

Title (en)

GASIFIER AND INCINERATOR FOR BIOMASS SLUDGE DESTRUCTION

Title (de)

VERGASER UND VERBRENNUNGSANLAGE FÜR DIE VERNICHTUNG VON BIOMASSENSCHLAMM

Title (fr)

GAZÉFIEUR ET INCINÉRATEUR POUR LA DESTRUCTION DE BOUES DE BIOMASSE

Publication

EP 2063965 A4 20160817 (EN)

Application

EP 07815890 A 20070921

Priority

- CA 2007001701 W 20070921
- US 53445206 A 20060922

Abstract (en)

[origin: WO2008034263A1] A device for gasifying biomass sludge having particle size less than 1 cm, and 20% to 100% solids content has a primary chamber, a fume transfer vent, a mixing chamber which accepts fumes from the primary chamber, and an afterburner chamber in fluid communication with the mixing chamber. A secondary burner produces an initial heating flame within a vertical portion of the afterburner chamber. A heat transfer chamber is in fluid communication with the afterburner chamber. Heated gases from the afterburner chamber cause heating of the heat transfer chamber. The primary chamber has a heat conductive floor superimposed over the heat transfer chamber so that conductive and convective heating of the primary chamber occur. At least one primary auger is located crosswise in the primary chamber between a sludge feed hopper and an ash hopper. The heat transfer chamber underlies the primary auger near the end at the ash hopper.

IPC 8 full level

F23G 5/027 (2006.01); **F23G 5/16** (2006.01); **F23G 7/00** (2006.01)

CPC (source: EP US)

F23G 5/0273 (2013.01 - EP US); **F23G 5/165** (2013.01 - EP US); **F23G 7/001** (2013.01 - EP US); **F23G 2201/303** (2013.01 - EP US); **F23G 2203/8013** (2013.01 - EP US)

Citation (search report)

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- [Y] US 4132179 A 19790102 - HEIMBURG RICHARD W, et al
- [A] US 4603644 A 19860805 - BROOKES DAVID R [CA]
- [A] US 5095826 A 19920317 - ERISSON C G FOLKE [SE], et al
- [A] US 3780676 A 19731225 - HAZZARD N, et al
- See references of WO 2008034263A1

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WO2021032770A1; US11781080B2

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