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**Datasheet for the decision
of 18 October 2016**

Case Number: T 0945/13 - 3.2.05

Application Number: 04251372.1

Publication Number: 1457335

IPC: B41F33/00

Language of the proceedings: EN

Title of invention:

Control system for a printing press

Patent Proprietor:

QUAD/TECH, INC.

Opponents:

Koenig & Bauer AG
manroland AG i.I.

Relevant legal provisions:

EPC Art. 123(2)

Keyword:

Amendments - extension beyond the content of the application
as filed (yes)

Decisions cited:

G 0002/10



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Case Number: T 0945/13 - 3.2.05

D E C I S I O N
of Technical Board of Appeal 3.2.05
of 18 October 2016

Appellant I: Koenig & Bauer AG
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Appellant II: QUAD/TECH, INC.
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Decision under appeal: **Interlocutory decision of the Opposition**
Division of the European Patent Office posted on
8 February 2013 concerning maintenance of the
European Patent No. 1457335 in amended form.

Composition of the Board:

Chairman M. Poock
Members: S. Bridge
 D. Rogers

Summary of Facts and Submissions

- I. A first and second opposition were filed against the patent as a whole based on Article 100(a) EPC (lack of novelty and lack of inventive step). The first opposition was further based on Article 100(c) EPC.
- II. Both opponent 1 and the patent proprietor lodged appeals against the interlocutory decision of the opposition division proposing to maintain European patent No. 1 457 335 in amended form on the basis of the then second auxiliary request.
- III. Oral proceedings were held before the board of appeal on 18 October 2016 in the absence of the party as of right (opponent 2), whose representatives had previously informed the board by letter of 22 September 2016 that they would not attend.
- IV. The requests of appellant I (opponent 1) were to set aside the decision under appeal and to revoke the patent.
- V. The requests of appellant II (patent proprietor) were to set aside the decision under appeal and to maintain the patent upon the basis of the main request, or one of the auxiliary requests 1 to 4, all filed under cover of a letter dated 19 November 2012, or alternatively upon the basis of one of auxiliary requests 5 to 12, all filed under cover of a letter dated 16 September 2016, or alternatively upon the basis of one of auxiliary requests 13 and 14, both filed at the oral proceedings before the board on 18 October 2016.
- VI. The party as of right (opponent 2) did not file any observations or requests in the appeal proceedings.

VII. Claim 1 according to the main request reads as follows:

"A control system (130) for a printing press, said control system comprising:

 a colour control subsystem (312) for identifying colour errors in an image; and

 a defect detection subsystem (316) for identifying print defects in an image;

wherein said colour control subsystem (312) and defect detection subsystem (316) are configured to share image data obtained from the printing press to identify print defects or identify colour errors in the image; and

 characterised by an integration subsystem (320) in operational communication with the colour control subsystem (312) and the defect detection subsystem (316), wherein said integration subsystem selectively enables and disables the colour control subsystem and the defect detection subsystem".

VIII. Claim 1 according to the auxiliary request 1 differs from claim 1 according to the main request in that the text at the end of the claim

"wherein said integration subsystem selectively enables and disables the colour control subsystem and the defect detection subsystem"

is replaced by

*"wherein said integration subsystem **processes colour error data and print defect data and selectively enables and disables the colour control subsystem and the defect detection subsystem based upon the data processed by the integration subsystem**" (additions indicated in bold by the board).*

- IX. Claim 1 according to the auxiliary request 2 differs from claim 1 according to auxiliary request 1 in that in the final "wherein ..." clause the text "output of" is inserted before "*the colour control subsystem*" and before "*the defect detection subsystem*".
- X. Claim 1 according to auxiliary request 3 differs from claim 1 according to auxiliary request 2 in that the text
"wherein the image data is processed in the colour control subsystem (312) to determine if a colour error exists and is processed in the defect detection subsystem to determine if a print defect error exists"
is added at the end of the preamble and in that the text
"wherein the defect detection subsystem is selectively enabled and disabled if the print defects are caused by the colour errors"
is added at the end of the claim.
- XI. Claim 1 according to the auxiliary request 4 is identical with claim 1 according to auxiliary request 3.
- XII. Claim 1 according to auxiliary request 5 differs with respect to claim 1 according to the main request in that the following text is added at the end of the preamble:
"wherein the image data obtained from the printing press is image data indicating differences between the image and a template image".
- XIII. Claim 1 according to auxiliary request 6 differs from claim 1 according to the main request in that the following text is added at the end of the preamble:

"wherein said image data obtained from the printing press comprises image data obtained by subtracting the image from a template image".

