Datasheet for the decision of 11 May 2010

Case Number: T 0100/08 - 3.2.05
Application Number: 99250278.1
Publication Number: 0982131
IPC: B41F 31/22
Language of the proceedings: EN

Title of invention: Ink unit in an intaglio printing press

Patentee: Komori Corporation

Opponent: KBA-GIORI S.A.

Headword: -

Relevant legal provisions:
EPC Art. 56, 123(2)
EPC R. 103

Keyword:
"Extension beyond the content of the application as filed (main request, yes)"
"Admissibility of late filed requests (auxiliary request I, yes, auxiliary requests II and III, no)"
"Inventive step (auxiliary request I, no)"

Decisions cited: -

Catchword: -
Case Number: T 0100/08 - 3.2.05

DECISION
of the Technical Board of Appeal 3.2.05
of 11 May 2010

Appellant: KBA-GIORI S.A.
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Decision under appeal: Interlocutory decision of the Opposition
Division of the European Patent Office posted
15 November 2007 concerning maintenance of
European patent No. 0982131 in amended form.

Composition of the Board:
Chairman: W. Zellhuber
Members: P. Michel
E. Lachacinski
Summary of Facts and Submissions

I. The appellant (opponent) lodged an appeal against the interlocutory decision of the Opposition Division maintaining European patent No. 0 982 131 in amended form.

II. Oral Proceedings were held before the Board of Appeal on 11 May 2010.

The appellant requested that the decision under appeal be set aside and that the European patent No. 0 982 131 be revoked in its entirety. He further requested refund of the appeal fee.

The respondent (patent proprietor) requested that the decision under appeal be set aside and the patent be maintained on the basis of the set of claims filed as main request on 11 April 2010 or on the basis of any of the sets of claims filed as auxiliary requests I, II and III during oral proceedings.

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

"1. An intaglio printing press including a plate cylinder (15) having an intaglio plate mounted on a circumferential surface of the plate cylinder (15), an impression cylinder (14) contacted with said plate cylinder (15), an ink collecting cylinder (16) contacted with said plate cylinder (15) and having a blanket mounted on a circumferential surface of the ink collecting cylinder (16), a first ink supply means (17-20) for supplying ink to said blanket of said ink collecting cylinder (16), a second ink supply means (21,
22) contacted with said plate cylinder (15), for supplying ink to said intaglio plate; and a wiping roller (23) contacted with said plate cylinder (15), characterized in that
said second ink supply means (21, 22) comprises a rotary screen (22), and an intermediate rubber roller (21) in contact with said rotary screen (22) and said intaglio plate of said plate cylinder (15);
said rotary screen (22) comprises a cylindrical hollow roller (22c) supported rotatably and having a small hole formed therein, an ink feed means (22a) for feeding ink to an inner peripheral surface of said hollow roller (22), and a squeegee (22b), disposed inside said hollow roller (22c), for delivering the ink, which has been fed by said ink feed means (22a), through the small hole of said hollow roller (22), said intermediate rubber roller (21) has on an outer periphery a groove (21c) and a printing pattern (21b) for transferring ink to said intaglio plate of said plate cylinder (15); and
a support portion (21d), for preventing the squeegee and the hollow roller of said rotary screen (22) from falling in said groove (21a) of said intermediate rubber roller (21), is provided on said intermediate rubber roller (21).

Claim 1 of auxiliary request I reads as follows:

