

Title (en)  
PROCESS FOR CONTINUOUSLY MANUFACTURING FIBRE-REINFORCED FLEECES

Publication  
**EP 0089018 B1 19860604 (DE)**

Application  
**EP 83102367 A 19830310**

Priority  
CH 154182 A 19820312

Abstract (en)  
[origin: EP0089018A1] 1. Process for the continuous production of fibre-reinforced webs, in which a core layer of particles is placed between an under-layer and a covering layer which form outer layers, at least one of the outer layers having threads capable of being actively needled, whereby the three layers are needled together, characterised in that the core layer is formed of elastic non-foamed granular particles incapable of being penetrated by the needling needles, and that the retaining threads are applied between the granular particles.

IPC 1-7  
**D04H 13/00**

IPC 8 full level  
**B29C 67/00** (2006.01); **B29B 15/00** (2006.01); **B29C 55/00** (2006.01); **B29C 59/00** (2006.01); **B29C 65/00** (2006.01); **B29C 65/48** (2006.01); **B29C 65/70** (2006.01); **B29C 67/20** (2006.01); **B29D 99/00** (2010.01); **B32B 5/24** (2006.01); **B32B 7/08** (2006.01); **B32B 25/10** (2006.01); **B32B 37/00** (2006.01); **C08J 5/04** (2006.01); **D04H 13/00** (2006.01)

CPC (source: EP)  
**D04H 1/485** (2013.01); **D04H 1/488** (2013.01); **D04H 1/498** (2013.01); **D04H 13/00** (2013.01)

Citation (examination)  
• DE 2855059 A1 19790705 - BREVETEAM SA  
• EP 0071209 A2 19830209 - TESCH G H

Cited by  
US5415917A; DE4122993A1; DE4244250A1; WO2012022334A3; WO9324694A1

Designated contracting state (EPC)  
AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)  
**EP 0089018 A1 19830921; EP 0089018 B1 19860604**; AT E20254 T1 19860615; AU 1219283 A 19830915; AU 563936 B2 19870730; CA 1241533 A 19880906; DD 208638 A5 19840404; DE 3363879 D1 19860710; JP S58167152 A 19831003; NZ 203527 A 19910226

DOCDB simple family (application)  
**EP 83102367 A 19830310**; AT 83102367 T 19830310; AU 1219283 A 19830309; CA 423534 A 19830314; DD 24874983 A 19830311; DE 3363879 T 19830310; JP 3935883 A 19830311; NZ 20352783 A 19830310