

**Internal distribution code:**

- (A) [ - ] Publication in OJ
- (B) [ - ] To Chairmen and Members
- (C) [ - ] To Chairmen
- (D) [ X ] No distribution

**Datasheet for the decision  
of 9 February 2021**

**Case Number:** T 1152/17 - 3.2.05

**Application Number:** 09167740.1

**Publication Number:** 2153993

**IPC:** B41F13/004, B41F13/016,  
B41F31/00

**Language of the proceedings:** EN

**Title of invention:**  
Method and apparatus for driving printing press

**Patent Proprietor:**  
Komori Corporation

**Opponent:**  
manroland sheetfed GmbH

**Headword:**

**Relevant legal provisions:**  
EPC Art. 54(2), 56  
RPBA 2020 Art. 13(1), 13(2)

**Keyword:**

Novelty - main request (no)

Amendment after summons - exceptional circumstances (yes)

Inventive step - auxiliary request (yes)

**Decisions cited:**

**Catchword:**



**Beschwerdekammern**

**Boards of Appeal**

**Chambres de recours**

Boards of Appeal of the  
European Patent Office  
Richard-Reitzner-Allee 8  
85540 Haar  
GERMANY  
Tel. +49 (0)89 2399-0  
Fax +49 (0)89 2399-4465

Case Number: T 1152/17 - 3.2.05

**D E C I S I O N**  
**of Technical Board of Appeal 3.2.05**  
**of 9 February 2021**

**Appellant:** manroland sheetfed GmbH  
(Opponent) Mühlheimer Strasse 341  
63075 Offenbach (DE)

**Representative:** manroland sheetfed GmbH  
Intellectual Property (SRI)  
Mühlheimer Strasse 341  
63075 Offenbach (DE)

**Respondent:** Komori Corporation  
(Patent Proprietor) 11-1, Azumabashi 3-chome  
Sumida-ku  
Tokyo (JP)

**Representative:** Uexküll & Stolberg  
Partnerschaft von  
Patent- und Rechtsanwälten mbB  
Beselerstraße 4  
22607 Hamburg (DE)

**Decision under appeal:** **Decision of the Opposition Division of the European Patent Office posted on 23 February 2017 rejecting the opposition filed against European patent No. 2153993 pursuant to Article 101(2) EPC.**

**Composition of the Board:**

**Chairman** P. Lanz  
**Members:** M. Holz  
C. Brandt

## Summary of Facts and Submissions

I. The appellant (opponent) appealed against the decision of the opposition division rejecting the opposition against European patent No. 2 153 993 ("the patent").

II. The documents referred to in the appeal proceedings include, *inter alia*:

E1: EP 1 256 445 A1

E3: US 6 796 239 B2

III. Oral Proceedings were held before the board on 9 February 2021.

The appellant (opponent) requested that the decision under appeal be set aside and that the patent be revoked.

The respondent requested that the appeal be dismissed or, in the alternative, that the decision under appeal be set aside and that the patent be maintained on the basis of the first auxiliary request filed with the letter dated 8 January 2021.

IV. The independent claims of the patent as granted (main request) have the following wording (the feature identification used by the board is indicated in brackets):

1. **[A1.1]** A method for driving a printing press, the printing press including: **[A1.2]** first driven means (6; 25) driven by first driving means (10); **[A1.3]** a first rotating body (2; 21) including a notch, **[A1.4]** the first rotating body (2; 21) being rotationally driven

by the first driven means (6; 25); **[A1.5]** second driven means (7; 26) rotationally driven by the first driving means (10) through the first driven means (6; 25); and **[A1.6]** a second rotating body (3; 22) provided with a notch at a position corresponding to the notch of the first rotating body (2; 21), the second rotating body (3; 22) being rotationally driven by the second driven means (7; 26), **[A1.7]** the method comprising the step of providing braking means (17a to 17d) to any one of the second rotating body (3; 22), the second driven means (7; 26), and third driven means (19) **[A1.8]** rotationally driven by the second driven means (7; 26); and characterized by **[A1.9]** controlling a braking force of the braking means (17a to 17d) according to load applied to the first driving means (10).

