

Title (en)

CATALYTIC SUPERCRITICAL GASIFICATION OF WET BIOMASS

Title (de)

KATALYTISCHE SUPERKRITISCHE VERGASUNG VON FEUCHTER BIOMASSE

Title (fr)

GAZEIFICATION SUPERCRITIQUE CATALYTIQUE DE BIOMASSES MOUILLEES

Publication

EP 0820497 A4 19981216 (EN)

Application

EP 96910689 A 19960328

Priority

- US 9604439 W 19960328
- US 41452395 A 19950331

Abstract (en)

[origin: WO9630464A1] A method for catalytically decomposing organic matter in a reaction medium is presented. Virtually complete gasification is achieved in relatively short periods of time. A hydrogen-rich gas may be formed from feedstocks (12) that include wet biomass, such as water hyacinth or algae, or organic waste or mixtures of biomass and organic waste. The reaction is catalyzed by a carbon-containing catalyst (22). The reaction medium may include supercritical water and is substantially oxygen-free. The carbon-containing catalyst (22) is stable in the environment of a supercritical water medium and maintains activity over long periods of time. Suitable carbon-containing catalysts are activated carbons or charcoals. Reaction products (26) are substantially free of tars or chars.

IPC 1-7

C10J 3/00

IPC 8 full level

C10J 3/02 (2006.01); **B01J 3/00** (2006.01); **C10J 3/00** (2006.01)

CPC (source: EP KR)

B01J 3/008 (2013.01 - EP); **C10J 3/00** (2013.01 - EP KR); **C10J 2200/06** (2013.01 - EP); **C10J 2300/0916** (2013.01 - EP); **C10J 2300/0946** (2013.01 - EP); **C10J 2300/0979** (2013.01 - EP); **C10J 2300/0986** (2013.01 - EP); **C10J 2300/1276** (2013.01 - EP); **Y02P 20/145** (2015.11 - EP); **Y02P 20/54** (2015.11 - EP)

Citation (search report)

- [Y] DE 1063590 B 19590820 - METALLGESELLSCHAFT AG
- See references of WO 9630464A1

Designated contracting state (EPC)

CH DK FI FR GB LI NL

DOCDB simple family (publication)

WO 9630464 A1 19961003; AU 5381796 A 19961016; DE 19681320 C2 20000629; DE 19681320 T1 19980319; EP 0820497 A1 19980128; EP 0820497 A4 19981216; JP H11502891 A 19990309; KR 19980703309 A 19981015; SE 9703448 D0 19970924; SE 9703448 L 19971125

DOCDB simple family (application)

US 9604439 W 19960328; AU 5381796 A 19960328; DE 19681320 T 19960328; EP 96910689 A 19960328; JP 52973596 A 19960328; KR 19970706713 A 19970926; SE 9703448 A 19970924