

Title (en)
MELTSPUN THERMOCHROMIC FABRICS

Title (de)
AUS DER SCHMELZE ERSPONNENE THERMOCHROME FLÄCHENGEBILDE

Title (fr)
TISSUS THERMOCHROMIQUES FILES PAR FUSION

Publication
EP 1446519 A4 20050914 (EN)

Application
EP 02776267 A 20021023

Priority
• US 0233857 W 20021023
• US 34806401 P 20011023

Abstract (en)
[origin: WO03035948A1] The present invention relates to a method of achieving a uniform distribution of reversible thermochromic pigment within a spunmelt nonwoven fabric, by incorporating the reversible thermochromic pigment into the polymer melt at the time of fiber or filament formation. It has been found that incorporating the pigment into the polymer melt enhances thermochromic uniformity as well as fabric durability. In addition, the reversible thermochromic fabric is processed in a single formation step, resulting in the present invention being more efficient than those methods practiced in the prior art.

IPC 1-7
D01F 6/00; **D01F 1/04**; **D01F 6/06**; **D04H 1/42**; **D04H 3/02**; **D04H 3/16**

IPC 8 full level
D01F 1/04 (2006.01); **D01F 6/06** (2006.01); **D04H 1/42** (2006.01); **D04H 3/02** (2006.01); **D04H 3/16** (2006.01)

CPC (source: EP US)
D01F 1/04 (2013.01 - EP US); **D01F 6/06** (2013.01 - EP US); **D04H 1/4291** (2013.01 - EP US); **D04H 1/4334** (2013.01 - EP US); **D04H 1/435** (2013.01 - EP US); **D04H 1/43838** (2020.05 - EP US); **D04H 3/02** (2013.01 - EP US); **D04H 3/16** (2013.01 - EP US); **Y10T 442/20** (2015.04 - EP US); **Y10T 442/60** (2015.04 - EP US)

Citation (search report)
• [X] EP 0908501 A1 19990414 - PILOT INK CO LTD [JP]
• [Y] PATENT ABSTRACTS OF JAPAN vol. 2000, no. 19 5 June 2001 (2001-06-05)
• [Y] PATENT ABSTRACTS OF JAPAN vol. 010, no. 017 (C - 324) 23 January 1986 (1986-01-23)
• See references of WO 03035948A1

Designated contracting state (EPC)
DE FR IT

DOCDB simple family (publication)
WO 03035948 A1 20030501; EP 1446519 A1 20040818; EP 1446519 A4 20050914; US 2003087566 A1 20030508

DOCDB simple family (application)
US 0233857 W 20021023; EP 02776267 A 20021023; US 28104702 A 20021023