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(71) Applicant (*for all designated States except US*): **MERCK  
PATENT GMBH** [DE/DE]; Frankfurter Strasse 250,  
64293 Darmstadt (DE).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **FU, Guoyi** [US/US];  
140 Hunter Lane, Savannah, GA 31405 (US). **LEWIS,  
Diane** [US/US]; 5 Walthour Cove, Savannah, GA 31410  
(US).

(74) Common Representative: **MERCK PATENT GMBH**;  
Frankfurter Strasse 250, 64293 Darmstadt (DE).

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(54) Title: PARTICLES WITH OPALESCENT EFFECT

(57) Abstract: The invention relates to particles with opalescent effect-especially 3-D structural color pigments-based on solid colloidal crystals of monodispersed spheres and the manufacturing processes suitable for large-scale production of such solid colloidal crystal products. The particles with opalescent effect contain a sphere based crystal structure (or super-lattice) built up by monodisperse spheres and one or more secondary types of much smaller colloidal particles occupying partially or completely the empty spaces between the monodisperse spheres.



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## INTERNATIONAL SEARCH REPORT

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## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C09K9/00 C09C1/30 C09C1/36 C09C3/00 C09C3/04

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 7 C09K C09C C03C C04B

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, PAJ, EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 0 141 388 A (KYOCERA) 15 May 1985 (1985-05-15)  page 3, line 20 -page 7, line 6; claims 1-7 -----	1-3, 5-12,14, 16
Y	US 3 497 367 A (A J GASKIN) 24 February 1970 (1970-02-24) column 5, line 20 -column 6, line 73; claims 1,5,8-19,22; examples 1-6 -----	1-12,14, 16
Y	WO 93 08237 A (MERCK) 29 April 1993 (1993-04-29) claim 16 -----	1-12,14, 16
Y	US 3 138 475 A (H SCHRÖDER) 23 June 1964 (1964-06-23) claims 1-7 -----	1-12,14, 16

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Vanhecke, H

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Information on patent family members

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