



Europäisches Patentamt  
European Patent Office  
Office européen des brevets



(11) **EP 0 826 509 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
**19.08.1998 Bulletin 1998/34**

(51) Int. Cl.<sup>6</sup>: **B41M 5/00**

(43) Date of publication A2:  
**04.03.1998 Bulletin 1998/10**

(21) Application number: **97115037.0**

(22) Date of filing: **29.08.1997**

(84) Designated Contracting States:  
**AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC  
NL PT SE**

(30) Priority: **29.08.1996 JP 247028/96**  
**21.01.1997 JP 21999/97**

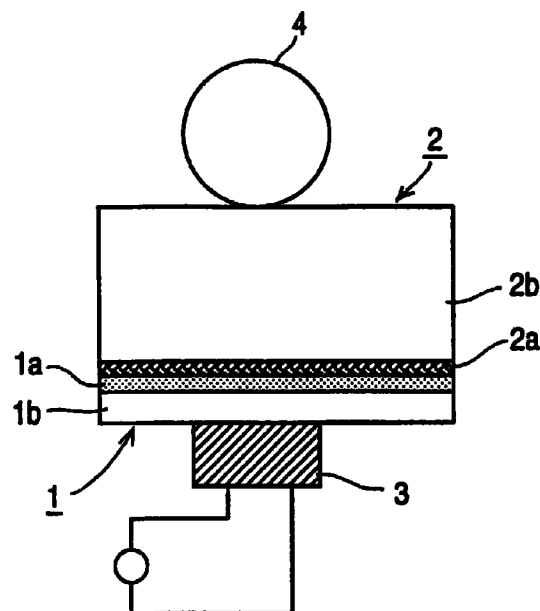
(71) Applicant:  
**VICTOR COMPANY OF JAPAN, LIMITED**  
**Yokohama-Shi Kanagawa-Ken 221 (JP)**

(72) Inventors:  
• **Kikuchi, Yuji**  
**Mito-shi, Ibaraki-ken (JP)**  
• **Nakano, Shigeru**  
**Mito-shi, Ibaraki-ken (JP)**

(74) Representative:  
**Wagner, Karl H., Dipl.-Ing.**  
**WAGNER & GEYER**  
**Patentanwälte**  
**Gewürzmühlstrasse 5**  
**80538 München (DE)**

(54) **Porous ink acceptor sheet for thermal dye transfer printing**

(57) Hot-melt type thermal ink transfer printing medium has an ink acceptance layer in which pores and microgrooves are contained, used for transferring hot-melt ink to the ink acceptance layer of the printing medium by using a thermal head. The printing medium satisfies at least one condition from a group of tow conditions that a 100 % stress of the ink acceptance layer in conformity with a measuring method of JIS-K-7127 is not less than 3,000 kN/m<sup>2</sup> and a Young's modulus of the ink acceptance layer in conformity with a measuring method of JIS-K-7127 is not less than 8,000 kN/m<sup>2</sup>.



**Fig. 1**

EP 0 826 509 A3



European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number  
EP 97 11 5037

| DOCUMENTS CONSIDERED TO BE RELEVANT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                       |                                                         |                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|----------------------------------------------|
| Category                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Citation of document with indication, where appropriate, of relevant passages                                                                                         | Relevant to claim                                       | CLASSIFICATION OF THE APPLICATION (Int.Cl.6) |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | EP 0 665 120 A (NEW OJI PAPER COMPANY LIMITED) 2 August 1995<br>* page 3, line 1 - line 11 *<br>* page 4, line 3 - line 24 *<br>* claims 1-9; examples 1-4 *<br>----  | 1-4                                                     | B41M5/00                                     |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | EP 0 570 899 A (FUJICOPIAN COMPANY LIMITED) 24 November 1993<br>* page 3, line 1 - line 10 *<br>* page 4, line 46 - line 51 *<br>* claims 1-8; examples 1-4 *<br>---- | 1-4                                                     |                                              |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | US 5 411 931 A (T-M. KUNG) 2 May 1995<br>* column 2, line 25 - line 37 *<br>* column 5, line 64 - column 6, line 2 *<br>* claims 1,2,10,11; examples 1,2 *<br>----    | 1-4                                                     |                                              |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | PATENT ABSTRACTS OF JAPAN<br>vol. 96, no. 3, 29 March 1996<br>& JP 07 309074 A (NEW OJI PAPER COMPANY LIMITED), 28 November 1995,<br>* abstract *<br>----             | 1-4                                                     | TECHNICAL FIELDS<br>SEARCHED (Int.Cl.6)      |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | PATENT ABSTRACTS OF JAPAN<br>vol. 96, no. 7, 31 July 1996<br>& JP 08 072426 A (ASAHI GLASS COMPANY LIMITED), 19 March 1996,<br>* abstract *<br>-----                  | 1-4                                                     | B41M                                         |
| The present search report has been drawn up for all claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                       |                                                         |                                              |
| Place of search<br><b>THE HAGUE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                       | Date of completion of the search<br><b>26 June 1998</b> | Examiner<br><b>Bacon, A</b>                  |
| CATEGORY OF CITED DOCUMENTS<br>X : particularly relevant if taken alone<br>Y : particularly relevant if combined with another document of the same category<br>A : technological background<br>O : non-written disclosure<br>P : intermediate document<br>T : theory or principle underlying the invention<br>E : earlier patent document, but published on, or after the filing date<br>D : document cited in the application<br>L : document cited for other reasons<br>& : member of the same patent family, corresponding document |                                                                                                                                                                       |                                                         |                                              |

EPO FORM 1503 03/82 (P04C01)