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Datasheet for the decision of 27 September 2023

Case Number: T 0245/19 - 3.2.05

Application Number: 11793840.7

Publication Number: 2658717

IPC: B41F5/24, B41F33/00

Language of the proceedings: EN

Title of invention:
System and method for adjusting and monitoring the pressures of printing rollers in a flexographic printing machine with central drum

Patent Proprietors:
Uteco Converting S.p.A.
Grafikontrol S.p.A.

Opponent:
Windmöller & Hölscher KG

Relevant legal provisions:
EPC Art. 54, 56, 100(a), 113(1), 116(1)
RPBA Art. 12(4)
RPBA 2020 Art. 12(8), 15(3)

Keyword:

Decision issued in written proceedings (yes)
Novelty (yes)
Inventive step (yes)
Admittance of novelty and inventive step attacks filed first on appeal (no)

Decisions cited:

G 0001/21, J 0011/87, J 0011/94, J 0027/94, J 0019/03, T 0003/90, T 0696/02, T 1027/03

Catchword:

Oral proceedings may be dispensed with if a party has given notice of non-appearance, even if the request for oral proceedings is expressly maintained (see point 1 of the reasons).

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Case Number: T 0245/19 - 3.2.05

D E C I S I O N
of Technical Board of Appeal 3.2.05
of 27 September 2023

Appellant: (Patent Proprietor 1)	Uteco Converting S.p.A. Viale del Lavoro 25 Z.I. 37030 Colognola Ai Colli (IT)
Appellant: (Patent Proprietor 2)	Grafikontrol S.p.A. Via Ludovico D'Aragona 7 20132 Milano (IT)
Representative:	Micaela Nadia Modiano Modiano & Partners Via Meravigli, 16 20123 Milano (IT)
Respondent: (Opponent)	Windmöller & Hölscher KG Münsterstrasse 50 49525 Lengerich (DE)
Decision under appeal:	**Interlocutory decision of the Opposition Division of the European Patent Office posted on 14 November 2018 concerning maintenance of the European Patent No. 2658717 in amended form.**

Composition of the Board:

Chairman	P. Lanz
Members:	O. Randl
	A. Bacchin

Summary of Facts and Submissions

I. The patent proprietors and the opponent both filed an appeal against the decision of the opposition division to maintain European patent No. 2 658 717 ("the patent") in amended form.

II. The opposition division was of the opinion that the subject-matter of claims 1 and 6 of the main request (patent as granted) and of auxiliary request 1 was not inventive over the state of the art, but that auxiliary request 2 did comply with the requirements of the EPC.

The opposition division considered, among others, documents D1 (EP 1 666 252 A2), D2 (WO 2004/065127 A2) D4 (WO 2007/086052 A2) and D5 (EP 1 843 898 B1).

III. In a letter dated 10 May 2019, the opponent withdrew its appeal. Consequently, the patent proprietors became sole appellants against the interlocutory decision of the opposition division maintaining the patent in amended form and the principle of prohibition of *reformatio in peius* applies. Thus, neither the board nor the opponent may challenge the maintenance of the patent as amended.

IV. First oral proceedings before the board took place on 28 September 2022.

At the end of the oral proceedings, the respondent informed the board that it had never received the appellants' statement of grounds of appeal. Having verified that the statement of grounds of appeal had never been notified to the respondent, the board decided that the provisional conclusions taken by the

board so far during the oral proceedings would be set aside and that the proceedings would be continued in writing with the notification of the statement of grounds of appeal to the respondent.

V. The appellants' statement of grounds of appeal was sent afresh on 6 October 2022. The respondent filed its reply on 16 February 2023.

VI. By letter dated 11 May 2023, the board summoned the parties to oral proceedings to be held on 28 September 2023.

VII. Following a request for postponement on behalf of the respondent, the board rescheduled the oral proceedings for 27 September 2023.

VIII. By letter dated 5 September 2023, the appellants announced they would not be attending the oral proceedings but that their request for oral proceedings was maintained.

IX. By letter dated 25 September 2023, the respondent's representative informed the board that he would not be attending the oral proceedings.

X. The board then cancelled the oral proceedings and issued its decision in writing.

XI. The appellants requested that the decision under appeal be set aside and that the patent be maintained as granted, or, alternatively, that the decision under appeal be set aside and that the patent be maintained in amended form, on the basis of either auxiliary request 1 or auxiliary request 2.

