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**Datasheet for the decision
of 21 March 2024**

Case Number: T 1401/22 - 3.2.07

Application Number: 16834833.2

Publication Number: 3305486

IPC: B26D5/00, B26D5/34, B26D11/00,
B31F7/00, B26D9/00, B32B29/00,
B32B37/20, B32B38/00,
B32B41/00, B31F5/04, B41J11/00,
B41J11/66, B41J11/68,
B41J11/70, B65H29/12,
B65H35/08, B65H43/08, G05B19/18

Language of the proceedings: EN

Title of invention:

CARDBOARD SHEET-CUTTING DEVICE, CUTTING CONTROL UNIT THEREFOR,
AND CARDBOARD SHEET-MANUFACTURING APPARATUS

Patent Proprietor:

Mitsubishi Heavy Industries Machinery
Systems, Ltd.

Opponent:

BHS Corrugated Maschinen- und
Anlagenbau GmbH

Headword:

Relevant legal provisions:

EPC Art. 100(a), 56, 100(c), 123(2)
RPBA 2020 Art. 12(6)

Keyword:

Grounds for opposition - subject-matter extends beyond content
of earlier application (no) - lack of patentability (no)
Inventive step - (yes) - closest prior art
Amendments - allowable (yes)
Late-filed evidence - admitted in first-instance proceedings
(no) - should have been submitted in first-instance
proceedings (yes) - admitted in first-instance proceedings
(yes) - circumstances of appeal case justify admittance (yes)

Decisions cited:

R 0005/13, T 1041/21, T 2117/18, T 0818/21

Catchword:



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Case Number: T 1401/22 - 3.2.07

D E C I S I O N
of Technical Board of Appeal 3.2.07
of 21 March 2024

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Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 1 April 2022
rejecting the opposition filed against European
patent No. 3305486 pursuant to Article 101(2)
EPC.**

Composition of the Board:

Chairman G. Patton
Members: V. Bevilacqua
 R. Cramer

Summary of Facts and Submissions

I. An appeal was filed by the opponent against the opposition division's decision to reject its opposition against European patent No. EP 3 305 486.

II. The opposition was based on the ground of lack of inventive step (Article 100(a) EPC in combination with Article 56 EPC) and on the ground of unallowable extension (Article 100(c) EPC in combination with Article 123(2) EPC).

III. The following documents are mentioned in the appealed decision:

E8 : EP 1 459 878 A2

E9 : JP 2004-82279 A / E9' English translation

E10: WO 98/09822 A1

E11: JP S59-207251 A / E11' English translation

E12: DE 42 18 764 A1

E13: DE 103 31 357 A1

E14: JP 2007-301662 A / E14' English translation

E15: JP 2002 273800 A / E15' English translation

IV. The following documents were submitted with the statement setting out the grounds of appeal:

E9a: "Computer to plate" Wikipedia extract

E16: letter of the appellant dated 16 August 2021 filed in the opposition proceedings

E17: JP 5-330022 A

E18: DE 30 45 951 A1

E19: DE 198 02 913 A1

E20: US 6 893 520 B2.

- V. The opposition division found that none of the grounds for opposition raised prejudiced the maintenance of the patent as granted.
- VI. In preparation for the oral proceedings, the board gave its preliminary opinion in a communication pursuant to Article 15(1) RPBA.
- VII. The opponent (appellant) reacted to the above mentioned communication with letter of 16 January 2024.
- VIII. Oral proceedings before the board took place on 21 March 2024.

At the conclusion of the proceedings, the decision was announced.

Further details of the proceedings can be found in the minutes.

- IX. The parties' final requests are as follows:

on the part of the appellant:

- that the decision under appeal be set aside and
- that the patent be revoked in its entirety, alternatively
- that the case be remitted to the opposition division for further prosecution on the basis of auxiliary requests 1 to 9;

on the part of the respondent (patent proprietor):

- that the appeal be dismissed, and the patent be maintained as granted
- alternatively, if the decision is set aside, that

- the appellant's request for remittal to the opposition division not be allowed and
- the patent be maintained in amended form according to one of auxiliary requests 1 to 9, filed with the reply to the statement setting out the grounds of appeal.

