

Title (en)  
PAPER AND METHOD OF MAKING IT

Publication  
**EP 0109282 B1 19880921 (EN)**

Application  
**EP 83306905 A 19831111**

Priority  
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• GB 8319384 A 19830718

Abstract (en)  
[origin: EP0109282A2] A paper is a unitary structure but has more than one layer. The layers are of respective different fibres. The paper is made by applying a second slurry to a first slurry at a time when both layers have a consistency which is primarily liquid but the first is less liquid than the second. The second slurry is applied to the first so as to provide a disturbance at an interface between the surfaces of the layers. This application of the second slurry is carried out under predetermined conditions of angle, distance, rate and consistency having regard to the conditions of the first slurry when the second slurry is applied so as to control the extent of disturbance in the interface between the layers and hence the degree of intermingling and interlinking in the interface region. This ensures the bonding together of the layers irrespective of the nature of the material of the slurries. The process allows the strength of the paper at the interface to be at least as great as that in either of the two layers. Thus this is particularly suitable for forming a battery separator having a density gradient across it.

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**D21F 11/04**

IPC 8 full level  
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CPC (source: EP)  
**D21F 11/04** (2013.01)

Cited by  
EP0233058A3; EP1674684A1; EP1746209A3; US6548433B1; US6582560B2; US9694306B2; WO9836128A1; US8951420B2; US10022657B2; US6749721B2; US8357220B2; US8545587B2; US9786885B2; US10155187B2; US10644289B2; US9885154B2; US10316468B2; US9303339B2; US9950284B2; US10343095B2; US10682595B2; US11167232B2; US11684885B2; US12011686B2; US6423183B1; US9121118B2; US9293748B1; US9577236B2; US9627668B1; US9728756B2; US10431796B2

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