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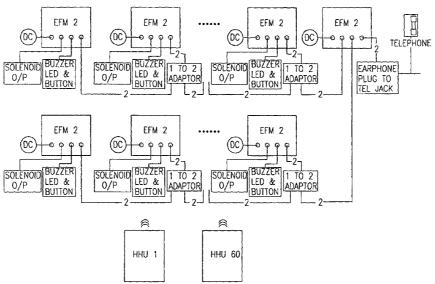
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(54) Title: A FLUID METERING SYSTEM FOR PREVENTING FLOOD DAMAGE OR FLUID LEAKAGE



(57) Abstract: A household fluid flow-rate monitor and control system is provided to prevent flood damage, fluid leakage and loss of fluid. The system includes a plurality of alarm units (EFM 2) for monitoring fluid flow in the system; an automatic electrically operated valve (SOLENOID O/P) for shutting off the fluid flow to prevent damage; a fluid meter (30) for sending to a monitor an electrical signal for every unit of fluid flowing through the system; and a controller unit including a microprocessor unit (MICRO PROCESSOR) and a memory unit connected to the automatic valve to shut off the system. The monitor receives input from the fluid meter or from a flood sensor and sends alarm signals (BUZZER, LED & BUTTON) for several types of events, such as burst flow, leakage, flood, etc. to the controller unit. The unit also has a manual override switch to bypass the electronics.



INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : G08B 21/00 US CL : 340/603, 605, 606							
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) U.S.: 340/603, 605, 606, 870.16, 539.1; 137/1, 78.1							
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)							
C. DOCUMENTS CONSIDERED TO BE RELEVANT							
Category *	Citation of document, with indication, where a		Relevant to claim No.				
X	US 5,913,236 A (WODESLAVSKY) 15 June 1999	10, 12-17					
	38.						
Y			1-9, 11				
Y	US 5,920,265 A (JOHNSON, Jr. et al) 06 July 1999, fig. 1-2, col. 4, lines 40-45.		11, 8				
Y	US 6,025,788 A (DIDUCK) 15 February 2000, fig. 1-3, col. 15, line10-col. 16, line 50, col. 13, lines 15-30.		1-9				
Y	US 5,240,022 A (FRANKLIN) 31 August 1993, col. 12, lines 21-39.		1-9				
Further	documents are listed in the continuation of Box C.	See patent family annex.					
		"T" later document published after the international filing date or priority					
"A" document defining the general state of the art which is not considered to be of particular relevance		date and not in conflict with the applic principle or theory underlying the inve	ation but cited to understand the				
 "E" earlier application or patent published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means 		"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art					
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