X. The arguments of the parties are dealt with in detail in the reasons for the decision.

XI. Independent claim 1 of the **main request** (as granted) reads as follows:

"A cardboard sheet-cutting method performed by a cardboard sheet-cutting device including a digital printing machine (38), a first cutting machine (23), a second cutting machine (24), a mark detector (40), and a control unit (53), comprising:
printing, by the digital printing machine (38), a cutting mark on a cardboard sheet (E) under transport;
cutting, by the first cutting machine (23), the cardboard sheet (E) under transport to a predetermined width in a longitudinal direction;
detecting, by the mark detector (40), the cutting mark in the cardboard sheet (E) under transport; cutting, by the second cutting machine (24), the cardboard sheet (E) under transport to a predetermined length in a width direction, when the mark detector (40) detects the cutting mark;
and controlling, by the control unit (53), operation of the first cutting machine (23) and the second cutting machine (24) and a movement of the mark detector (40) on the basis of a change in printing image information, wherein the printing image information is a cutting width, of the cardboard sheet (E) to be cut by the first cutting machine (23), changed with a change in

the printing image, and the control unit (53) moves the mark detector (40) on the basis of the changed printing image, without stopping the transport of the cardboard sheet (E)".

Independent claim 13 of the **main request** (as granted) reads as follows:

"A cutting control device to perform the cardboard sheet-cutting method according to any one of claims 1-12, comprising the following means for carrying out the steps of the method according to claim 1: a digital printing machine (38), a first cutting machine (23), a mark detector (40), a second cutting machine (24), and a control unit (53)."

Independent claim 14 of the **main request** (as granted) reads as follows:

"A cardboard sheet-manufacturing apparatus (10) comprising: a single facer (15) for bonding a second liner (C) to a core paper (B) subjected to waveform processing to manufacture a single-faced cardboard sheet (D); a double facer (20) for bonding a first liner (A) to a core paper side in the single-faced cardboard sheet (D) to manufacture a double-faced cardboard sheet (E); and the cardboard sheet-cutting control device according to claim 13".

The text of the independent claims of **auxiliary requests 1 to 9** is not relevant to the present decision.

Reasons for the Decision

1. Admittance of documents E9a and E16 to E20 in appeal proceedings

Documents E9a and E17 to E20 were filed for the first time in appeal proceedings by the appellant with its statement of grounds. Thus, their admission into the proceedings is subject to the board's discretionary power according to Articles 12(4) and 12(6) RPBA.

Document E16 is a letter from the appellant filed during the opposition proceedings.

- 1.1 The appellant submits that documents E9a and E17 are to be admitted into the appeal proceedings as evidence of the knowledge of a skilled person in the technical field of the patent in suit.

E16 is also to be admitted, because it contains *inter alia* arguments related to the inventive step objection against granted claim 1, discussed in the appealed decision, based on the combination of documents E8 and E9.

E18, E19 and E20 are also to be admitted, being *prima facie* relevant for discussing inventive step of granted claim 1 starting from document E8.

Further, according to the appellant, the filing of documents E18 to E20 with the statement setting out the grounds for appeal was justified, and these documents have to be admitted. This is because when the opposition division rejected the opposition, it surprisingly deviated from its preliminary opinion that

the subject-matter of granted claim 1 lacked inventive step starting from E8.

Documents E18 to E20 could not have been submitted earlier because they were found by chance in the course of a search relating to different subject-matter.

1.2 The respondent requested not to admit any of these documents arguing as follows.

E9a is a very recent document with a date in 2022, and therefore does not even form part of the prior art. This document cannot be of *prima facie* relevance and should have been filed in the first instance already.

E16, filed on 5 August 2021 before the opposition division, is not to be considered as being part of the appeal case.

Admitting E18 to E20 would go against the main purpose of appeal proceedings as set out in Article 12(2) RPBA, and would compel the board to go beyond a judicial review of the appealed decision.

1.3 The board decided

- to admit documents E9a and E17 into the proceedings,
 - not to admit documents E18, E19 and E20 and
 - not to take document E16 into account,
- for the following reasons.

1.3.1 E9a and E17 have been filed by the appellant to further develop their inventive step objection based on documents E8 and E9, which forms the basis of the appealed decision. Therefore, they consist of a mere development of a discussion which took place in the

framework of an objection raised and discussed during the opposition proceedings and dealt with in the decision under appeal, point II.3.1.1.