7. **[A7.A]** A printing press comprising a driving apparatus, the printing press including: **[A7.B]** first driven means (6; 25) driven by first driving means (10); **[A7.C]** a first rotating body (2; 21) including a notch, the first rotating body (2; 21) being rotationally driven by the first driven means (6; 25); **[A7.D]** second driven means (7; 26) rotationally driven by the first driving means (10) through the first driven means (6; 25); and **[A7.E]** a second rotating body (3; 22) provided with a notch at a position corresponding to the notch of the first rotating body (2; 21), the second rotating body (3; 22) being rotationally driven by the second driven means (7; 26), **[A7.F]** the driving apparatus comprising braking means (17a to 17d) provided to any one of the second rotating body (3; 22), the second driven means (7; 26), and third driven means (19) **[A7.G]** rotationally driven by the second driven means (7; 26); and characterized by **[A7.H]** control means (30, 60, 80, 90a to 90; 80', 90a' to 90d') adapted for controlling a braking force of the

braking means (17a to 17d) according to load applied to the first driving means (10).

- V. Claim 1 of the first auxiliary request differs from claim 1 as granted by including the following additional feature:

**[AUX]** wherein the braking force of the braking means (17a to 17d) to be applied when the notch of the first rotating body (2; 21) and the notch of the second rotating body (3; 22) face each other is larger than that applied when a circumferential surface of the first rotating body (2; 21) and a circumferential surface of the second rotating body (3; 22) face each other.

Claim 6 of the first auxiliary request differs from claim 7 as granted by the same feature AUX.

- VI. The reasons for the decision under appeal may be summarised as follows.

Document E1 implicitly disclosed features A1.3 and A1.6 since the gears of document E1 could be identified as first and second rotating bodies. Moreover, document E1 mentioned a sheet fed printing press in paragraph [0002]. This implied that the rotating bodies were provided with notches.

However, document E1 did not disclose feature A1.9 of claim 1 as granted, rendering the claimed subject-matter new over document E1. In particular, document E1 disclosed a braking means whose force was controlled according to the rotational speed of the printing press (see paragraph [0013]). Therefore, the braking force remained constant if the rotational speed of the

printing press was constant. Moreover, the speed of the printing press could not be understood as being equivalent to the load cited in claim 1 since other parameters (interaction between cylinders, gears, sheet to be printed) also represented (part of) a load applied to the first driving means. Furthermore, in document E1, the speed of the printing press, when constant, did not require the braking force to be adapted, whereas in claim 1 both the braking force and the load varied at the same time.

For, *mutatis mutandis*, the same reasons, the subject-matter of claim 7 as granted was new over document E1.

The problem to be solved was considered as to eliminate a non-uniform rotation of rotating bodies in a printing press during braking.

In the opposition division's view, the skilled person would have found no suggestion in the prior art to control the braking force according to the load applied to the first driving means. Neither document E2 nor document E3 disclosed a printing press suitable for controlling the braking force according to the load applied to the first driving means. As a consequence, the subject-matter of claims 1 and 7 was also based on an inventive step.

VII. During the appeal proceedings the appellant argued essentially as follows.

*Main request*

Features A1.3 and A1.6 were implicitly disclosed in document E1 since sheetfed offset presses had to have, from a technical perspective, cylinders with at least

one notch. Moreover, the notches of cooperating cylinders had to rotate in a coordinated manner.

Furthermore, feature A1.9 was disclosed in document E1. Paragraph [0013] of this document disclosed that the hydraulic brake was to apply a higher braking force at lower rotational speeds than at higher rotational speeds. Moreover, different rotational speeds implied different resistance and friction forces occurring within the printing press, giving rise to different loads being applied to the driving motor. According to the appellant's understanding, the fact that the frictional forces increased with higher rotational speeds was the reason that document E1, in paragraph [0013], suggested reducing the braking force applied by the hydraulic brake when the rotational speed reached higher values.

Hence, the subject-matter of claim 1 as granted was not new over document E1. The same applied, *mutatis mutandis*, for the subject-matter of claim 7 as granted.

