Decision of 4 December 2001

Case Number: T 1023/98 - 3.2.5
Application Number: 93250013.5
Publication Number: 0551976
IPC: B41F 27/00
Language of the proceedings: EN

Title of invention:
Apparatus for mounting a plate on a plate cylinder

Patentee:
Komori Corporation

Opponent:
MAN Roland Druckmaschinen AG
Heidelberger Druckmaschinen AG

Headword:
-

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

Keyword:
"Addition of subject-matter (main and first auxiliary request, yes)"
"Inventive step (second auxiliary request, yes)"

Decisions cited:
-

Catchword:
-
Case Number: T 1023/98 - 3.2.5

DECISION
of the Technical Board of Appeal 3.2.5
of 4 December 2001

Appellant: MAN Roland Druckmaschinen AG
(Opponent I)
Mühlheimer Strasse 341
D-63075 Offenbach (DE)

Party as of right: Heidelberger Druckmaschinen AG
(Opponent II)
Kurfürsten-Anlage 52-60
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Respondent: Komori Corporation
(Proprietor of the patent)
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Tokyo (JP)

Representative: Patentanwälte Wenzel & Kalkoff
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Composition of the Board:
Chairman: W. Moser
Members: P. E. Michel
A. Burkhart
Summary of Facts and Submissions

I. The appellant (opponent I) lodged an appeal against the interlocutory decision of the Opposition Division maintaining European patent No. 0 551 976 in amended form.

In the decision under appeal, it was held that the grounds of opposition submitted by the appellant and the other party (opponent II) under Article 100(a) (lack of inventive step) and Article 100(c) EPC (added subject-matter) did not prejudice the maintenance of the patent as amended.

The following documents were referred to in the appeal proceedings:

D1: DE-U-77 28 905

D2: GB-A-1 321 562

D3: DD-C-69 382


II. Oral Proceedings were held before the Board of Appeal on 4 December 2001.

(i) The appellant requested that the decision under appeal be set aside and the patent be revoked in its entirety.
(ii) The respondent (patentee) requested as a main request that the appeal be dismissed, or as auxiliary requests, that the patent be maintained on the basis of the following documents filed on 29 October 2001:

(a) claims 1 to 4 filed as first auxiliary request; or

(b) claims 1 to 3 filed as second auxiliary request; or

(c) claims 1 to 3 filed as third auxiliary request.

(iii) The other party did not attend the oral proceedings and refrained from submitting any requests.

III. Claim 1 of the patent as maintained by the Opposition Division (main request of the respondent) reads as follows:

"1. An apparatus for mounting a plate on a plate cylinder, comprising:

a plate lockup device (4) provided inside a gap (2) formed in the circumferential surface of said plate cylinder (1) such that it does not extend beyond the circumferential surface of said plate cylinder (1) and including gripper surfaces (5b, 8a) between which said plate (13) mounted on said plate cylinder (1) is securely held,

detecting means comprising a pair of reference
pins (16) arranged on said plate lockup device (4) inside said gap (2) such that they do not extend beyond the circumferential surface of said plate cylinder (1), said reference pins (16) being adapted to engage with at least one notch (13a, 13b) provided in an insertion end (13c) of said plate (13) and form an electrical contact therewith and

indicator means (23) for confirming and indicating whether a plate inserted in the plate lockup device is correctly positioned,

said apparatus being characterised in that

said reference pins (16) are adapted to engage with a pair of notches (13a, 13b) provided in said insertion end (13c) of said plate (13), whereby on insertion of said plate in said plate lockup device, each of said reference pins (16) abuts the base of one notch (13a, 13b) respectively and forms an electrical contact therewith,

said indicator means (23) is provided on a stationary portion of said apparatus,

a guide member (34) is supported on a supporting member on the machine frame for guiding the plate towards the gripper surface of said plate lockup device (4) when the plate is inserted, and

connecting means (39 to 42) are provided for connecting said pair of reference pins (16) and said indicating means (23) when said plate cylinder (1) stops at a predetermined position to
allow insertion of said plate insertion end (13c) in said plate lockup device (4), said connecting means comprising contacts (39, 40) formed on said plate cylinder and contacts (41, 42) provided on said supporting member and adapted to be brought into tight contact with the contacts on said plate cylinder in synchronism with an operation of said guide member.

Claim 1 of the first auxiliary request differs from claim 1 of the main request in that the feature "which conduct an electric current when an insertion end (13c) of said plate (13) is inserted in the plate lockup device (4)" has further been incorporated in the preamble of the claim.

