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D E C I S I O N
of 8 December 2005

Case Number: T 0807/04 - 3.2.05

Application Number: 94101074.6

Publication Number: 0614761

IPC: B41J 2/255

Language of the proceedings: EN

Title of invention:
Ink tank

Patentee:
SEIKO EPSON CORPORATION

Opponents:
Pelikan Hardcopy (International) AG
Société ARMOR

Headword:
-

Relevant legal provisions:
EPC Art. 76(1), 123(3)

Keyword:
"Extension beyond the earlier application as filed (main request and third auxiliary request) - yes"
"Extension of the protection conferred by the claims (first, second, fourth to eleventh auxiliary requests) - yes"

Decisions cited:
-

Catchword:
-



Case Number: T 0807/04 - 3.2.05

D E C I S I O N
of the Technical Board of Appeal 3.2.05
of 8 December 2005

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Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted 11 June 2004
revoking European patent No. 0614761 pursuant
to Article 102(1) EPC.

Composition of the Board:

Chairman: W. Moser
Members: H. Schram
W. Zellhuber

Summary of Facts and Submissions

- I. The appeal is against the decision of the Opposition Division posted 11 June 2004 revoking European patent No. 0 614 761 on the ground that claim 1 as granted did not meet the requirements of Article 100(c) EPC (extension beyond the content of the earlier application as filed, Article 76 EPC).

The European patent application No. 94 101 074.6 that matured into the patent in suit is a second-generation divisional application (a "divisional of a divisional"), since it is a divisional application of European patent application No. 90 201 874.6 (publication No. EP-A 0 406 983), which itself is a divisional application of European patent application No. 84 306 887.5 (publication No. EP-A 0 139 508), hereinafter referred to as the parent application.

- II. Oral proceedings were held before the Board of Appeal on 8 December 2005.
- III. The appellant (patent proprietor) requested as a main request that the decision under appeal be set aside and that the case be remitted to the Opposition Division for further prosecution. As an auxiliary measure, the appellant requested that the decision under appeal be set aside and that the patent in suit be maintained on the basis of the following documents:
- (i) claims 1 to 5, filed respectively as first to eleventh auxiliary requests on 8 November 2005; or

(ii) two further amendments to claim 1 according to the first to ninth auxiliary requests, which were filed respectively as twelfth to twenty-ninth auxiliary requests on 30 November 2005.

Respondent I (opponent 01) requested that the appeal be dismissed.

On 6 December 2005, respondent II (opponent 02) had already informed the Board that it would not be represented in the oral proceedings and that all its requests directed against maintenance of the patent in suit were withdrawn.

IV. Claim 1 according to the main request reads as follows:

"1. An ink tank (2) for supplying a proper amount of ink needed to a dot matrix printer head, said ink tank having a bottom wall, a top wall and walls extending between them, being formed as an integral unit detachably mountable to a printer head and being formed with a plurality of ink-supply sections defined by the ink tank walls and separation walls between the ink supply sections, each of said ink-supply sections having an ink supply port (41) in the bottom wall of the tank,

said ink tank having an ink absorbing member, formed of a porous material impregnated with ink, in each of said ink-supply sections,

said ink-supply sections containing ink of different colors, and

each ink-supply section having an air hole (42) therein which communicates with air in a space formed between the ink absorbing member and at least one wall

of the ink-supply section such that the ink absorbing member is at a distance from the at least one wall of the ink-supply section."

Claim 1 of the first auxiliary request differs from claim 1 of the main request in that the expressions "and at least one wall" and "the at least one wall" have been replaced by the expressions "and an internal surface" and "the internal surface", respectively.

Claim 1 of the second auxiliary request differs from claim 1 of the main request in that the expressions "and at least one wall" and "the at least one wall" have been replaced by the expressions "and an internal surface of the ink-supply section including at least an internal surface of the top wall" and "the internal surface of at least the top wall", respectively.

