



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11) **EP 1 120 280 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
05.09.2001 Bulletin 2001/36

(51) Int Cl.7: **B41M 5/00**

(43) Date of publication A2:
01.08.2001 Bulletin 2001/31

(21) Application number: **01300347.0**

(22) Date of filing: **16.01.2001**

(84) Designated Contracting States:
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE TR**
Designated Extension States:
AL LT LV MK RO SI

(30) Priority: **27.01.2000 US 491642**
10.04.2000 US 545934

(71) Applicant: **Hewlett-Packard Company,
A Delaware Corporation
Palo Alto, CA 94304 (US)**

(72) Inventor: **Tsao, Yi-Hua
San Diego, CA 92127 (US)**

(74) Representative: **Jackson, Richard Eric
Carpmaels & Ransford,
43 Bloomsbury Square
London WC1A 2RA (GB)**

(54) **Method for increasing dot size on porous media printed with pigmented inks**

(57) It is found that by wetting coated media, such as film-based media (e.g., Mylar film) and resin-coated papers (e.g., photobase paper), with a dilute polymer solution or colloidal silica or colloidal alumina dispersion with small particle size, the dot size increases compared

to the current default dot size when printed with pigment-based inks in a Hewlett-Packard CP-2500 or CP-3500 printer. No previous efforts are known to increase the dot size on coated porous media printed with pigment inks.

EP 1 120 280 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 01 30 0347

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.7)		
X	EP 0 878 322 A (OJI PAPER) 18 November 1998 (1998-11-18)	1-5, 10	B41M5/00		
Y	* page 6, line 41 - page 7, line 4 * * page 7, line 33 - line 46 * * page 8, line 22 - line 32 * * page 9, line 41 - line 47 * * page 10, line 25 - line 32 * * page 10, line 55 - page 11, line 23 * * page 13, line 33 - line 34 * * page 15, line 43 - line 45 * * page 16, line 20 - page 17, line 49; figure 2 *	6-9			
Y	EP 0 428 144 A (CANON) 22 May 1991 (1991-05-22) * page 14, line 35 - line 48 *	6-9			
Y	US 4 849 286 A (MILNE) 18 July 1989 (1989-07-18) * column 1, line 53 - line 58 *	6-9			
Y	WO 98 52765 A (NASHUA) 26 November 1998 (1998-11-26) * page 6, line 3 - line 9 *	6-9			
Y	EP 0 490 372 A (NISSHINBO) 17 June 1992 (1992-06-17) * page 5, line 47 - page 6, line 16 *	6-9	<table border="1"> <thead> <tr> <th>TECHNICAL FIELDS SEARCHED (Int.Cl.7)</th> </tr> </thead> <tbody> <tr> <td>B41M</td> </tr> </tbody> </table>	TECHNICAL FIELDS SEARCHED (Int.Cl.7)	B41M
TECHNICAL FIELDS SEARCHED (Int.Cl.7)					
B41M					
The present search report has been drawn up for all claims					
Place of search THE HAGUE		Date of completion of the search 5 July 2001	Examiner Magrizos, S		
<table border="0"> <tr> <td style="vertical-align: top;"> CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document </td> <td style="vertical-align: top;"> T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document </td> </tr> </table>				CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document	T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document	T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document				

EPC FORM 1503 03 82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 01 30 0347

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

05-07-2001

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 878322 A	18-11-1998	JP 10315610 A	02-12-1998
		JP 11147361 A	02-06-1999
		EP 1038691 A	27-09-2000
		JP 11180039 A	06-07-1999
EP 428144 A	22-05-1991	JP 2694042 B	24-12-1997
		JP 4115983 A	16-04-1992
		JP 2713649 B	16-02-1998
		JP 4097880 A	30-03-1992
		JP 2668838 B	27-10-1997
		JP 3155982 A	03-07-1991
		AT 125491 T	15-08-1995
		DE 69021170 D	31-08-1995
		DE 69021170 T	07-12-1995
		US 5314713 A	24-05-1994
US 4849286 A	18-07-1989	NONE	
WO 9852765 A	26-11-1998	NONE	
EP 490372 A	17-06-1992	JP 4214393 A	05-08-1992
		US 5256623 A	26-10-1993