"1. An intaglio printing press including a plate cylinder (15) having an intaglio plate mounted on a circumferential surface of the plate cylinder (15), an impression cylinder (14) contacted with said plate cylinder (15), an ink collecting cylinder (16) contacted with said plate cylinder (15) and having a
blanket mounted on a circumferential surface of the ink collecting cylinder (16), a first ink supply means (17-20) for supplying ink to said blanket of said ink collecting cylinder (16), a second ink supply means (21, 22) contacted with said plate cylinder (15), for supplying ink to said intaglio plate; and a wiping roller (23) contacted with said plate cylinder (15), characterized in that said second ink supply means (21, 22) comprises a rotary screen (22), and an intermediate rubber roller (21) in contact with said rotary screen (22) and said intaglio plate of said plate cylinder (15); said rotary screen (22) comprises a cylindrical hollow roller (22c) supported rotatably and having a small hole formed therein, an ink feed means (22a) for feeding ink to an inner peripheral surface of said hollow roller (22), and a squeegee (22b), disposed inside said hollow roller (22c), for delivering the ink, which has been fed by said ink feed means (22a), through the small hole of said hollow roller (22), said intermediate rubber roller (21) has a groove (21c) formed in an outer peripheral portion thereof which is in contact with an ink portion transferred from said first ink supply means (17-20) to said intaglio plate of said plate cylinder (15), and a printing pattern (21b) on an outer periphery for transferring ink to said intaglio plate of said plate cylinder (15); and support portions (21d), for preventing the squeegee and the hollow roller of said rotary screen (22) from falling in said groove (21a) of said intermediate rubber roller (21), are provided on said intermediate rubber roller (21) in such a manner that said support portions (21d) constantly support said squeegee (22b) via said hollow roller (22c)."
Claim 1 of auxiliary request II differs from claim 1 of auxiliary request I in that the following additional feature is introduced:

"wherein one of said support portions (21d) is formed on each of both end sides, in the width direction, of the intermediate rubber roller (21) for supporting both end sides of the squeegee (22b) via the hollow roller".

Claim 1 of auxiliary request III differs from claim 1 of auxiliary request I in that the following additional feature is introduced:

"wherein the support portions (21d) are formed by both end sides, in the width direction, of the intermediate rubber roller (21) and are shaped like support rings for supporting both end sides of the squeegee (22b) via the hollow roller".

IV. The following documents are referred to in the present decision:

D1: US-A-4,516,496  
D7: WO-A-97/34767  
D9a: English translation of document D9  
D14: English translation of priority document JP 23510298

V. The arguments of the appellant in the written and oral proceedings can be summarised as follows:
The arguments as to the allowability of the amendments to claim 1 under Article 123(2) EPC were introduced in the grounds of appeal as a response to the form in which the claim was maintained by the opposition division. This ground of opposition should accordingly be admitted into the proceedings.

It is not relevant to the question of allowability of the amendments under Article 123(2) EPC whether the features under consideration are essential or not. There is no disclosure in the application as filed of a groove not having all the features of claim 4 and support portions not having all the features of claim 5. Claim 1 should also specify the presence of a blanket in accordance with paragraphs [0018] and [0019] of the application as filed.

The subject-matter of claim 1 of the main request was thus not disclosed in the application as filed.

The amended auxiliary requests I, II and III filed by the respondent for the first time at the oral proceedings are late filed and should not be admitted into the proceedings. If these requests were to be admitted, it would necessitate discussing all aspects of the amended claims, including clarity, entitlement to priority and inventive step. In particular, claim 1 of auxiliary requests II and III includes features taken from the description.

Document D14, the earlier priority document, only discloses support portions in the form of support rings at paragraph [0015]. There is no disclosure in document
D14 of the generalisation included in claim 1 of auxiliary request I. Claim 1 is thus not entitled to the priority date of document D14, and document D9 belongs to the prior art.

Document D9 is the closest prior art. The roller (29) implicitly provides a support function, even if this is provided by the printing pattern.

Thus, the sole difference between the disclosure of document D9 and claim 1 is the placement of the second ink supply means on the plate cylinder. This is, however, an equivalent solution which does not have an inventive character. In addition, document D1 indicates that the skilled person is aware of the alternative of arranging the second ink supply means on the plate cylinder.

The subject-matter of claim 1 of the first auxiliary request thus does not involve an inventive step.

VI. The arguments of the respondent in the written and oral proceedings can be summarised as follows:

The arguments of the appellant as to the allowability of the amendments to claim 1 under Article 123(2) EPC were introduced late and should not be admitted into the proceedings.

