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(54) Title: MULTI-STAGE WASTE REMEDIATION SYSTEM

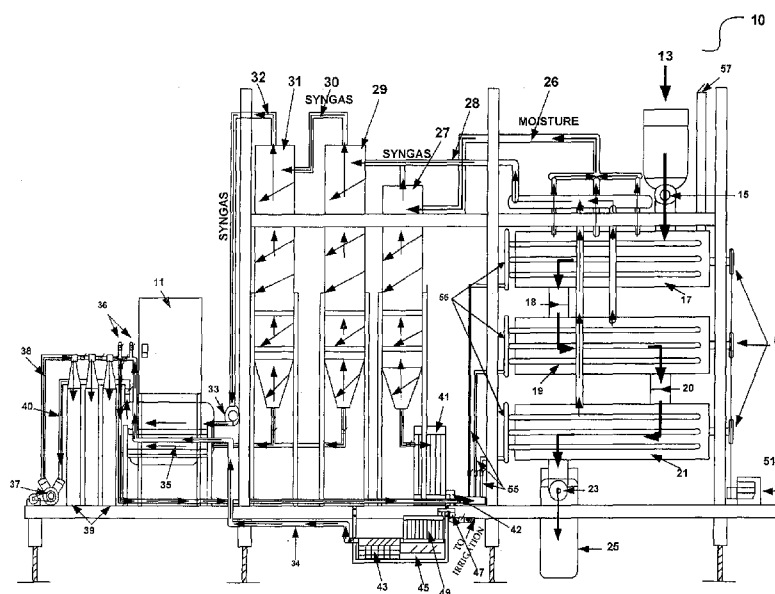


FIGURE 1

(57) Abstract: The present invention relates to waste remediation processes, in particular to a self-sustained multi-stage thermal decomposition process system for waste remediation, comprising heating the waste in a first chamber (17) to remove moisture, collecting the moisture in a first tank (27), transferring the moisture from the moisture tank to a waste water filtration system (41), delivering the heated moisture-free waste from the first chamber to a second chamber (19), heating the moisture-free waste in the second chamber to produce syngas, transferring the syngas to a second tank (29), delivering the remaining waste from the second chamber to a third chamber (21), and heating the remaining waste in the third chamber to produce syngas and char. The system harnesses useable producer gas and converts organic and inorganic waste into bio-char.

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

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A. CLASSIFICATION OF SUBJECT MATTER

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ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

B09B C10L C10B C10J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EP0-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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X	GB 2 539 447 A (SAGE & TIME LLP [GB]) 21 December 2016 (2016-12-21)	1,8
Y	pages 1,3-7; claims 1,5,8,11,12	2,6,7, 9-11
A	-----	3-5
X	EP 2 325 287 A1 (RV LIZENZ AG [CH]) 25 May 2011 (2011-05-25)	1,8
Y	claims 1,5,15	2,6,7, 9-11
A	-----	3-5



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents :

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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