XII. The respondent requested that the appeal be dismissed.

XIII. Independent claims 1 and 6 of the patent as granted read as follows (in claim 1 below, the feature references used by the board have been added in square brackets):

"1. [**1**] A system for adjusting and monitoring the pressures of printing rollers (3, 4) of printing stations arranged around a central drum (2) of a flexographic printing machine, comprising:
[**2**] at least one reader (7) [**2-1**] which is adapted to be placed at the printing rollers (3, 4) of the printing machine directly behind the print in output from the central drum (2) [**2-2**] to detect the contrast of the print on the printing material (8) wrapped around the central dram [sic] (2) of the printing machine, [**2-3**] said reader (7) is constituted by a scanning head [**2-4**] whose size is equal to the width of the printing material (8), and [**2-5**] said reader (7) is capable of reading over the entire printing width and [**2-6**] of directly measuring the amount of the entire print on the printing material (8) with respect to its background, [**2-7**] said amount corresponding to said contrast; and
[**3**] a processing and control unit (10) which is [**3-1**] connected to said at least one reader (7) and is [**3-2**] adapted to determine and control, as a function of the contrast detected by said reader (7), the position of the printing rollers (3, 4) with respect to said central drum (2) in order to achieve the desired print; and
wherein [**3-3**] said processing and control unit (10) comprises a control section (15) and a processing section (14) that are adapted:

[**3-4**] to command performance of a sequence of stepwise movements, according to preset steps, of the printing plate roller (3) with respect to the central drum (2) or also of the anilox roller (4) with respect to the printing plate roller (3), in order to make contact in printing at different printing pressures,
[**3-5**] to store for each movement of the printing plate roller (3) data acquired regarding its position and the contrast measured by the reader (7); and
[**3-6**] to analyse and elaborate the acquired data and automatically calculate, the position and therefore the printing pressure of the printing plate roller (3) with respect to the central drum (2) in order to achieve the desired print."

"6. A method for controlling printing pressures for a flexographic printing machine by means of a system according to one or more of the preceding claims, characterized in that it comprises the following steps:
1) entering from the control station the data of the new job, such as for example the printing format, the type of material to be printed, the printing stations involved, the color that is present on each station;
2) making the machine run at the speed at which the method for controlling printing pressures is performed and measuring the contrast of the printing material (8) without printing by means of the at least one reader (7);
3) performing a sequence of stepwise movements of the printing plate roller (3) with respect to the central drum (2) or also of the anilox roller (4) with respect to the printing plate roller (3), in order to make contact in printing at different printing pressures, and measuring the contrast of the print by means of the reader (7) and during performance of said sequence, storing for each movement of the printing plate

roller (3) data acquired regarding its position and the contrast measured by the reader (7);
4) at the end of the sequence of movements and of the corresponding contrast measurements, analyzing and elaborating the acquired data and automatically calculating, the position and therefore the printing pressure of the printing plate roller (3) with respect to the central drum (2) in order to achieve the desired print."

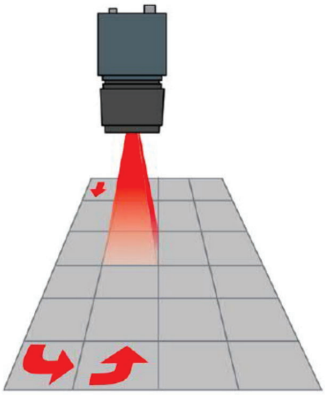
XIV. The parties' submissions with respect to the issues relevant for the decision can be summarised as follows:

(a) Interpretation of claim 1

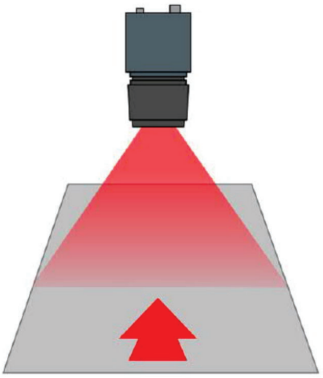
(i) Respondent

Feature group 2 (features 2 and 2-1 to 2-7)

This feature group refers to a so-called "line scan camera". Such a line scan camera is explicitly disclosed in paragraph [0033] of document D5 and in other prior-art documents. The term "line scan camera" is also part of the common general knowledge in this field.
The difference between a "line scan camera" and an "area camera" is explained in paragraph [0041] of document D5. A line scan camera covers the entire printing width and is preferably used for general controlling tasks. An area camera can focus on specific segments of the printed image and is preferably used for controlling tasks referring to image details like the "registration problem". This is the type of digital camera used in smartphones, for example. With regard to the moving material web of a flexographic printing machine, the operation of an **area camera** is as follows:



Only certain areas of the moving material web can be inspected at one time. If the whole of the moving material web is to be inspected over the entire width thereof, an area camera reaches its limits in terms of resolution and real-time capability. This is because an uninterrupted capture of the printed image on the moving material web can only be achieved by capturing overlapping images, as shown by the arrows in the image above. Once this has been done, additional software is required to crop the individual images, to eliminate distortion and to assemble the images in the correct sequence. A much better and more simple inspection of the whole of the moving material web over the entire width thereof can be achieved by **line scan cameras.**



Line scan cameras have just a single row of light-sensitive pixels, which constantly scan the moving material web line by line at a sufficiently high frequency. Once one line has been scanned, the motion of the material web is then used to insert a "line feed" on the resulting digital image shown on the monitor for the next line. A line scan camera constitutes a very simple and inexpensive solution for the inspection of the complete moving material web over the entire width thereof. The pulses generated by the encoder are then passed to the line scan camera, so that the line rate of the camera will always be perfectly synchronised to the varying speed of the moving material web.

