Case Number: T 0464/04 - 3.2.05
Application Number: 94101082.9
Publication Number: 0605387
IPC: B41J 2/255
Language of the proceedings: EN
Title of invention: Method for impregnating ink absorbing means in an ink tank
Patentee: SEIKO EPSON CORPORATION
Opponent: Pelikan Hardcopy (International) AG
Headword: 
Relevant legal provisions: EPC Art. 76(1)
Keyword: "Extension beyond the earlier application as filed - yes"
Decisions cited: 
Catchword: 

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DECISION
of the Technical Board of Appeal 3.2.05
of 20 December 2005

Appellant: Pelikan Hardcopy (International) AG
(Opponent)
Gewerbestrasse 9
CH-8132 Egg (CH)

Representative: Fähndrich, Martin
Lovells
Kennedydamm 17
D-40476 Düsseldorf (DE)

Respondent: SEIKO EPSON CORPORATION
(Proprietor of the patent)
4-1, Nishishinjuku 2-chome
Shinjuku-ku
Tokyo (JP)

Representative: HOFFMANN EITLE
Patent- und Rechtsanwälte
Arabellastrasse 4
D-81925 München (DE)

Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 15 January 2004 rejecting the opposition filed against European patent No. 0605387 pursuant to Article 102(2) EPC.

Composition of the Board:
Chairman: W. Moser
Members: H. Schram
W. Zellhuber
Summary of Facts and Submissions

I. The appellant (opponent) lodged an appeal against the decision of the Opposition Division posted 15 January 2004 rejecting the opposition against European patent No. 0 605 387 as a whole based on Articles 100(a) EPC (lack of inventive step, Article 56 EPC) and 100(c) EPC (extension beyond the content of the earlier application as filed, Article 76 EPC).

The European patent application No. 94 101 082.9 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. 90 201 873.8 (publication No. EP-A 0 406 982), 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 20 December 2005.

III. The appellant requested that the decision under appeal be set aside and that the European patent No. 0 605 387 be revoked.

The respondent (patent proprietor) requested as main request that the appeal be dismissed. As an auxiliary measure, he 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 and 2 filed respectively as first to thirty-fifth auxiliary requests, or claim 1 filed respectively as thirty-sixth to seventieth auxiliary requests, on 21 November 2005; or

(ii) two further amendments to claim 1 according to the first to twenty-ninth auxiliary requests filed respectively as seventy-first to one hundred and twenty-eighth auxiliary requests on 30 November 2005.

IV. Claim 1 of the patent in suit reads as follows:

"1. A method for impregnating ink absorbing means in an ink tank having an air hole comprising:

   providing an ink tank body (40) and a lid (50) to close same, the ink tank having an interior defined by the inner wall surfaces of the ink tank body and the lid,

   placing the ink absorbing means into the tank interior and closing the lid,

   such that a space is formed between the ink absorbing means and at least one inner wall surface of the ink tank, the ink absorbing means being at a distance from said at least one inner wall surface, and such that the air hole communicates with said space,

   creating a sub-atmospheric pressure within the ink tank,

   and then impregnating the ink absorbing means with the ink at a pressure lower than atmospheric pressure."

All of the auxiliary requests comprise the features "placing the ink absorbing means into the tank interior and closing the lid" (hereinafter referred to as
step 1), and "creating a sub-atmospheric pressure within the ink tank, and then impregnating the ink absorbing means with the ink at a pressure lower than atmospheric pressure" (hereinafter referred to as step 2).

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

There was no disclosure in the parent application as filed that the lid was closed prior to impregnating the ink absorbing means with the ink at a pressure lower than atmospheric pressure, contrary to Article 76(1) EPC. Consequently, the patent in suit had to be revoked.

