

Title (en)

METHOD AND PLANT FOR THE CONVERSION OF SOLID CIVIL AND INDUSTRIAL WASTE INTO HYDROGEN

Title (de)

VERFAHREN UND ANLAGE ZUR UMWANDLUNG VON FESTEM KOMMUNALEM UND GEWERBLICHEM ABFALL IN WASSERSTOFF

Title (fr)

INSTALLATIONS POUR LA TRANSFORMATION DE DECHETS SOLIDES, URBAINS ET INDUSTRIELS, EN HYDROGENE ET PROCEDE POUR CE FAIRE

Publication

EP 1597340 A1 20051123 (EN)

Application

EP 04710396 A 20040212

Priority

- EP 2004001411 W 20040212
- IT VI20030030 A 20030213

Abstract (en)

[origin: WO2004072210A1] An industrial process is described, together with the relative plant, for the thermal gasification of combustible material from waste, in the form of "C.D.R." or "fluff", at zero emission into the atmosphere. The plant, which operates through a multigas plasma torch, running with oxygen-enriched air, produces hydrogen and other technical gases. The hydrogen can be used, after separation from the various gases, for the generation of electric energy through high yield systems and low harmful gas emissions, such as, for example, fuel cells or "Turbogas", for industrial uses and/or for feeding hydrogen vehicles. The process also envisages the possibility of generating electric energy with traditional Brayton cycle gas turbines or with "OTTO gas" groups.

IPC 1-7

C10J 3/46; C10J 3/48; C10J 3/72; C10J 3/84

IPC 8 full level

C10J 3/18 (2006.01); **C10J 3/76** (2006.01)

CPC (source: EP)

C10J 3/18 (2013.01); **C10J 3/723** (2013.01); **C10J 3/76** (2013.01); C10J 2200/09 (2013.01); C10J 2300/0906 (2013.01); C10J 2300/0943 (2013.01); C10J 2300/0946 (2013.01); C10J 2300/0956 (2013.01); C10J 2300/0959 (2013.01); C10J 2300/1238 (2013.01); C10J 2300/1634 (2013.01)

Citation (search report)

See references of WO 2004072210A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2004072210 A1 20040826; EP 1597340 A1 20051123; IT VI20030030 A1 20040814

DOCDB simple family (application)

EP 2004001411 W 20040212; EP 04710396 A 20040212; IT VI20030030 A 20030213