Feature 2-4

Neither Fig. 1 nor Fig. 2 of the patent shows a line scan camera extending over the entire printing width.

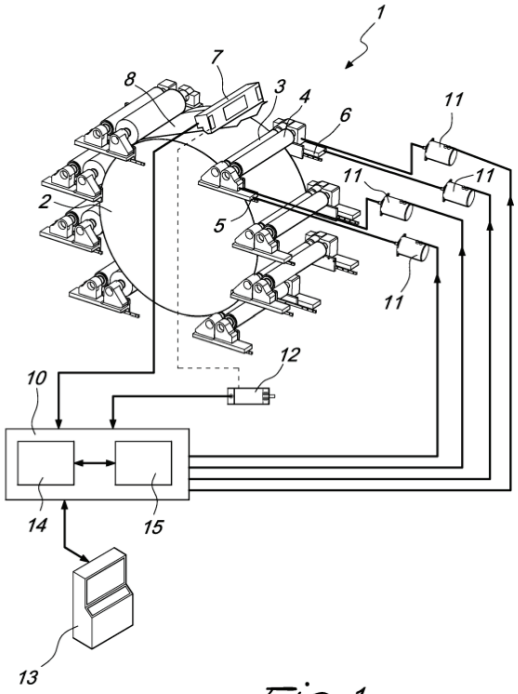
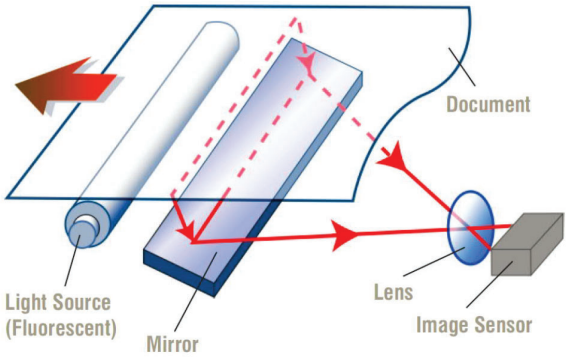
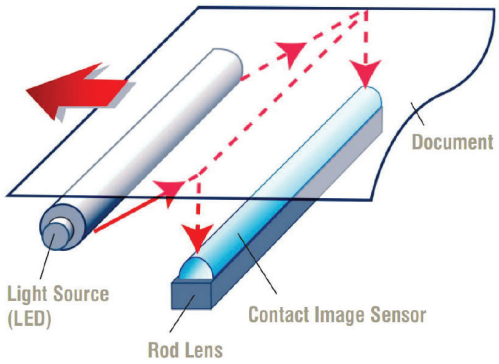


Fig. 1

The patent does not provide any further details regarding feature 2-4; it needs to be clarified using common general knowledge in this field. In this connection, an explanation of "CCD technology" (charge-coupled device technology) vs. "CIS technology" (contact image sensor technology) is helpful. A line scan camera always consists of a light source, one or more image sensors and a lens system. This is true for both CCD and CIS technology. These technologies differ in the type of image sensors used. **In CCD technology**, a **line scan camera** uses a central CCD chip as the image sensor:



The use of a mirror is optional. In contrast, **in CIS technology** a **line scan camera** uses a CIS sensor as the image sensor. The light from the light source is reflected by the document and then captured by a glass rod lens, directing the light towards the light-detecting elements that capture the pixel. This means that the CIS sensor spans the entire width of the printed image and has a 1:1 mapping between a pixel across the current scan line and the pixel in the corresponding light-detecting element.



Several interpretations are possible here:

(1) Feature 2-4 focuses merely on the width of the light source without committing to CCD technology or CIS technology.
(2) Its intention is to have a mirror whose size is equal to the width of the printed material. This would imply a line scan camera according to CCD technology.
(3) The feature concentrates on the rod lens, implying a line scan camera according to CIS technology.

(b) Novelty of the main request over document D1

(i) Appellants

The subject-matter of claim 1 is novel over document D1 because this document does not disclose features 2, 2-1, 2-3, 2-4, 3-3 and 3-4.

- Features 2 and 2-1: Contrary to the opposition division's finding, paragraphs [0027] to [0028] and [0036] do not mention camera K and its position as being **directly behind the print** in output from the central drum 2. Only in paragraph [0039] of document D1 is it disclosed that "this print image 10 is recorded in the detection area 11 by the camera K." From the schematic representation of

Fig. 1 of document D1, the skilled person would at most have derived that camera K is in fact placed over, above and sideways with respect to the print image 10. This arrangement is technically compatible with the type of image of a recording camera disclosed by that document (see paragraph [0008], [0020], [0022] or [0026]).

