DECISION
of 13 November 2001

Case Number: T 0377/98 - 3.2.5
Application Number: 92107737.6
Publication Number: 0512549
IPC: B41C 1/10

Language of the proceedings: EN

Title of invention:
Printing press

Patentee:
FUJI PHOTO FILM CO., LTD.

Opponent:
MAN Roland Druckmaschinen AG

Headword: 

Relevant legal provisions:
EPC Art. 56

Keyword:
"Inventive step (yes)"

Decisions cited:

Catchword:
Case Number: T 0377/98 - 3.2.5

DECISION
of the Technical Board of Appeal 3.2.5
of 13 November 2001

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

Representative: -

Respondent: FUJI PHOTO FILM CO., LTD.
(Proprietor of the patent) 210 Nakanuma
Minami-Ashigara-shi
Kanagawa-ken (JP)

Representative: Grünecker, Kinkeldey,
Stockmair & Schwanhäusser
Anwaltssozietät
Maximilianstrasse 58
D-80538 München (DE)

Decision under appeal: Interlocutory decision of the Opposition Division of the European Patent Office posted 3 April 1998 concerning maintenance of European patent No. 0 512 549 in amended form.

Composition of the Board:
Chairman: W. Moser
Members: P. E. Michel
A. Burkhart
Summary of Facts and Submissions

I. The appellant (opponent) lodged an appeal against the interlocutory decision of the Opposition Division maintaining the patent No. 0 512 549 in amended form.

In the decision under appeal, it was held that the grounds of opposition submitted by the appellant under Article 100(a) (lack of novelty and inventive step) did not prejudice the maintenance of the patent as amended.

The following documents were referred to in the appeal proceedings:

D3: DE-A-3911932

II. Since the statement setting out the grounds of appeal was not filed in due time, the appellant requested re-establishment of his rights under Article 122 EPC. In an interlocutory decision of the Board of Appeal of 16 November 1998 it was held that the request of the appellant for re-establishment regarding the grounds of appeal was allowed, and that the appeal was admissible.

III. Oral Proceedings were held before the Board of Appeal on 13 November 2001.

(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, and, as auxiliary requests, that the decision under appeal be set aside and the patent be maintained on the basis of the following documents filed during the oral proceedings:

(a) claims 1 to 11 as first auxiliary request;

(b) claims 1 to 11 as second auxiliary request;

(c) claims 1 to 11 as third auxiliary request.

III. Claim 1 of the patent as maintained by the Opposition Division reads as follows:

"1. A multi-color printing press that comprises a single plate cylinder (12) that allows press plates (28) for n colors (B,C,M,Y) to be disposed cylindrically at predetermined intervals, an impression cylinder (22) whose diameter is one-nth of that of said plate cylinder (12), said impression cylinder (22) having a single sheet of printing paper (23) wrapped around it and delivering said printing paper (23) after it has made n consecutive revolutions, and an ink supply assembly (16) for the n colors (B,C,M,Y) characterized by n platemaking units (14M,14C,14B,14Y) which are disposed around the circumference of said plate cylinder (12) and near the plate cylinder (12) for individually preparing press plates (28) for single colors."

IV. In the written and oral procedure, the appellant argued essentially as follows:
Document D1 is the closest prior art. The object of the invention is to shorten the time required for preparation of the press plates. It is inherently obvious that this aim can be achieved by the provision of a plurality of platemaking units, thus enabling the simultaneous preparation of the plates.

Document D4 discloses a printing press in which a plurality of plate cylinders are grouped around an impression cylinder, each of the plate cylinders being provided with a plate making unit. This arrangement enables imaging to be carried out simultaneously for a plurality of colour images. It is accordingly obvious for the person skilled in the art to arrange a plurality of platemaking units around a single plate cylinder in a press of the type disclosed in document D1.

Documents D5 and D3 show that multi-colour printing may be carried out with various machine configurations and that the provision of an imaging device for each colour is also known.

The subject-matter of claim 1 thus does not involve an inventive step.