It is not essential to the performance of the invention that the groove is in contact with an ink portion transferred from said first ink supply means. A groove may also be provided where no ink is present. If the groove does not extend over the entire width of the
rubber roller, it is not necessary to constantly support the squeegee. In view of the use of the word "when" at column 4, line 49 of the application as filed, it is clear that a plurality of support portions are not necessary.

By virtue of the construction specified in claim 1 of the main request, it is inevitable that the hollow roller is between the squeegee and the rubber roller.

It is necessary to read the claims in the light of the description and to take into account the implicit disclosure of the application as filed.

The subject-matter of claim 1 of the main request was thus disclosed in the application as filed.

The amended claim 1 of auxiliary request I does not introduce any features drawn from the description and does not raise any issues which constitute a surprise for the appellant. The request should therefore be admitted into the procedure.

Document D14, the earlier priority document, discloses support portions as specified in claim 1 of auxiliary request I at paragraph [0015]. The person skilled in the art appreciates that it is the function of the support portions which is important and not the form of the support portions. Claim 1 is thus entitled to the priority date of document D14 and document D9 does not form part of the prior art.

Even if document D9 were to be regarded as forming part of the prior art, nevertheless it is not regarded as
being the closest prior art, since it is less relevant than documents D1 and D3 and teaches away from providing ink directly to the plate cylinder.

Insofar as document D9 is regarded as forming the closest prior art, there is no indication of where a groove should be provided on the intermediate rubber roller or where a support portion should be provided.

There are various solutions, other than the provision of support portions on the intermediate rubber roller, for the problems associated with the squeegee and the hollow roller of the rotary screen falling in the groove of the intermediate rubber roller. Thus, document D7 uses a cam arrangement and document D4 has a displaceable roller which can be moved away from the plate cylinder.

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

Claim 1 of auxiliary requests II and III is amended so that the claim is entitled to the earlier priority date, so that document D9 does not from part of the prior art for these requests. These requests should therefore be admitted into the proceedings.
Reasons for the Decision

1. Main request

1.1 Amendments

1.1.1 The appellant introduced arguments as to the allowability of the amendments to the claims in the grounds of appeal filed on 18 March 2008.

In the proceedings before the Opposition Division, the patent in suit was maintained on the basis of an auxiliary request, including an amended claim 1, filed during oral proceedings. The Opposition Division held that the amendments to claim 1 satisfied the requirements of Article 123(2) EPC.

It is accordingly appropriate to consider the issues arising under Article 123(2) EPC with respect to the amendments to claim 1 in the present proceedings.

1.1.2 Claim 1 specifies that the intermediate rubber roller has on an outer periphery a groove, without, however, specifying the form of the groove.

In the application as filed (published version), the groove is mentioned in claim 4 and in the description in paragraphs [0011] and [0019]. In each case, it is specified that the groove is in contact with an ink portion transferred from the first ink supply to the intaglio plate of the plate cylinder. There is no suggestion in the application as filed that the groove need not satisfy these conditions.
The argument of the respondent to the effect that it is not essential to the performance of the invention that the groove is in contact with an ink portion transferred from said first ink supply means is not relevant. The issue which has to be decided is whether or not the application as filed discloses to the skilled reader that the groove on the outer periphery of the intermediate rubber roller need not be in contact with an ink portion transferred from the first ink supply to the intaglio plate of the plate cylinder. In the absence of any suggestion to this effect, the application as filed cannot be regarded as disclosing to the skilled reader a groove other than one in contact with an ink portion transferred from the first ink supply to the intaglio plate of the plate cylinder.

1.1.3 Further, claim 1 specifies that a support portion, for preventing the squeegee and the hollow roller of the rotary screen from falling in the groove of the intermediate rubber roller is provided on the intermediate rubber roller.

In the application as filed (published version), the support portion is mentioned in claim 5 and in the description in paragraphs [0012] and [0019]. In each case, it is specified that the support portion or portions support the squeegee via the hollow roller. There is no suggestion in the application as filed that the squeegee could be supported in any way other than via the hollow roller.

1.1.4 Claim 1 thus includes features which are not disclosed in the application as filed in the generalized form as
specified in claim 1. The requirements of Article 123(2) EPC are therefore not met.