Claim 1 of the third auxiliary request differs from claim 1 of the main request in that the expression "ink absorbing member" (three occurrences) has been replaced by the expression "ink absorbing means" and in that the feature ", and the ink absorbing means comprising a plurality of ink absorbing members arranged so that ink may flow from one to the other, the ink absorbing member having pores of different average diameter such that the average diameter of the pores reduces in the direction of the ink supply port" is added at the end of the claim.

Claims 1 of the fourth and fifth auxiliary requests entail a combination of the amendments to claim 1 according to the first and third auxiliary requests and

according to the second and third auxiliary requests, respectively.

Claim 1 of the sixth auxiliary requests differs from claim 1 of the first auxiliary request in that the expression "and an internal surface" now reads "and the internal surface".

Claim 1 of the seventh auxiliary request differs from claim 1 of the second auxiliary request in that the expression "at least" has been deleted.

Claims 1 of the eighth and ninth auxiliary requests entail a combination of the amendments to claim 1 according to the third and sixth auxiliary requests and according to the third and seventh auxiliary requests, respectively.

Claim 1 of the tenth auxiliary request differs from claim 1 of the first auxiliary request in that the expression "the internal surface of the ink-supply section" is followed by the expression "and is surrounded by the space".

Claim 1 of the eleventh auxiliary request entails a combination of the amendments to claim 1 according to the third and tenth auxiliary requests.

The supplemental amendments to be added at the end of the feature describing the space in claims 1 of the first to ninth auxiliary requests read "wherein each ink-supply section has ridges supporting the ink absorbing member such that the ink absorbing member is surrounded by a layer of air" and ", wherein, in each

ink-supply section, the ink absorbing member is held in contact with only a raised surface of the bottom wall of the ink tank body, ridges of the ink tank, separation and top walls and a partition wall disposed between the air hole and the ink supply port and having one end joined to a separation wall or ink tank wall of the supply section", respectively, which requests are to be renumbered as twelfth to twentieth and twenty-first to twenty-ninth auxiliary requests, whereby the expression "ink absorbing member" should read "ink absorbing means" in claim 1 of the fourteenth to sixteenth, nineteenth, twentieth, twenty-third to twenty-fifth, twenty-eighth and twenty-ninth auxiliary requests.

- V. The appellant argued in writing and during the oral proceedings essentially as follows:

A basis for the contested feature near the end of claim 1 of the main request, viz. "... space formed between the ink absorbing member and at least one wall of the ink-supply section ..." was the passage on page 3, lines 24 to 27, and the additional feature of claim 9, of the parent application. The person skilled in the art would understand that, since the ink absorbing means were not floating inside the ink tank, the space between the ink absorbing means and the internal surface of the ink tank referred to in claim 9 could not pertain to the whole internal surface of the ink tank, but rather to a part of the internal surface of the ink tank. Moreover, the person skilled in the art would realize that, in order to solve the problem described on page 6, lines 13 to 27, of the parent application, it was sufficient that an air space

communicating with the air hole 42 was present somewhere between the ink absorbing means and a wall, or a part thereof. Claim 1 of the main request and of the third auxiliary request did therefore not extend beyond the disclosure of the parent application.

The first to eleventh auxiliary requests were filed well in advance, i.e. one month before the date of oral proceedings, and should be admitted. The two supplemental amendments were filed within two days of the oral proceedings of a parallel case, T 873/04, held on 28 November 2005, which concerned another second-generation divisional application of the same parent application as in the present case, with the same parties, in response to the findings of the same Board in a different composition in said case, and should be admitted as well.

The replacement of "at least one wall" to "an [the] internal surface" in claims 1 of the first, second, and fourth to eleventh auxiliary requests met the requirements of Article 123(3) EPC, since the expression "internal surface" simply referred to the inside or inner wall of the ink tank.

