

Title (en)
BLENDING OF SMALL PARTICLE STARCH AND STARCH-BASED MATERIALS WITH SYNTHETIC POLYMERS FOR INCREASED STRENGTH AND OTHER PROPERTIES

Title (de)
MISCHUNG VON KLEINTEILIGER STÄRKE UND STÄRKEBASIERTEN MATERIALIEN MIT SYNTHETISCHEN POLYMEREN FÜR ERHÖHTE FESTIGKEIT UND ANDERE EIGENSCHAFTEN

Title (fr)
MÉLANGE D'AMIDON ET DE MATIÈRES À BASE D'AMIDON À PETITES PARTICULES AVEC DES POLYMÈRES SYNTHÉTIQUES POUR UN ACCROISSEMENT DE RÉSISTANCE ET D'AUTRES PROPRIÉTÉS

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Application
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Abstract (en)
[origin: WO2021007513A1] Described herein are blends of starch or starch-based materials with polymeric materials, where the starch or starch-based material is intimately blended with the polymeric material, so as to exhibit very small particles sizes (e.g., less than 2 µm, or less than 1 µm) for the starch or starch-based material in the matrix of the polymeric material. Such intimate dispersion of very small particles provides for far more of the particles dispersed more evenly throughout the matrix of the polymeric material, which may enhance various performance characteristics of the blended composite material. Methods of producing articles from such blends exhibiting such small particles and excellent dispersion are also disclosed.

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Citation (search report)

- [X] EP 2380932 A1 20111026 - MITSUBISHI CHEM CORP [JP]
- [X] WO 0017270 A1 20000330 - NOVAMONT SPA [IT], et al
- [X] "Chemistry, Process Design, and Safety for the Nitration Industry /ACS /Symposium Series", vol. 1114, 1 January 2012, AMERICAN CHEMICAL SOCIETY/OXFORD UNIVERSITY PRESS, US, ISSN: 0097-6156, article C. BASTIOLI ET AL: "Starch in Polymers Technology", pages: 87 - 112, XP055490447, DOI: 10.1021/bk-2012-1114.ch007
- See references of WO 2021007513A1

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