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D E C I S I O N
of 12 December 2002

Case Number: T 0698/00 - 3.2.5

Application Number: 92305131.2

Publication Number: 0518559

IPC: B41F 33/00

Language of the proceedings: EN

Title of invention:

A method and apparatus for creating a control strip

Patentee:

Creo IL. Ltd.

Opponent:

MAN Roland Druckmaschinen AG

Headword:

-

Relevant legal provisions:

EPC Art. 56

Keyword:

"Inventive step (no)"

Decisions cited:

-

Catchword:

-



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Boards of Appeal

Chambres de recours

Case Number: T 0698/00 - 3.2.5

D E C I S I O N
of the Technical Board of Appeal 3.2.5
of 12 December 2002

Appellant: MAN Roland Druckmaschinen AG
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D-86135 Augsburg (DE)

Representative: -

Respondent: Creo IL. Ltd.
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Representative: Grünecker, Kinkeldey
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Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted 15 May 2000
rejecting the opposition filed against European
patent No. 0 518 559 pursuant to Article 102(2)
EPC.

Composition of the Board:

Chairman: W. Moser
Members: P. E. Michel
W. R. Zellhuber

Summary of Facts and Submissions

- I. The appellant (opponent) lodged an appeal against the decision of the Opposition Division rejecting the opposition against European Patent No. 0 518 559.

Opposition was filed against the patent as a whole, based on Article 100(a) EPC (lack of novelty and inventive step).

The Opposition Division held that the grounds for opposition mentioned in Article 100(a) EPC did not prejudice the maintenance of the patent as granted.

The following documents are referred to *inter alia* in the decision under appeal:

E1: Blum, M., Thorne, M., "Calibration of Postscript-based Color Reproduction Systems", TAGA Proceedings of the 43rd Annual TAGA Conference in Rochester, New York (US) from May 5-8, 1991, Table of content, pages 36-47;

E2: Munger K, "The UGRA/ FOGRA Digital Control Wedge and its Application", TAGA Proceedings of the 43rd Annual TAGA Conference in Rochester, New York (US) from May 5-8, 1991, pages 48-62.

- II. Oral proceedings before the Board of Appeal were held on 12 December 2002.

- (i) The appellant requested that the decision under appeal be set aside and the patent be revoked.
- (ii) The respondent (patentee) requested that the appeal be dismissed.

III. The independent claims 1 and 6 of the patent in suit as granted read as follows:

"1. A method of calibrating a colour printing press comprising, generating a digital representation of at least one colour separation representing an image and an associated control strip in accordance with at least one screening parameter, providing a proof (27) and a printed output (39) of the image and the control strip, comparing the proof and the printed output, modifying at least one screening parameter according to the results of the comparison step, and repeating the generating step with the at least one modified screening parameter."

"6. A colour printing press system comprising, a screen generator (20) capable of generating a digital representation of at least one colour separation representing an image and an associated control strip in accordance with at least one screening parameter, a proofer (26) associated with the screen generator and capable of providing a proof of the image and the control strip (27), output means (24, 30, 34, 36, 38) for providing a printed output, comparing means (18) for comparing the proof with the printed output, and means (12) for modifying at least one screening parameter according to results produced by the comparing means, whereby the printing press can be calibrated for each new original."

IV. In the written and oral proceedings, the appellant argued essentially as follows:

The subject-matter of claim 1 of the patent in suit is only distinguished over the disclosure of document E2 by the step of modifying at least one screening

parameter according to the results of the comparison step, and repeating the generating step with the at least one modified screening parameter.

The object of the invention is to enable the method of calibrating a colour printing press for a new original to take into account the printing machine characteristics.

It is noted that, in document E2 at page 53, sixth paragraph, it is stated that both "the recording density and the dot shape structure are the main factors influencing the image quality". Changes in the recording density and the dot shape structure can only be made via the CPU which provides a digital file to the screen generator or RIP. This procedure does not have a surprising technical effect and conforms to general practice for controlling the quality of digital printing.

Thus, the combination of the disclosure of document E2 and the general technical knowledge of the person skilled in the art leads to the subject-matter of claim 1 without requiring an inventive step.

