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(54) **Title:** REACTOR SYSTEM FOR PRODUCING GASEOUS PRODUCTS

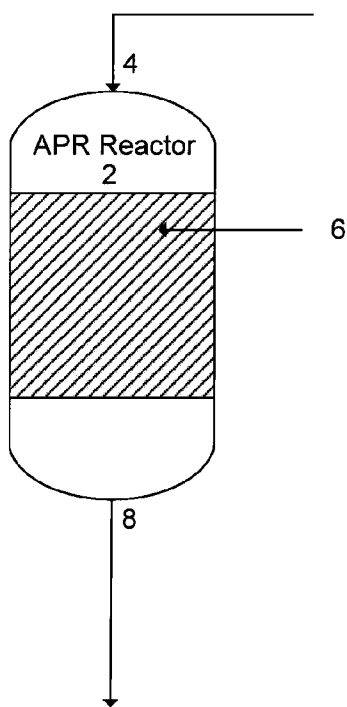


FIGURE 1

(57) **Abstract:** Reactor systems are provided for the catalytic conversion of liquid feedstocks to synthesis gases and other noncondensable gaseous products. The reactor systems include a heat exchange reactor configured to allow the liquid feedstock and gas product to flow concurrently in a downflow direction. The reactor systems are particularly useful for producing hydrogen and light hydrocarbons from biomass-derived oxygenated hydrocarbons using aqueous phase reforming. The generated gases may find used as a fuel source for energy generation via PEM fuel cells, solid-oxide fuel cells, internal combustion engines, or gas turbine gensets, or used in other chemical processes to produce additional products. The gaseous products may also be collected for later use or distribution.

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B. FIELDS SEARCHED

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

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

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X	WO 99/61369 A (KADMOS AE EPENDYTIKON PROTOVOU [GR]; VERYKIOS XENOPHON [GR]) 2 December 1999 (1999-12-02) abstract page 1, line 5 - line 17 page 3, line 3 - line 11 page 3, line 13 - line 32 page 6, line 17 - page 7, line 2 page 7, line 28 - page 8, line 13; figure 2 claim 1	1-21

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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