- Features 2-3 and 2-4: Document D1 teaches the use of a "camera K" that shoots print images 10 in a detection area 11 (paragraphs [0039] and [0040]). The only examples of a "camera" of the system of document D1 are disclosed as being a "color camera" (paragraph [0022]) or a "digital camera that supplies digitized images of the recorded print images" (paragraph [0026]). There is absolutely no mention in document D1 of a **scanning head** capable of scanning a printed image.
- Features 3-3 and 3-4: The common general meaning of a **stepwise movement** is a movement marked by or proceeding in steps: a gradual, stepwise approach, moving by adjacent intervals, like a series of steps (see the Merriam Webster, Collins or Oxford dictionaries). The movements of the rollers of document D1 do not qualify as a sequence of stepwise movements, according to preset steps, of the printing plate roller with respect to the central drum or of the anilox roller with respect to the printing plate roller, in order to make contact in printing at different printing pressures.

(ii) Respondent

The respondent did not comment on the novelty of the subject-matter of claim 1 over document D1.

(c) Admittance of the novelty objection based on document D4

(i) Respondent

The objection that claim 1 lacks novelty in view of document D4 should be admitted. Document D4 cites in its introduction the US equivalent of document D1 as prior art. The discussion of this prior art alone discloses all of the features of claim 1 of the patent.

(ii) Appellants

The appellants did not comment on the admittance of this objection.

(d) Admittance of the inventive-step objection based on document D5

(i) Respondent

This objection should be admitted into the appeal proceedings. It must be possible to raise new arguments in response to the interlocutory decision of the opposition division within the scope of the right to be heard. Otherwise, holding oral proceedings would be pointless. If there were difficulties with regard to inventive step in getting from document D1 to document D5, but document D1 was mentioned in document D5, then an attack based on a combination of document D5 with document D1 must be admissible. It is just another way of looking at the same thing.

(ii) Appellants

The appellants did not comment on the admittance of this objection.

Reasons for the Decision

1. Cancellation of the oral proceedings and issuance of the decision in written proceedings

In the present case, both parties requested oral proceedings in the event the board did not grant their respective main requests. In the board's preliminary opinion, which was communicated to the parties pursuant to Article 15(1) RPBA 2020, the board expressed its intention to allow the appellants' main request. As explained in points VIII. and IX., both parties announced they would not be attending the oral proceedings, with the appellants explicitly maintaining their request for oral proceedings.

In such a situation, it is not necessary for oral proceedings to be held in order to hear the respondent. The reasons for this are as follows.

In several decisions of the Boards of Appeal (see, for example, T 3/90, point 1 of the reasons; T 696/02, point 7.1 of the reasons; T 1027/03, point 2 of the reasons), it has been held that an announcement that a party will not be participating in oral proceedings is equivalent to the withdrawal of that party's request for oral proceedings and that as a consequence there was no need for oral proceedings to be held.

This board has doubts as to whether a declaration of non-attendance can in fact be construed as a withdrawal of a party's request for oral proceedings, with all legal implications, including, for instance, that the party is bound thereby. In point 2.2 of its decision J 11/94, the Legal Board of Appeal stated that, for reasons of legal certainty, any procedural declaration must be unambiguous, particularly - because of the consequences thereof - declarations terminating the proceedings. In this board's view, this also applies to declarations of withdrawal of the request for oral proceedings, particularly since the right to oral proceedings is a fundamental right which gives the parties the opportunity to be heard under Article 113 EPC and Article 6 ECHR (see decision G 1/21 of the Enlarged Board of Appeal, point 45 of the reasons). Furthermore, in decision J 19/03 (point 5 of the reasons), citing decisions J 11/87 (points 3.3 and 3.6 of the reasons) and J 27/94 (point 8 of the reasons), it was held that a party is normally bound by its procedural acts provided the procedural statement was clear and unconditional.

This board is of the opinion that a party's announcement that it will not be appearing at the hearing does not necessarily entail the withdrawal of a previously made request to present their arguments orally. Notwithstanding this, it is not mandatory for oral proceedings to be held in these circumstances. The announcement of a party that it will not be appearing at the hearing results in its request for oral proceedings becoming ineffective. The board remarks that this is true irrespective of a declaration that the request for oral proceedings is explicitly maintained, as in the case of the present appellants.

The right to oral proceedings enshrined in Article 116(1) EPC must be seen in the context of the right to be heard under Article 113(1) EPC (see decision G 1/21, paragraph 13 of the grounds). It is therefore a right to be heard in oral proceedings. The right to oral proceedings cannot be understood as the right to have the board hold oral proceedings with the other parties to the proceedings. Such an understanding, which separates the right to oral proceedings from the right to be heard at oral proceedings, has no basis in the EPC as interpreted by the Boards of Appeal.

Since as a consequence of an announcement that a party will not be appearing at oral proceedings a party's request for oral proceedings becomes ineffective, the board may dispense with oral proceedings if no other reason makes it necessary or desirable to hold them.

In the present case, there is no such reason, because the board has decided to allow the appellants' main request, i.e. to maintain the patent as granted, and also because all parties announced they would not be attending the oral proceedings.

Finally, the case is ready for decision on the basis of the parties' written submissions, which have been fully taken into account by the board (Article 12(8) and Article 15(3) RPBA 2020).