XIV. Claim 1 according to auxiliary request 7 differs from claim 1 according to the main request in that the following text is added after *"comprising:"*:

"a scanner assembly (134) for obtaining first image data from the printing press;"

in that *"second"* is inserted between *"share"* and *"image data"* and in that the following text is added at the end of the preamble:

"wherein the second image data obtained from the printing press comprises image data obtained by correcting and colour converting the first image data to generate a corrected colour converted image, and determining a difference between the corrected colour converted image and a template image".

XV. Claim 1 according to auxiliary request 8 differs from claim 1 according to auxiliary request 7 in that the text

"determining a difference between"

is replaced by

"subtracting".

XVI. Auxiliary requests 9 to 13

Respective claim 1 according to auxiliary requests 9 to 13 differs to claim 1 respectively according to the main request and auxiliary requests 5 to 8 in that the texts

"for identifying colour errors in an image" and

"for identifying print defects in an image"

are respectively replaced by

"for identifying if colour errors exist in an image" and *"for identifying if print defects exist in an image"*.

Claim 1 according to auxiliary request 12 contains a further amendment in that the text *"is obtained"* is inserted between *"obtained"* and *"by"* in the last *"wherein ..."* clause of the preamble. Appellant II explained that this latter amendment constituted a word processing error.

XVII. Claim 1 according to auxiliary request 14 differs from claim 1 according to auxiliary request 13 in that the texts

"colour errors" and

"print defects"

are respectively replaced by

"colour differences to determine a colour error" and

"the presence and (x,y) locations of print defects".

XVIII. The arguments of appellant I in the written and oral proceedings can be summarised as follows:

Main request

The amendments *"for identifying colour errors in an image"*, *"for identifying print defects in an image"* and *"to identify print defects or identify colour errors in the image"* have no basis in the application as filed and constitute added subject-matter.

Appellant I also subscribes to the board's provisional analysis set out in the provisional opinion annexed to the summons to oral proceedings regarding the amendment *"image"* added into the feature *"said colour control subsystem (312) and defect detection subsystem (316) are configured to share **image** data obtained from the*

printing press" for which there is no basis in the application as filed.

In this context, the term "*image data obtained from the printing press*" must be understood as the image as acquired from the printing press (e.g. step 348 in the flow chart of figure 8) before any further processing (such as steps 352 to 368 shown in the flow chart of figure 8) have occurred.

These amendments thus constitute added subject-matter contrary to Articles 123(2) and 100(c) EPC.

No further comments were advanced when, after the deliberation concerning the main request, the board pointed out that the arguments concerning claim 1 according to the main request appeared to apply likewise to claim 1 respectively according to auxiliary requests 1 to 13 as they were at that time.

Auxiliary requests 13 and 14

The scanner assembly was only originally disclosed in the context of a web which is not mentioned in claim 1 according to auxiliary requests 13 and 14.

The feature concerning normalising the colorimetric values for illumination of the passage page 14, lines 20 to 24 is missing from the subject-matter of claim 1 according to auxiliary requests 13 and 14.

These amendments thus constitute further added subject-matter contrary to Articles 123(2) and 100(c) EPC.

XIX. The arguments of appellant II in the written and oral proceedings can be summarised as follows:

Main request

The skilled person knows as part of his common general knowledge that the term "*image data obtained from the printing press*" refers to image data obtained after processing steps - such as steps 352 to 360 of the flow chart of figure 8 - and thus refers to the image data which has been "*corrected and colour converted*" (application as filed, page 14, line 23) as produced by the acquisition module 308 of the flow chart of figure 8.

Furthermore, the application as filed, in particular page 4, line 24 to page 5, line 4 describes that image data is collected from a web and that the same image data is transferred to a processor for processing in a colour control subsystem and a defect detection subsystem such that the data obtained from the printing press, which is shared between the colour control subsystem and defect detection subsystem, is clearly image data. The expression "*are configured to share*" means that both subsystems 312 and 316 expect to receive the same data from the acquisition module 308 of figure 8.

In addition, step 368 of the modular flow chart of figure 8 is part of both subsystems 312 and 316 and is described in the passage page 14, lines 20 to 24 of the application as filed. The results of this step are thus shared by both subsystems and constitute image data.

The subject-matter of claim 1 according to the main request meets the requirements of Articles 123(2) and 100(c) EPC.

No further comments were advanced when, after the deliberation concerning the main request, the board pointed out that the arguments concerning claim 1 according to the main request appeared to apply likewise to claim 1 respectively according to auxiliary requests 1 to 13 as they were at that time.