As a matter of fact, these documents are aimed at providing evidence of the knowledge of a skilled person in relation to the meaning of the acronym "CTP" used in document E9 (E9a) and to show how a skilled person would have read E9 (E17). Thus, the content of document E9a is not used as such to prove the skilled person's common general knowledge prior to the priority date of the contested patent.

There is therefore no reason for excluding these documents from the proceedings on the basis of either Article 12(4) RPBA or Article 12(6) RPBA.

1.3.2 The situation with documents E18, E19 and E20 is different.

The appellant uses these documents to raise and formulate new inventive step objections against the subject-matter of granted claim 1.

According to Article 12(6), second sentence, RPBA, a board shall not admit evidence which should have been submitted in the proceedings under appeal unless the circumstances of the case justify admittance thereof.

The relevance of the evidence, or the circumstances related to the retrieval thereof, are not criteria to be applied in the application of Article 12(6) RPBA.

The board notes that inventive step of the subject-matter of granted claim 1 was already challenged, starting from E8, when the opposition was first filed

(notice of opposition, section IV.A.1).

The reaction of the respondent thereto was submitted with their reply to the notice of opposition (see section 3) and the opposition division first issued a preliminary opinion which followed the arguments of the appellant, and then after discussion at oral proceedings, decided to follow those of the respondent.

The board considers that the appellant could and should therefore have submitted these documents already with its notice of opposition, or at the latest, in reaction to the respondent's reply thereto.

The fact that the preliminary view on inventive step starting from E8 does not correspond to the findings of the appealed decision, and that the opposition division therefore changed its mind following the respondent's arguments, is not in itself a convincing justification for filing new evidence against claim 1 of the main request in appeal proceedings. A preliminary view is by essence non-binding and can be reversed in the course of the subsequent proceedings.

Furthermore, the opposition division did not base its decision on arguments or new facts presented during the oral proceedings (which the appellant did not attend), but rather on the respondent's arguments filed with its reply to the notice of opposition.

For the reasons discussed above, the arguments provided by the appellant to justify the late filing of documents E18 to E20 are not convincing, and these documents are not admitted.

- 1.3.3 Document E16 was already filed by the appellant in opposition proceedings and contains arguments filed before the opposition division.

According to the established jurisprudence (see the Case Law of the Boards of Appeal, 10th Edition 2022, CLB in the following, V.A.2.6.5) a reference to a party's own first-instance submissions cannot replace or complement a party's "complete case" within the meaning of Article 12(3) RPBA even if such submissions are attached to the statement of grounds of appeal (see e.g. T 2117/18 and T 1041/21).

As a consequence of the above the board decides that document E16 is not to be taken into account in appeal proceedings.

This does not however mean that none of the arguments submitted with this document will be dealt with in the present decision.

This is because the present appeal proceedings are already based on some of these arguments, namely on those under section I.A.2.a and I.A.2.b thereof, related to the combination of documents E8 and E9, as far as these have been taken and further developed in the statement setting out the grounds of appeal (Article 12(1)(b) RPBA) in the light of the appealed decision.

Concerning the remaining arguments contained in E16, these do not constitute a basis for the present proceedings.

At the oral proceedings before the board the appellant confirmed that its complete case with the relevant

arguments and objections were put forward in its statement setting out the grounds of appeal.

2. Added subject-matter, claim 1 of the main request

2.1 The opposition division found (appealed decision, II.2) that claim 1 of the main request did not contain unallowable extensions.

The amendment discussed in the decision is the replacement of the feature

"a control unit that controls operation of the first cutting machine and the second cutting machine and **changes a control setting value of** the mark detector" (see originally filed claim 1)

by the feature

"controlling, by the control unit, operation of the first cutting machine and the second cutting machine and **a movement of** the mark detector".

According to the appealed decision the now claimed movement of a mark detector necessarily implies a change of its underlying control setting values, so that the feature which was explicitly defined in the original claim 1 is now also present, implicitly, in the claim.

2.2 The appellant contests the above findings referring to paragraphs [0009], [0057], [0058], [0066] and [0067] of the published patent application and arguing as follows.

