not allowable and constitutes a significant improvement of the claims with regard to the question of inventive step. In view of the numerous newly added limiting features, the reasons given in the contested decision for denying inventive step of the then auxiliary request do not apply any more.

In view of these facts, and given the ex-parte nature of the present proceedings, the Board decided to admit the request into the appeal proceedings.

#### Article 123(2) EPC

- 6. As explained in point 3 above, claim 1 recites a combination of the steps depicted in Figures 5 and 6.
- 6.1 Steps (a) to (g) correspond respectively to steps (S200) to (S212) of Figure 6 described in paragraphs [0063] to [0066].

- 12 - T 0391/11

Even though those paragraphs refer mainly to ink formulas, it is clear from the title, the last sentence of paragraph [0063], and original claim 39, that the same solution was also originally foreseen for colourant formulas.

6.2 At the oral proceedings the appellant referred to paragraph [0065] as the basis for the combination of the methods of Figures 5 and 6.

The Board agrees that the skilled person would unambiguously derive from the application as originally filed, and in particular from the description at paragraphs [0057] to [0066] and Figures 5 and 6, that the method of Figure 5 is a method for populating the electronic colour library which is used by the method of Figure 6 of selecting a formula. Paragraph [0065] cited by the appellant indeed explicitly mentions the flowchart of Figure 5 in connection with the previously identified substrate and other criteria.

From those passages it is also clear that the "electronic library" of the claim, also mentioned in Figure 5, is the same as the "electronic color library" mentioned for both methods in paragraphs [0059], [0064] and [0066], or in some of the claims as originally filed (for example, claims 48, 51 and 52).

The Board further finds that the skilled reader directly interprets the database described in paragraphs [0045] to [0048] as corresponding to the electronic colour library of the embodiments of Figures 5 and 6.

- 13 - T 0391/11

- 6.3 Steps (b1) to (b9) of claim 1 correspond to steps (S100) to (S116) described in paragraphs [0057] to [0062]. The colour information formats mentioned in step (b2) were listed in several original claims, for example in claims 49 and 62 as originally filed.
- 7. The Board is therefore satisfied that claim 1 fulfils the requirements of Article 123(2) EPC.

## Novelty

- 8. In the opinion of the Board, the claimed subject-matter is novel over the disclosure of D1.
- 8.1 Document D1 mentions the existence of a database or colour library, for example on pages 12, 13 and 15, but does not explain how the data is entered into the database. In particular, it does not disclose a procedure for entering data into the database having the steps recited in claim 1.

## Conclusion

9. The request is based on a combination of features which has not been considered by the first instance and for which document D1 may not represent the closest prior art. For that reason, and in order not to deprive the applicant of the possibility of having the issue of inventive step considered by two instances, the Board finds it appropriate to remit the case to the department of first instance on the basis of the new main request. Consequently, all other requests of the appellant are to be considered to be withdrawn (see Section VII above).

- 14 - T 0391/11

## Order

## For these reasons it is decided that:

- 1. The decision under appeal is set aside.
- 2. The case is remitted to the department of first instance for further prosecution.

The Registrar:

The Chairman:



I. Aperribay

R. Moufang

Decision electronically authenticated