

Title (en)
HIGH EFFICIENCY ORGANOSOLV SACCHARIFICATION PROCESS

Publication
EP 0074983 B1 19861105 (EN)

Application
EP 82900956 A 19820326

Priority
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Abstract (en)
[origin: WO8203409A1] Comminuted cellulosic materials which may or may not contain lignin are partially or totally hydrolyzed or saccharified by an improved organosolv process using an aqueous acetone solvent mixture containing a small amount of an acidic compound and containing at least about 70 per cent by volume of acetone and up to virtually anhydrous acetone. The process is performed at elevated reaction temperatures, preferably at 145<math>\text{<0>C}</math> to 230<math>\text{<0>C}</math>, for a limited period of time and then with cooling such that the resultant dissolved sugars from the hydrolysis are not degraded into non-sugars. In particular the reaction is conducted such that the cellulosic material is dissolved and such that at least ninety percent or more of available sugars in the cellulosic material are recovered. Unexpectedly it has been found that acetone at high concentration forms stable complexes with the sugars which prevents their degradation and also facilitates separation of the sugars. Lignin and sugars derived are commercially useful chemical compounds.

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C13K 1/02; **D21C 3/20**

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