Claim 1 of the patent as granted omits the feature, originally disclosed, that the movement of the mark detector is a direct consequence of a change of a control setting value thereof.

Claim 1 of the patent as granted also neither mentions the detection of a mark by a mark detector, nor a movement unit, and therefore also encompasses movements which are not made in reaction to a mark detection and through a moving unit.

The originally filed documents, however, only disclose that a movement of the mark detector is possible on the basis of a change of a control setting value of the mark detector and as the consequence of the activation of a moving unit.

This is also what is disclosed in paragraph [0093] of the published application, which the respondent wrongly identifies as providing a basis to the contested amendment.

This passage clearly states that the control setting value is set to a detected position, detected by the mark detector and that then the cutting control unit moves the mark detector to a detected position after a change using the moving unit on the basis of the changed cutting width.

What the originally filed documents do not disclose, and is now claimed, is that the movement of the mark detector on the basis of a change in printing image information inevitably implies a change in the underlying control setting value.

The term "control setting value" is extremely broad and not limited to movement data.

A change in a control setting value does not therefore necessarily have to correspond to a movement of the mark detector, but can also relate to other parameters thereof, such as a sampling rate or resolution of the mark detector.

2.3 The board is not convinced by the above arguments.

The contested feature of granted method claim 1

*"controlling... **a movement of** the mark detector on the basis of a change in printing image information "*

does not refer to any possible movement of a mark detector, but only to those obtained through the controlling unit of the cardboard sheet cutting device.

This is evident from the last method step thereof, according to which the control unit moves the mark detector on the basis of the changed printing image.

The objection that claim 1 should include a moving unit is not convincing.

The movement of the mark detector by a moving unit is an implicit feature of the claim, because this movement, being controlled by the control unit, inevitably requires the presence of an actuator (moving unit).

Claim 1 also explicitly foresees the step of

"detecting, by the mark detector, the cutting mark in the cardboard sheet under transport".

The objection that granted claim 1 does not mention mark detection is therefore also not convincing.

The board therefore concurs with the findings of the opposition division that the movement of the mark detector, being done through a control unit, as claimed in the granted claim, inevitably implies a change of a control setting value, stored in the control unit, related to the mark detector.

In this respect, the board considers that the feature *"controlling, by the control unit...a movement of the mark detector"*

is to be read as a specific embodiment of the originally claimed feature

"a control unit that changes a control setting value of the mark detector".

The board also follows the respondent's argumentation, according to which claim 1 of the patent as granted implicitly comprises a change of a control setting value of the mark detector by specifying its movement, which is originally disclosed in paragraph [0093] of the published patent application.

This is because this passage contains the information that the control setting value is set to a detected position, detected by the mark detector, and that the cutting control unit moves the mark detector to a detected position after a change using the movement unit on the basis of the changed cutting width.

Based on the above, the board concludes that the opposition division correctly decided that the ground for opposition under Article 100(c) EPC does not prejudice maintenance of the patent as granted.

3. Inventive step of the subject-matter of granted claim 1 starting from E8

3.1 Closest prior art - Distinguishing features

3.1.1 The appealed decision is based on the finding that E8 is a suitable starting point to discuss inventive step, as it discloses a cardboard sheet-cutting method performed by a cardboard sheet cutting device including a mark detector, comprising a step of detecting, by the mark detector, a cutting mark in the cardboard sheet under transport (see section II.3.1.1).

The opposition division found that E8 does not disclose that the mark detector is moved.

3.1.2 During oral proceedings the board structured the discussion, referring to R 5/13, by first establishing which document or documents constituted the most promising starting point.

Both parties agreed that E8 was to be considered as disclosing the most promising springboard towards the subject-matter of granted claim 1.

3.1.3 The appellant then argued that a skilled person, reading E8 would find that the feature:

"without stopping the transport of the cardboard sheet"

was disclosed in this document.

This is because E8 describes a corrugator with a digital printing device, and this particular printing technology is specifically used as it allows changing the image to be printed without having to change hardware components and stop the printing machine, see paragraph [0004], lines 28 to 30 of column 1.

For a person skilled in the art it is evident, according to the appellant, that the use of a digital printing device, which does not require a change of printing plates, also makes it unnecessary to stop the transport of the cardboard web during minor adjustments of the machine.

