

Title (en)  
METHOD FOR MAKING A STRONG AND SOFT NONWOVEN WEB

Title (de)  
VERFAHREN ZUR HERSTELLUNG EINES WEICHEN,STARKEN VLIESTOFFES

Title (fr)  
PROCEDE DE FABRICATION D'UNE BANDE CONTINUE SOUPLE ET SOLIDE

Publication  
**EP 1047822 A1 20001102 (EN)**

Application  
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Abstract (en)  
[origin: WO9937839A1] The present invention provides a method for making a strong and soft nonwoven web. A neckable nonwoven web is fed in a first direction. A tensioning force is applied to the neckable nonwoven web to neck the nonwoven web. Optionally, the necked nonwoven web may be subjected to mechanical stabilization after necking to provide a stabilized extensible necked nonwoven web. The nonwoven web is then subjected to incremental stretching in a direction perpendicular to the first direction to provide a strong and soft nonwoven web.

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IPC 8 full level  
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Citation (search report)  
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Cited by  
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