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54 **Dye pattern absorption into plastics.**

57 Method, apparatus and product are provided for absorption of a dye pattern 25 on and below the surface of a plastic article 26 including webs wherein one or more dispersed dyes are applied to the surface of the article in a desired pattern. Sufficient subliming energy by application of heat or application of radio frequency waves to the dye deposited or printed surface of the plastic article, sufficient to heat the dyes to a sublimation temperature therefor causes the dyes and dye pattern to sublime on and below the surface of the plastic article.

Also provided is a method for laminating or fusing the reverse side of the plastic article to a substrate during the dye sublimation process.

Also provided is a method for thermoforming the plastic article during or after the dye sublimation process.

Further provided is a decorated plastic article having a substantially non-porous surface penetrated with dispersed dyes therein in a pattern, said pattern being durable against weathering. The article can be of thermoplastic or thermo-set plastic.

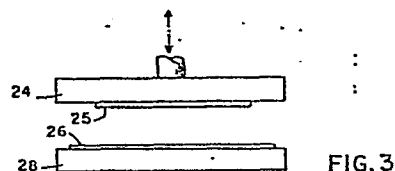


FIG. 3



European Patent
Office

EUROPEAN SEARCH REPORT

0097528

Application number

EP 83 30 3573

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. ³)
X	FR-A-2 318 193 (OZALID GROUP HOLDINGS) * Claims; page 5, lines 8-13 *	1	B 41 M 5/02 B 41 M 1/30
X	CH-A- 532 477 (CIBA-GEIGY) * Claims *	1	
X	GB-A- 813 930 (UNITED KINGDOM ATOMIC ENERGY AUTHORITY) * Claims *	1	
			TECHNICAL FIELDS SEARCHED (Int. Cl. ³)
			B 41 M B 44 C
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 27-03-1985	Examiner MALHERBE Y.J.M.
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	