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

The order of the steps reiterated in claim 1 of the patent in suit was directly and unambiguously derivable from the passage on page 10, line 25, to page 11, line 1, of the parent application. Since in this passage the ink tank with the ink-absorbing members ("ink-impregnated members 61, 62") disposed therein was described before it was described that the ink-impregnated members 61, 62 were impregnated with ink under a low atmospheric pressure, it was clear that the impregnating step was performed whilst the ink-absorbing members were located inside the ink tank with the lid closed. It was evident to the person skilled in the art that placing ink-absorbing members that were impregnated with a high amount of ink into an ink tank and then closing the lid was technically not feasible
without spoiling ink. This was confirmed by the passage on page 19, lines 14 to 22, of the parent application, describing an alternative embodiment of the invention, which only differed from the ink tank shown in Figure 4 in that the ink-absorbing member had different front and rear thicknesses, whereby the thickness of the front portion exceeded the height of the interior of the ink tank. In this embodiment the ink absorbing member was explicitly said to be compressed by the tank lid 50 (cf. page 19, lines 18 to 22, of the parent application), so that closing the lid after impregnating the ink absorbing means with ink would result in squashing the ink out of the ink absorbing member. Claim 1 of the patent in suit did therefore not extend beyond the content of the earlier application as filed, in line with Article 76(1) EPC.

Reasons for the Decision

1. **Article 76(1) EPC - Main request**

The alleged disclosure of the subject-matter of claim 1 of the patent in suit in the parent application is based on the following passages (see page 10, line 25, to page 11, line 1):

(i) "The ink tank 2, or each ink tank 2a, 2b, comprises an ink tank body 40, two stacked ink-impregnated members 61, 62 of a porous material which are disposed in the space in the ink tank body 40 so as to fill the latter, and a lid 50."
(ii) "The ink-impregnated members 61, 62 are impregnated with ink under a low atmospheric pressure ranging from 5 to 10 mmHg, so that air remaining in the porous ink-impregnated members will be reduced as much as possible to increase the amount of impregnated ink."

In these passages, there is no disclosure that step 1 is performed before step 2, as required by claim 1 as granted.

The respondent has argued that the person skilled in the art would not contemplate to impregnate the ink absorbing means prior to introducing it into the ink tank, since ink would easily be spoiled by introducing the ink-impregnated ink absorbing means into the ink tank, especially if the ink absorbing means was compressed by the ink tank lid as described on page 19, lines 18 to 22, of the parent application, and in view of the fact that the parent application taught to increase the amount of impregnated ink as much as possible (see passage (ii) referred to above).

In the judgement of the Board, the description on page 19, lines 14 to 22, of the fourth embodiment of the ink tank, which is shown in Figure 8, does not disclose a method for impregnating ink absorbing means in an ink tank. Said passage is silent about how to impregnate an ink absorbing member as shown in Figure 8. Even if the person skilled in the art would envisage placing the ink absorbing means into the tank interior and closing the lid of the ink tank prior to impregnating the ink absorbing means, which is not at all disclosed, he or she is not taught how the ink
absorbing means might be impregnated in situ with ink (via the ink supply port 41, the air hole 42, or possibly otherwise). Furthermore, there is nothing in the specification that excludes that step 2 takes place while the ink tank and the ink absorbing means are in a vacuum chamber which is kept at a low pressure, so that the step of "closing the lid" need not necessarily precede the step of "creating a sub-atmospheric pressure within the ink tank".

Claim 1 of the patent in suit therefore does not meet the requirements of Article 76(1) EPC.

2. **Auxiliary requests**

Since the sequence of the steps 1 and 2 referred to under point 1 above is present in all of the auxiliary requests, none of these requests are allowable either, Article 76(1) EPC.

With this state of affairs it was not necessary for the Board to decide on formally admitting the auxiliary requests, which were filed outside the time limit set by the Board for filing requests in the annex to the summons to oral proceedings, into the appeal proceedings.
Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The patent is revoked.

The Registrar:     The Chairman:

M. Dainese         W. Moser