VI. The respondents I and II argued in writing and respondent I argued during the oral proceedings essentially as follows:

According to the passage on page 18, lines 1 to 6, of the parent application, the ink absorbing members were surrounded by a layer of air, which implied that the ink absorbing members were at a distance of all walls, not "at a distance from the at least one wall" as

claimed in claim 1 of the main request and of the third auxiliary request. For this reason alone these claims contravened the requirements of Article 76(1) EPC.

Filing eleven auxiliary requests just one month before the oral proceedings was tantamount to letting the Board decide on the subject-matter upon which the patent could be maintained. This applied the more so to the twelfth to twenty-ninth auxiliary requests filed eight days before the oral proceedings. None of these requests should be admitted into the appeal proceedings.

The first, second, and fourth to eleventh auxiliary requests extended the scope of the protection conferred by the claims as granted, since the distance between the ink absorbing member was defined in claim 1 as granted with respect to a wall, i.e. the whole wall, whereas in these auxiliary requests this distance was defined to a surface of a wall, i.e. a part of the wall. None of these requests were thus allowable under Article 123(3) EPC.

Reasons for the Decision

1. *Admissibility of the auxiliary requests*

The first to eleventh auxiliary requests were filed in response to the communication of the Board annexed to the summons to oral proceedings and within the time limit set by the Board for filing written submission and/or requests. These requests are therefore admitted into the appeal proceedings.

The two further amendments to claim 1 according to the first to ninth auxiliary requests were filed eight days before the date of the oral proceedings and were hence filed outside the time limit set by the Board for filing written submission and/or requests. These amendments are not *prima facie* allowable, since the objection raised against the expression "... a space formed between the ink absorbing means and at least one wall ..." in claim 1 of the third auxiliary request under Article 76(1) EPC, and against the expression "internal surface" in claim 1 of the remaining auxiliary requests under Article 123(3) EPC are not overcome by these amendments. The twelfth to twenty-ninth auxiliary requests based on these amendments are therefore not admitted into the appeal proceedings.

2. *Article 76(1) EPC*

2.1 Main request - Interpretation of the expression "at a distance from" in claim 1

The feature "... in a space formed between the ink absorbing member and at least one wall of the ink-supply section such that the ink absorbing member is at a distance from the at least one wall of the ink-supply section" in claim 1 of the main request encompasses, in the opinion of the Board, firstly, the case that the ink absorbing member and the opposite wall of the ink-supply section are spaced apart without any physical contact between the ink absorbing member and the (at least one) wall and, secondly, the case that the ink absorbing member and the (at least one) wall are held in contact with internal projections or ridges provided

on said at least one wall. The person skilled in the art would readily understand that in the latter case the absorbing member and the opposite wall still define a space, and a distance, between them. In the judgement of the Board, the person skilled in the art would not take such internal projections or ridges into account for determining the distance between the ink absorbing member and the opposite wall. It follows that, apart from the portions where the ink absorbing member and the internal projections or ridges are held in contact, the ink absorbing member is necessarily at a distance from the entire internal surface of a particular wall.

2.2 Disclosure of the parent application

According to the embodiment of the invention described on page 8, lines 26 to 30, (all references in this section pertain to the published version of the parent application as filed) the ink-supply sections are obtained by dividing the ink tank 2a, which is a part of ink tank 2, into sections (see Figure 1). An embodiment of the undivided ink tank 2 is shown in Figure 4 and described on page 10, line 25 to page 11, line 31. The ink tank comprises an ink tank body 40 and a lid 50 (top wall in the wording of claim 1 of the main request), see page 10, lines 25 to 29. The ink tank body 40 has a bottom wall 40a, a front wall 40b, a side wall 40c and a front partition 48 having one end joined to the side wall 40c, see page 11, lines 1 to 3, and lines 15 to 22. The hollow interior of the ink tank defined by the bottom wall 40a, the sidewall 40c, the partition 48, and the lid 50 accommodates therein the ink absorbing member comprising two porous members, see page 11, lines 25 to 28. In the judgement of the Board,

the description of the tank body 40 of the tank 2 applies *mutatis mutandis* to the tank body of an ink-supply section.

