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D E C I S I O N
of 22 November 1999

Case Number: T 0756/97 - 3.2.3

Application Number: 90203038.6

Publication Number: 0428236

IPC: F26B 13/20, F26B 21/02

Language of the proceedings: EN

Title of invention:
Drier with improved configuration of the air ducts

Patentee:
Heidelberg Druckmaschinen A.G.

Opponent:
VITS-Maschinenbau GmbH

Headword:
-

Relevant legal provisions:
EPC Art. 54, 111(1)

Keyword:
"Novelty - (yes) after amendment"
"Decision re appeals - exercise of discretion"

Decisions cited:
-

Catchword:
-



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Boards of Appeal

Chambres de recours

Case Number: T 0756/97 - 3.2.3

D E C I S I O N
of the Technical Board of Appeal 3.2.3
of 22 November 1999

Appellant: Heidelberg Druckmaschinen
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Respondent: VITS-Maschinenbau GmbH
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Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted 12 May 1997
revoking European patent No. 0 428 236 pursuant
to Article 102(1) EPC.

Composition of the Board:

Chairman: C. T. Wilson
Members: H. Andrae
J. P. B. Seitz

Summary of Facts and Submissions

- I. European patent No. 0 428 236 was granted on 10 May 1995 on the basis of European patent application No. 90 203 038.6.
- II. The patent was opposed by the Respondent on the grounds of lack of novelty or lack of inventive step (Article 100(a) EPC). In support of his arguments, the Respondent referred into alia to
- (V1) US-A-2 671 279
- (designation of the prior art documents in accordance with the decision under appeal).
- III. The patent was revoked by a decision of the Opposition Division dated 12 May 1997 on the ground that the subject-matter of Claim 1 was not novel having regard to the prior art known from (V1).
- IV. The Appellant (Patentee) lodged an appeal against this decision on 3 July 1997 paying the appeal fee on the same day. The Statement of Grounds of Appeal was filed by Telefax of 10 September 1997.

Together with the Statement of Grounds of Appeal the Appellant submitted an amended Claim 1 and requested that the decision under appeal be set aside and the patent be maintained on the basis of the amended Claim 1 and Claims 2 to 9 as granted. With the letter dated 9 July 1998 the Appellant requested that the case be remitted to the first instance for further examination.

The amended Claim 1 reads as follows:

"1. Drier (1) for elongated strips (8) of carrier material, comprising at least one row of nozzles (6, 7), each nozzle extending in the transverse direction of the strips (8) and each nozzle being provided with a feed opening at at least one side, each of the feed openings being connected to a feed duct (10) extending adjacently to the nozzles (6, 7) and a fan (9) connected to the feed duct (10) for supplying a drying gas mixture to the feed duct (10), the feed duct (10) extending at least partially either above or below the rows of nozzles (6, 7), and the fan being located either above or below the level taken by the row of nozzles

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the fan is located such that the gas mixture leaving the fan (9) is supplied to the feed duct (10) without passing through bends, the feed duct (10), extending substantially free of deflection, has at least partially an L- or U-shaped cross-section and that a part of the section extends above and/or below the nozzles (6, 7)."

In the above-cited Claim 1 the following obvious amendments have been made by the Board:

"transverse" for "transversed";

"connected to the feed duct (10)" for "connected to a feed duct (10)";

"supplying a drying gas mixture" for "supplying a dry

gas mixture"; and

"the feed duct (10)" for "the duct (10)".

V. In a communication dated 16 June 1998 the Board set out its provisional opinion that Claim 1 in the amended version is novel over the disclosure of (V1) and that it could be considered appropriate to remit the case to the Opposition Division for further prosecution.

VI. The Appellant's arguments set forth in support of his request can be summarized as follows:

The feature of the amended Claim 1 that the feed duct constitutes an elongated element guiding the gas stream free of deflection is specified in column 2, lines 53 to 57 and in Figure 1 of the drawing of the patent in suit.

Claim 1 has furthermore been amended such as to clearly indicate that the "L- or U-shaped sections" are cross-sections. Figure 2 in connection with column 2, lines 49 to 57 of the patent in suit discloses to the skilled person that the feed ducts 10, 16 comprise U- or L-shaped cross-sections.