Auxiliary requests 13 and 14

The web is not an essential part of the control system for a printing press and thus does not have to be included in the subject-matter of claim 1 according to auxiliary requests 13 and 14.

The expression "*corrected and colour converted acquired image*" of claim 1 according to auxiliary requests 13 and 14 encompasses the feature concerning normalising the colorimetric values for illumination. There are no features from the passage page 14, lines 20 to 24 missing from the subject-matter of claim 1 according to auxiliary requests 13 and 14.

The argument that the subsystems share both the image data provided from the acquisition module 308 and the results of step 368 of the flow chart of figure 8, as advanced in the context of the main request, carries over to claim 1 according to auxiliary requests 13 and 14.

The subject-matter of claim 1 according to auxiliary requests 13 and 14 meets the requirements of Articles 123(2) and 100(c) EPC.

Reasons for the Decision

1. *Main request - Added subject-matter (Article 123(2) EPC and 100(c) EPC 1973)*

1.1 In his grounds for appeal, appellant I (opponent 1) raised an objection of added subject-matter (Article 100(c) EPC 1973), amongst others, against functional statements ("*...for identifying colour errors/print defects in an image...*") of claim 1 according to the second auxiliary request. Since these same statements are also present in claim 1 according to higher ranking requests, the board must investigate these requests with respect to the ground of opposition under Article 100(c) EPC 1973.

1.2 Claim 1 according to the main request combines the subject-matter from independent claims 1 and 5 as filed including some additional amendments and reads as follows (the additions in bold and deletions in cross-out with respect to originally filed claim 1 have been added by the board):

"1. A control system **(130)** for a printing press, said **control** system comprising:
a colour control subsystem **(312) for identifying colour errors in an image;** and
a defect detection subsystem **(316) for identifying print defects in an image;**
wherein said colour control subsystem **(312)** and defect detection subsystem **(316)** are adapted **configured** to share **image** data obtained from ~~a~~ **the** printing press **to identify print defects or identify colour errors in the image;** and

characterised by

an integration subsystem (320) in operational communication with the colour control subsystem (312) and the defect detection subsystem (316), wherein said integration subsystem selectively enables and disables the colour control subsystem and the defect detection subsystem".

This latter paragraph was the subject-matter of independent claim 5 as filed.

- 1.3 In decision **G 2/10** of 30 August 2011 (point 4.3 of the Reasons, first paragraph), the Enlarged Board of Appeal stated the following: *"The importance and the applicability, without exception, of Article 123(2) EPC was underlined in the jurisprudence of the Enlarged Board of Appeal as early as in its opinion **G 3/89** and decision **G 11/91** (OJ EPO 1993, 117 and 125, relating to amendments by way of correction). From these rulings it follows that any amendment to the parts of a European patent application or of a European patent relating to the disclosure (the description, claims and drawings) is subject to the mandatory prohibition on extension laid down in Article 123(2) EPC and can therefore, irrespective of the context of the amendment made, only be made within the limits of what a skilled person would derive directly and unambiguously, using common general knowledge, and seen objectively and relative to the date of filing, from the whole of these documents as filed, points 1., 1.3 and 3. of the Reasons"* (emphasis added by the board). The underlined text is frequently referred to as the "gold standard" for assessing any amendment for its compliance with Article 123(2) EPC (see **G 2/10**, point 4.3 of the Reasons, last paragraph).

Thus, the question to be answered is whether claim 1 comprises subject-matter which a skilled person would not derive directly and unambiguously, using common general knowledge, and seen objectively and relative to the date of filing, from the whole of the application documents as filed.

1.4 The following will focus in particular on the amendment "**image**" in the feature "*said colour control subsystem (312) and defect detection subsystem (316) are configured to share **image** data obtained from the printing press*" (emphasis added by the board). This amendment constitutes added subject-matter for the following reasons.

1.4.1 The feature that the subsystems "*are configured to share*" data includes two different interpretations which differ with respect to where the shared data comes from and where the shared data goes to, namely:

- (a) that "*image data obtained from the printing press*" from the acquisition module 308 of figure 8 is provided to both subsystems 312 and 316 which can therefore be said to "*share*" this data - this point was emphasised by the patent proprietor; and
- (b) that one of the subsystems 312, 316 allows the other of the subsystems 312, 316 to use data it obtained by further processing from the "*image data obtained from the printing press*" (application as filed, page 15, lines 29 and 30: "*The defect locations reported by the defect detection subsystem 316 may be used to decide which pixels are used by the color control subsystem 312*"; page 21, lines 7 and 8: "*The defect detection system processor 416 then transfers the defect locations to a color control system processor 420*").

