

Title (en)

METHOD AND PLANT FOR THE CONVERSION OF MAINLY CELLULOSIC MATERIAL

Title (de)

VERFAHREN UND ANLAGE ZUR UMWANDLUNG VON HAUPTSÄCHLICH CELLULOSEMATERIAL

Title (fr)

PROCÉDÉ ET INSTALLATION POUR LA CONVERSION DE MATÉRIAU PRINCIPALEMENT CELLULOSIQUE

Publication

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Application

EP 15732434 A 20150610

Priority

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Abstract (en)

[origin: WO2015189775A1] A method for conversion of mainly cellulosic material, comprising the steps of predisposing a quantity (1) of mainly cellulosic material, predisposing an anaerobic bacterial population (2), predisposing a mixed aerobic bacterial population (3), decomposition of the quantity (1) of mainly cellulosic material into a liquid fraction (1a), a gaseous fraction (1b) and a solid fraction (1c) with a predetermined thermochemical treatment, fermentation of the liquid fraction (1a) and gaseous fraction (1b) inside a fermenter (12) by inoculating the anaerobic bacterial population (2) in the liquid fraction (1a) and gaseous fraction (1b), so as to produce a solution (VFA) containing volatile fatty acids, aerobic digestion of a first portion (VFAs) of the solution (VFA) by action of the mixed aerobic bacterial population (3) for the production of an enriched bacterial population (4) producing polyhydroxyalkanoates, aerobic digestion of a second portion (VFAs) of the solution (VFA) performed through an action of the enriched bacterial population (4) for obtaining products (5) rich in polyhydroxyalkanoates and separation of the products (5) into a usable fraction (5a') mainly composed of polyhydroxyalkanoates (PHA), and a residual fraction (5b, 5a''), at least partly composed of a cellular residue (5a'').

IPC 8 full level

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Citation (search report)

See references of WO 2015189775A1

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