According to (V1) hot air supplied by fan 32 flows through passage 34 to plenum chamber 35, thus undergoing a first deflection. From plenum chamber 35 the air is guided through a second deflection into the duct 21, 22, 23 or 24 and finally through a third deflection onto the fabric to be dried. The components 34 and 35 of (V1) cannot, therefore, be designated as feed ducts guiding a gas stream free of deflection.

In Figure 2 and the pertinent description of the patent, reference sign 10 designates the whole feed duct above and below the nozzles 6, 7 whereas reference sign 16 designates additionally the part of the feed duct extending laterally and below the nozzles. In the case that the two parts of the feed duct are separated by the dividing wall shown in Figure 2, each part clearly forms an L-shaped cross-section.

The underlying problem as outlined in column 1, lines 3 to 17 of the patent consists in reducing the flow resistance in the feed duct. Since deflections of the flow in the feed duct such as a U-turn and an S-turn shown in the relevant prior art are expressly to be avoided, the term "L- or U-shaped section" cannot relate to L- or U-shaped turns in the feed duct but has clearly the meaning of "...cross-section".

VII. The Respondent requests that the appeal be dismissed. In support of his request, he argued essentially as follows:

Neither Figure 1 nor Figure 2 of the patent in suit shows any structural feature of the feed duct 10 which has a similarity to a U-shape. It is absolutely conceivable that the feed duct 10 depicted only in part in Figures 1 and 2 comprises a deflection. Besides, according to the description there are further deflections designated as "small deflections" which, however, are not defined and cannot be recognized in the drawings. From the feature "U-shaped" which as indicated in the patent causes slight bends, nobody can derive a straight extension of the feed duct.

In column 2, lines 51 to 53 of the patent the feature "U-shaped section" is mentioned in connection with the feed duct 10. From this, the skilled person cannot conclude that "section" means "cross-section". The cross-section which is clearly visible in Figure 2 is not in the least similar to a U-shape.

The skilled person can by no means recognize unambiguously from the patent specification as a whole that the term "section" has the meaning "cross-section". Since this term which is undoubtedly a key concept of Claim 1 as granted is not disclosed, the skilled person cannot carry out the invention.

In the German translation of Claim 1 as granted the term "L- oder U-förmiger Abschnitt" is used which cannot have the meaning of "...cross-section". In the event of patent infringement proceedings before a court in Germany the judge relying on the German translation of the claims will pass sentence of infringement based on the disclosure of citation (V1). If, however, the term "L- or U-shaped section" is interpreted as "...cross-section" this constitutes at least in comparison with the German translation of Claim 1 an "aliud" which is objectionable under Article 123(2) EPC.

Reasons for the Decision

1. The appeal is admissible.
2. *Article 123 EPC*

Claim 1 on file differs from Claim 1 in the version as

granted in that in the characterizing portion of the claim the following amendments were made:

- (a) The wording "...the duct (10) has at least..." has been replaced by the wording "...the feed duct (10), extending substantially free of deflection, has at least..."

- (b) The term "L- or U-shaped section" has been replaced by the term "L- or U-shaped cross-section"

In respect of the amendment under (a) the Board refers to the passage in page 4, lines 8 to 12 of the original description corresponding to column 3, lines 7 to 12 of the patent in suit

"...so that, coming from the fan, the path to be followed by the drying air mixture comprises only two bends, namely one bend to enter the nozzle from the feed duct and one bend in order to be sprayed from the nozzle onto the strip 8..."

and to the passage from page 3, line 35 to page 4, line 2 of the original description corresponding to column 2, lines 53 to 57 of the patent in suit

"The configuration of this feed duct 10 is such that it is a continuation or extension of the volute of the fans 9 so that the gas mixture leaving the fans 9 is supplied to the feed duct 10 without passing through bends".

Thus, the feed duct 10 is devoid of bends up to the

respective position from which the gas is deflected to enter laterally a nozzle row via a nozzle feed opening. This means that there are no U-shaped or L-shaped turns in the length of the feed duct since such turns would constitute bends. In column 3, lines 12 to 19 of the patent in suit the following reference is made:

"It is noted here that due to the U-shape of the feed duct a part of the gas flow does not flow in an entirely straight line between the outflow opening of the fan and the entrance aperture of the nozzles. The variation is small, however, and the bends thus created in the path are so slight that they cause little flow resistance."

