

Title (en)  
MOISTURE TRANSPIRATION COMPOSITE AND PRODUCTS THEREFROM

Title (de)  
FEUCHTIGKEITSTRANSPIRATIONSVERBUNDSTOFF UND PRODUKTE DARAUS

Title (fr)  
COMPOSITE D'HUMIDITE ET DE TRANSPIRATION ET PRODUITS ISSUS DUDIT COMPOSITE

Publication  
**EP 1562740 A4 20090715 (EN)**

Application  
**EP 03752997 A 20030505**

Priority  
• US 0313997 W 20030505  
• US 14623702 A 20020515

Abstract (en)  
[origin: WO03097345A1] A formed hydrophilic urethane polymer foam composite HF with particles 3 up to 0.1% by weight of superabsorbent polymer and selectively other additives to enable collected moisture to move from an area of high humidity to an area of lower humidity, having a urethane polymer foam layer formed into a sized and shaped matrix, having interconnected strands 4 and filaments 1 of the urethane polymer and sized and shaped interstitial gaps and spaces 2, said particles 3 of superabsorbent polymer dispersed in, on and through said interconnected strands and filaments in spaced relationship and the sized and shaped interstitial air gaps 2 to provide improved capillarity in the formed foam matrix enhance transpiration and also multi-layered embodiments including at least one of said formed foam composites 5 to transpire collected moisture and enable evaporation of the transpired moisture.

IPC 8 full level  
**A43B 23/02** (2006.01); **B32B 5/22** (2006.01); **A43B 7/12** (2006.01); **B32B 5/18** (2006.01); **B32B 5/24** (2006.01); **B32B 27/40** (2006.01); **C08G 18/10** (2006.01); **C08J 9/00** (2006.01); **C08L 23/30** (2006.01); **C08L 39/06** (2006.01); **C08L 75/04** (2006.01); **D06M 11/76** (2006.01); **D06M 11/79** (2006.01); **D06M 15/21** (2006.01); **D06M 15/227** (2006.01); **D06M 15/285** (2006.01); **D06M 15/564** (2006.01); **C08G 101/00** (2006.01); **D06M 101/06** (2006.01); **D06M 101/32** (2006.01)

CPC (source: EP)  
**A43B 13/04** (2013.01); **B32B 5/18** (2013.01); **B32B 27/40** (2013.01); **C08J 9/0061** (2013.01); **C08J 2375/04** (2013.01); **C08J 2400/14** (2013.01)

Citation (search report)  
• [XY] US 6025287 A 20000215 - HERMANN PAUL F [US]  
• [X] US 5744509 A 19980428 - WILSON ROBERT N [US], et al  
• [X] EP 0073948 A2 19830316 - BLUECHER HASSO VON [DE], et al  
• [Y] WO 9954371 A1 19991028 - ESSEX SPECIALTY PROD [US]  
• See references of WO 03097345A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 03097345 A1 20031127**; AU 2003243198 A1 20031202; CN 100371163 C 20080227; CN 1665677 A 20050907; EP 1562740 A1 20050817; EP 1562740 A4 20090715; JP 2005525455 A 20050825; JP 4163682 B2 20081008

DOCDB simple family (application)  
**US 0313997 W 20030505**; AU 2003243198 A 20030505; CN 03815580 A 20030505; EP 03752997 A 20030505; JP 2004504718 A 20030505