Therefore, the board has decided not to hold oral proceedings and to issue the decision in writing.

2. Interpretation of selected claim features

2.1 "Reader" and "scanning head"

Claim 1 requires the presence of a reader to detect the contrast of the print on the printing material wrapped around the central drum of the printing machine (features 2 and 2-2).

According to feature 2-3, the reader is constituted by a scanning head. Feature 2-5 adds that the reader is capable of reading over the entire printing width.

Neither the "reader" nor the "scanning head" is defined in the patent.

The board interprets the term "reader" as a device capable of extracting information from an object by acting on it optically, magnetically, chemically, etc. (based on the relevant Oxford English Dictionary (OED) definition of "read").

"Scanning head" is understood to mean a part of the printing machine containing a tool or device for scanning the printed image. The OED provides the following definition for the verb "scan": "to cause (an area, object, or image) to be systematically traversed by a beam or detector; to convert (an image) into a linear sequence of signals in this way for purposes of transmission or processing".

2.2 "Stepwise movements"

Paragraph [0038] of the patent reads as follows:

> "*The sequence first moves the anilox roller 4 so as to make contact with the printing plate roller 3 and ink it, then moves stepwise, or according to preset steps, the printing plate roller 3 from the position for not printing on the material (condition of minimum contrast) to the position of maximum printing pressure (condition of maximum contrast), until by an increase in printing pressure the contrast measured by the reader 7 no longer varies appreciably*" (underlining added by the board).

This disclosure, which appears to define the term "stepwise" as "according to preset steps", is in line with the common meaning of this term ("in a series of distinct or separate stages; with intermittent pauses, not continuously", OED). Consequently, "stepwise movements" are understood to mean movements that are non-continuous, i.e. movements that are carried out in a series of stages rather than in one go.

2.3 Combination of features 2-4 and 2-5

Feature 2-4 requires the size of the scanning head to be equal to the width of the printing material, whereas feature 2-5 requires it to be capable of reading over the entire printing width (which will, in general, be smaller than the width of the printing material). This particular combination of features, one of which was taken from page 5, lines 27 and 28, of the original description and the other from original claim 2, is somewhat redundant. Feature 2-4 is more demanding than

feature 2-5 because the scanning head must be capable of reading over the whole width of the printing material and not only over the printed width. The fact that feature 2-4 was introduced at the request of the examining division to further distinguish the subject-matter of claim 1 from the disclosure of document D1 (see the Annex to the examining division's communication dated 7 July 2015) corroborates this understanding.

The respondent argued that features 2 to 2-7 referred to a line scan camera and that feature 2-4 could be interpreted in various ways as defining the width of the light source, the mirror (if CCD technology were used) or the rod lens (with CIS technology). According to the respondent, a line scan camera extending over the entire printing width was neither meant nor disclosed in Fig. 1 or Fig. 2 of the patent.

The board disagrees. Feature 2-4 requires the scanning head (and not a light source or a mirror) to have a size equal to the width of the printing material. The disclosure of Fig. 1 is in line with this requirement because the size of reader 7 corresponds to the size of the printing material.

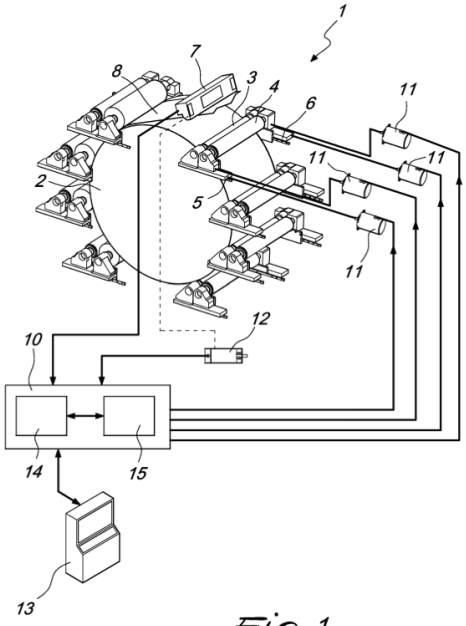


Fig. 1

In view of this, it seems unwarranted to speculate on the precise technology (CCD, CIS, etc.) being used. Feature 2-4 must therefore be interpreted according to its literal meaning, i.e. that the scanning head of the reader must have a size equal to the width of the printing material.

2.4 Significance of features 3-4 to 3-6

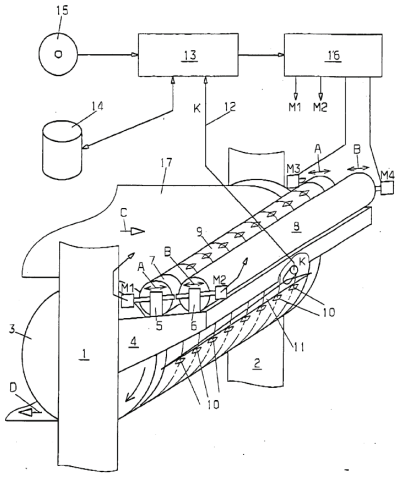
Features 3-4 to 3-6 have in common the fact that they describe actions for which the control and processing sections are "adapted". Consequently, these features are anticipated if a prior-art system is capable of carrying out these actions, even if the actions as such are not disclosed. For instance, if in a prior-art device the processing section is configured to move the printing plate roller with respect to the central drum, and the section is capable of carrying out this movement in a series of stages, then the corresponding feature is disclosed by this prior-art device.

