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Datasheet for the decision
of 21 October 2015

Case Number: T 1506/11 - 3.2.05
Application Number: 03006870.4
Publication Number: 1348559
IPC: B41J2/175
Language of the proceedings: EN

Title of invention:
A printing apparatus and ink cartridge therefor

Patent Proprietor:
Seiko Epson Corporation

Opponent:
Pelikan Hardcopy Production AG

Relevant legal provisions:
EPC 1973 Art. 54, 56
RPBA Art. 13(1)

Keyword:
Novelty - (yes)
Inventive step - (yes)
Late-filed argument - justification for late filing (no)

Decisions cited:
T 1496/11
DECISION of Technical Board of Appeal 3.2.05 of 21 October 2015

Appellant: Pelikan Hardcopy Production AG
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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted on 12 April 2011 rejecting the opposition filed against European patent No. 1340559 pursuant to Article 101(2) EPC.

Composition of the Board:
Chairman M. Poock
Members: S. Bridge
D. Rogers
Summary of Facts and Submissions

I. An appeal was lodged by the opponent against the decision of the opposition division rejecting its opposition filed against the European patent No. 1 348 559 and not admitting into the procedure either late filed documents L16 (EP 1 164 025 A1) and L17 (EP 1 114 726 A1) or a new ground of opposition under Article 100(c) EPC.

II. Although the opposition filed against the patent as a whole was nominally based on Articles 100(a), (b) and (c) EPC 1973, only the grounds of lack of novelty (Article 54 EPC 1973) and lack of inventive step (Article 56 EPC 1973) of Article 100(a) EPC 1973 were substantiated.

III. Oral proceedings were held before the board of appeal on 21 October 2015.

IV. The requests of the appellant (opponent) were to set aside the decision under appeal and to revoke the patent.

V. The request of the respondent (patent proprietor) was to maintain the patent upon the basis of claims 1 to 15 submitted at the oral proceedings before the board.

The board pointed out that this request necessarily implied that the decision under appeal be set aside.

VI. Claim 1 according to the sole request reads as follows (the feature numbering 1 to 10 is the one used in the contested decision, the label 11 for the final feature having been added by the board):
1. "An ink cartridge (210; 310) detachably mountable on
a printing apparatus which has a carriage having a
printhead and an ink supply needle communicating
with the print head,
the ink cartridge (210; 310), comprising:

2. a body (220; 320) for containing ink therein, the
body having a bottom wall (222; 322),
a first wall (224; 324) adjacent to said bottom wall
(222; 322),
a second wall (226; 326) disposed opposite to said
first wall,
a third wall (227; 327) adjacent to said bottom wall
(222; 322) and said second wall (226; 326), and
a fourth wall (228; 328) opposite the third wall
(227; 327);

3. an ink supply section (240; 340) having an ink
supply opening (242; e.g. 342) formed in the bottom
wall (222; 322) for accommodating said ink supply
needle;

4. a memory (260; 360)

4.1 comprising a contact terminal member (262; 362)
disposed on said body (220; 320) and

5. a protruding member (282; 382);

6. wherein both said contact terminal member (262; 362)
and said protruding member (282; 382) are located on
said second wall (226; 326);
characterized in that

7. - the ink supply section (240; 340) is formed in the
bottom wall (222; 322)

7.1 near said first wall (224; 324),

8. - the protruding member (282; 382) is engageable
with a groove formed in the printing apparatus,

9. - the contact terminal member (262; 362) is shifted
from the center of the second wall (226; 326) in the widthwise direction towards the third wall (227; 327), and

- the protruding member (282; 382) is formed on the second wall (226; 326) closer to the fourth wall than to the third wall (227; 327), and

- a projecting part (290; 390) is provided on the second wall (226; 326) near an upper wall of said body (220; 320) which is opposite said bottom wall (222; 322), the projecting part (290; 390) being disposed above said contact terminal member (262; 362) and said protruding member (282, 382).