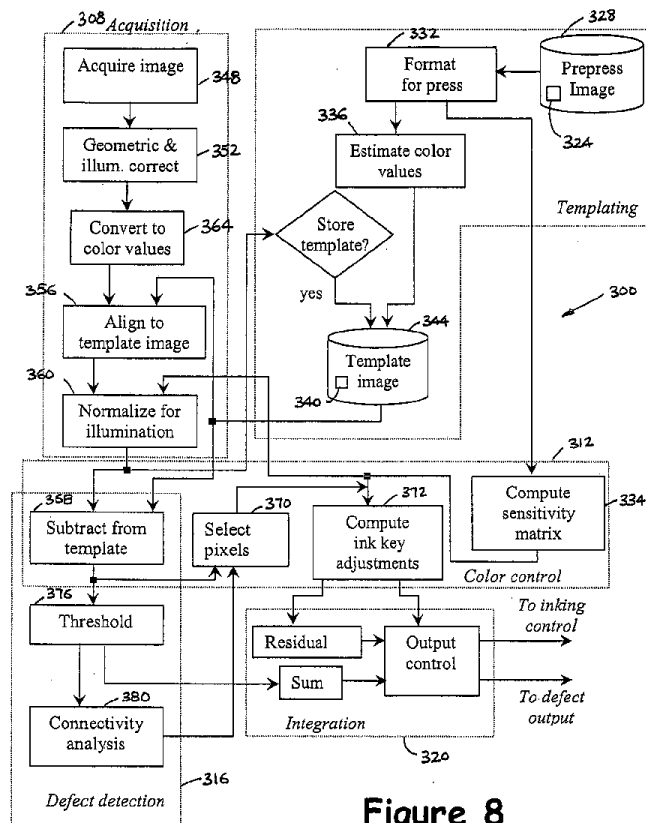


Figure 8

According to the patent proprietor, insofar as interpretation (a) is concerned, the subsystems 312 and 316 are "configured to share image data" in the sense that both subsystems expect to obtain the same image data. However, such an "expectation" is not embodied by any particular technical features in the subsystems themselves. Instead, it is the control system as a whole which has to be configured so as to ensure that the appropriate data is supplied to its subsystems. Thus, according to understanding (a), the subsystems 312 and 316 both receive data from the acquisition subsystem 308 (as shown in the flow chart of figure 8). This interpretation is supported by the first embodiment (page 4, line 24 to page 20, line 24, figures 1 to 9) but not by the second embodiment (page 20, line 25 to page 21, line 29, figure 10), because in the latter each of the two subsystems has its own scanner 408, 424 for acquiring image data (figure 10).

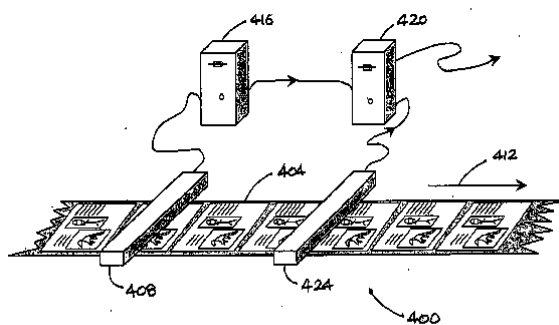


Figure 10

According to interpretation (b), one of the subsystems 312 and 316 is configured to use data obtained by further processing from the "image data obtained from the printing press" by the other one of the subsystems 312 and 316, i.e. data is shared between the subsystems 312 and 316 in the sense that data from one subsystem can be used by the other. This interpretation is supported by both embodiments (see citations above and, for example, the arrow linking boxes 380 and 370 in the flow chart of figure 8 and the arrow linking processors 416 and 420 in figure 10).

1.4.2 The amendment "**image**" in the feature "*said colour control subsystem (312) and defect detection subsystem (316) are configured to share **image** data obtained from the printing press*" (emphasis added by the board) further requires that the data which is shared is "image data". This requirement must be met for both interpretations (a) and (b). For interpretation (a) this is clearly the case, since the data obtained from the printing press is image data, even after the processing steps of the acquisition subsystem 308 of the flow chart of figure 8.

1.4.3 However, with respect to interpretation (b), the original disclosure of the subsystems 312 and 316

sharing "defect locations" which are understood as "(x,y) locations" (application as filed, page 15, line 3) does not constitute image data. This was not contested by the parties.