3. Main request: novelty

3.1 Novelty over document D1

Document D1 discloses a method for adjusting the print image of a rotary printing press by adjusting the relative position of the counter-pressure roller 3, the print roller 7 and the anilox roller 8, which are movable relative to one another. A camera K measures the intensity of the light reflected by sections of the printed image. The intensity values are supplied to a control and regulating unit 13, which generates signals for the actuators of the rollers on the basis of the measured intensity values (see claim 1).

Figur 1



As can be seen from point 5 of the reasons for the decision under appeal, the opposition division concluded that the subject-matter of claim 1 differed from the disclosure of document D1 in features 2-3 and 2-4.

The appellants argued that features 2, 2-1, 3-3 and 3-4 are not disclosed in document D1 either.

3.1.1 Features 2 and 2-1

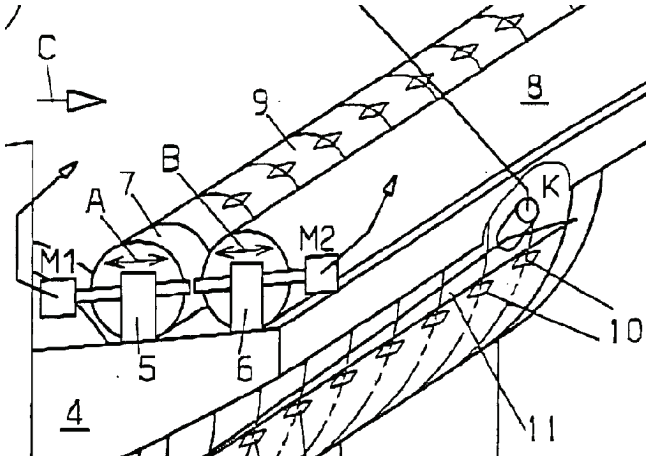
According to these features, the claimed system comprises at least one reader adapted to be placed at the printing rollers of the printing machine directly behind the print in output from the central drum.

In the last paragraph on page 4 of the decision under appeal, the opposition division explained its view that these features are disclosed in document D1 as follows:

> "... *at least one reader (K) which is adapted to be placed at the printing rollers (7, 8) of the printing machine directly behind the print (10) in output from the central drum (3) (cf. paragraphs [0027]-[0028] and [0036] in conjunction with figure 1; figure 1 solely depicts one printing unit provided with the camera K being placed at the printing rollers 7, 8 and 3 directly behind the print in output from the central drum 3 according to the feeding direction C of the web, since the acquisition is made after the printing material has been printed; D1 contemplates in the cited paragraphs [0027]-[0028] and [0036] a plurality of such printing units, therefore the same observations apply to the last printing unit arranged along the central drum 3 ...*"

The board understands this to mean that camera K constitutes a reader according to claim 1. As the camera of document D1 is preferably a digital camera, the board is satisfied that it qualifies as a "reader" within the meaning of claim 1 (see point 2.1 above).

Is camera K of Fig. 1 of document D1 placed at the printing rollers of the printing machine directly behind the print in output from the central drum 3?



Detail of Fig. 1 of document D1

The appellants argued that the skilled person contemplating Fig. 1 of document D1 would at most have derived that camera K is placed over, above and sideways with respect to the print image 10 in the form of rectangles, to catch a panoramic view from above and towards the underlying detection area 11. A camera arranged behind the print in output would have to look upwards, from below and towards the printing console 4, thereby recording print image 10 on the background of the console 4.

The board endorses the opposition division's view. It is true that the shape of detection area 11 in Fig. 1 is surprising and possibly incorrect, but the skilled person derives a clear teaching from document D1 that the camera serves to provide digital images of the printed images (see, for example, paragraphs [0020] and [0026]). Thus, it is clear that the skilled person considering Fig. 1 of document D1 in light of the description would have understood that the camera is

placed at the printing rollers of the printing machine directly behind the print in output from the central drum. Thus, features 2 and 2-1 are disclosed in document D1.

3.1.2 Features 2-3 and 2-4

According to features 2-3 and 2-4, the reader is constituted by a scanning head whose size is equal to the width of the printing material.

The opposition division found these features not to be disclosed in document D1. However, the opposition division found camera K to be a scanning head (top of page 5 of the decision under appeal). According to the opposition division, camera K acquires the visible electromagnetic radiation reflected by the printed material and, therefore, scans the latter. The board disagrees. Although digital cameras (such as CCDs) may involve the scanning of sensor elements, it is not the printed image in itself that is being scanned by a digital camera. Therefore, the digital camera of document D1 does not constitute a scanning head. Thus, feature 2-3 is not disclosed. Moreover, the size of the camera is not equal to the width of the printing material. Consequently, document D1 does not disclose features 2-3 and 2-4.

