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(54) Title: COATING COMPOSITION, PREFERABLY PRINTING INK FOR SECURITY APPLICATIONS, METHOD FOR PRODUCING A COATING COMPOSITION AND USE OF GLASS CERAMICS

(57) Abstract: The present invention relates to coating compositions, preferably printing inks for security applications comprising at least one organic resin, at least one pigment and optionally at least one organic solvent. Said pigment comprises glass ceramic composite particles, containing at least one crystalline particle embedded in a glass matrix. Said glass ceramic particles have a particle size in the range of between 0.1 µm to 50 µm. Preferably active ions selected from the group of the rare-earth elements are incorporated into the crystalline phase of the composite to provide the glass ceramics with luminescent up- and down- converting characteristics. Glass ceramic luminescents have excellent physical and chemical stability. The glass matrix permits as well the stabilisation of the photophysically interesting halide host crystals which have low phonon energies. Such materials provide unusual excitation and emission properties.

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 00/12134

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC 7 C09D11/00 B41M3/14

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 C09D B41M

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)

EPO-Internal, WPI Data, PAJ, COMPENDEX, IBM-TDB, INSPEC

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GB 2 258 659 A (DE LA RUE THOMAS & CO LTD) 17 February 1993 (1993-02-17) The whole document ---	1-15
A	GB 2 207 440 A (ERA PATENTS LTD) 1 February 1989 (1989-02-01) page 3, line 4-12; claim 14 ---	1
A	WO 96 03466 A (COOKSON MATTHEY CERAMICS PLC ;CLIFFORD JOHN FRANCIS (GB); WATTS JE) 8 February 1996 (1996-02-08) claim 1; examples 1,3,4 -----	1

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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GB 2207440	A	01-02-1989	WO 8901226 A JP 2504443 T	09-02-1989 13-12-1990
WO 9603466	A	08-02-1996	AU 3084395 A	22-02-1996