- 1.4.4 The patent proprietor (appellant II) further referred to the passage page 14, lines 20 to 24 which describes the "comparison step 368" which is shown in the flow chart of figure 8 as belonging to both subsystems 312 and 317 of the flow chart of figure 8. This passage reads:

"Once the colorimetric values have been normalized for illumination in step 360, the data is sent to a comparison step 368 which generates results that are shared by both the color control subsystem module 312 and the defect detection subsystem module 316. In step 368, the corrected and color converted acquired image is subtracted from the template image 340".

This passage discloses that the results of the comparison step 368 are shared by both the color control subsystem module 312 and the defect detection subsystem module 316 and that this step also involves subtracting the corrected and color converted acquired image from the template image 340.

It was not contested by the parties, that the skilled person expects as part of his common general knowledge that the result of a comparison step will at least consist of a binary answer to the question of whether the two images are the same or whether they differ. It was also not contested by the parties, that the result of subtracting the corrected and color converted acquired image from the template image 340 does not

answer the question of whether the two images are the same or whether they differ, since the latter requires performing some kind of test on the images rather than an arithmetic operation such as a subtraction.

Furthermore, the application as filed is silent about whether the result of the subtraction is related to, or part of, the results generated by the comparison step 368. It follows that the results of comparison step 368, which according to the passage page 14, lines 20 to 24 "*are shared by both the color control subsystem module 312 and the defect detection subsystem module 316*" do not necessarily comprise image data.

Therefore, the patent proprietor's argument that the result of subtracting the corrected and color converted image from the template image results in image data which is shared by the subsystems 312 and 316 cannot be accepted, because the passage page 14, lines 20 to 24 does not directly and unambiguous disclose that the shared data corresponding to the results of comparison step 368 necessarily includes (such) image data.

1.4.5 In consequence, with respect to interpretation (b) of the above amended feature, the amendment that the subsystems share "*image data*" constitutes added subject-matter with respect to the application as filed, contrary to the requirements of Articles 123(2) EPC and Article 100(c) EPC 1973.

2. Auxiliary requests 1 to 4

The amendments to claim 1 according to auxiliary requests 1 to 4 do not affect the features objected to in claim 1 according to the main request (section 1.4). In consequence, the arguments set out in section 1.4

above apply likewise to these claims which thus do not meet the requirements of Article 123(2) EPC and Article 100(c) EPC 1973.

3. Auxiliary request 5

The amendment made to claim 1 does not address or overcome the objection set out in section 1.4. The passage (application as filed, page 14, lines 20 to 24) advanced by appellant II (patent proprietor) as basis for the additional amendment to claim 1 was already discussed in the context of the main request (see sections 1.4.4 and 1.4.5).

The additional passage (page 10, lines 20 to 21 of the application as filed) indicated by appellant II as a basis for the text "*indicating differences*" refers to the manner in which "*the defect detector subsystem will apprise the operator of any defects that have been detected*" and thus concerns the output of the defect detector subsystem to the operator and does not necessarily relate to data that is shared by the two subsystems.

In consequence, the objection set out in section 1.4 in the context of the main request applies likewise to claim 1 according to auxiliary request 5.

Therefore, the subject-matter of claim 1 according to auxiliary request 5 does not meet the requirements of Article 123(2) EPC and Article 100(c) EPC 1973.

4. Auxiliary requests 6 to 8

Although the amendments respectively made to claim 1 gradually approach or use the actual wording from the

passage in the application as filed, page 14, lines 20 to 24, this does not address or overcome the objection set out in sections 1.4.4 and 1.4.5.

In consequence, the objection set out in section 1.4 in the context of the main request applies likewise to claim 1 according to auxiliary requests 6 to 8.

Therefore, the subject-matter of claim 1 according to auxiliary requests 6 to 8 does not meet the requirements of Article 123(2) EPC and Article 100(c) EPC 1973.

5. Auxiliary requests 9 to 14

The respective amendments made to claim 1 according to auxiliary request 9 to 14 do not address or overcome the objection set out in section 1.4. The passage (application as filed, page 14, lines 20 to 24) advanced by appellant I as basis for the additional amendments to claim 1 was already discussed in the context of the main request (see sections 1.4.4 and 1.4.5).

In consequence, the objection set out in section 1.4 in the context of the main request applies likewise to claim 1 respectively according to auxiliary request 9 to 14.

Therefore, the subject-matter of claim 1 respectively according to auxiliary request 9 to 14 does not meet the requirements of Article 123(2) EPC and Article 100(c) EPC 1973.

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:



D. Meyfarth

M. Poock

Decision electronically authenticated