VII. The following documents are referred to in the present decision:

L5: DE 297 11 115 U1;
L6: US 6,250,750;
L7: EP 0 412 459 A2;
L9: WO 01/54910 A2;
L16: EP 1 164 025 A1;
L17: EP 1 114 726 A1;
L18a: EP 1 759 857 A1;
L18b: EP 1 880 858 A1;
L19a: Translation of priority document JP 2002-093838;

VIII. The arguments of the appellant in the written and oral proceedings can be summarised as follows:

The sole request should not be admitted, because:
- the term "substantially parallel" in amended claim 4 is unclear, and
it is unclear whether claim 14 is a dependent claim or not, because the expression "is attached" is ambiguous in that it can be understood as a process step rather than an apparatus requirement.

The disclosure of documents L16 and L17 is prima facie relevant to the question of novelty and inventive step of the subject-matter of the independent claim. These documents should therefore be admitted into the proceedings.

Document L16

The subject-matter of claim 1 lacks novelty, because the ribs at the back of the cartridge shown in figure 9 of document L16 constitute a projecting part in the sense of feature 11 of claim 1. An additional novelty objection based on figures 28A to 28C of document L16 was withdrawn during the oral proceedings.

There is no evidence for the protective effect of the projecting part as alleged by the respondent. Adding a projecting part to the cartridge disclosed in document L16 is only a matter of routine alternative design for the skilled person, because such a projecting part (e.g. document L17, figure 6) does not provide a technical effect. Therefore, the subject-matter of claim 1 lacks an inventive step.

Document L17

The subject-matter of claim 1 lacks novelty, because although figure 6 of document L17 discloses the ink supply section next to the second wall, the ink supply section is also "near" the first wall (feature 7.1), because the relative term "near" is effectively
meaningless. The lines identified by the appellant in figure 6 in the vicinity of the contact terminal member 40 disclose a protruding member in the sense of features 5, 6, 8 and 10 of claim 1. In this context, the citation "see pages 18 and 19 of the grounds of appeal" was made during the oral proceedings before the board.

The subject-matter of claim 1 lacks an inventive step with respect to the teaching of document L17. In this context, the citation "see points 3 and 4 on pages 21 and 22 of the grounds of appeal" was made during the oral proceedings before the board. These points argue:
- disposing the ink supply section near the first wall (feature 7.1) only solves the known problem of ink potentially contaminating the contact terminal member (Bl-publication, paragraph [0010]) by the known solution of increasing the distance between the ink supply section and the contact terminal member; and
- positioning ridges (i.e. a protruding member) disposed near the corners on all walls of a cartridge are generally known for that purpose to the skilled person (e.g. document L6, column 3, lines 43 to 47, figure 6).

Therefore, the subject-matter of claim 1 lacks an inventive step.

Decision T 1496/11 which became available to the public at the end of the year 2012, made the appellant aware of the possibility of novelty objections under Article 54(3) EPC based on divisional applications in cases of invalid priority claims. The appellant thus could not have been reasonably expected to file such arguments earlier than with the letter of 12 August 2015.
Therefore, the argument based on a lack of priority (translations L19a to L19c) of the claimed subject-matter rendering it subject to a novelty objection under Article 54(3) EPC based on the divisional applications L18a and L18b should be admitted into the proceedings.

IX. The arguments of the respondent in the written and oral proceedings can be summarised as follows:

The skilled person knows that the term "substantially parallel" merely covers imprecisions in the manufacturing process and this does not render the subject-matter of amended claim 4 unclear. In addition, formerly independent claim 14 was amended to be dependent on claim 1 and hence was novel and inventive if claim 1 was novel and inventive. The request should be admitted into the proceedings.

The disclosure of documents L16 and L17 is not prima facie relevant to the question of novelty and inventive step of the subject-matter of the independent claim. These documents should therefore not be admitted into the proceedings.

*Document L16*

The cartridge shown in figure 9 of document L16 does not exhibit a protruding member in the sense of features 5, 6 and 8 of claim 1. In addition the ribs at the back of the cartridge of figure 9 of document L16 do not protrude and are not disposed above the contact terminal member 106. These ribs thus do not constitute a projecting part in the sense of feature 11 of claim 1. The subject-matter of claim 1 is novel with respect to document L16.
The projecting part provides some protective effect in that it acts as a spacer when the cartridge is dropped (Bl-publication, paragraph [0036]). The corresponding objective problem is the provision of some protection by simple means. The solution is thus a purposive provision of the projecting part according to feature 11 of claim 1. The subject-matter of claim 1 involves an inventive step with respect to document L16.