*First auxiliary request*

There were no objections against taking into account the claims of the first auxiliary request, even though it was filed at a rather late stage of the proceedings.

Moreover, allowability of the claim amendments and novelty of the claimed subject-matter were not disputed.

However, the subject-matter of claims 1 and 6 of the first auxiliary request was not based on an inventive step in view of a combination of documents E1 and E3.



Document E1 did not disclose the feature AUX of claim 1 of the first auxiliary request.

The objective technical problem could be considered as how to reduce a non-uniformity of the rotation of the rotating bodies.

The skilled person starting from document E1 would have noticed that the periodic positional alignment and misalignment of the notches of the cylinders resulted in a non-uniform cylinder rotation. This problem was also present in the printing press of document E3. To solve the above technical problem, document E3, with particular reference to column 4, lines 50-53, taught that an additional drive motor could be used to exert a braking influence to diminish the effect of sharp load fluctuations. According to this passage, the braking force was thus adjusted in response to load fluctuations. The skilled person would have applied this teaching of document E3 to the printing press of document E1, thus arriving at the feature combination of claim 1 of the first auxiliary request without exercising an inventive step.

The same applied, *mutatis mutandis*, to the subject-matter of claim 6 of the first auxiliary request.

VIII. The respondent's arguments can be summarised as follows.

*Main request*

Document E1 did not explicitly disclose features A1.3 and A1.6.

Moreover, document E1 did not disclose feature A1.9 since the load in document E1 was not controlled according to the load applied to the driving means but according to the rotational speed, as described in paragraph [0013] of document E1. In particular, in document E1, the braking force was constant when the rotational speed was constant, irrespective of the load applied to the driving means.

Moreover, taking into account the whole of claim 1 and, in particular, the detailed description of embodiments in the patent specification, the skilled person would have understood claim 1 in such a way that the load cited in feature A1.9 varied cyclically as a consequence of the rotation of the cylinders periodically bringing the notches into and out of positional alignment with each other. In contrast, document E1 did not disclose such a periodic load variation occurring with the periodicity of the cylinder rotation, let alone controlling the breaking force according to such a periodically varying load applied to the driving means.

The respondent, however, acknowledged that it was implicit for printing presses such as the one described in document E1 that the frictional forces that had to be overcome by the driving means increased as the rotational speed increased. This effect was comparable to a moving car overcoming higher frictional forces when moving at a higher speed. However, this effect was in no technical relation to the invention.

Hence, the subject-matter of claim 1 as granted was new over document E1. The same applied, *mutatis mutandis*, for the subject-matter of claim 7 as granted.

*First auxiliary request*

The amended claims according to the first auxiliary request had been filed in reaction to the view that there was no compelling reason why the load used to control the braking force must be associated with the notches of the first and second rotating bodies, expressed for the first time in the board's communication under Article 15(1) RPBA 2020. In response to the board's finding, amended independent claims 1 and 6 of the first auxiliary request were submitted which included features to establish a relationship between the level of the braking force and the positional alignment of the notches. In view of these exceptional circumstances, the claims of the first auxiliary request should be admitted into the proceedings pursuant to Article 13(2) RPBA 2020.

In conformity with the appellant's view, document E1 did not disclose the feature AUX of claim 1 of the first auxiliary request. Moreover, the formulation of the objective technical problem considered by the appellant was correct.

However, document E3 was silent about any non-uniformity of the cylinder rotation caused by the presence of cylinder notches and their periodic alignment and misalignment. In contrast, the cited passage in column 4, lines 50-53, referred to the technical problem of maintaining a tooth flank or side contact of the gears of the gear train. Moreover, this passage did not suggest varying the braking force based on load fluctuations. Rather, it implied that, in a stationary state, the braking force was constant. There was, in particular, no indication that the braking force was to be varied periodically between two levels

based on the positions of the notches as implied by the feature AUX of claim 1 of the first auxiliary request.

Hence, even if combining documents E1 and E3, the skilled person would not have arrived at the subject-matter of claim 1 of the first auxiliary request in an obvious manner. The same applied, *mutatis mutandis*, to the subject-matter of claim 6 of the first auxiliary request.