Claim 1 of the second auxiliary request differs from claim 1 of the main request in that the last paragraph is amended so as to read:

"connecting means (39 to 42) are provided for connecting said pair of reference pins (16) and said indicating means (23) when said plate cylinder (1) stops at a predetermined position to allow insertion of said plate insertion end (13c) in said plate lockup device (4), said connecting means comprising a pair of contacts (39, 40) formed on said plate cylinder and a pair of contact rollers (41, 42) provided on said supporting member and adapted to be brought into tight contact with the contacts on said plate cylinder in synchronism with an operation of said guide member when the plate is inserted into said plate lockup device."

IV. In the written and oral procedure, the appellant argued essentially as follows:
Claim 1 of the main request and claim 1 of the first auxiliary request do not comply with the requirements of Article 123(2) EPC. There is no basis in the application as filed for the expression "contacts (41, 42) provided on said supporting member". The application as filed consistently refers to contacts (39, 40) formed on the plate cylinder and to contact rollers (41, 42) provided on the supporting member.

There is, however, no objection under Article 123(2) EPC to claim 1 of the second auxiliary request.

Document D5 was filed during the proceedings before the Opposition Division as a reaction to the introduction of amended claims and should therefore be admitted into the proceedings.

The subject-matter of claim 1 of the second auxiliary request of the respondent does not involve an inventive step. Document D1 represents the closest prior art. This document discloses an arrangement which comprises registration pins which cooperate with notches in the leading edge of a plate and supply an electrical signal to a display which may be provided either on or away from the plate cylinder.

Document D5 discloses a plate exchange mechanism having a guide member in the form of a roller for guiding a new plate into position.

Document D3 discloses reference pins for positioning a plate on the plate cylinder which supply an electrical signal to indicating means on the stationary part of the apparatus. Electrical signals are supplied from the pins to the indicating means through contact means.
Such indicating means on the stationary part of the apparatus can be used with any form of registration system. Thus, it would be obvious to the person skilled in the art to position the indicating means of document D1 on the stationary part of the apparatus. Moreover, since a guide member in the form of a roller is known from document D5, it does not involve an inventive step to provide a contact in the form of a roller.

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

The paragraph at column 7, lines 12 to 24 of the published version of the application as filed refers to "contacts". It is thus clear to the person skilled in the art reading the application as filed that it is essential to provide a contact in order to complete the electrical circuit, but that it is not necessary for the contact to be in the form of a roller. Claim 1 of the main request and claim 1 of the first auxiliary request thus comply with the requirements of Article 123(2) EPC.

Document D5 was late filed and should not be admitted into the proceedings.

The subject-matter of claim 1 involves an inventive step in view of the cited prior art, even if document D5 were to be taken into account. Document D1 is the closest prior art. The problem to be solved is to enable reliable verification of the correct positioning of the plate. The remaining documents do not suggest the claimed solution to this problem.
Reasons for the Decision

1. Late filing of document D5

During the proceedings before the Opposition Division, a set of amended claims was filed by the respondent, in which claim 1 was amended so as to specify the nature of the connecting means for connecting the reference pins to the indicating means. Document D5 was introduced into the proceedings as showing a guide member which makes contact with a printing plate during plate insertion and which is mounted on a stationary part of the apparatus. Document D5 was thus filed during the proceedings before the Opposition Division as a reaction to the introduction of amended claims and should therefore be admitted into the proceedings.

2. Main request and first auxiliary request

2.1 Amendments

The application as filed nowhere refers to contacts in general being provided on the supporting member. Thus, referring to the published version of the application as filed, in the passage at column 5, lines 28 to 47, there is described with reference to Figures 6, 7 and 12 the provision of contacts 39 and 40 on the plate cylinder 1 which make contact with contact rollers 41 and 42 which are mounted on the end of a contact lever 37.

Whilst the paragraph at column 7, lines 12 to 24 and claim 4 refer to contacts in general for closing the electric circuit when the plate cylinder is stopped, there is no disclosure of the location of the contacts.
Thus, the only disclosure of contacts on the supporting member in the application as filed refers to contacts in the form of rollers. Even if the person skilled in the art regarded it as being an obvious measure to replace the contact rollers as disclosed in the application as filed by some other form of contact, this does not mean that the introduction of the broader term does not extend beyond the disclosure of the application as filed.

Claim 1 of the main request and claim 1 of the first auxiliary request thus do not comply with the requirements of Article 123(2) EPC.