The skilled person would therefore consider avoiding disruptions such as stopping the transport of the cardboard sheet as an implicit feature of the method disclosed in E8.

The appellant did not contest that, apart from "*without stopping the transport of the cardboard sheet*", the other features mentioned as distinguishing features over E8 in the decision under appeal, point II.3.1.1, were not disclosed in E8.

3.1.4 The board is not convinced by the above argumentation.

According to the established case law (CLB, I.C.4), subject-matter is regarded as disclosed in a document only if it is clearly and directly derivable therefrom, taking into account also the common general knowledge of the skilled person.

An implicit disclosure would in particular require that the allegedly disclosed feature is the clear and

unambiguous consequence of what is explicitly mentioned in the document (CLB, I.C.4.3).

Document E8 discloses a corrugated board production system and method. It describes printing on the component paper webs (3, 22) using digital printing units (4, 26) before the webs are combined into a corrugated board web (see paragraphs [0011], [0016]).

However, there is no explicit disclosure anywhere in E8 that the transport of the corrugated board web is not stopped when the printing image is changed. E8 mentions typical web transport speeds (e.g. up to 400 m/min in paragraph [0015]) but does not specify that these speeds are maintained without interruption during the entire process including printing.

Even if a skilled person might consider it advantageous from a productivity perspective not to interrupt the web transport because of the size of such installation as in E8 and the time necessary for stopping it, leading to possible huge paper waste, E8 does not exclude that there could be reasons to stop the web. As put forward by the respondent, not stopping the installation when changing the printing image could also involve paper waste.

The uninterrupted transport is therefore not an inevitable consequence of the disclosure of E8.

The feature "without stopping the transport of the cardboard sheet" is, for the above reasons, novel over the content of the disclosure of document E8.

As a consequence of the above, the features distinguishing the subject-matter of claim 1 from the

method disclosed in this document are those already identified in the appealed decision, point II.3.1.1.

These features read, using the language of the claim, as follows:

- controlling by the control unit a movement of the mark detector on the basis of a change in printing image information,
- and
- wherein the control unit moves the mark detector on the basis of the changed printing image, without stopping the transport of the cardboard sheet.

3.2 Effect - Problem to be solved

3.2.1 The appellant argued, during oral proceedings, that starting from E8, changing the position of the mark detector has the effect of adapting its position to different cutting widths, and that the problem to be solved should be formulated as

how to adapt this known method, thereby increasing flexibility thereof.

3.2.2 The board disagrees and does not see any reason, in particular because the appellant failed to provide any argument in that respect, to conclude that the opposition division was wrong when it formulated the objective technical problem as

how to perform a cutting operation that increases efficiency and suppresses generation of waste paper (point II.3.1.1, page 6 of the decision under appeal).

This problem was formulated by taking all the distinguishing features into account, with their

effect, explicitly given in paragraph [0009] of the patent in suit, of reducing the generation of waste paper and therefore of increasing efficiency.

On the other hand the problem formulated by the appellant during oral proceedings does not take account of all the distinguishing features, and in particular of the requirement, discussed above, that the control unit moves the mark detector on the basis of the changed printing image, **without stopping the transport of the cardboard sheet.**

3.3 Combination of E8 with E9, discussion of inventive step

According to the appellant E9 does not only teach how to reduce paper waste in a method such as the method disclosed in E8, but also teaches to do that without stopping the transport of the cardboard sheet.

This is because E9 teaches

- controlling, by the control unit, a movement of the mark detector on the basis of a change in printing image information, and
- moving, through the control unit, the mark detector on the basis of the changed printing image.

E9 also directly teaches that these two method steps should be applied without stopping the transport of the cardboard sheet.

This is because E9 mentions "CTP" (see page 4, last paragraph of the translation E9') and therefore discloses a digital printing method which does not need to be stopped to change the printing image. The image is directly impressed on the printing rolls.

In this context the appellant argues that the opposition division wrongly understood the expression "CTP system" giving it the meaning of "computer-to-plate system" whereby the correct meaning was "computer to press", meaning that printed page content is sent directly to printing cylinders, without the need to change plates.

