

Title (en)

METHOD AND APPARATUS FOR THERMAL PATTERNING OF TEXTILE SUBSTRATES

Publication

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Application

EP 84300109 A 19840109

Priority

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Abstract (en)

[origin: EP0121290A1] 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.

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