

Title (en)
METHOD FOR PRODUCING STARCH ESTERS

Title (de)
VERFAHREN ZUR HERSTELLUNG VON STÄRKEESTERN

Title (fr)
PROCEDE DE PRODUCTION D'ESTERS D'AMIDON

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EP 1070086 A1 20010124 (DE)

Application
EP 99907304 A 19990202

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Abstract (en)
[origin: DE19805367A1] The invention relates to a method for producing compostable starch esters which can be subsequently converted into thermoplastically deformable products, said method being carried out in a continuous or discontinuous way. The activation of starch with carboxylic acid anhydrides is carried out under intensive influence of mechanical energy, pressure or cavitation whereby the organophoby of starch particles is overcome. Consequently, the carboxylic acid anhydride penetrates quickly and quasi-thoroughly in the starch particles, without any change in the partially crystalline structure of said particles, at the time when the acid carboxylic anhydrides simultaneously react with residual moisture of the natural or modified starches, without any noticeable destructuring. According to the invention, activation is carried out at a temperature ranging from 10 to 140 DEG C and at a pressure comprised between 0.001 and 100 bars, preferably at a temperature ranging from 15 to 100 DEG C and at a pressure comprised between 0,01 and 1000 bars.

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