Title (en)

OPTIMIZED PROCESS FOR TREATING WASTE VIA HYDROTHERMAL TREATMENT

Title (de)

OPTIMIERTES VERFAHREN ZUR ABFALLBEHANDLUNG DURCH HYDROTHERMISCHE BEHANDLUNG

Title (fr)

PROCÉDÉ OPTIMISÉ DE TRAITEMENT DE DÉCHETS PAR TRAITEMENT HYDROTHERMAL

Publication

EP 2663533 A1 20131120 (FR)

Application

EP 12700069 A 20120109

Priority

- FR 1150247 A 20110112
- EP 2012050248 W 20120109

Abstract (en)

[origin: WO2012095391A1] The present invention relates to a process for the hydrothermal oxidation of organic compounds, optionally with oxidizable inorganic compounds, contained in an aqueous effluent, in which said aqueous effluent is injected into a tubular reactor where the effluent is brought to a supercritical pressure and where the temperature of the effluent is gradually increased from its initial temperature up to a supercritical temperature, without intermediate temperature reduction, while introducing into said tubular reactor an amount of oxidizing agent sufficient to completely oxidize the organic compounds and optionally to at least partly oxidize oxidizable inorganic compounds, the oxidizing agent being introduced in a fractionated manner at several points located increasingly downstream of the reactor, and in which the composition and/or the concentration of organic compounds and/or of oxidizable inorganic compounds within the effluent to be treated varies with time, and, upstream of the tubular reactor where the oxidation is carried out, the TOD of the effluent to be treated is measured and it is monitored so that is has a value greater than 120 g/l and less than 250 g/l prior to its injection into the tubular reactor.

IPC 8 full level

C02F 1/72 (2006.01); **B01J 3/00** (2006.01); **B01J 3/04** (2006.01); **B01J 19/00** (2006.01); **B01J 19/24** (2006.01); **C02F 11/08** (2006.01)

CPC (source: EP KR RU US)

B01J 3/008 (2013.01 - RU); **B01J 3/04** (2013.01 - RU); **B01J 19/2415** (2013.01 - RU US); **C02F 1/72** (2013.01 - KR RU US); **C02F 1/727** (2013.01 - EP US); **C02F 11/06** (2013.01 - US); **C02F 11/08** (2013.01 - KR); **C02F 11/086** (2013.01 - EP RU US); C02F 2101/30 (2013.01 - EP US); C02F 2103/32 (2013.01 - EP US); C02F 2103/34 (2013.01 - EP US); C02F 2209/001 (2013.01 - EP US); C02F 2209/05 (2013.01 - EP US); C02F 2209/08 (2013.01 - EP US); C02F 2209/29 (2013.01 - EP US); C02F 2301/066 (2013.01 - EP US); C02F 2303/08 (2013.01 - EP US); Y10S 210/908 (2013.01 - RU)

Citation (search report)

See references of WO 2012095391A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

FR 2970247 A1 20120713; **FR 2970247 B1 20140926**; BR 112013017895 A2 20161011; CA 2824476 A1 20120719; CN 103459330 A 20131218; CN 103459330 B 20160810; EP 2663533 A1 20131120; JP 2014503354 A 20140213; JP 5948346 B2 20160706; KR 20140020854 A 20140219; MX 2013008155 A 20140117; MX 336168 B 20160111; RU 2013137241 A 20150220; RU 2587179 C2 20160620; US 2014051903 A1 20140220; US 9073769 B2 20150707; WO 2012095391 A1 20120719

DOCDB simple family (application)

FR 1150247 A 20110112; BR 112013017895 A 20120109; CA 2824476 A 20120109; CN 201280012717 A 20120109; EP 12700069 A 20120109; EP 2012050248 W 20120109; JP 2013548809 A 20120109; KR 20137019599 A 20120109; MX 2013008155 A 20120109; RU 2013137241 A 20120109; US 201213979224 A 20120109