

Title (en)
SHEET MATERIAL FOR FORMING THE LOOP PORTION FOR HOOK AND LOOP FASTENERS

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EP 0341993 B1 19930818 (EN)

Application
EP 89304709 A 19890510

Priority
US 19383288 A 19880513

Abstract (en)
[origin: EP0341993A1] A sheet material (10) adapted to be cut into pieces to form the loop portions for fasteners of the type comprising releasably engageable hook and loop portions. The sheet material (10) comprises a multiplicity of fibers (16) having portions bonded to a backing (12) along its front surface at spaced bonding locations (18) to form arcuate portions (20) of the fibers projecting from the front surface (13) of the backing (12). The arcuate portions (20) have a height from the backing of less than about 0.64 centimeters, and the fibers (16) have a basis weight in the range of 5 to 100 grams per square meter measured along the front surface (13) to provide sufficient open area between the fibers (16) to afford ready engagement of those fibers (16) by the hook portions of a fastener.

IPC 1-7
A44B 18/00; D04H 11/04

IPC 8 full level
A44B 18/00 (2006.01); **A61F 13/49** (2006.01); **A61F 13/53** (2006.01); **A61F 13/56** (2006.01); **B32B 5/02** (2006.01); **D04H 11/04** (2006.01)

CPC (source: EP KR)
A44B 18/00 (2013.01 - KR); **A44B 18/0011** (2013.01 - EP); **D04H 11/04** (2013.01 - EP)

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WO2012121875A1; USRE44842E; US5762645A; EP0712590A3; EP0800808A4; US5616394A; CN103653555A; KR20150081307A; US5607345A; EP0461777A1; US6039911A; US5547531A; US5647864A; US5763041A; US5624427A; EP1048236A3; US5888607A; US5380313A; US5032122A; US5476702A; US5595567A; US5554239A; US6162522A; US5830298A; US5699593A; EP2447048A3; US5407439A; US5470417A; US5569233A; US5611791A; DE19722748A1; DE19722748C2; US5517737A; AU670536B2; TR27991A; US6146738A; AU736729B2; CN102454050A; EP0913104A3; KR100478761B1; KR20150081306A; US6332250B1; WO2019005769A1; WO9806290A1; WO9201401A1; WO9220251A1; WO2008003438A1; WO02077349A1; WO9724482A1; US10376420B2; WO2024079720A1; US6637079B1; US6849142B1; US7303805B2; US7785095B2; US8784972B2; US8734931B2; US9872542B2; WO2019005729A1; WO2016081438A1; US10973710B2; US11007093B2; US10704172B2; WO2020142433A1; WO2022112946A1; EP2113186A1; WO2017030856A1; US10709619B2; WO0073063A1; WO9519242A1; WO2019152621A1; US7160600B2; US8500940B2; US8790475B2; WO2017112601A1; US10967624B2; US11020949B2; US8777919B2; US9138031B2; WO2016065134A1; US9713558B2; US10456303B2; US10687588B2; US10779618B2; US7282251B2; US6368097B1; US7790264B2; US7960008B2; WO2012112768A1; US8592496B2; USRE45946E; US7052565B2; US6599599B1; US6586066B1; US6673177B2; US6579162B2; EP2545798A1; WO2013009964A1; US9913766B2; US11365495B2; US7468114B2; US7851047B2; US8393374B2; WO2013040156A1; US10070999B2; US10165833B2; US10470947B2; US10478354B2; US11491058B2; EP3863580B1

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