

Title (en)

Method of upgrading biomass pyrolysis liquids for use as fuels and as a source of chemicals by reaction with alcohols

Title (de)

Verfahren zur Aufarbeitung von Pyrolyseölen zur Anwendung als Brennstoffe und als Ausgangsprodukt für chemische Produkte durch Reaktion mit Alkoholen

Title (fr)

Procédé d'amélioration d'huiles de pyrolyse comme combustibles et comme produit de départ pour produits chimiques par réaction avec des alcools

Publication

EP 0718392 A1 19960626 (EN)

Application

EP 95309400 A 19951222

Priority

GB 9426066 A 19941222

Abstract (en)

A method for upgrading liquid products recently obtained from the pyrolysis of biomass to obtain valuable chemicals or to upgrade the liquid products for use as renewable liquid fuels. The method solves many of the problems associated with liquid products of pyrolysis including chemical instability and aging, corrosivity, high viscosity, high water content and relatively low calorific value. The liquid products of pyrolysis are chemically combined with one or more alcohols. The preferred alcohol is ethanol. Blending of the upgraded pyrolysis products with excess alcohol extends the use of both alcohol fuels as well as biomass pyrolysis liquid fuels.

IPC 1-7

C10G 1/00

IPC 8 full level

C10G 1/00 (2006.01)

CPC (source: EP)

C10G 1/002 (2013.01); **C10C 5/00** (2013.01)

Citation (search report)

[DA] CHEMICAL ABSTRACTS, vol. 96, no. 18, 3 May 1982, Columbus, Ohio, US; abstract no. 96146001, POLK M. B.: "development of methods for the stabilization of pyrolytic oils." page 198; column right; XP002000127 & POLK M.B., REPORT 1981 EPA600/2-81.201

Cited by

CN101812376A; US9670413B2; WO2012035410A2; US10400175B2; US9809564B2; WO0194498A1; US10337726B2; US10948179B2; US9039790B2; US10427069B2; US9062264B2; US9850440B2; US9631145B2; US10544368B2; WO2013135986A1; US9951278B2; US10563127B2; US9387415B2; US11028325B2; US8864999B2; US10400176B2; US10982152B2; US7998315B2; US8323456B2; US9187444B2; US9193926B2; US8524087B2; US8669405B2; US10633606B2; US10640719B2; US8377152B2; US8454712B2; US8506658B2; US8636888B2; US8628589B2; US9617489B2; US9969942B2; US10041667B2; US10570340B2; US10794588B2; US10975315B2

Designated contracting state (EPC)

AT DE ES FR GB GR IT NL

DOCDB simple family (publication)

EP 0718392 A1 19960626; EP 0718392 B1 19990901; AT E184045 T1 19990915; DE 69511832 D1 19991007; GB 9426066 D0 19950222

DOCDB simple family (application)

EP 95309400 A 19951222; AT 95309400 T 19951222; DE 69511832 T 19951222; GB 9426066 A 19941222