## **Reasons for the Decision**

### 1. Main request

1.1 In the grounds for the decision under appeal, the opposition division took the view that features A1.3 and A1.6 were implicitly disclosed in document E1. In the statement setting out the grounds for appeal, the appellant provided further arguments why these features were implicitly present in the printing press described in document E1. The respondent asserted, with reference to claim 1 as granted, that document E1 did not explicitly disclose features A1.3 and A1.6 but has not provided any substantive arguments as to a possible implicit disclosure.

In view of this, the board sees no reason to deviate from the opposition division's finding that features A1.3 and A1.6 are implicitly disclosed in document E1.

1.2 As regards feature A1.9, the appellant has argued that, for the printing press of document E1, an increase in rotational speed would also lead to higher frictional forces, giving rise to an increased load acting on the drive motor. The respondent agreed with this finding.

The board shares this view. The frictional forces occurring within the drive train of the printing press give rise to a load applied to the driving mechanism that increases as rotational speed increases. Moreover, document E1, in paragraph [0013], discloses that the braking force exerted by the hydraulic brake is reduced when the rotational speed increases ("*... um bei niedrigen Geschwindigkeiten einen höheren Druck und somit eine höhere Bremswirkung zu erzielen als bei hohen Maschinengeschwindigkeiten.*"). As a result, the braking force, exerted by the hydraulic brake, is controlled according to the load applied to the driving means caused by the frictional forces.

The respondent argued that the skilled person would have read claim 1 as granted in a narrower sense, namely as implying that the load cited in feature A1.9 varied cyclically due to the notches periodically facing each other as a result of the cylinder rotation.

The board is not convinced by this argument for the following reasons.

Firstly, such a narrowed interpretation is not apparent from claim 1 itself. While claim 1, in features A1.3 and A1.6, defines the provision and arrangement of notches, it is not apparent that feature A1.9 is limited with respect to load variations caused by the periodic movement of the notches. Quite to the contrary, claim 1 does not identify the origin of the load at all. Therefore, a control of the braking force according to a load acting on the driving means, the load varying for other reasons, e.g. due to increasing frictional forces caused by an increased rotational speed, falls within the definition of feature A1.9.

Secondly, it is acknowledged that the patent specification describes embodiments in which the load applied to the driving means varies periodically due to the notches cyclically facing each other. However, according to the established case law of the Boards of Appeal, in situations where the patent proprietor has the opportunity of cutting down his claims to accord with stricter limits given in the description, the scope of a claim should not be cut down by implying into it features which appear only in the description, as this would deprive claims of their intended function (see Case Law of the Boards of Appeal, 9. edition 2019, section II.A.6.3.4). When applying this principle to claim 1, even though the above feature is described in the patent specification, the independent claims cannot be read as implying this feature.

Therefore, the board concludes that document E1 discloses feature A1.9.

Consequently, the subject-matter of claim 1 as granted is not new over document E1. Hence, it does not meet the requirements of Article 54(2) EPC.

2. First auxiliary request

2.1 Admittance

2.1.1 The claims of the first auxiliary request were filed by letter dated 8 January 2021, i.e. after notification of the summons to oral proceedings dated 14 September 2020. In accordance with Article 12(2) and (4) RPBA 2020, which applies to the first auxiliary request in view of Article 25(1) and (2) RPBA 2020, the filing of this request is considered an amendment to the respondent's appeal case, the admittance of which is at

the discretion of the board. According to the provisions of Article 13(2) RPBA 2020, an amendment to a party's appeal case shall, in principle, not be taken into account unless there are exceptional circumstances, which have been justified with cogent reasons by the party concerned.