2. Auxiliary request I

2.1 Admissibility

At the oral proceedings, subsequent to the announcement by the Board that the amendments to claim 1 according to the main request did not satisfy the provisions of Article 123(2) EPC, the respondent requested that an amended auxiliary request I be admitted to overcome this objection. In view of the fact that the proposed amendments appear *prima facie* to overcome the objections and that the amendments involve features drawn from the dependent claims (claims 4 and 5) of the patent in suit as granted, it was decided to admit the request.

2.2 Inventive step

2.2.1 Closest prior art

Claim 1 specifies that "support portions (21d), for preventing the squeegee and the hollow roller of said rotary screen (22) from falling in said groove (21a) of said intermediate rubber roller (21), are provided on said intermediate rubber roller (21) in such a manner that said support portions (21d) constantly support said squeegee (22b) via said hollow roller (22c)." The form of the support portions is not, however, specified.

Document D14 is the certified translation of the earlier of two Japanese applications from which the
patent in suit claims priority. This document discloses at paragraph [0015] that "both end sides, in the width direction, of the rubber roller 21 are shaped like support rings to prevent the fall of the squeegee 22b into the groove". Apart from this passage there is, however, no mention of support portions for the rubber roller.

There is thus no disclosure in document D14 of support portions provided on the rubber roller other than support portions shaped like support rings. Accordingly, claim 1 is not entitled to the earlier priority date of 21 August 1998. Document D9, published on 13 July 1999, thus forms part of the state of the art.

Document D9 is regarded as the closest prior art. Documents D1 and D3 are regarded as being less relevant in that they do not disclose the structure of the second ink supply means as specified in claim 1.

As shown in Figure 1 of document D9, this document discloses an intaglio printing press including a plate cylinder (15) having an intaglio plate mounted on a circumferential surface of the plate cylinder (15), an impression cylinder (14) contacted with the plate cylinder (15), an ink collecting cylinder (28) contacted with the plate cylinder (15) and having a blanket mounted on a circumferential surface of the ink collecting cylinder (28), a first ink supply means (21-25) for supplying ink to the blanket of the ink collecting cylinder (28), a second ink supply means (26, 27) contacted with the ink collecting cylinder (28), for supplying ink to said intaglio plate; and a wiping roller (18) contacted with the plate cylinder (15).
As shown in Figure 2 of document D9 and paragraph [0017] of document D9a, the second ink supply means (26, 27) comprises a rotary screen (26), and an intermediate rubber roller (27) in contact with the rotary screen (26). The rotary screen (26) comprises a cylindrical hollow roller (26c) supported rotatably and having a small hole formed therein, an ink feed means (26a) for feeding ink to an inner peripheral surface of the hollow roller (26), and a squeegee (26b), disposed inside the hollow roller (26c), for delivering the ink, which has been fed by the ink feed means (26a), through the small hole of the hollow roller (26).

As shown in Figure 3a and described at page 9, lines 4 to 6, the intermediate rubber roller (27) as shown in Figures 1 and 2 may be replaced by a pattern roller (29). Such a pattern roller is provided with a groove formed in an outer peripheral portion thereof (i.e. the spaces between the pattern elements) and a printing pattern on an outer periphery for transferring ink to the ink collecting cylinder (28).

The subject-matter of claim 1 is thus distinguished from the disclosure of document D9 by the provision of a support portion on the intermediate rubber roller and by the fact that the second ink supply means is contacted with the plate cylinder as opposed to the ink collecting cylinder.

Document D9 does not explicitly disclose the presence of a groove on the outer periphery of the intermediate rubber roller, which is in contact with an ink portion transferred from the first ink supply means to the
intaglio plate of the plate cylinder. However, it has not been placed in doubt that this feature belongs to common practice in order to avoid mixing of the inks supplied from the first and second ink supply means.

2.2.2 Problem to be solved

According to paragraph [0005] of the patent in suit, the problem to be solved is to facilitate the use of inks, such as optical variable inks, having poor transfer characteristics. This problem is, however, solved in the printing press of document D9.