Document E17, which is mentioned in the introductory portion of E9, in the paragraph "Background of invention", also supports the above interpretation of the teaching of this document, because it shows that while the mark detector is moved to the correct position the transport of the cardboard sheet is not stopped.

The appellant submitted that the only reasonable choice for a skilled person to combine the teachings of documents E8 and E9 would be to control, with the control unit, a movement of the mark detector on the basis of a change in printing image information, and to move, always with the control unit, the mark detector on the basis of the changed printing image, **without stopping the transport of the cardboard sheet.**

3.3.1 The board is not convinced by the above argumentation of the appellant.

3.3.2 E9 fails to disclose the distinguishing feature that a mark detector is moved while the cardboard sheet is being transported.

E9 therefore does not teach to move the mark detector without stopping the transport of the cardboard sheet, as claimed.

This is because E9 is directed to a cutting device for an offset rotary printing press that requires changing a printing plate when a job is changed.

As a matter of fact, E9 discloses that the mark detector is moved before the start of the next printing job of E9 ("a mark detector is set in advance before starting printing", see page 2, fifth line from the bottom, see also the fifth line from the bottom on page 7 and the first line on page 8 of the translation E9').

The mark detector 6 of E9 is therefore to be put in the correct position, where it can detect the mark 2, before the printing and cutting machines are started.

E9 therefore teaches to move the mark detector only before the start of the next printing job.

Hence, neither E8 nor E9 disclose that the control unit moves the mark detector on the basis of the changed printing image, without stopping the transport of the cardboard sheet, as claimed.

As a consequence of the above, even if the skilled person starting from E8 would take E9 into account, they would not have necessarily stopped the transport of the cardboard sheet, and would therefore not have arrived at the subject-matter of claim 1 without having to exercise an inventive skill.

- 3.3.3 Taking document E9a into account, as requested by the appellant, does not change the above conclusions. Even if E9a (dated 2022, i.e. post-published) shows that CTP may also mean "computer to press", the skilled person would immediately understand that the correct interpretation of this expression in the context in

which it is used in document E9 (dated 2004) is the other possible one, namely "computer to plate". Indeed, E9, which is older than E9a, clearly mentions "image data for plate making" (see page 1, "problem to be solved" of the translation E9').

- 3.3.4 Also the argument that a skilled person aiming at reducing waste paper in the method of E8 would, on the basis of E17 combine the teachings of documents E8 and E9, but without stopping the transport of the cardboard sheet, is not convincing.

This is because even if E17 is mentioned in the introductory portion of the description part of E9 discussing the prior art, there is no basis for concluding that the particular feature of E17 to which the appellant refers in its argumentation is also an implicit feature of the method according to E9.

Furthermore, while E17 may suggest a method in which the transport of the cardboard sheet is not stopped, E9 teaches the opposite, namely that waste paper is reduced if the cardboard sheet web is stopped when the mark detector is moved (see page 7, line 5, and page 8 of the translation E9').

- 3.4 Combination of E8 with E12, discussion of inventive step

- 3.4.1 The opposition division acknowledged inventive step of the subject-matter of granted claim 1 starting from E8 and taking the teaching of E12 into account.

- 3.4.2 The appellant contested the above findings arguing, during oral proceedings, as follows.

The subject-matter of claim 1 of the main request lacks inventive step, because E12 teaches to move the mark detector without stopping the transport of the cardboard sheet.

For the appellant, E12 discloses that mark detectors 12, 13 are brought into a scanning position during use by moving them perpendicularly to the direction of the cardboard sheet transport until pre-mark detectors 14, 15 have detected pre-marks 18, 19 and the scanning points of the pre-mark detectors 14, 15 are positioned at a defined position (column 3, lines 12 to 19).

These pre-marks are print image information.

The opposition division was therefore wrong in concluding that there is no movement of the detector based upon print image information in E12.

E12 therefore teaches that mark detectors can be moved, and also that to reduce printing defects (Makulaturbogen) the printing press does not need to be stopped, but can be operated at slow speed (Schleichgang) when a mark detector is moved on the basis of the changed printing image (column 2, lines 31 to 36, column 3, lines 51-57).

The skilled person would see the advantages of this teaching and have no practical difficulties in applying it to the method disclosed in E8.

