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(54) Title: PRESSURE TANK FAULT DETECTOR AND METHOD

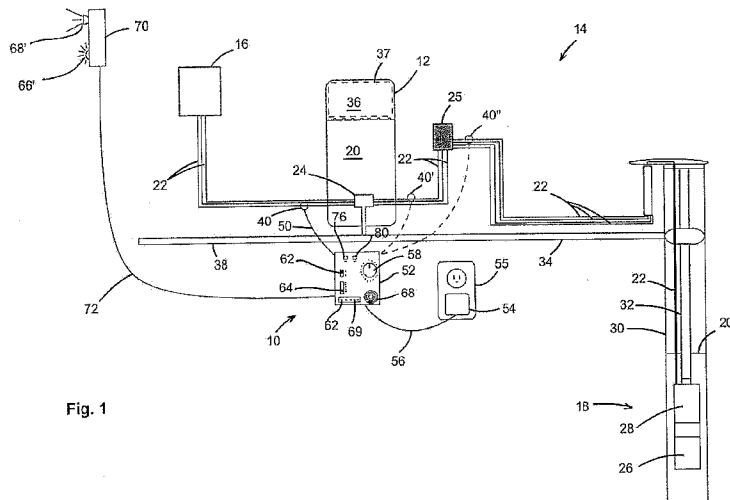


Fig. 1

(57) Abstract: A pressure tank fault detector and method provides a system (10) for detecting a fault in a pressure tank (12). The system includes a current transformer (40) positioned adjacent a pump power wire (22). A circuit (42) includes a timer (44), a data recorder (46), and a system status indicator (48). When the pump (18) operates, the current transformer (40) signals the circuit (42) and the timer (44) measures the signal duration. The data recorder (46) logs a short cycle when the timer (44) measures less than a selectable predetermined amount of time. When two or more short cycles are recorded, an alarm is produced. Preferably, the system (10) includes a test circuit (74) and allows selection of the number of short cycles before the alarm and whether to record only consecutive short cycles. Optionally, the system (10) detects and signals pump cycles exceeding a predetermined excessive run time.



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INTERNATIONAL SEARCH REPORT

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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)

IPC 8: F04B 23/02, G01M 3/00, G01N 21/88

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

Korea Utility Model and applications for Utility Model since 1975

Japanese Utility Model and applications for Utility Model since 1975

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

eKIPASS(KIPO internal) & keyword : "PRESSURE TANK", "FAULT"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 08-086278 A (HITACHI BUILDING SYST ENG & SERVICE CO LTD) 02 APRIL 1996 See page 6, column 2, line 15 - page 10, column 2, line 36 and Figure 1.	1-48
A	KR 20-0299553 Y1 (DAEWOO ELECTRONICS CO LTD) 31 DECEMBER 2002 See page 2, line 32 - line 51 and Figure 1.	1-48
A	KR 20-0311801 Y1 (INCHEON RAPID TRANSIT CORPORATION) 09 MAY 2003 See page 2, line 39 - page 4, line 33 and Figures 1, 2.	1-48
A	WO 98-54560 A1 (LEHMANN) 03 DECEMBER 1998 See page 13, line 16 - page 25, line 13 and Figures 2, 4.	1-48



Further documents are listed in the continuation of Box C.



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