

Title (en)

PROCESS FOR UPGRADING FUELS BY IRRADIATION WITH ELECTRONS

Title (de)

AUFBEREITUNG VON BRENNSTOFFEN DURCH BESTRAHLUNG MIT ELEKTRONEN

Title (fr)

PROCEDE DE VALORISATION DE COMBUSTIBLES PAR RAYONNEMENT D'ELECTRONS

Publication

EP 0710269 A1 19960508 (EN)

Application

EP 94923048 A 19940721

Priority

- IT 9400120 W 19940721
- IT FI930140 A 19930723

Abstract (en)

[origin: WO9503374A1] A process and a plant for the improvement of the chemical-physical and technological properties of fuels, in particular bio-fuels and pyrolysis oils obtained from biomass or industrial or municipal wastes is suggested. The fuel obtained by thermochemical conversion processes in a reactor (1) is subjected to an electron irradiation or electron stimulation activation process by means of electrostatic accelerator (10) or other equivalent means, such as silent dielectric discharge or pulsed streamer corona discharges. This plasma-chemical treatment induces complex chemical reducing/oxidising mechanisms in the fuel under treatment with improvement of its characteristics.

IPC 1-7

C10B 53/00; C10B 19/00; C10G 32/00; C10G 1/02; B01J 19/08

IPC 8 full level

B01J 19/08 (2006.01); **C10B 19/00** (2006.01); **C10B 49/22** (2006.01); **C10B 53/00** (2006.01); **C10B 53/02** (2006.01); **C10C 5/00** (2006.01);
C10G 1/02 (2006.01); **C10G 32/00** (2006.01)

CPC (source: EP)

B01J 19/085 (2013.01); **C10B 19/00** (2013.01); **C10B 49/22** (2013.01); **C10B 53/00** (2013.01); **C10B 53/02** (2013.01); **C10C 5/00** (2013.01);
C10G 1/02 (2013.01); **C10G 32/00** (2013.01); B01J 2219/0894 (2013.01); Y02E 50/10 (2013.01)

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 9503374 A1 19950202; AU 7275094 A 19950220; BR 9407146 A 19960917; CN 1127518 A 19960724; EP 0710269 A1 19960508;
IT 1262524 B 19960702; IT FI930140 A0 19930723; IT FI930140 A1 19950123

DOCDB simple family (application)

IT 9400120 W 19940721; AU 7275094 A 19940721; BR 9407146 A 19940721; CN 94192847 A 19940721; EP 94923048 A 19940721;
IT FI930140 A 19930723