The skilled person would apply this teaching of E12 to the mark detector, without changing the structure and functioning of the remaining elements of this known device and method which is already aimed at reducing

stops and disruptions to a minimum, because it is already based on a digital printing machine.

In this way they would arrive at the distinguishing features, and in particular at the step of moving the mark detector without stopping the transport of the cardboard sheet, without having to exercise any inventive skill.

3.4.3 The board is not convinced by the above objection of the appellant.

This is because E12 deals only with printing defects (Makulaturbogen), without addressing operations related to cutting cardboard, let alone changing cutting width.

E12 can therefore not provide any teaching solving the problem formulated above (how to perform a cutting operation that increases efficiency and suppresses generation of waste paper).

In conclusion E12, while potentially related to the broader context of printing and cutting operations, does not disclose or suggest the specific solution of moving the mark detector to improve cutting operations without stopping the transport of the cardboard sheet.

3.5 Combination of E8 with the common general knowledge, discussion of inventive step

3.6 The appellant also raised, during oral proceedings before the board, the objection that the subject-matter of claim 1 of the main request lacks inventive step starting from E8 in combination with the knowledge of a skilled person.

In this respect the appellant put forward that it is obvious for a person skilled in the art, starting from E8, to move the mark detector of E8 on the basis of the changed printing image, without stopping the transport of the cardboard sheet.

This is because a skilled person always tries to avoid unnecessary disruptions, which are detrimental to efficiency.

- 3.7 The board is not convinced that applying the distinguishing features, identified above, to the method of E8, would be something that a skilled person would do on the basis of their general knowledge alone.

This is also because the appellant alleged but failed to demonstrate that introducing these features into the method known from E8 would be among the common approaches a person skilled in the art would employ to solve the problem of increasing efficiency and suppressing generation of waste paper.

Furthermore, there is no evidence on file that specifically these features are widely used to achieve the above purposes in the technical field of the patent in suit.

- 3.8 Combination with E10, discussion of inventive step

- 3.8.1 According to the appealed decision, the skilled person starting from E8 and aiming at increasing efficiency by suppressing generation of waste paper would not take E10 into consideration.

This was because E10 is in a different technical field, as it concerns an adhesive label production method.

3.8.2 The appellant objects in its written submissions that the opposition division failed to recognise that E10 is in the same technical field as E8, and therefore wrongly concluded that the skilled person would not take this document into account.

3.8.3 The board is not convinced that E10 is in the same technical field as E8, and that a skilled person would look at this document to find a solution to the problem as formulated above.

This is because E10 relates to a method and machine for printing and cutting sheets of paper for making adhesive labels, while E8 discloses corrugated board production.

The passage at page 1, lines 1 to 7 of E10, to which the appellant refers in its statement of grounds, does not support the appellant's assertion that E8 and E10 are in the same technical field, because the latter clearly relates to label-making.

The board therefore concurs with the finding in section II.3.1.2 of the appealed decision that a skilled person would not look at E10 to find a solution for reducing waste in the cardboard sheet-cutting method performed by a cardboard sheet-cutting device including a digital printing machine of E8.

3.9 Combination with E11, discussion of inventive step

3.9.1 According to the appealed decision (II.3.1), the skilled person starting from E8 and aiming at

increasing efficiency by suppressing generation of waste paper is not taught by E11 to move the mark detector without stopping the transport of the cardboard sheet.

3.9.2 The appellant contested, in its statement of grounds of appeal, the above findings as follows.

E11 provides a solution to the problem of increasing efficiency by suppressing generation of waste paper. It discloses the automatic movement and positioning of a mark detector 10 to a position of a web to be printed when a mark position changes (see the passage spanning between pages 1 and 2 of the machine translation, figure 6 and page 4).

According to the appellant it would be obvious, when this teaching is applied to a cardboard sheet-cutting method performed by a cardboard sheet-cutting device including a digital printing machine, such as the one disclosed in E8, to do that without stopping the transport of the cardboard sheet, because a skilled person would immediately recognize that the set-up times needed to change the plate disclosed in E11 would no longer be necessary.

A skilled person would therefore apply the teaching of E11, namely an automatic movement and positioning of a sensor to a position of a web to be printed when a mark position changes, during cardboard transport, because the advantages achieved therewith are evident.

