

Internal distribution code:

- (A) [] Publication in OJ
(B) [] To Chairmen and Members
(C) [X] To Chairmen
(D) [] No distribution

**Datasheet for the decision
of 16 January 2008**

Case Number: T 1246/04 - 3.3.01

Application Number: 00108284.1

Publication Number: 1045013

IPC: C09D 11/00

Language of the proceedings: EN

Title of invention:

Aqueous pigment ink sets for color inkjet recording, color inkjet recording method, and color inkjet recorded matter

Applicant:

Seiko Epson Corporation

Opponent:

-

Headword:

Pigment ink set/SEIKO EPSON

Relevant legal provisions:

EPC Art. 84

RPBA Art. 15(3)

EPC R. 115(2)

Relevant legal provisions (EPC 1973):

EPC R. 71

Keyword:

"Clarity (no)"

"Decision based on a new objection in the absence of the Appellant"

Decisions cited:

-

Catchword:

-



Case Number: T 1246/04 - 3.3.01

D E C I S I O N
of the Technical Board of Appeal 3.3.01
of 16 January 2008

Appellant:

Seiko Epson Corporation
4-1, Nishi-shinjuku 2-chome
Shinjuku-ku
Tokyo 163-0811 (JP)

Representative:

Grünecker, Kinkeldey,
Stockmair & Schwanhäusser
Anwaltssozietät
Maximilianstraße 58
D-80538 München (DE)

Decision under appeal:

Decision of the Examining Division of the
European Patent Office posted 5 May 2004
refusing European application No. 00108284.1
pursuant to Article 97(1) EPC.

Composition of the Board:

Chairman: P. Ranguis
Members: J. Jonk
C. Brandt

Summary of Facts and Submissions

I. This appeal lies from the decision of the Examining Division refusing European patent application 00 108 284.1, publication number EP 1 045 013, relating to "Aqueous pigment ink sets for color inkjet recording, color inkjet recording method, and color inkjet recorded matter".

II. Claim 1 of the application as filed read as follows:

" An aqueous pigment ink set for color inkjet recording, comprising: yellow ink; cyanide ink; and magenta ink; wherein the sedimentary degree of yellow ink is 40% or less, the sedimentary degree of cyanide ink is 30% or less, and the sedimentary degree of magenta ink is 15% or less."

III. The Examining Division held that the subject-matter of the then pending sets of claims according to main request, first auxiliary request and second auxiliary request lacked novelty in view of documents

(2) EP-A-0 831 135 and

(4) EP-A-0933 406.

Furthermore, the subject-matter of the then pending set of claims of the third auxiliary request lacked inventive step in view of said document (2) and the fact that styrene-acrylic polymers were commonly used dispersants in the field of inks. Moreover, having regard to the formulation of Claim 1 as a result to be achieved, the claims did not comply with Article 84 EPC either.

- IV. Oral proceedings before the Board were held on 16 January 2008.

As communicated to the Board by facsimile on 14 January 2008, the Appellant did not attend the oral proceedings. The oral proceedings were therefore held in the absence of the Appellant in accordance to Rule 115(2) EPC.

- V. The Appellant defended the patentability of the subject-matter of the present application in writing on the basis of three new sets of claims as main request, first auxiliary request and second auxiliary request, respectively.

Independent **Claim 1 of the main request** read as follows:

"An aqueous pigment ink set for color inkjet recording, **comprising:** yellow ink; cyan ink; magenta ink; light cyan ink, and/or light magenta ink, and black ink;

wherein the sedimentary degree of yellow ink is 40% or less, the sedimentary degree of cyan ink is 30% or less, the sedimentary degree of light cyan ink is 30% or less, the sedimentary degree of magenta ink is 15% or less, the sedimentary degree of light magenta ink is 15% or less, and the sedimentary degree of black ink is 15% or less;

wherein the sedimentary degree of cyan ink and light cyan ink is lower than the sedimentary degree of yellow ink, and the sedimentary degree of magenta ink, light magenta ink, and black ink is lower than the sedimentary degree of cyan ink and light cyan ink; and

wherein the colorant for yellow ink is C.I. pigment yellow 74, C.I. pigment yellow 109, or C.I.