V. In the written and oral proceedings, the respondent argued essentially as follows:

The present invention is distinguished over the disclosure of document E2 by the use of closed loop control involving simultaneous production of a printed image and a proof, each having a control strip thereon. It is noted that the proof does not only have the control strip thereon, but also an image.

Document E2 merely provides a new digital control strip or wedge which is suitable for a large number of applications.

When the person skilled in the art is faced with an unsatisfactory printed product, there is nothing in the prior art which would suggest repeating the generating step with a modified screening parameter. Rather, the control of the printing press would be altered, or a different paper would be used.

Claim 1 should not be construed as requiring that a fresh proof be prepared each time a fresh digital representation of at least one colour separation is generated. The invention does not lie in changing the proof, but in looking at the printed output (39) of the image and control strip and then repeating the generating step with a modified screening parameter.

The subject-matter of claim 1 thus involves an inventive step.

Reasons for the Decision

1. *Novelty*

As set out in point 2 of the decision under appeal, document E2 represents the content of an oral presentation given before the priority date of the patent in suit. The Board sees no reason to depart from this conclusion. References hereinafter to document E2 thus refer to the oral presentation.

Document E2 discloses a control strip (illustrated in Figure 1) which is available in digital form on a floppy disk. As shown in Figure 5, the control strip is supplied to a raster image processor (RIP) from a processor (CPU), where an encapsulated PostScript file of the control strip is incorporated into a layout software, whereby the strip can be incorporated

anywhere within the page (see page 53, second paragraph). Then, a page comprising an image and the control strip is processed in a colour separation program and output as hard copy together with the control strip. The argument of the respondent that document E2 does not disclose the use of a proof comprising an image and a control strip is thus not accepted.

The subject-matter of claim 1 is novel with respect to the disclosure of document E2, since this document does not disclose a method of calibrating a colour printing press comprising the step of modifying at least one screening parameter according to the results of a comparison of the proof and the printed output, and repeating the generating step with the at least one modified screening parameter.

Document E1 relates to methods for the calibration of PostScript-based colour reproduction systems. There is, however, no disclosure of any comparison of a proof and a printed output.

The subject-matter of claim 1 is thus novel. It is also noted that novelty was not in dispute in the present proceedings.

2. *Inventive step*

2.1 Closest prior art

The closest prior art is represented by document E2, whose disclosure is discussed under point 1 above. The subject-matter of claim 1 is thus distinguished over the disclosure of this document by virtue of the step

of modifying at least one screening parameter according to the results of a comparison of the proof and the printed output, and repeating the generating step with the at least one modified screening parameter.

2.2 Problem underlying the invention

The problem underlying the invention is to improve the calibration of a colour printing press for a new original.

2.3 Solution

According to claim 1, the aforementioned problem is solved by means of the steps set out at point 2.1 above.

Following this procedure does not, however, involve an inventive step.

After comparing the proof and the printed output, a person skilled in the art will make a decision as to whether or not the printed output is satisfactory. If not, it would then be necessary to change a parameter of the printing process and then repeat the comparison step.

It is accepted that, as stated in the decision under appeal at point 4.2.2, there are several possibilities for intervention in the entire process in order to improve the quality of the printed output. It is further accepted that a preferred option for such intervention would be in the press control for the colour printing press and that a further possibility would be to use a different paper. Both these options would avoid the necessity of preparing a new set of colour separation plates. However, cases will occur where these interventions do not achieve the desired

result, for example, in view of the fact that the reason for the unsatisfactory image quality lies in the recording density or the dot shape structure, which, as stated in document E2 at page 53, last paragraph, "are the main factors influencing the image quality".

In such a case, it will be necessary to intervene so as to alter recording density or the dot shape structure in the screen generated by the RIP; that is, by modifying a screening parameter. It then follows that the generating step must be repeated in order to complete the printing process. The specified procedure thus does not involve some special form of "closed loop control", but merely corresponds to the procedure which must be gone through if it is found that there is no easier way of correcting image defects in a printed output of a colour printing system as shown in Figure 5 of document E2.

Therefore, the subject-matter of claim 1 does not involve an inventive step in the sense of Article 56 EPC.

Consequently, the sole request of the respondent is not allowable and the patent in suit must be revoked.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The patent is revoked.

The Registrar:

The Chairman:

M. Dainese

W. Moser