The four walls extending between the bottom wall 40a and the lid 50 of the ink tank body 40 shown in Figure 4 correspond, in the opinion of the Board, to the walls extending between the bottom wall and the top wall as defined in claim 1 of the main request: a front wall 40b, a wall opposite the front wall 40b ("rear wall"), and two "lateral" walls (the lateral wall farthest away from the viewer in Figure 4 labelled with the reference numeral 40c is shown to have two vertical ridges 47, see page 11, lines 15 to 19, which keep the porous (ink absorbing) members 61, 62 at a distance from said wall).

The lid 50 in Figure 4 is shown to have a ridge 51 keeping the porous members 61, 62 at a distance from said lid. The porous members are further held in contact with a front partition 48, such that a space filled with air is present between the porous members 61, 62 and the front wall 40b.

In the judgement of the Board, in the embodiment of the ink-supply section described on page 10, line 25 to page 11, line 31, and shown in Figure 4, the porous members 61, 62 are necessarily at a distance from all walls extending between the bottom wall and top wall, and from the top wall. This follows from the passage on page 11, lines 28 to 31, which states that "[the two porous members] ... are held in contact with only the raised surface 44 of the bottom 40a, the vertical ridges 47 of the sidewall 40c, the partition 48, and

the ridges 51 of the lid 50" (emphasis added by the Board).

The passage on page 18, lines 1 to 6, viz. "*In the ink tank construction described above, the ink-impregnated members 61, 62 are supported on the ridges 47, 51 in the ink tank body 40. The ink-impregnated members 61, 62 are therefore surrounded by a layer of air which communicates by way of the air hole 42 with the ambient air.*", supports the view that the ink absorbing members are at a distance from all walls, except from the bottom wall, of the ink tank.

It is evident to the person skilled in the art that the ink absorbing member cannot be surrounded from all sides by a layer of air, since it stands on the bottom wall 40a (see Figure 4). More particularly, the surface 44 of the bottom wall 40a, which is "raised" as compared to the slots 45a, b, and c in the bottom wall 40a, supports the ink absorbing member 62 (see page 11, lines 7 to 12, and Figure 4). These slots 45a, b, and c are intended to transport ink; they are not filled with air that communicates with the air hole.

There is thus no disclosure in the parent application that the ink absorbing member is at a distance from only one wall of the ink-supply section, a possibility that falls within the ambit of claim 1 of the patent in suit.

- 2.3 It follows from the above that claim 1 of the main request comprises subject-matter that extends beyond the parent application as filed, Article 76(1) EPC. This request is therefore not allowable. This

conclusion holds likewise for claim 1 of the third auxiliary request.

3. *First, second, and fourth to eleventh auxiliary requests*

Claim 1 of the first, second, and fourth to eleventh auxiliary requests have in common that the expression "at least one wall" present in claim 1 of the patent in suit as granted has been replaced by the expression "an [the] internal surface".

The amended claims merely require that the ink absorbing member is at a distance from an [the] internal surface of the ink-supply section, they no longer require that the ink absorbing member is at a distance from at least one wall of the ink-supply section. In the judgement of the Board, the requirement "the ink absorbing member is at a distance from an [the] internal surface of the ink-supply section" means that the ink absorbing member is at a distance from only a part or parts of the inner surface of a particular wall of the ink-supply section, not necessarily at a distance from the whole inner surface of a particular wall, i.e. at a distance from the wall itself. The use of the definite article ("the internal surface") does not make any difference in this regard.

The amended claims thus no longer require that the ink absorbing member is at a distance, apart from internal projections, from the entire internal surface of a particular wall (cf. point 2.1 above, last sentence).

The claims according to the first, second, and fourth to eleventh auxiliary requests are thus amended in a way that extends the protection conferred by the claims, contrary to Article 123(3) EPC.

These requests are thus not allowable.

4. Since there are no other requests to be considered, the appeal has to be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

M. Dainese

W. Moser