**Document L17**

According to figure 6 of document L17, the ink supply section is disposed next the second wall and therefore not near the first wall: thus feature 7.1 is not disclosed. The lines identified by the appellant in figure 6 in the vicinity of the contact terminal member 40 are not discussed in document L17 and could also represent a groove on the third/fourth wall so that document L17 does not directly and unambiguously disclose a protruding member in the sense of claim 1. As a further consequence, projecting part 8e of figure 6 is not disposed above any protruding member. Therefore, the subject-matter of claim 1 is novel and inventive with respect to document L17.

The legal and factual basis for a novelty objection under Article 54(3) EPC based on divisional applications in cases of invalid priority claims has existed since the beginning of the opposition filed by fax of 2 October 2008. Even if the appellant was reminded of such a possibility when decision T 1496/11 became available to the public at the end of 2012, there is no legitimate reason for waiting until 12 August 2015 to raise such a complex objection for the first time at such a late stage of the proceedings.
Furthermore, in view of a corresponding question pending before the Enlarged Board of Appeal (case G1/15), this issue cannot be dealt with without adjournment of the oral proceedings. Therefore, the argument based on a lack of priority (translations L19a to L19c) of the claimed subject-matter rendering it subject to a novelty objection under Article 54(3) EPC based on the divisional applications L18a and L18b should not be admitted into the proceedings.

Reasons for the Decision

1. Admissibility of the sole request

1.1 Amended claim 4

As pointed out in the annex to the summons to oral proceedings, the final feature of claim 5 as granted (which is now claim 4 of the sole request) "at least a portion of said surface lying in a plane which is substantially parallel to said first wall (224;324)" (emphasis added by the board) differs from the disclosure that surface 292,392 "is nearly parallel to the second sidewall 226",326 (emphasis added by the board) of paragraphs [0055], [0064] and of claim 5 of the application as published. The labelling of the wall as 'first' is obviously incorrect and the solution "second" is itself obvious from these citations.

The expression "substantially parallel" of the claim as granted was not, as such, the subject of the amendment which only concerned the labelling of the wall.

The amendment made in claim 4 of the sole request does not introduce a lack of clarity and was already filed
in an earlier request in response to the board's annex to the summons to oral proceedings.

1.2 Amended claim 14

The amendment made to claim 14 converts the previously optional attachment of an ink cartridge according to claims 1 to 13 into a necessary one. In consequence, amended claim 14 now necessarily contains all the features of claim 1 and is thus a claim which is dependent on claim 1.

The argument advanced on behalf of the appellant that the expression "is attached" is ambiguous in that it can be understood as a process step rather than an apparatus requirement cannot be followed, because claim 14 is an apparatus claim and the wording of the feature "comprising a carriage (141) to which an ink cartridge according to any one of claims 1 to 13 is attached" cannot be interpreted as a method step within the apparatus claim.

The amendment made in claim 14 of the sole request does not introduce a lack of clarity.

As advanced on behalf of the respondent, this modification corresponds to one already made in other requests which were filed earlier in response to the board's annex to the summons to oral proceedings. The amendment is motivated by the grounds of appeal under Article 100(a) EPC 1973 in that it avoids a separate investigation of novelty and inventive step, should dependent claim 14 be carried by any novelty and inventive step of claim 1.
1.3 The nature of the amendments made to claim 4 and to claim 14 are straightforward, respect the need for procedural economy and do not raise issues which would require an adjournment of the proceedings. In consequence, there are no reasons for the board not to admit the sole request into the proceedings (Article 13 Rules of Procedure of the Board of Appeal - RPBA).

2. Admissibility of late filed documents L16 and L17

Although late filed documents L16 and L17 were not admitted into the proceeding by the opposition division, the board considers that they disclose, in combination, many features of the claimed invention and are thus relevant to the subject-matter of the contested claims. In consequence, the board uses its discretion under Article 12(4) RPBA to admit these documents into the proceedings.

3. Document L16

3.1 Claim 1 - Novelty (Article 54 EPC 1973)

The cartridge shown in figure 9 of document L16 does not exhibit a protruding member in the sense of features 5, 6 and 8 of claim 1. The protruding members 131, 132 of the embodiment shown in figures 27 to 29 are missing in the one of figure 9. In addition, the ribs at the back of the cartridge are neither disposed above the contact terminal member 106 nor are they disposed above protruding members 131, 132 of the embodiment of figures 27 to 29.
These ribs thus do not constitute a projecting part in the sense of feature 11 of claim 1. The subject-matter of claim 1 of the sole request is new with respect to document L16.