3.9.3 The board is not convinced by the above arguments. The passage spanning between pages 1 and 2 of the translation of this document, to which the appellant refers, does not disclose that the control unit moves

the mark detector on the basis of the changed printing image while the cardboard sheets are transported, as claimed.

E11 discloses an automatic movement of a mark detector, but, like E9, in the context of a rotary offset printing machine using printing plates (see page 2, lines 5 and 6 of the translation E11').

When using such plate-based rotary printing presses, it is only possible to change a printing job if a plate is changed.

To change printing plates it is however mandatory that the plate cylinder, on which the printing plate is mounted, is stopped, which also stops paper transportation.

The skilled person would therefore, for the same reasons as already discussed in relation to the combination of E8 with E9 above, not be motivated by E11 to move the mark detector without stopping the transport of the cardboard sheet.

3.10 Conclusion on inventive step

The subject-matter of claim 1 of the main request is inventive over the combination of document E8, taken as a starting point, with the knowledge of the skilled person or with each of documents E9, E10, E11 and E12.

4. Inventive step of the subject-matter of claim 1 of the patent as granted starting from E13, E14, E15

4.1 The appellant raised, only in writing, inventive step objections starting from documents E13, E14 and E15,

each taken in combination with any of E9, E10 E11 and E12.

- 4.1.1 Starting from each of E13, E14 and E15 the appellant identifies the same distinguishing features which were already identified starting from E8, and formulated inventive step objections by referring to the arguments already submitted starting from E8.

- 4.2 The board concurs with the finding of the opposition division that the subject-matter of claim 1 is inventive also starting from E13, E14 and E15, for the same reasons already discussed above starting from E8 (appealed decision, point II.3.2).

In this context the board notes that, according to the established case law (see in particular case R 5/13, reasons 15) a standard approach to the discussion of inventive step involves first establishing which of the available prior art documents constitutes the closest prior art.

Since documents E13, E14 and E15 are more remote than E8 from the claimed subject-matter, with at least the same distinguishing features, inventive step has also to be acknowledged starting from these documents in view of the same arguments given above starting from E8 as closest prior art.

- 5. Objections against claims 13 and 14 of the main request

- 5.1 The appellant raised written lack of inventive step objections against independent claims 13 and 14 of the main request only by explicitly referring to the arguments already submitted in relation to claim 1 and without submitting further arguments specifically

formulated for these claims.

- 5.2 However, as discussed above, the appellant failed to convincingly demonstrate that the subject-matter of claim 1 of the main request lacks inventive step.

Based on the above, and for the same reasons, also the objections raised against claims 13 and 14 are not convincing.

- 5.3 The subject-matter of claim 13 and 14 of the main request is therefore also inventive.

6. Obiter dictum - Unnecessary costs and loss of work resources

- 6.1 In a letter dated 18 January 2024 the appellant informed the Board that they would speak German at the oral proceedings, and requested interpretation into German. The respondent informed the Board with letter of 13 February 2024 that they would speak English and requested interpretation into English. With Form 3018 of 16 February 2024 the parties were informed that interpretation from German into English and from English into German had been arranged.

- 6.2 At the start of the oral proceedings the Chairman asked the respondent whether interpretation from German into English was necessary as all participants on the respondent's side appeared to be German-speaking. The respondent then stated that they did not need interpretation from German into English, and the interpreters were dismissed.

6.3 It is indicated at the bottom of EPO Form 3018 that the parties are requested to inform the board as soon as possible if there is any change that could affect the arrangements for interpreting made, in particular if interpreting is no longer needed. By doing so, the parties further follow the EPI recommendations (see "Resolution regarding non-attendance at oral proceedings", point 2, currently available under: <https://patentepi.org/en/epi-papers/recommendations-of-council.html>). If the board is informed promptly, unnecessary expenses can be avoided as well as unnecessary preparation on the side of the interpreters who need to study the documents of the file in advance.

Arrangement of interpretation also involves further work for the EPO as the pool of available interpreters is limited and it cannot always be guaranteed that interpreters are available on a given date, with the consequence that oral proceedings may need to be cancelled if no interpreters are available (see also T 818/21, obiter dictum under point 9 of the reasons).

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



G. Nachtigall

G. Patton

Decision electronically authenticated