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Utilization of a nuclear-type interface level detector/transmitter.

An apparatus and method are provided for measuring and/or controlling fluid interface levels occurring within a vessel, wherein the fluid interface levels are measured and/or controlled by the utilization of a nuclear level measurement device comprising a radiation source and a radiation detector. This nuclear measurement device is externally positioned on a

generally vertical standpipe which is in fluid communication with the vessel containing the fluids whose interface level is to be measured and/or controlled. The vertical standpipe is externally positioned, in relationship to the vessel, such that the fluid interface levels within the standpipe correspond with the same levels to those within the vessel.

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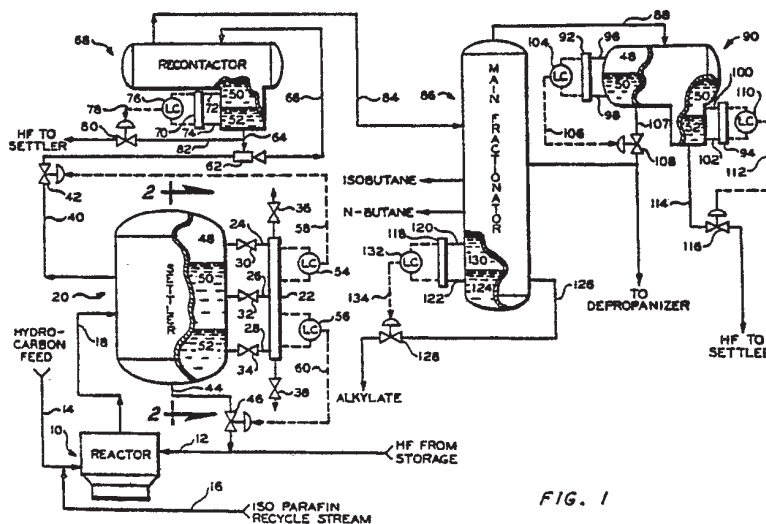


FIG. 1



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
X	GB-A-986109 (BALDWIN INSTRUMENT COMPANY) * page 2, line 8 - page 3, line 75; figures 1-4 *	1, 6, 12, 14, 15.	G05D9/12 G01F23/28 C07C2/54
Y		2, 3, 4, 7, 11, 16-28	
A		8-10, 40-42	
Y	US-A-2797284 (J.M. BROOKE) * column 2, line 21 - column 3, line 5; figures 1, 2 *	2, 3, 4	
A		29-37	
Y	US-A-2676265 (W.G. GREEN) * column 1, line 49 - column 3, line 24; figure 1 *	7, 11, 16, 17	
Y	CONTROL AND INSTRUMENTATION. vol. 1, no. 7, November 1969, LONDON GB page 24 D. TAYLOR: "NUCLEONIC METHODS" * page 24, middle column, paragraph 2,3; figure 3 *	18, 20	TECHNICAL FIELDS SEARCHED (Int. Cl.4)
A		38	G05D G01F C07C
Y	CONTROL AND INSTRUMENTATION. vol. 5, no. 1, January 1973, LONDON GB pages 26 - 28; A. SHAW: "LIQUID LEVEL MEASURED SEVEN DIFFERENT WAYS" * page 28, middle column, line 5 - right-hand column, line 42; figures 5, 6 *	19, 20	
A		39	
Y	US-A-3314445 (B.P. BRODT) * column 1, lines 38 - 49; figure 1 *	21-28	
Y	US-A-2960607 (J. KOHL) * column 1, line 66 - column 2, line 44; figure 1 *	23-28	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 03 AUGUST 1990	Examiner GOETZ P.A.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... & : member of the same patent family, corresponding document	



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
A	<p style="text-align: center;">---</p> US-A-2843144 (L.M. ROBINSON ET AL.) * the whole document * <p style="text-align: center;">-----</p>	2, 3, 4, 29-37	
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
The present search report has been drawn up for all claims			
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<b>CATEGORY OF CITED DOCUMENTS</b> X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... & : member of the same patent family, corresponding document	

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