

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
25 February 2021 (25.02.2021)



(10) International Publication Number
WO 2021/032842 A1

(51) International Patent Classification:
B01J 19/24 (2006.01)

(21) International Application Number:
PCT/EP2020/073342

(22) International Filing Date:
20 August 2020 (20.08.2020)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
19192881.1 21 August 2019 (21.08.2019) EP

(71) Applicant: **NEDERLANDSE ORGANISATIE VOOR TOEGEPAST-NATUURWETENSCHAPPELIJK ONDERZOEK TNO** [NL/NL]; Anna van Buerenplein 1, 2595 DA 's-Gravenhage (NL).

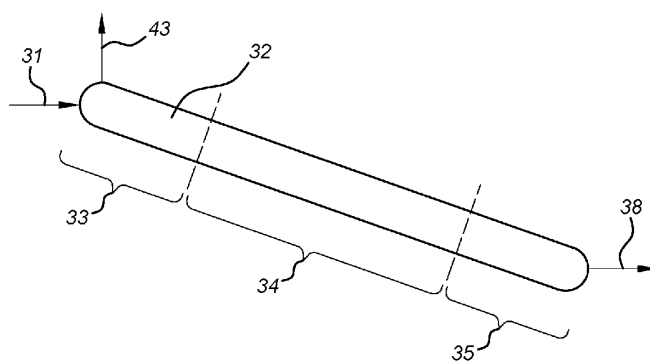
(72) Inventors: **VAN DER MEIJDEN, Christiaan Martinus**; Anna van Buerenplein 1, 2595 DA 's-Gravenhage (NL). **PELS, Jan Remmert**; c/o TNO / IP & Contracting, Anna van Buerenplein 1, 2595 DA 's-Gravenhage (NL).

(74) Agent: **NEDERLANDSCH OCTROOIBUREAU**; P.O. Box 29720, 2502 LS The Hague (NL).

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,

(54) Title: REACTOR FOR THE HYDROTHERMAL TREATMENT OF BIOMASS



(57) Abstract: The present invention concerns a reactor and a process for the hydrothermal treatment of an aqueous mixture, such as watery biomass. The reactor according to the invention comprises (31) an inlet for receiving the aqueous mixture, (32) a tube-shaped reactor interior, which is inclined at an angle in the range of 1 – 45°; (33) a first zone in the reactor interior (32) comprising means (5) for heating the aqueous mixture; (34) a second zone in the reactor interior (32) for keeping the aqueous mixture at the predetermined temperature; (35) a third zone in the reactor interior (32) for cooling the aqueous mixture; (38) an outlet for discharging a hydrothermally treated aqueous mixture, and (43) an outlet for discharging gas, wherein inlet (31) and outlet (43) are positioned at the top part of the reactor and outlet (38) at the bottom part of the reactor. The inclined nature of the reactor ensures that all gases are efficiently removed from the liquid effluent, and the CO₂ formed during the process is used to improved efficacy of the hydrothermal treatment.

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TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
KM, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report (Art. 21(3))*