

Title (en)

Method and apparatus for thermal patterning of textile substrates.

Title (de)

Verfahren und Vorrichtung zum thermischen Herstellen von Mustern auf textilen Warenbahnen.

Title (fr)

Procédé et installation pour la production thermique de motifs sur des substrats textiles.

Publication

EP 0121290 A1 19841010 (EN)

Application

EP 84300109 A 19840109

Priority

US 45649183 A 19830107

Abstract (en)

The invention provides method and apparatus for imparting visual surface effects to a relatively moving, thermally modifiable substrate (12) by application of discrete streams of heated pressurised fluid, e.g. gas, to surface areas of the substrate. The apparatus includes an elongate manifold assembly (30) comprising two gas receiving compartments, (81, 160), each extending across the path of said substrate. Heated gas from the first compartment passes into the second compartment, which is comprised of a series of chambers (162, 166) with an elongate exit slot (115) positioned closely adjacent the substrate surface. The gas is uniformly mixed within the second compartment, and may then be directed from the exit slot onto the substrate as a thin, continuous stream or curtain extending the length of the manifold. By use of blocking streams of relatively cool gas which deflect the dilute selected lateral segments of the heated gas stream in accordance with pattern information after the curtain of heated gas emerges from the exit slot, smaller streams of groups of streams may be formed which squarely impinge on the substrate surface and impart a selected pattern to the substrate, by thermal modification of the surface.

IPC 1-7

D06C 23/00

IPC 8 full level

B29C 35/00 (2006.01); **B29C 59/00** (2006.01); **B29C 61/00** (2006.01); **B29C 69/00** (2006.01); **D06C 7/00** (2006.01); **D06C 23/00** (2006.01)

CPC (source: EP)

D06C 23/00 (2013.01)

Citation (search report)

- [X] GB 2065035 A 19810624 - MILLIKEN RES CORP
- [X] EP 0059029 A1 19820901 - MILLIKEN RES CORP [US]
- [X] EP 0057999 A2 19820818 - MILLIKEN RES CORP [US]
- [AD] US 3774272 A 19731127 - RUBASCHEK N, et al
- [AD] US 3613186 A 19711019 - MAZZONE CHARLES P, et al
- [AD] US 3256581 A 19660621
- [AD] BE 766310 A 19710916 - SCHROERS CO TEXTILAUSTRUST

Cited by

EP0455327A3; US11638927B2; US6962609B2; US6751831B2; WO2019052663A1; WO2009011742A1

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)

EP 0121290 A1 19841010; EP 0121290 B1 19870729; AT E28673 T1 19870815; AU 2294783 A 19840712; AU 575305 B2 19880728; CA 1249919 A 19890214; DE 3465119 D1 19870903; DK 6784 A 19840708; DK 6784 D0 19840106; IE 55058 B1 19900509; IE 840015 L 19840707; JP H0453978 B2 19920828; JP S59187666 A 19841024; NZ 206770 A 19870831

DOCDB simple family (application)

EP 84300109 A 19840109; AT 84300109 T 19840109; AU 2294783 A 19831229; CA 444808 A 19840106; DE 3465119 T 19840109; DK 6784 A 19840106; IE 1584 A 19840105; JP 36984 A 19840106; NZ 20677084 A 19840106