3. Second auxiliary request

3.1 Amendments

Claim 1 specifies the presence of "a pair of contacts (39, 40) formed on said plate cylinder and a pair of contact rollers (41, 42) provided on said supporting member and adapted to be brought into tight contact with the contacts on said plate cylinder in synchronism with a operation of said guide member when the plate is inserted into said plate lockup device." This is disclosed in the application as filed at column 5, lines 31 to 47 of the published version of the application as filed. The amendments thus comply with the requirements of Article 123(2) EPC. This was not disputed by the appellant.

3.2 Novelty

The subject-matter of claim 1 is new since none of the cited documents discloses all the features of the claim
in combination. It is also noted that novelty of
claim 1 was not in dispute.

3.3 Inventive step

3.3.1 Closest prior art

Document D1 represents the closest prior art and
discloses an apparatus having all the features of the
precharacterising portion of claim 1. There is no
disclosure as to the location of the indicating means
(12). It is merely stated that an electrical circuit
(13) is completed by the printing plate (2), the
reference pins (9,10), a power source (11) and a switch
(17).

3.3.2 Object of the invention

The object of the invention is thus not to enable
reliable verification of the correct positioning of the
plate. This problem is solved by the arrangement of
document D1, and not by the features which distinguish
the subject-matter of claim 1 over the disclosure of
document D1. The object is rather, as stated in the
decision of the Opposition Division, to position the
indicating means in an appropriate manner.

3.3.3 Solution

According to claim 1, the above object is achieved by
providing the "indicator means (23) ... on a stationary
portion of said apparatus", and further providing
"connecting means (39 to 42) ... for connecting said
pair of reference pins (16) and said indicating means
(23) when said plate cylinder (1) stops at a
predetermined position to allow insertion of said plate insertion end (13c) in said plate lockup device (4), said connecting means comprising a pair of contacts (39, 40) formed on said plate cylinder and a pair of contact rollers (41, 42) provided on said supporting member and adapted to be brought into tight contact with the contacts on said plate cylinder in synchronism with an operation of said guide member when the plate is inserted into said plate lockup device."

As stated above in paragraph 3.3.1, document D1 does not contain any disclosure as to the positioning of the indicator means.

Document D2, whilst suggesting the provision of indicator means in the form of an oscillator (17) on a stationary part of the apparatus, relies on a resonance circuit to detect the presence of a plate. This document thus does not contain any suggestion of the claimed solution.

Document D3 discloses an arrangement in which registration pins engage slots in a printing plate and an electrical connection between the registration pins and indicator means mounted away from the printing cylinder is achieved through contacts (13a, 13b) in the form of slip rings and brushes. The brushes are in permanent contact with the slip rings and there is no suggestion of the solution according to claim 1 of the patent in suit, according to which there are "a pair of contact rollers (41, 42) provided on said supporting member and adapted to be brought into tight contact with the contacts on said plate cylinder in synchronism with an operation of said guide member when the plate is inserted into said plate lockup device." This
arrangement gives rise to the additional advantage that the contacts are only in contact with the contact rollers during plate insertion.

Document D4 discloses indicator means in the form of LEDs which are provided on the reference pins. There is thus no suggestion in this document of the provision of indicator means on a stationary portion of the apparatus.

Document D5 relates to a plate replacing apparatus, but does not disclose any arrangement for confirming and indicating whether a plate inserted in the plate lockup device is correctly positioned. The roller (125) serves to bring a new plate being supplied to the printing cylinder into tight contact with the surface of the printing cylinder. Thus, whilst the combination of documents D1 and D3 suggests mounting the indicator means on a stationary part of the apparatus and providing contacts to enable an electrical connection between the reference pins on the plate cylinder and the stationary indicator means, document D5 does not suggest the further step of providing contact rollers on the supporting member which are brought into tight contact with contacts on the plate cylinder in synchronism with operation of the plate guide member when the plate is inserted into said plate lockup device. Thus, the combination of documents D1, D3 and D5 does not lead to apparatus as claimed in claim 1.

3.3.4 The subject-matter of claim 1 according to the second auxiliary request thus involves an inventive step. Claims 2 and 3 are appendant to claim 1 and relate to preferred embodiments of the apparatus of claim 1. These claims thus similarly involve an inventive step.
4. In these circumstances it is not necessary to consider the third auxiliary request of the respondent.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the first instance with the order to maintain the patent on the basis of the following documents:

   (a) claims 1 to 3 filed as second auxiliary request on 29 October 2001;

   (b) description: pages 2, 2a submitted on 1 July 1998, and pages 3 to 5 of the patent as granted;

   (c) drawings: Figures 1 to 12 as granted.

The Registrar: The Chairman:

M. Dainese W. Moser