

Title (en)  
Water-decomposable non-woven fabric.

Title (de)  
Wasserlösliche Fliesstoff.

Title (fr)  
Non-tissé décomposable dans l'eau.

Publication  
**EP 0608460 A1 19940803 (EN)**

Application  
**EP 93101388 A 19930129**

Priority  
EP 93101388 A 19930129

Abstract (en)  
A water-decomposable non-woven fabric comprises a water-dispersible fiber layer, each fiber of which is bound with one another using a water-soluble binder comprising an unsaturated carboxylic acid/unsaturated carboxylic acid ester copolymer in which 1 to 60 mole % of the repeating units derived from the unsaturated carboxylic acid is in the form of a salt and which is soluble in tap water but is insoluble in an aqueous solution containing not less than 0.5 % by weight of a neutral inorganic salt comprising a monovalent ion; the water-dispersible fiber layer being composed of a mixture of 40 to 90 % by weight of fibers having a crimp number of 19/inch or less, 10 to 60 % by weight of fibers having a crimp number of 20/inch to 25/inch, and not more than 10 % by weight of fibers having a crimp number of 26/inch or more; and a content of the binder in the non-woven fabric being 1 to 30 % by weight relative to the total weight of the non-woven fabric. The non-woven fabric has a good feeling (high softness and good touch) and sufficient mechanical strength, and can be easily broken and dispersed by throwing into a large amount of water.

IPC 1-7  
**D04H 1/64; D04H 1/42**

IPC 8 full level  
**D04H 1/42** (2012.01); **D04H 1/425** (2012.01); **D04H 1/4258** (2012.01); **D04H 1/49** (2012.01); **D04H 1/50** (2012.01); **D04H 1/64** (2012.01)

CPC (source: EP US)  
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Citation (search report)  
• [Y] WO 9215742 A2 19920917 - FULLER H B LICENSING FINANC [US]  
• [A] EP 0326298 A2 19890802 - UNION OIL CO [US]  
• [Y] PATENT ABSTRACTS OF JAPAN vol. 014, no. 143 (C-0703)19 March 1990 & JP-A-2 014 058 ( HIROYUKI KANAI ) 18 January 1990  
• [Y] PATENT ABSTRACTS OF JAPAN vol. 014, no. 100 (C-0693)23 February 1990 & JP-A-1 306 661 ( LION CORP ) 11 December 1989  
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• [A] DATABASE WPI Section Ch, Week 4991, Derwent Publications Ltd., London, GB; Class A14, AN 91-357893 & JP-A-3 239 709 (LION CORP) 25 October 1991  
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