3.1.3 Features 3-3 and 3-4

Features 3-3 and 3-4 require the processing and control unit to comprise a control section and a processing section adapted to command the performance of a sequence of stepwise movements, according to preset steps, of the printing plate roller with respect to the central drum or also of the anilox roller with respect

to the printing plate roller, in order to make contact in printing at different printing pressures.

The opposition division concluded on pages 5 and 6 of the decision under appeal that both features were disclosed in paragraphs [0040] to [0049] of the description of document D1.

The appellants' main objection appears to be that the movements of the printing plate roller and the anilox roller disclosed in document D1 are not stepwise.

The opposition division appears to have understood "stepwise" to mean "in subsequent steps". However, this interpretation is not in line with the "definition" of "stepwise" in the patent (see point 2.2 above). Accordingly, a series of movements does not necessarily constitute a "stepwise movement" within the meaning of claim 1.

Thus, document D1 does not disclose stepwise movements.

However, this is not necessary for document D1 to anticipate feature 3-4. In this context, the board refers to the statements in point 2.4 above. It is clear that document D1 discloses a control unit that is capable of commanding movements of printing roll 7 and anilox roll 8. The board is unable to see any disclosure in document D1 that would suggest that these movements cannot be carried out in little steps. Therefore, the printing machine of document D1 also discloses features 3-3 and 3-4.

3.1.4 Conclusion regarding novelty over document D1

The subject-matter of claim 1 is novel over the disclosure of document D1 because this document does not disclose features 2-3 and 2-4.

3.2 Novelty over document D4

In section III of its reply to the statement of grounds of appeal, the respondent raised the objection that the subject-matter of claim 1 was not novel over the disclosure of document D4.

It argued that the discussion of the US equivalent of document D1 (US 6,634,297 B2) in the section describing the background of the invention (document D4, page 2, line 9, to page 3, line 15) disclosed all of the features of claim 1 of the patent.

This objection could and should have been filed before the opposition division. The respondent did not provide any justification for not filing this objection until the appeal proceedings. Moreover, it is doubtful that the presentation of a prior-art document (document D1) that is not novelty-destroying for a claim (see point 3.1 above) in another prior-art document (document D4) could anticipate the claim.

Thus, the board has decided to exercise its discretion under Article 12(4) RPBA 2007 not to admit this objection.

3.3 Conclusion with regard to novelty

The ground for opposition under Article 100(a) EPC in combination with Article 54 EPC does not prejudice the maintenance of the patent.

4. Main request: inventive step

4.1 Starting from document D1

4.1.1 Differences

As explained above (see point 3.1), document D1 does not disclose features 2-3 and 2-4 because document D1 discloses the use of a digital camera instead of a scanning head whose size is equal to the width of the printing material.

4.1.2 Objective technical problem

The opposition division concluded that the objective technical problem was to provide a versatile, simple and cheaper solution for quicker data acquisition of different formats printed by the printing machine. It did not give its reasons for defining the objective technical problem in this way.

The appellants argued that a skilled person, in view of the express teachings of document D1, would not have seen a problem in the use of camera K. Regardless of whether this is correct, the application of the problem-solution approach requires the definition of an objective technical problem based on the distinguishing features.

What is the technical effect of replacing camera K of document D1 with a scanning head whose size is equal to the width of the printing material?

The only passage of the patent disclosing features 2-3 and 2-4 in combination, i.e. paragraph [0028], does not describe any such effect. The problem allegedly solved by the claimed invention according to paragraph [0016] of the patent is the same as the one solved by the system of original claim 1, which did not comprise features 2-3 and 2-4. Therefore, it is not self-evident that the distinguishing features solve this problem. Consequently, it is necessary to examine what effect the skilled person would have attributed to these features.

The skilled person would have been of the opinion that features 2-3 and 2-4 make the system more versatile because the printed patterns can be changed without any need for readjusting camera(s) K. It is not self-evident to the board that the use of a scanning head whose size is equal to the width of the printing material would have made the device cheaper or the data acquisition quicker.

Therefore, the objective technical problem is defined as making the system of document D1 more versatile.