The features of providing a support portion on the intermediate rubber roller and providing the second ink supply means in contact with the plate cylinder do not have any interrelationship and are therefore regarded as relating to two separate problems.

The support portion has the effect of preventing the squeegee and the hollow roller of said rotary screen from falling in the groove of the intermediate rubber roller.

The positioning of second ink supply means in contact with the plate cylinder as opposed to the ink collecting cylinder has the same result in terms of transferring inks having poor transfer characteristics, and is thus not seen as solving a technical problem. Thus, the problem to be solved by this feature is regarded as being to provide an alternative location for the second ink supply means.
2.2.3 Solution

As discussed above, document D9 does not disclose a support portion provided on the intermediate rubber roller, for preventing the squeegee and the hollow roller of said rotary screen from falling in the groove of the intermediate rubber roller. However, it is clear to the person skilled in the art that the squeegee and the hollow roller should not be allowed to fall in the groove of the intermediate rubber roller. Accordingly, it is necessary that either the printing pattern itself is such that the squeegee and the hollow roller are supported at all times, or that some form of support in addition to the printing pattern is provided. In the event that the support is provided by the printing pattern itself, the portions of the printing pattern which exert a supporting function must be regarded as constituting support portions.

Whilst it was suggested that an arrangement such as those disclosed in documents D4 or D7 could be provided instead of a support portion, this is not accepted. The arrangement of document D4 is intended to move a varnish application cylinder away from an impression roll in the event that there is no sheet present as a result of a malfunction of the feed means. Document D7 discloses a silk screen printing machine having a cam arrangement for moving a stencil cylinder away from an impression cylinder. These documents are thus not concerned with an intermediate rubber roller having a groove in its periphery.

It thus does not involve an inventive step to provide a support portion on the intermediate rubber roller.
The second ink supply means has the function of supplying a special ink to the intaglio plate of the plate cylinder. This can be achieved by supplying the ink either directly to the plate cylinder, or indirectly, via the ink collecting cylinder. It is noted that document D1 shows a copperplate printing machine in which inks are supplied both to a collecting cylinder 3 by means of cylinders 7 and directly to the plate cylinder 1 by means of a cylinder 4. The person skilled in the art is thus aware that this alternative exists.

It thus does not involve an inventive step to arrange the second ink supply means in contact with the plate cylinder.

Accordingly, the subject-matter of claim 1 does not involve an inventive step.

3. Auxiliary requests II and III

3.1 Admissibility

At the oral proceedings, after the Board had announced their opinion that the subject-matter of claim 1 of auxiliary request I lacked an inventive step, the respondent requested that further auxiliary requests II and III be admitted into the proceedings in order to overcome this objection by virtue of an amendment which would prima facie enable claim 1 to be entitled to the earlier priority date, which would result in document D9 no longer constituting prior art within the meaning of Article 52(1) EPC. However, the feature introduced
into claim 1 in each case was not present in the claims as granted and it is not immediately evident that the subject-matter of the amended claims involves an inventive step in view of the remaining cited documents.

It was accordingly not appropriate to admit the requests at that stage in the proceedings.

4. Reimbursement of the appeal fee

It is alleged on behalf of the appellant that the decision of the Opposition Division does not deal with all the points raised by the appellant under Articles 84 and 123(2) EPC. Whilst the decision under appeal does not explicitly refer to substantive arguments concerning the requirements of Article 84 EPC, in fact, the arguments of the appellant under this article correspond closely to those raised under Article 123(2) EPC, so that the Board is of the opinion that it was not necessary for the Opposition Division to repeat arguments dealt with under Article 123(2) EPC under the heading of Article 84 EPC.

Accordingly, the Board is of the opinion that no substantial procedural violation occurred in the proceedings before the Opposition Division, so that there is no reason for the reimbursement of the appeal fee.
Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The patent is revoked.

3. The request for reimbursement of the appeal fee under Rule 103 EPC is refused.

The Registrar: The Chairman:

D. Meyfarth W. Zellhuber