pigment yellow 110; the colorant for cyan ink is C.I. pigment blue 15:3; the colorant for light cyan ink is C.I. pigment blue 15:3; the colorant for magenta ink is C.I. pigment red 122; the colorant for light magenta ink is C.I. pigment red 122; and the colorant for black ink is carbon black." (bold added)

Independent **Claim 2 of the main request** read as follows:

"An aqueous pigment ink set for color inkjet recording, **comprising:** green ink and/or orange ink; yellow ink; cyan ink; magenta ink;

wherein the sedimentary degree of green ink is 60% or less, the sedimentary degree of yellow ink is 40% or less, the sedimentary degree of orange ink is 40% or less, the sedimentary degree of cyan ink is 30% or less, and the sedimentary degree of magenta ink is 15% or less;

wherein the sedimentary degree of yellow ink and orange ink is lower than the sedimentary degree of green ink, the sedimentary degree of cyan ink is lower than the sedimentary degree of yellow ink and orange ink, and the sedimentary degree of magenta ink is lower than the sedimentary degree of cyan ink; and

wherein the colorant for the green ink is C.I. pigment green 7 or C.I. pigment green 36; the colorant for yellow ink is C.I. pigment yellow 74, C.I. pigment yellow 109, or C.I. pigment yellow 110; the colorant for the orange ink is C.I. pigment orange 36 or C.I. pigment orange 43; the colorant for cyan ink is C.I. pigment blue 15:3; and the colorant for magenta ink is C.I. pigment red 122."

Independent **Claim 1 of the first auxiliary request** corresponded to Claim 1 of the present main request, except that the method for determining the sedimentary degree of each ink had been specified.

The subject-matters of **Claim 1 of the second auxiliary request** corresponded to Claim 1 of the present first auxiliary request. According to this request Claims 2 and 3 of the first auxiliary request had been deleted.

The Appellant considered that the subject-matter of the present claims was novel and involved inventive step, since the cited prior art did not clearly and unmistakably disclose pigment ink sets as defined in the claims, wherein all the inks satisfy both, the requirement concerning the maximum value of the sedimentary degree of each ink and the requirement concerning the relative order of sedimentary degrees of the various inks of one ink set.

Furthermore, the claimed subject-matter also complied with Article 84 EPC, since the sedimentary degree could be clearly and reliably determined by the method for measuring specified in the description of the application as filed.

VI. The Appellant requested that the decision under appeal be set aside, and a patent be granted on the basis of one of the three sets of claims all submitted on 9 September 2004 as main, first auxiliary or second auxiliary request, respectively.

VII. At the conclusion of the oral proceedings the Board's decision was pronounced.

Reasons for the Decision

1. The appeal is admissible.

Main request

2. *Amendments (Article 123(2) EPC)*

- 2.1 Claim 1 is supported by Claims 1, 12, 13 and 14 of the application as filed.

Claim 2 finds its support in Claims 1, 15, 16 and 17 of the application as filed.

Claim 3 is supported by Claims 1, 18, 19 and 20 of the application as filed.

The subject-matter of Claims 4 and 5 correspond to that of Claims 21 and 22, respectively, of the application as filed.

- 2.2 Therefore, the Board concludes that the subject-matter of the present claims does not extend beyond the application as filed, and consequently meets the requirements of Article 123(2) EPC.

3. *Clarity within the meaning of Article 84 EPC*

- 3.1 Claim 1 relates to an aqueous pigment ink set for colour inkjet recording, comprising a yellow ink, cyan ink, magenta ink, light cyan ink and/or light magenta ink, and black ink, whereby with respect to each ink the maximum sedimentary degree and the suitable

colorant pigments have been specified, and concerning the combination of inks the relative order of the sedimentary degrees has been indicated. According to the Appellant's submissions and the application as filed these features are essential features of the claimed invention.