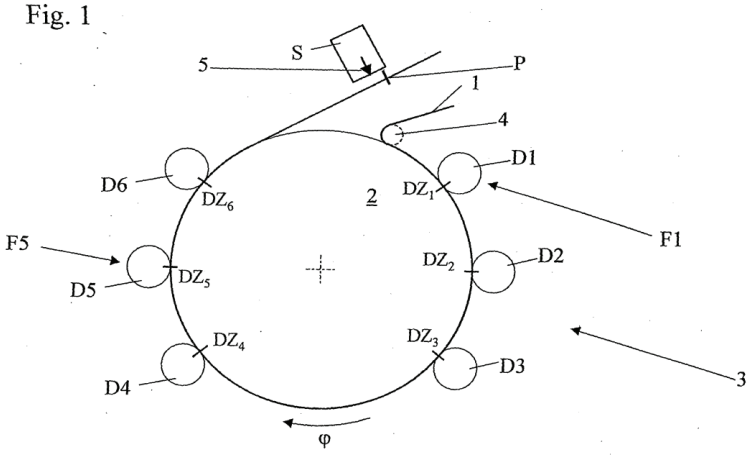
4.1.3 Obviousness for the skilled person

The question to be answered by the board is whether the skilled person looking for a way to make the system of document D1 more versatile would have been led by the prior art to replace camera K with a scanning head whose size is equal to the width of the printing material.

The opposition division concluded that document D5 would have led the skilled person to this solution in an obvious way.

Document D5 discloses a method for registering a rotary printing press 3 with several inking units F1-F6.

Fig. 1



It teaches how the number of sensor systems can be reduced. This goal is obtained by means of a method in which images of printed substrate 1 are recorded by a sensor station S, information on the rotational movements of printing plate cylinders D1-D6 is recorded and correction signals for the actuators of the cylinders D1-D6 based on this information and the images are generated in order to reduce deviations of the single-colour images from their desired position (see claim 1). Line scan cameras, light barriers and all kinds of sensors can be considered to be sensor stations (see paragraph [0013]).

The skilled person wishing to make the system of document D1 more versatile would most likely not have consulted document D5. Document D5 has the objective of defining a system that does not need one sensor system

per inking unit (see paragraph [0008]). However, document D1 already discloses the option that a single camera can be used to adjust several inking units (see paragraph [0028]). Therefore, the skilled person would have had no incentive to combine documents D1 and D5.

In point 9 of the reasons for the decision under appeal, the opposition division stated that the skilled person would have combined the teaching of documents D1 and D5, but did not justify this finding.

Even if the skilled person had considered a combination of documents D1 and D5, the board is unable to see why they would have provided the system of document D1 with a scanning head whose size is equal to the width of the printing material. The precise nature of the sensor station is not a concern in document D5, according to which "all kinds of sensors" (*alle möglichen Sensoren*) can be used (see paragraph [0013]). Also, document D5 does not contain any teaching in respect of the width of the sensor station.

In this respect, point 9 of the reasons for the decision under appeal contains the following statement:

> "*To this regard, attention should be paid to the fact that even if the size of the scanning head is equal to the width of the printing material, it is required from said scanning head, according to the invention, in particular to claim 1 of the contested patent, to be capable of reading exclusively over the entire printing width and not over the entire width of the printing material, so that no technical effect can be identified in a scanning head having a size greater that the maximum printing width the printing machine can*

deliver. The difference in width between the printing material and the printing width the printing machine can deliver is therefore technically not considered as being a distinguishing feature."

The board cannot endorse this reasoning, for the reasons given in point 2.3 above.

The remaining reasoning of the opposition division in point 9 of the reasons for the decision under appeal is based on the understanding of the relationship between features 2-4 and 2-5 that the board does not endorse and therefore does not need to be addressed.

Thus, the board has concluded that it has not been demonstrated in a persuasive way that the skilled person seeking a solution to the objective technical problem would have combined documents D1 and D5, and in doing so would have been led to subject-matter within the scope of claim 1.

4.1.4 Conclusion

The subject-matter of granted claim 1 is inventive over the disclosure of document D1 in view of document D5.

The same applies to claim 6.

4.2 Admittance of the inventive-step attack starting from document D5

In section IV of its reply to the statement of grounds of appeal, the respondent raised the objection that the subject-matter of claim 1 was not inventive over the disclosure of documents D5 and D1.

This line of attack was filed for the first time during the appeal proceedings, although it could and should have been filed before the opposition division. The respondent did not provide any proper justification for not filing this objection until the appeal proceedings.

The board cannot endorse the argument that, if an opponent had difficulties establishing that the skilled person starting from a document would have consulted another document citing the first document, then the reverse attack must be admissible. Far from being "just another way of looking at the same thing", the attack starting from document D5 and combining it with document D1 is a completely different attack requiring the assessment of different facts from the one starting from document D1 and combining it with document D5. If the respondent considered this attack convincing, it should have filed it during the first-instance proceedings.

Thus, the board has decided to exercise its discretion under Article 12(4) RPBA 2007 not to admit this objection.

4.3 Conclusion with regard to inventive step

The ground for opposition under Article 100(a) EPC in combination with Article 56 EPC does not prejudice the maintenance of the patent.

4.4 Overall conclusion

As none of the grounds for opposition raised by the respondent prejudices the maintenance of the patent, the patent can be maintained as granted.

Consequently, the decision under appeal is to be set aside and the patent maintained as granted, in accordance with the appellants' main request.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The patent is maintained as granted.

The Registrar: The Chairman:

N. Schneider P. Lanz

Decision electronically authenticated