3.2 Claim 1 - Inventive step (Article 56 EPC 1973)

The cartridge disclosed in document L16 (figures 27 to 29) may be considered as closest prior art. The subject-matter of claim 1 differs from this cartridge in the provision of the projecting part disposed on the cartridge as set out in feature 11.

Even if the skilled person had any incentive to provide a projecting part on the second wall (i.e. the underside in figure 27, i.e. the side opposite to where the text "FIG.27" is located) near the upper wall of the body (i.e. the side of the cartridge next to where the text "FIG.27" is located) such a projecting part would not be located above the contact terminal member 106 and the protruding member 131, 132. Conversely, if the projecting part were provided above the contact terminal member 106 and the protruding member 131, 132, it would not be located on the second wall near the upper body wall.

Thus even if the skilled person were to consider the projecting member 8e of figure 6 of document L17, he would not arrive at the subject-matter of claim 1.
Consequently, starting from the cartridge disclosed in document L16, the subject-matter of claim 1 of the sole request is not obvious for the person skilled in the art.

4. Document L17

4.1 Claim 1 - Novelty (Article 54 EPC 1973)

According to figure 6 of document L17, the ink supply section 8c is disposed adjacent to the second wall (as identified by the presence of the contact terminal member 40) and is thus disposed as remotely from the opposite first wall as is possible on that cartridge. Even though the relative term "near" is vague, the board considers that it nevertheless has the effect of excluding the exact contrary disposition of figure 6. Therefore, the embodiment of figure 6 of document L17 does not disclose feature 7.1 which requires the ink supply section to be formed (in the bottom wall) "near said first wall".

Fig. 6 of document L17 and Fig. 6 of document L17 with arrows and text added by the appellant
The lines to the right of the contact terminal member 40 in figure 6 identified by the appellant are not discussed in document L17. These lines are geometrically ambiguous in that it is not clear what they represent and, in particular, on which of the second or third/fourth wall of the cartridge the lines identified by the leftmost arrow added to figure 6 by the appellant are situated. Therefore, these lines do not necessarily represent a protruding member (feature 5) located on the second wall (i.e. the wall on which the contact terminal member 40 is disposed) and might, instead, represent a groove on the third or fourth wall, as pointed out by the respondent.

Pages 18 and 19 of the grounds of appeal referred to by citation by the appellant during the oral proceedings before the board, attempt to give a meaning to the lines identified in figure 6 of document L17 in terms of their similarity to lines on a figure relating to a different cartridge in document L6 or L5. In the absence of a clear cross reference to this effect between documents L5/L6 and L17, such an interpretation is purely speculative.

In consequence, there is no direct and unambiguous disclosure of a protruding member on the second wall of the cartridge of figure 6 of document L17.

Thus, document L17 neither discloses an ink supply section disposed according to feature 7.1, nor a protruding member in the sense of features 5, 6, 8 and 10 of claim 1. Therefore, the subject-matter of claim 1 of the sole request is novel with respect to document L17.
4.2 Claim 1 - Inventive step (Article 56 EPC 1973)

The cartridge disclosed in document L17 (figure 6) was considered by the appellant as an alternative starting point for the evaluation of an inventive step, because the overall shape of the cartridge is closer to that shown in the embodiments of the patent in suit, even though there are differing features (see point 4.1 above).

![FIG. 6](image)

*Fig. 6 of document L6*

The skilled person seeking to provide a protruding member in the form of known positioning ridges disposed near the corners of a cartridge (e.g. document L6, column 3, lines 43 to 47, figure 6) will have to change the arrangement on the second wall of the cartridge of figure 6 of document L17 to accommodate such known positioning ridges.

