



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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(21) International Application Number: PCT/US99/01225 (22) International Filing Date: 20 January 1999 (20.01.99) (30) Priority Data: 60/071,937 20 January 1998 (20.01.98) US 09/210,229 11 December 1998 (11.12.98) US (71) Applicant: KIMBERLY-CLARK WORLDWIDE, INC. [US/US]; 401 North Lake Street, Neenah, WI 54956 (US). (72) Inventors: NOHR, Ronald, Sinclair; 8955 Nesbit Lakes Drive, Alpharetta, GA 30202 (US). MACDONALD, John, Gavin; 1472 Knollwood Terrace, Decatur, GA 30033 (US). (74) Agents: WITHERS, James, D.; Jones & Askew, LLP, 2400 Monarch Tower, 3424 Peachtree Road, N.E., Atlanta, GA 30326 (US) et al.	(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> (88) Date of publication of the international search report: 23 November 2000 (23.11.00)	
(54) Title: IMPROVED METHOD OF MAKING SULFANATOPHENYL SUBSTITUTED PORPHINES (57) Abstract The present invention relates to improved methods of making Cu-meso-tetra-(4-sulfanatophenyl)-porphine (designated p-CuTPPS4). The improved processes allow the production of p-CuTPPS4 at lower cost and higher yields compared to conventional methods of making p-CuTPPS4. The present invention further relates to methods of making Cu-meso-tetra-(2-sulfanatophenyl)-porphine (designated o-CuTPPS4) and the use of o-CuTPPS4 as a colorant stabilizer for a variety of colorants, especially magenta colorants. The o-CuTPPS4, according to the present invention, provides a more stable and more "blue" colorant stabilizer compared to known colorant stabilizers, such as Cu-meso-tetra-(p-phenylcarboxylic acid)-porphine.		

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/01225

A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 C09B47/00 C09D11/00 C07D487/22 //(C07D487/22,257:00,
209:00,209:00,209:00,209:00)

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 C09B C09D C07D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CHEMICAL ABSTRACTS, vol. 120, no. 5, 31 January 1994 (1994-01-31) Columbus, Ohio, US; abstract no. 54371m, WANG, LIHONG ET AL: "Effect of substituents attached at benzaldehyde on the synthesis and properties of porphyrins" XP002139596	1
Y	abstract & FENXI HUAXUE, vol. 21, no. 6, 1993, pages 665-668, china	1-20
Y	WO 97 20000 A (KIMBERLY CLARK CO) 5 June 1997 (1997-06-05) abstract; example 38 --- -/--	1, 13, 14, 16, 20



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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INTERNATIONAL SEARCH REPORT

International Application No

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