



EUROPEAN PATENT APPLICATION

Application number : **92308997.3**

Int. Cl.⁵ : **G03C 8/40**

Date of filing : **01.10.92**

Priority : **11.10.91 US 775193**

Date of publication of application :
14.04.93 Bulletin 93/15

Designated Contracting States :
BE DE FR GB IT

Date of deferred publication of search report :
30.06.93 Bulletin 93/26

Applicant : **MINNESOTA MINING AND
MANUFACTURING COMPANY**
3M Center, P.O. Box 33427
St. Paul, Minnesota 55133-3427 (US)

Inventor : **Ishida, Takuzo, c/o Minnesota
Mining and Manufact.
Company, 2501 Hudson Road, P.O. Box 33427**
St. Paul, Minnesota 55133-3427 (US)

Representative : **Baillie, Iain Cameron et al**
c/o Ladas & Parry, Altheimer Eck 2
W-8000 Munich 2 (DE)

Photothermographic article for preparing multicolor images.

This invention relates to heat-developable photographic materials, i.e., photothermographic materials. It has been described in the patent literature to transfer a dye image formed in a photothermographic system by means of a transfer solvent.

It would be desirable to provide a photothermographic material capable of producing multiple color images, wherein image development, including dye transfer, can be carried out without the use of liquids. This invention provides a photothermographic article comprising (a) an image-receiving element comprising a polymeric image-receiving layer, (b) strippably adhered to said image-receiving element, an imageable photothermographic element comprising a plurality of emulsion layers, each of which emulsion layers comprises a binder, a silver source material, photosensitive silver halide in catalytic proximity to the silver source material, and a leuco dye, and (c) interposed between each pair of said emulsion layers, a dye-permeable interlayer. The dyes formed in each emulsion layer, i.e., magenta dye in the green sensitive layer, yellow dye in the blue sensitive layer, and cyan dye in the red sensitive layer, migrate through the interlayers and the emulsion layers to the image-receiving layer as the photothermographic article is heated for development. Dye formation and dye transfer can be carried out without the aid of any transfer solvent or wet chemicals. After development by heat, the imageable photothermographic element, which is strippably adhered to the image-receiving layer, can be peeled away from the image-receiving layer and discarded.



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number

EP 92 30 8997

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.5)
D,Y	US-A-4 594 307 (ISHIDA) * the whole document * ---	1-25	G03C8/40
D,Y	US-A-4 460 681 (FRENCHIK) * claims; example 6 * ---	1-25	
Y	EP-A-0 190 054 (KONISHIROKU) * page 8, line 17 - page 9, line 5; claim 1 * -----	1-25	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			G03C
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 04 MAY 1993	Examiner MAGRIZOS S.
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 01.82 (P0401)