In this context, it has been indicated in the description of the application as filed that, if an ink set consisting of various aqueous pigment inks is stored for a long period of time, differences will arise in the sedimentary degree between the pigments inks of the various colours causing a degeneration of the colour balance of the printed matter, and that this problem can be solved by combining selected inks providing a difference in altitude to the upper limit of the sedimentary degree of the respective inks in accordance with a certain fixed rule (see page 2, second and third paragraph, and page 29, last paragraph, to the first line of page 30).

Furthermore, it has been indicated that the sedimentary degree of the respective inks can be adjusted by appropriately selecting the type of the colorant pigments (see page 6, last line to page 7, third paragraph, and page 14, second and third paragraph).

The relative order of the sedimentary degrees for the combination of inks as claimed further improves the achieved effects (see page 8, third paragraph to page 9 first paragraph, in combination with page 11, second and third paragraph, relating to the subject-matter of present Claim 1).

The importance of these technical features of the claimed invention is actually confirmed by independent Claim 2 of this request relating to an aqueous pigment ink set, which contains a green ink and/or an orange ink in addition to a yellow ink, cyan ink and magenta ink as specified in present Claim 1, and wherein also for the green ink and the orange ink the values of the maximum sedimentary degree and the specific relative order of the sedimentary degree with respect to each other and the further cited inks, as well as the suitable colorant pigments have been specified.

3.2 However, Claim 1 has not been restricted to the cited yellow ink; cyan ink; magenta ink; light cyan ink and/or light magenta ink; and black ink in view of the term "comprising" (see lines 1 and 2 of the claim, as well as page 5, last line, to page 6, line 3 of the application as filed and the adapted description submitted on 9 September 2004). Therefore, according to the broadly formulated claim further inks might be present in the claimed pigment ink set without any information about their sedimentary properties and appropriate colorant pigments, which information would be essential for the claimed invention.

3.3 Under these circumstances, and in accordance with the established case law of the Boards of Appeal, the Board finds that the broadly formulated Claim 1 already for this reason, i.e. apart from the clarity objections made by the Examining Division, does not define the matter for which protection is sought by reference to all its essential features as required by Article 84, first sentence, EPC.

3.4 It is true, that the Appellant, due to the absence of its representative during the oral proceedings held according to Rule 115(2) EPC, in which the Board considered the question of clarity in the sense of Article 84 EPC, had not been informed about the clarity objection set out above.

However, the Board holds that the Appellant choosing not to be represented at the oral proceedings should ensure that he has filed all the amendments he wishes to be considered by the Board and also has waived the opportunity of filing further amendments to overcome any objections during the oral proceedings.

Furthermore, on 13 December 2007 new Article 15(3) of the Rules of Procedure of the Boards of Appeal (RPBA) (OJ 2007, 536), entered into force, which corresponds to Article 11(3) RPBA entered into force on 1 May 2003. According to this Article:

"The Board shall not be obliged to delay any step in the proceedings, including its decision, by reason only of the absence at the oral proceedings of any party duly summoned who may then be treated as relying on its written case."

Therefore, a decision with respect to the matter of clarity including the introduced objection can be taken without further ado and without violation of the principle of the right to be heard.

3.5 Thus, in view of the considerations above, the Board concludes that the requirements of Article 84 EPC have not been met.

4. *First and second auxiliary request*

4.1 Both Claims 1 of these requests, like Claim 1 of the main request, have not been restricted to the cited links in view of the term "comprising" (see lines 1 and 2 of the claims, as well as page 5, last line, to page 6, line 3 of the application as filed and the respective adapted descriptions submitted on 9 September 2004).

4.2 Under these circumstances, the Board has come to the conclusion that the subject-matter of both Claims 1 do not meet the requirements of Article 84 EPC for the same reasons as set out above for the main request.

4.3 As a result, these auxiliary requests are not allowable either.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

N. Maslin

P. Ranguis