

(19)



Europäisches Patentamt

European Patent Office

Office européen des brevets



(11)

EP 1 072 623 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
02.01.2003 Bulletin 2003/01

(51) Int Cl.7: **C08G 61/02, B41M 5/155**

(43) Date of publication A2:
31.01.2001 Bulletin 2001/05

(21) Application number: **00105409.7**

(22) Date of filing: **14.03.2000**

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

(30) Priority: **21.07.1999 KR 9929619**
26.01.2000 KR 0003589

(71) Applicant: **Daedong Company, Ltd.**
135-090 Seoul (KR)

(72) Inventor: **Lee, Sung Woo**
Kwanak-Gu, 151-080 Seoul (KR)

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

(54) **Polyvalent metal salts of salicylic acid resin and process for the preparation thereof**

(57) The present invention relates to a process for preparing polyvalent metal salts of salicylic acid resin, comprising reacting salicylic acid or its derivative and styrene or its derivative in the presence of zinc salt of organic carboxylic acid and/or polyvalent metal compound at 50 to 200 °C to prepare the reaction product,

and reacting the reaction product with polyvalent metal compound; an aqueous dispersion where the polyvalent metal salt of resin is dispersed in water; and to a color development sheet prepared from the polyvalent metal salts of salicylic acid resin.

EP 1 072 623 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 00 10 5409

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	US 5 382 560 A (N.HISADA ET AL.) 17 January 1995 (1995-01-17) * claims 1-23; examples 1-3 *	1-7	C08G61/02 B41M5/155
X,D	US 4 952 648 A (K.YAMAGUCHI ET AL.) 28 August 1990 (1990-08-28) * column 2, line 38 - column 3, line 28 * * column 5, line 16 - line 27 * * column 5, line 42 - line 50 * * column 6, line 4 - line 7 * * column 7, line 8 - line 59 * * claims 1-7 *	1-7	
X,D	US 4 929 710 A (T.SCHOLL ET AL.) 29 May 1990 (1990-05-29) * examples 2-11 * * column 3, line 47 - column 4, line 3 * * column 4, line 65 - column 5, line 12 *	1-7	
X,D	US 5 525 686 A (Y.TANABE ET AL.) 11 June 1996 (1996-06-11) * Comparative Example 1 * * claims 1-6 *	2-7	TECHNICAL FIELDS SEARCHED (Int.Cl.7) C08G B41M
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 7 November 2002	Examiner Bacon, A
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	

EPO FORM 1503 03 82 (P04C01)

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

EP 00 10 5409

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.

07-11-2002

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5382560 A	17-01-1995	JP 3119944 B2	25-12-2000
		JP 6015951 A	25-01-1994
		JP 6072019 A	15-03-1994
		DE 69206393 D1	11-01-1996
		DE 69206393 T2	05-09-1996
		EP 0547629 A1	23-06-1993
		ES 2080423 T3	01-02-1996
		JP 6087786 A	29-03-1994
		JP 6104786 B	21-12-1994
US 4952648 A	28-08-1990	AU 593173 B2	01-02-1990
		AU 2068988 A	16-02-1989
		BR 8804105 A	07-03-1989
		CA 1306578 A1	18-08-1992
		CN 1031235 A , B	22-02-1989
		CN 1053212 A	24-07-1991
		DE 3876535 D1	21-01-1993
		DE 3876535 T2	01-07-1993
		EP 0303443 A2	15-02-1989
		ES 2036266 T3	16-05-1993
		JP 1133780 A	25-05-1989
		JP 2633915 B2	23-07-1997
		KR 9108290 B1	12-10-1991
US 4929710 A	29-05-1990	DE 3635742 A1	05-05-1988
		AU 595387 B2	29-03-1990
		AU 7977587 A	28-04-1988
		EP 0264751 A2	27-04-1988
		JP 63112537 A	17-05-1988
US 5525686 A	11-06-1996	CN 1109075 A , B	27-09-1995
		CN 1229032 A	22-09-1999
		DE 69405081 D1	25-09-1997
		DE 69405081 T2	26-02-1998
		EP 0659580 A1	28-06-1995
		HK 1002264 A1	14-08-1998
		JP 3208263 B2	10-09-2001
		JP 7228042 A	29-08-1995
		KR 147840 B1	17-08-1998
		SG 52499 A1	28-09-1998

EPO FORM P0489

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82