

Title (en)
SYSTEMS AND METHODS FOR AIR EMBOSsing FABRICS UTILIZING IMPROVED AIR LANCES

Title (de)
VORRICHTUNGEN UND VERFAHREN ZUM GAUFRIEREN VON GEWEBEN MITTELS VERBAESSERTER LUFTDÜSEN

Title (fr)
SYSTEMES ET PROCEDE DE GAUFRAGE DE TISSUS AU MOYEN DE LANCES A AIR AMELIOREES

Publication
EP 1196648 B1 20090408 (EN)

Application
EP 00936157 A 20000522

Priority
• US 0013993 W 20000522
• US 13537999 P 19990521

Abstract (en)
[origin: WO0071802A1] Air embossing systems, air lances and methods of air embossing fabrics produce fine detail, crisp transition between unembossed and embossed regions, and a high degree of uniformity across the width of an embossed fabric. The air embossing systems utilize air lances (210) for directing a stream of air onto the embossable surface (113) of a fabric (111) that have at least one nozzle (216) having an orifice dimension substantially less than that of conventional nozzles. The air embossing systems can also include air lance nozzles positioned in close proximity to the embossable surface, nozzles with an orifice dimension that is substantially less than the nozzle length, nozzles in the shape of an elongated slit oriented across essentially the entire width of the fabric, air lances including a nozzle-forming component (214) separable from the main body (212) of the air lance to enable the nozzle to be positioned within close proximity to the fabric and to redirect air to be emitted such that a substantial fraction of the air stream is directed perpendicular to the fabric surface, and air lances including baffles or air redirecting elements (340) which deflect air to pass through the nozzle and onto the fabric surface at an increased angle, relative to the air lance longitudinal axis.

IPC 8 full level
D06C 23/00 (2006.01); **D06C 23/04** (2006.01)

CPC (source: EP)
D06C 23/04 (2013.01)

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
WO 0071802 A1 20001130; AT E428013 T1 20090415; AU 5151800 A 20001212; CA 2372958 A1 20001130; CA 2372958 C 20090721; CN 1267595 C 20060802; CN 1357066 A 20020703; DE 60041970 D1 20090520; EP 1196648 A1 20020417; EP 1196648 A4 20050126; EP 1196648 B1 20090408; MX PA01011929 A 20050729; TR 200200156 T2 20020422

DOCDB simple family (application)
US 0013993 W 20000522; AT 00936157 T 20000522; AU 5151800 A 20000522; CA 2372958 A 20000522; CN 00809124 A 20000522; DE 60041970 T 20000522; EP 00936157 A 20000522; MX PA01011929 A 20000522; TR 200200156 T 20000522