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(71) Applicant: MARKEM CORPORATION  
150 Congress Street  
Keene New Hampshire 03431(US)

(72) Inventor: Peart, Whitcomb Sprague  
45 Hilltop Drive  
Keene New Hampshire 03431(US)

(72) Inventor: Baldvins, Jon Otto  
18, Navaho Street  
Nashua New Hampshire 03063(US)

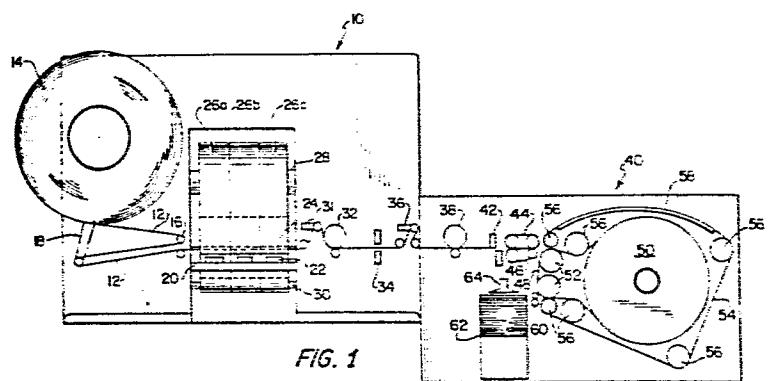
(74) Representative: Faggioni, Marco, Dr. Ing. et al,  
FUMERO - Studio Consulenza Brevetti  
Widenmayerstrasse 4/I  
D-8000 München 22(DE)

(54) **Process and apparatus for forming permanent images using carrier supported inks containing sublimable dyes.**

(57) A process for forming a permanent, abrasion and chemical resistant image on a fabric or plastic substrate is disclosed which comprises (a) providing a printing matrix having raised portions in the shape of the image to be printed on the substrate, (b) providing a carrier supported ink comprising (1) a uniform coating of an ink composition comprising a sublimable dye, (2) a carrier sheet for supporting said coating on one surface thereof, (c) disposing the carrier supported ink adjacent to the printing matrix such that the uncoated surface of the carrier sheet faces the printing matrix, (d) providing a fabric or plastic film substrate having a surface into which said sublimable dye can diffuse, (e) disposing the substrate such that the surface thereof faces the coated surface of the carrier sheet, (f) applying pressure between said printing matrix and said substrate to cause the printing matrix to contact the uncoated surface of the carrier sheet and the coated surface of the carrier sheet to contact the substrate surface, said pressure being applied under conditions sufficient to cause the ink composition to completely transfer from the carrier sheet to the substrate surface in the shape of the image defined by the raised portions of the printing matrix, but insufficient to cause the dye in the ink composition to sublime or vaporize, and (g) heating the ink composition which has been transferred to the substrate surface, said heating occurring under conditions sufficient to cause the dye therein to sublime or vaporize and then diffuse into the substrate surface.

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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	US-A-4 063 878 (E.W. WEEKS) * Claims *	1	B 41 M 5/02
D, A	US-A-3 363 557 (C.B. BLAKE) * Claims; column 3, line 62 - column 4, line 44 *	1	
A	GB-A-1 596 808 (UNITED STATES GYPSUM CO.) * Claims *	1	
-----			TECHNICAL FIELDS SEARCHED (Int. Cl. 3)
-----			B 41 M D 06 P
The present search report has been drawn up for all claims			
Place of search	Date of completion of the search	Examiner	
THE HAGUE	05-08-1985	MALHERBE Y.J.M.	
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone	T : theory or principle underlying the invention		
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