These deflections are clearly caused by the transition from a non-U-shaped cross-section of the fan outflow opening to the U-shaped cross-section of the feed duct which requires some flow particles during the transition to follow a slightly curved path. These deflections cannot, in the Board's opinion, be regarded as bends such as U-turns or S-turns which in the sense of the underlying technical problem (see column 1, lines 5 to 17 of the patent in suit) have to be avoided.

It follows from the above references that the person skilled in the art, reading the whole document would interpret the term "an L- or U-shaped section" as "an L- or U-shaped cross-section". It is shown clearly in original Figure 2 of the patent in suit that both the upper feed duct and the lower feed duct each have an L-shaped cross-section. According to original Claim 3 corresponding to Claim 2 as granted a common feed duct

may be provided. The upper and the lower feed ducts will then clearly combine to form a common feed duct having a U-shaped cross-section.

Claim 1 therefore complies with Article 123(2) EPC.

No objection has been raised under Article 123(3) EPC and the Board is also satisfied that the amendments to Claim 1 do not extend the protection conferred so that also Article 123(3) EPC is complied with.

3. The Respondent raised the ground for opposition under Article 100(b) EPC for the first time on 4 November 1996 after expiry of the nine-month period provided for filing notice of opposition. The Respondent argued that the invention cannot be carried out by a person skilled in the art since the meaning of the term "section" being crucial to Claim 1 is not disclosed in the patent in suit.

Since the Board has come to the conclusion that the term "L- or U-shaped section" was originally disclosed as "L- or U-shaped cross-section" (see section 2 above) it follows that the patent in suit discloses the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art. The objection under Article 100(b) EPC is therefore unfounded.

4. The Opposition Division revoked the patent in suit on the ground that Claim 1 in the version as granted lacked novelty over the disclosure of (V1).

(V1) describes a drier for elongated strips (20) of

carrier material, comprising at least one row of nozzles (21, 22, 23, 24), each nozzle extending in the transverse direction of the strips, and each nozzle being provided with a feed opening at at least one side, each of the feed openings being connected to a feed duct (34, 35) extending adjacently to the nozzles and a fan (32) connected to the feed duct for supplying a drying gas mixture to the feed duct, the feed duct extending partially above the rows of nozzles.

The fan is located such that the gas mixture leaving the fan is supplied to the feed duct (34, 35) through a bend (see the flow deflection between the passage (34) and the air supply chamber (35)). Furthermore, there is no disclosure of the feature that the feed duct comprises an L- or U-shaped cross-section and that a part of this section extends above and/or below the nozzles.

Hence, (V1) does not describe the features according to the characterizing portion of Claim 1 that the fan is located such that the gas mixture leaving the fan is supplied to the feed duct without passing through bends, that the feed duct extending substantially free of deflection has at least partially an L- or U-shaped cross-section and that a part of the section extends above and/or below the nozzles.

Claim 1 on file complies therefore with the requirement of novelty (Article 54 EPC) with regard to (V1).

5. According to Article 111(1) EPC, after having determined the allowability of the appeal, the Board of Appeal may either exercise any power within the

competence of the department which was responsible for the decision appealed or remit the case to that department for further prosecution. In the exercise of such discretion, the particular facts of the case to be decided have to be taken into account.

In the present case the decision has been based on the ground that the subject-matter of Claim 1 is known from (V1). The remaining cited prior art, including the alleged public prior use, has not yet been examined. The other criteria of patentability, in particular the issue of inventive step, also remain to be decided upon.

The Board considers that in cases like this, taking account in particular of the Appellant's request to remit the case to the first instance for further examination, the first instance should complete the examination on the basis of the remaining cited prior art.

6. The Board therefore sets aside the decision of the first instance and avails itself of its power under Article 111(1) EPC in order to refer the case back to the Opposition Division for further prosecution on the basis of Claims 1 to 9 indicated under section IV above.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the first instance for further prosecution.

The Registrar:

The Chairman:

N. Maslin

C. T. Wilson