

Title (en)

A UNIVERSAL FEEDER FOR A GASIFICATION REACTOR

Title (de)

UNIVERSELLE ZUFÜHRUNG FÜR EINEN VERGASUNGSREAKTOR

Title (fr)

DISPOSITIF D'ALIMENTATION UNIVERSEL POUR UN RÉACTEUR DE GAZÉIFICATION

Publication

EP 3986987 A1 20220427 (EN)

Application

EP 20825112 A 20200226

Priority

- US 201916445118 A 20190618
- US 201916723538 A 20191220
- US 2020019900 W 20200226

Abstract (en)

[origin: WO2020256798A1] A universal feeder system that combines with a fluidized bed gasification reactor for the treatment of multiple diverse feedstocks including sewage sludge, municipal solid waste, wood waste, refuse derived fuels, automotive shredder residue and non-recyclable plastics. The invention thereby also illustrates a method of gasification for multiple and diverse feedstocks using a universal feeder system. The feeder system comprises one or more feed vessels and at least one live bottom dual screw feeder. The feed vessel is rectangular shaped having three vertical sides and an angled side of no less than 60 degrees from the horizontal to facilitate proper flow of feedstock material that have different and/or variable flow properties. The feedstocks are transferred through an open bottom chute to a live bottom dual screw feeder and through another open bottom chute to a transfer screw feeder that conveys feedstock to the fuel feed inlets of a gasifier.

IPC 8 full level

C10J 3/46 (2006.01); **B01J 8/18** (2006.01); **C02F 11/10** (2006.01); **C10K 1/02** (2006.01)

CPC (source: EP)

B01J 6/008 (2013.01); **B01J 7/00** (2013.01); **B01J 8/1872** (2013.01); **B01J 8/32** (2013.01); **B65G 65/46** (2013.01); **B65G 69/20** (2013.01); **C02F 11/06** (2013.01); **C10J 3/503** (2013.01); **C10K 1/026** (2013.01); **B01J 2204/002** (2013.01); **B01J 2204/007** (2013.01); **B01J 2208/00902** (2013.01); **B65G 33/18** (2013.01); **C02F 2209/02** (2013.01); **C02F 2209/225** (2013.01); **C10J 2200/152** (2013.01); **C10J 2200/158** (2013.01); **C10J 2300/092** (2013.01); **C10J 2300/0923** (2013.01); **C10J 2300/0946** (2013.01)

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2020256798 A1 20201224; AU 2020297273 A1 20210819; CA 3128254 A1 20201224; EP 3986987 A1 20220427; EP 3986987 A4 20230719; JP 2022537794 A 20220830

DOCDB simple family (application)

US 2020019900 W 20200226; AU 2020297273 A 20200226; CA 3128254 A 20200226; EP 20825112 A 20200226; JP 2021528875 A 20200226