- 2.1.2 The respondent has argued that the amended claims according to the first auxiliary request were filed in reaction to the view that there was no compelling reason why the load used to control the braking force must be associated with the notches of the first and second rotating bodies, expressed for the first time in the board's communication under Article 15(1) RPBA 2020 dated 28 October 2020 (see point 9.5). In response to the board's finding, amended independent claims 1 and 6 of the first auxiliary request were submitted which included features to establish a relationship between the level of the braking force and the positional alignment of the notches.
- 2.1.3 The appellant has neither contested this view nor raised any objections against the admittance of the first auxiliary request into the proceedings.
- 2.1.4 The board considers the filing of the amended claims according to the first auxiliary request as a direct reaction to the view that, according to granted claim 1, the load used to control the braking force was not necessarily associated with the notches of the first and second rotating bodies, an aspect raised for the first time in the board's communication under Article 15(1) RPBA 2020. The amendments to the claims of the first auxiliary request specifically address this issue, do not give rise to new objections, and are further based on dependent claims as granted. Moreover,

the appellant has not objected to the admittance of the first auxiliary request.

2.1.5 Based on these considerations, the board is satisfied that the respondent has convincingly demonstrated that sound reasons exist for filing this request so far into the proceedings representing exceptional circumstances within the meaning of Article 13(2) RPBA 2020, thus justifying that the first auxiliary request be taken into account. The board therefore exercises its discretion under Article 13(1) and (2) RPBA 2020 and admits the first auxiliary request into the proceedings.

2.2 Inventive step

2.2.1 The parties consider document E1 as the prior-art closest to the claimed subject-matter and further share the view that document E1 does not disclose the feature AUX of claims 1 and 6 of the first auxiliary request.

2.2.2 Moreover, the parties agree that the objective technical problem solved by the claimed subject-matter in view of the feature AUX can be considered as how to reduce a non-uniformity of the rotation of the rotating bodies.

2.2.3 While the appellant argues that the claimed solution was suggested by document E3, this view is not shared by the respondent.

2.2.4 The appellant, in particular, refers to the passage in column 4, lines 50-53, of document E3 which reads:  
*"Expediently, the secondary drive motor 29 can also be operated so as to exert a slight braking influence, so that the tooth flank or side contact is also maintained even when sharp load fluctuations occur."*



In contrast to the appellant's opinion, the respondent does not interpret this passage in such a way that the braking force exerted by the secondary drive motor is controlled to vary between different values according to a load applied to the main drive motor. Rather, it argues that the above passage must be read in its context, in particular with respect to the technical problem of maintaining a tooth flank or side contact of the gears of the gear train.

In the board's view, the cited passage indeed describes a solution to the technical problem of maintaining a continuous tooth flank or side contact of the gears of the gear train (see the sentence immediately preceding the text passage cited by the appellant in column 4, lines 48-50, of document E3: "*The tooth flank or side contact is continuously maintained during the printing operation in order to prevent doubling phenomena.*"). To this end, document E3 suggests applying, via the secondary drive motor, a continuous and sufficiently high braking force that allows the tooth flanks or sides to maintain contact even if sharp load variations occur. However, this passage does not imply that the braking force is adjusted according to the load when load variations occur. In particular, it does not ensue from this passage that the braking force exerted by the secondary drive motor is controlled to vary between different values according to a (momentary) load level applied to the main drive motor during load variations. Quite to the contrary, a constant braking force fulfils the definitions in column 4, lines 50-53, of document E3 and further solves the technical problem envisaged by that document.

Therefore, the feature AUX is not derivable from document E3 and, in particular, the passage in column 4, lines 50-53, of this prior-art document.

The skilled person combining documents E1 and E3 would thus not have arrived at the subject-matter of claim 1 of the first auxiliary request in an obvious manner.

2.2.5 Hence, the subject-matter of claim 1 of the first auxiliary request is based on an inventive step within the meaning of Article 56 EPC.

The same applies, *mutatis mutandis*, to the subject-matter of claim 6 of the first auxiliary request.

2.3 For these reasons, the claims of the first auxiliary request meet the requirements of the EPC.

## Order

### For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the opposition division with the order to maintain the patent in amended form on the basis of claims 1 to 10 according to the first auxiliary request filed with letter dated 8 January 2021 and a description and drawings to be adapted.

The Registrar:

The Chairman:



N. Schneider

P. Lanz

Decision electronically authenticated