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

It is agreed that document D1 represents the closest prior art. The engraving device disclosed in this document comprises a movable laser beam engraving head mounted on a movable carriage. The printing cylinder must perform a plurality of revolutions to complete the gravure.
Document D3 discloses a printing machine in which a single imaging unit is associated with each printing cylinder.

Document D4 discloses a printing machine having a large paper transport cylinder surrounded by a plurality of small printing cylinders, each of which is associated with a single imaging head.

Document D5 is concerned with a printing apparatus in which the press plate is exposed before mounting.

It is also agreed that the problem to be solved is to decrease preparation time for the press plates. The solution as defined in claim 1 of the patent in suit, in which the press plates for a plurality of colours are prepared simultaneously by means of a plurality of print making units is not, however, rendered obvious by the cited prior art. The skilled person would tend rather to try to increase the speed of rotation of the plate cylinder.

The solution to this problem according to the patent in suit, whereby a plurality of platemaking units are disposed around the circumference of the plate cylinder and near the plate cylinder is thus not suggested by the prior art.

Document D4 is not concerned with the present problem, but with the problems associated with the registration of the colour images. The problem is solved by arranging the plate cylinders around the impression cylinder. Four plate making units are only provided because of the presence of four plate cylinders, each plate making unit being associated with a plate
The subject-matter of claim 1 thus involves an inventive step.

Reasons for the Decision

Main request

1. Amendments

As regards the question of whether or not the patent in suit meets the requirements of Article 123(2) and (3) EPC, the Board agrees to the reasons given under point II.2 of the decision under appeal. This issue was not raised by the parties in the appeal proceedings.

2. Novelty

In view of the fact that claim 1 is directed to a "multi-color printing press", it follows that the term "n", which is the number of colours to be printed, has a value of at least 2. Claim 1 is accordingly directed to a multi-color printing press in which a plurality of platemaking units are disposed around the circumference of a single plate cylinder and near the plate cylinder for individually preparing press plates for single colors. None of the cited prior art documents discloses such an arrangement. The subject-matter of claim 1 is thus new. Novelty of the subject-matter of claim 1 was also not contested by the appellant.

3. Inventive step
3.1 Closest prior art

Document D1 represents the closest prior art and discloses a multi-colour printing press having all the features of the preamble of claim 1. A single platemaking device in the form of a laser engraving device (5) is disposed adjacent to a plate cylinder (1). In order to prepare the plurality of images necessary for multi-colour printing, the images are prepared sequentially by the laser engraving device on the plate during rotation of the plate cylinder.

3.2 Object of the invention

The object of the invention is to reduce the time required for preparation of the press plates.

3.3 Solution

According to claim 1, the above object is achieved by the provision of a plurality of plate making units around a single plate cylinder. It is thus possible to prepare all the press plates for all of the colours to be printed simultaneously.

The prior art does not suggest the solution according to the invention.

The arrangement of document D4, in which a plurality of plate cylinders are arranged around an impression cylinder, is not concerned with the above problem, but rather with the problem of minimization of registration errors. This is achieved by arranging the plate cylinders around a common impression cylinder.
The arrangement of document D4 necessitates the use of a comparatively large impression cylinder so as to enable the plate cylinders, each of which bears a single colour separation image, to be arranged around its periphery. This is not compatible with the arrangement sketched in Figure 5 of document D1, where, for the purposes of four colour printing, the plate cylinder (1) has a peripheral length of four times that of the impression cylinder (3), thus enabling the superimposition of the four colour images on the paper held on the impression cylinder.

Finally, in the printing press of document D4, each plate cylinder has only a single plate making unit. Thus the teaching of both document D1 and document D4 is that each plate cylinder should have a single plate making unit.

Thus, not only does document D4 not offer a solution to the problem solved according to the patent in suit, but also the teaching of document D4 is not compatible with that of document D1.

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

4. Claims 2 to 12 are directly or indirectly appendant to claim 1 and are directed to preferred aspects of the printing press of claim 1. The subject-matter of these claims thus similarly involves an inventive step.

5. The appeal is thus to be dismissed. In these circumstances, it is not necessary to consider the auxiliary requests of the respondent.
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: M. Dainese

The Chairman: W. Moser