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(71) Applicant (for all designated States except US): **NCH CORPORATION** [US/US]; 2727 Chemsearch Blvd., Irving, TX 75062 (US).

(72) Inventors: **PEARCE, Robert, Clarence, III**; 3218 Kenilworth Dr., Arlington, TX 76001 (US). **KIPLINGER, Dale, V.**; 3104 Chestnut Rd., Carrollton, TX 75007 (US).

**EVARO, Jose, E.**; 1705 Meadow Crest Ln., Mansfield, TX 76063 (US). **PRUITT, Judith, Gayle**; 2600 Waterloo, Mesquite, TX 75181 (US). **COLARUSSO, Joseph, Thomas**; 2103 Valleydale, Arlington, TX 76013 (US).

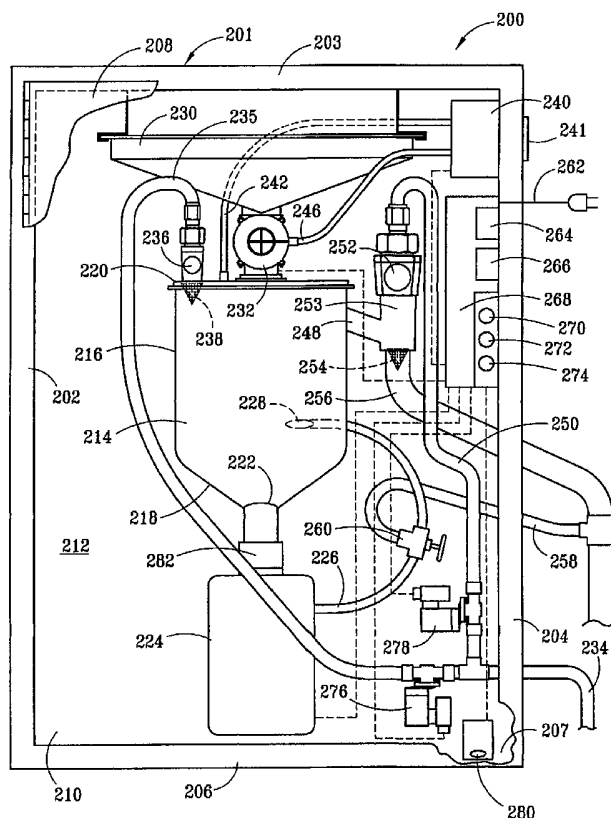
(74) Agent: **ROSS, Monty, L.**; Locke Liddell & Sapp LLP, Ste. 2200, 2200 Ross Avenue, Dallas, TX 75201 (US).

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(54) Title: BIOMASS GENERATOR



(57) Abstract: A biomass generator (200) useful for continuously growing and withdrawing bacteria to be used in a desired beneficial application, the generator (200) having a bacteria growth chamber (214); water and nutrient inlet ports (234, 232); upper and lower outlet ports (248, 222); a recirculating pump (224) withdrawing and reintroducing fluid to establish a vortex in the growth chamber (214) while controlling foaming and pump cavitation; a low pressure air inlet line (242) discharging air inside the growth chamber (214) above the vortex; a fluid discharge line (256) receiving bacteria-containing fluid from the upper outlet port (248) of the growth chamber (214); a flush line (250) discharging wash water into the fluid discharge line (256); and an electrical controller (268) cooperating with solenoid-operated valves (276, 278) and a feeder mechanism (232) to periodically introduce water and nutrients into the chamber (214), thereby simultaneously causing bacteria-containing fluid to be discharged from the growth chamber (214) through the upper outlet port (248). A method for growing bacteria using the subject apparatus is also disclosed.



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<b>B. FIELDS SEARCHED</b> Minimum documentation searched (classification system followed by classification symbols) U.S. : 435/3, 286.1, 286.5, 286.7, 289.1, 309.2, 813 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)		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,369,032 A (PRATT) 29 November 1994 (29.11.1994), see entire document.	1-65
A	US 5,447,866 A (RUNYON) 05 September 1995 (05.09.1995), see entire document.	1-66
A	US 6,168,949 B1 (RUBENBERGER) 02 January 2001 (02.01.2001), see entire document.	1-65
A	US 6,335,191 B1 (KIPLINGER et al.) 01 January 2002 (01.01.2002), see entire document.	1-65
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
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