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(21) International Application Number: PCT/US97/05651 (22) International Filing Date: 4 April 1997 (04.04.97) (30) Priority Data: 08/629,805 10 April 1996 (10.04.96) US (71) Applicant: MICRO MOTION, INC. [US/US]; 7070 Winchester Circle, Boulder, CO 80301 (US). (72) Inventor: DUTTON, Robert, E.; 1027 Willow Place, Louisville, CO 80027 (US). (74) Agents: CLEVELAND, Dan, Jr. et al.; Duft, Graziano & Forest, P.C., Suite 140, 1790-30th Street, Boulder, CO 80301-1018 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
(54) Title: PUMP-OFF CONTROLLER (57) Abstract The operation of an oil well pumping unit control system (20, 200) is governed by a computerized automated control unit (88) that receives flow rate measurements from a Coriolis flow meter (28). The control unit causes production from a beam pumping unit (22) to cease when measurements from the Coriolis flow meter indicate a decline in the pump efficiency. The decline in pump efficiency indicates that a production fluid level (136) in the production tubing (108) has fallen below the uppermost point of travel for the pump plunger (122). Production from the well is, accordingly, shut-in to afford the reservoir sufficient time to build the pressure and corresponding fluid level that is required to recommence production operations.		