

Title (en)
BIOFUEL

Title (de)
BIOKRAFTSTOFF

Title (fr)
BIOCARBURANT

Publication
EP 3383982 A1 20181010 (EN)

Application
EP 16823028 A 20161202

Priority

- GB 201521464 A 20151204
- GB 201607149 A 20160425
- GB 201617690 A 20161019
- GB 201617692 A 20161019
- GB 2016053810 W 20161202

Abstract (en)
[origin: GB2545103A] Biofuel composition comprising waste coffee grounds (WCG). It is preferably solid, formed as briquettes, pucks or pellets, the pellets being suitable for combustion in a biomass boiler. Preferably it comprises at least 50% wt WCG, even more preferably at least 75%. At least half of this quantity is preferably made up of waste coffee grounds from the manufacture of instant coffee (IWCG). The biofuel may additionally contain a fibrous filler (sawdust, coffee bean husks), preferably less than 50% wt, and a binding agent (lignosulphonate, glycerol), preferably up to 10% wt. Other possible ingredients are oxidisers like sodium / potassium nitrate and processing agents like starch (also a binder). The biofuel preferably has a durability of at least 60% and a net calorific value of 16-24 MJ/kg. A method of producing such biofuel is also claimed, by compressing suitable feedstock into pellets etc. The WCG may be dried to a moisture content of 6-20%. Coffee oil is preferably extracted therefrom, then the WCG are mixed with other ingredients and the feedstock may be conditioned through treatment with steam, then pressed / extruded through a die having boreholes into pellets which are further cooled. A relevant apparatus is also claimed.

IPC 8 full level

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C10L 5/20 (2013.01 - EP); **C10L 5/22** (2013.01 - GB); **C10L 5/30** (2013.01 - EP US); **C10L 5/361** (2013.01 - EP GB US);
C10L 5/363 (2013.01 - EP GB US); **C10L 5/445** (2013.01 - EP GB US); **C10L 2200/0469** (2013.01 - US); **C10L 2290/06** (2013.01 - EP US);
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Y02E 50/10 (2013.01 - EP GB); **Y02E 50/30** (2013.01 - EP GB); **Y02P 20/145** (2015.11 - GB)

Citation (search report)

See references of WO 2017093757A1

Designated contracting state (EPC)

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