

Title (en)

Process and apparatus for chemical conversion of cellulose waste to glucose.

Title (de)

Verfahren und Vorrichtung für die chemische Umwandlung von cellulosehaltigen Abfallstoffen zu Glukose.

Title (fr)

Procédé et dispositif pour la conversion chimique de déchets cellulosiques en glucose.

Publication

EP 0037912 A2 19811021 (EN)

Application

EP 81101951 A 19810316

Priority

- US 13133980 A 19800318
- US 13134080 A 19800318

Abstract (en)

A process and apparatus for the conversion of waste cellulose to glucose wherein waste cellulose is acid hydrolyzed includes continuously feeding waste cellulose into a inlet port with a twin screw extruder, continuously reacting the cellulose with water in the presence of an acid catalyst at elevated temperature and pressure in a reaction zone disposed in the extruder between the inlet port and an outlet port and at least quasi-continuously discharging the reacted cellulose from the extruder while maintaining the elevated temperature and pressure in the reaction zone by forming a dynamic seal zone at the upstream end of the reaction zone and valving the discharge downstream of the outlet port.

IPC 1-7

C13K 1/02

IPC 8 full level

C13K 1/02 (2006.01)

CPC (source: EP)

C13K 1/02 (2013.01)

Cited by

EA023989B1; EP3722303A4; EP2172568A1; EP0092478A1; US11692000B2; US9963555B2; US9809867B2; WO9424316A1; WO2012097781A1; US8123864B2; US9284383B2; US10155966B2; US10844413B2; US10053745B2; US10858712B2; US10793646B2; US11821047B2

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI SE

DOCDB simple family (publication)

EP 0037912 A2 19811021; EP 0037912 A3 19820421; EP 0037912 B1 19850821; AU 548717 B2 19860102; AU 6812681 A 19810924; BR 8101561 A 19810922; CA 1190923 A 19850723; DE 3171880 D1 19850926; IN 153348 B 19840707

DOCDB simple family (application)

EP 81101951 A 19810316; AU 6812681 A 19810306; BR 8101561 A 19810317; CA 371826 A 19810226; DE 3171880 T 19810316; IN 288CA1981 A 19810317