

(19) World Intellectual Property Organization
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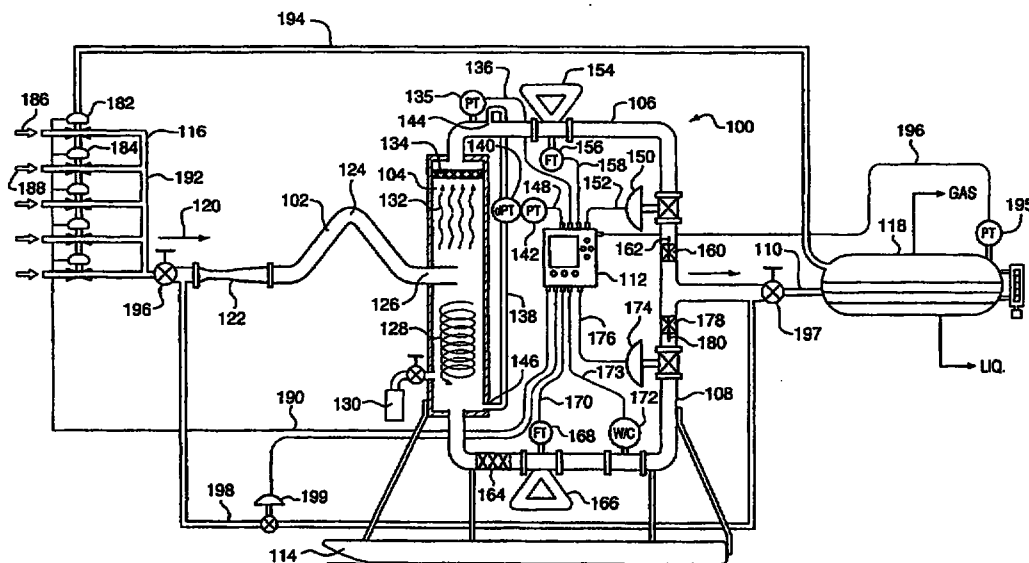
(43) International Publication Date
3 May 2001 (03.05.2001)

PCT

(10) International Publication Number
WO 01/31298 A2

- (51) International Patent Classification⁷: G01F (74) Agents: DUFT, Donald, M. et al.; Chrisman, Bynum & Johnson, P.C., 1900 Fifteenth Street, Boulder, CO 80302 (US).
- (21) International Application Number: PCT/US00/41222
- (22) International Filing Date: 18 October 2000 (18.10.2000) (81) Designated States (national): BR, CA, CN, IN, JP, KR, MX, RU, SG.
- (25) Filing Language: English
- (26) Publication Language: English (84) Designated States (regional): European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).
- (30) Priority Data:
09/428,416 28 October 1999 (28.10.1999) US
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- Published:**
— Without international search report and to be republished upon receipt of that report.
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: MULTIPHASE FLOW MEASUREMENT SYSTEM



(57) Abstract: An automatic well test system (100) utilizes a two phase vortex separator 104 connected to a pair of Coriolis flowmeters (154, 166) to measure volumetric flow rates in three phase flow. Measurements are performed according to a process (P200) including an iterative convergence technique. Measurements are enhanced by the use of real time density and water cut measurements from a water cut meter (172) and a water density meter.