However, according to document L17, "an overhang portion [i.e. protruding member] 8e, which engages with the projection of a lever provided on the holder (...) is formed at the upper end of a vertical wall 8d on that side of the ink feeding port 8c" (paragraph [0084], figure 6).
This teaching has two consequences:
- when adding positioning ridges disposed near the corners on all walls of a cartridge (document L6, column 3, lines 43 to 47, figure 6), the resulting arrangement will not necessarily be such that the projecting part 8e is disposed above the added positioning ridges [i.e. protruding member] as required in feature 11 of claim 1, since there is no teaching to this effect in either document L6 or L17; and
- furthermore, the skilled person will be reluctant to displace the ink supply port to the other end of the bottom face (feature 7.1), because the relative disposition of the ink supply port and the overhang portion [i.e. projecting part] 8e will be modified contrary to the teaching of document L17.

Thus the arguments provided by the appellant require hindsight in order to arrive at the subject-matter of claim 1, when starting from the cartridge of figure 6 of document L17.

Consequently, also starting from the cartridge disclosed in document L17, the subject-matter of claim 1 is not obvious for the person skilled in the art.

5. Other documents

5.1 Although no longer presented during oral proceeding before the board, the appellant argued in writing that the subject-matter of claim 1 lacked novelty with respect to figure 7 of document L9 and figure 6 of document L20.
However, these figures neither disclose
- feature 7.1 (because the ink supply section (figure 7: 88; figure 6: 44, 54) is formed near said second (figure 7: 72) and not near the first wall (figure 7: 82), nor
- feature 9 (because the contact terminal member (figure 7: 74 figure 6: 31) is centered on the second wall (figure 7: 72) and thus not shifted from the center of the second wall in the widthwise direction towards the third wall).

In consequence, the subject-matter of claim 1 of the sole request is also novel with respect to documents L9 and L20.

5.2 Although no longer presented during oral proceeding before the board, the appellant further argued in writing that the subject-matter of claim 1 lacked an inventive step when starting from either figure 22 of document L5 or from figures 5, 10 and 18 of document L7.

However, the cartridge of document L5 neither has
- a memory (feature 4) and thus cannot exhibit any of the related features concerning the disposition of the corresponding contact terminals, nor
- a protruding member (feature 5, 6 and 8) engageable with a groove formed in the printing apparatus, nor
- a ink supply section formed near the first wall (feature 7.1).

Similarly, the cartridge of document L7 neither has
- feature 6, because the contact terminals are not located on the same wall as the protruding member; nor
- a protruding member formed on the second wall closer to the fourth wall than the third wall (feature 10); and
- does not clearly disclose feature 7.1.

In addition, neither document has a projecting part (feature 11). In consequence, documents L5 and L7 are more remote than the ones considered above and thus cannot render the subject-matter of claim 1 obvious to the skilled person.

6. **Priority**

The legal and factual basis for a novelty objection under Article 54(3) EPC based on divisional applications in cases of invalid priority claims has existed since the beginning of the opposition filed by fax of 2 October 2008 (divisional L18a published 7 March 2007 and divisional L18b published 23 January 2008). Even if the appellant was reminded of such a possibility when decision T 1496/11 became available to the public (which according to the appellant was at the end of the year 2012), no legitimate reason was provided for waiting at least an additional two and a half years until 12 August 2015 to raise such a complex objection for the first time at such a late stage of the proceedings.
Therefore, the board uses its discretion under Article 13(1) RPBA not to admit the late filed documents L18a, L18b and L19a to L19c and corresponding argument based on a lack of priority (translations L19a to L19c) of the claimed subject-matter rendering it subject to a novelty objection under Article 54(3) EPC based on the divisional applications L18a and L18b.

7. In summary, none of the arguments which were provided on behalf of the appellant demonstrate a lack of novelty or a lack of inventive step for the subject-matter of claim 1 (Articles 54 and 56 EPC 1973) and no other or further arguments were presented during the oral proceedings before the board.

The positive findings of the board on novelty and inventive step for claim 1 also apply to dependent claim 14 (see point 1.2 above).
Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the department of first instance with the order to maintain the patent as amended in the following version:
   Description:
   Pages 3 to 8 of the patent specification.
   Page 2 of the amended patent specification received during the oral proceedings of 21 October 2015.
   Claims:
   Numbers 1 to 15 received during the oral proceedings of 21 October 2015.
   Drawings:
   Figs 1 to 17B of the patent specification.

The Registrar: 

The Chairman:

D. Meyfarth M. Poock

Decision electronically authenticated