

BESCHWERDEKAMMERN  
DES EUROPÄISCHEN  
PATENTAMTS

BOARDS OF APPEAL OF  
THE EUROPEAN PATENT  
OFFICE

CHAMBRES DE RECOURS  
DE L'OFFICE EUROPEEN  
DES BREVETS

**Internal distribution code:**

- (A) [ ] Publication in OJ  
(B) [ ] To Chairmen and Members  
(C) [X] To Chairmen  
(D) [ ] No distribution

**D E C I S I O N**  
**of 26 July 2004**

**Case Number:** T 1283/01 - 3.2.5

**Application Number:** 93117734.9

**Publication Number:** 0600245

**IPC:** B41M 5/00

**Language of the proceedings:** EN

**Title of invention:**

Ink jet recording sheet and method for producing same

**Patentee:**

MITSUBISHI PAPER MILLS, LTD.

**Opponent:**

OJI PAPER COMPANY, LIMITED

**Headword:**

-

**Relevant legal provisions:**

EPC Art. 54, 56

**Keyword:**

"Novelty (yes)"

"Inventive step (yes)"

**Decisions cited:**

-

**Catchword:**

-



Case Number: T 1283/01 - 3.2.5

**D E C I S I O N**  
of the Technical Board of Appeal 3.2.5  
of 26 July 2004

**Appellant:** MITSUBISHI PAPER MILLS, LTD.  
(Proprietor of the patent) 4-2, Marunouchi 3-chome  
Chiyoda-ku  
Tokyo (JP)

**Representative:** Hansen, Bernd, Dr. Dipl.-Chem.  
Hoffmann Eitle,  
Patent- und Rechtsanwälte  
Arabellastrasse 4  
D-81925 München (DE)

**Respondent:** OJI PAPER COMPANY, LIMITED  
(Opponent) 7-5, Ginza 4-chome  
Chuo-ku  
Tokyo 104 (JP)

**Representative:** Barz, Peter, Dr.  
Patentanwalt  
Kaiserplatz 2  
D-80803 München (DE)

**Decision under appeal:** Decision of the Opposition Division of the  
European Patent Office posted 18 October 2001  
revoking European patent No. 0600245 pursuant  
to Article 102(1) EPC.

**Composition of the Board:**

**Chairman:** W. Moser  
**Members:** W. Widmeier  
W. R. Zellhuber

## Summary of Facts and Submissions

I. The appellant (patent proprietor) lodged an appeal against the decision of the Opposition Division revoking European patent No. 0 600 245.

The Opposition Division held that the subject-matter of claim 1 lacked novelty.

II. The appellant requested that the decision under appeal be set aside and that the patent be maintained on the basis of claims 1 to 6 submitted on 26 May 2004.

III. The respondent (opponent) has not submitted any request.

IV. The following documents were referred to by the appellant:

D1: JP-A-52-74 340 (English translation)

D2: JP-A-1 095 092 (English translation of selected passages)

D3: JP-A-4 219 266 (English translation of selected passages)

D4: JP-A-63 001 582 (English translation of selected passages)

D5: JP-A-63 001 583 (English translation of selected passages)

D6: EP-A-0 524 635

V. Independent claim 1 reads as follows:

"1. An ink jet recording sheet which comprises a support comprising a wood pulp and 10 % by weight or more of a filler, one ink-receiving layer containing a binder and a pigment, coated one side of the support, and one back-coat layer coated on the other side of the support, wherein the ratio of gas permeability P according to JIS P8117 to density D according to JIS P8118 of the recording sheet (P/D-ratio) is in the range of 150 to 2000, and wherein the back-coat layer comprises, as a binder, a mixture of a synthetic polymer latex having a glass transition temperature of -50°C to +25°C, and at least one water-soluble binder selected from starch, polyvinyl alcohol and a cellulose derivative."

Independent claim 6 reads as follows:

"6. A method for producing the ink jet recording sheet of claim 1 wherein the backcoat layer and the ink-receiving layer are coated by a roll coater or a rod coater."

VI. The appellant argued essentially as follows:

(a) *Novelty*

Document D1 does not describe an ink recording sheet comprising a back-coat layer and having a P/D-ratio as specified in claim 1.

Documents D2, D4 and D5 do not mention that the ink jet recording sheet has a back-coat layer.

Document D3 does not disclose an ink jet recording sheet whose back-coat layer comprises a polymer latex as specified in claim 1.

Document D6 does not disclose a back-coat layer which has a glass transition temperature in the range as specified in claim 1.

It follows that the subject-matter of claim 1 is novel.

(b) *Inventive step*

Document D6 is prior art according to Article 54(3) EPC and is thus to be considered with respect to novelty only.

None of documents D1 to D5 suggests that the glass transition temperature of a polymer latex comprised in the back-coat layer of an ink jet recording sheet is important for the strike-through, curling and pick resistance properties of the recording sheet. Consequently, none of these documents renders a back-coat layer which comprises a polymer latex having a glass transition temperature of  $-50^{\circ}\text{C}$  to  $+25^{\circ}\text{C}$  obvious.

The subject-matter of claim 1 thus involves an inventive step.

VII. The respondent informed the Board on 4 July 2002 that he did not intend to comment on the appellant's submissions and on 12 July 2004 that he did not intend to comment on the amended description and claims. In the opposition procedure the respondent had

acknowledged novelty of the subject-matter of claim 2, which has become claim 1 in the appeal procedure.

## **Reasons for the Decision**

### 1. *Formal requirements*

Claims 1 to 6 meet the requirements of Articles 84 and 123(2) and (3) EPC and of Rule 57a EPC. The same applies to the amended description of the patent in suit. No objections have been raised by the respondent in this respect.

### 2. *Novelty*

None of the cited prior art documents discloses an ink jet recording sheet having a back-coat layer which comprises, as a binder, a mixture of a synthetic polymer latex having a glass transition temperature of -50°C to +25°C and a water-soluble binder selected from starch, polyvinyl alcohol and cellulose derivative.

For this reason, the subject-matter of claim 1 is to be considered novel.

### 3. *Inventive step*

- 3.1 Document D6 was filed before, but published after, the priority date of the patent in suit and thus constitutes prior art according to Article 54(3) EPC for all designated Contracting States. It has therefore to be disregarded when assessing inventive step (Article 56 EPC).

- 3.2 The feature of claim 1 that the back-coat layer of the ink jet recording sheet comprises a polymer latex having a glass transition temperature of  $-50^{\circ}\text{C}$  to  $+25^{\circ}\text{C}$  cannot be derived in an obvious manner from documents D1 to D5, neither considered alone nor considered in combination. These documents are silent about such a binder component and do not give any hint to it.
- 3.3 The Board concludes therefore that the subject-matter of claim 1 involves an inventive step.
- 3.4 Claims 2 to 5 are dependent claims of claim 1. Their subject-matter thus also involves an inventive step.
- 3.5 Independent claim 6 relates to a method using the back-coat layer of claim 1. Thus, also the subject-matter of claim 6 is to be considered to involve an inventive step.

**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 with the order to maintain the patent on the basis of the following documents:
  - (a) claims 1 to 6 filed on 26 May 2004
  
  - (b) description: pages 2 to 12 and 15 to 37 filed on 30 April 2004.

The Registrar:

The Chairman:

D. Meyfarth

W. Moser