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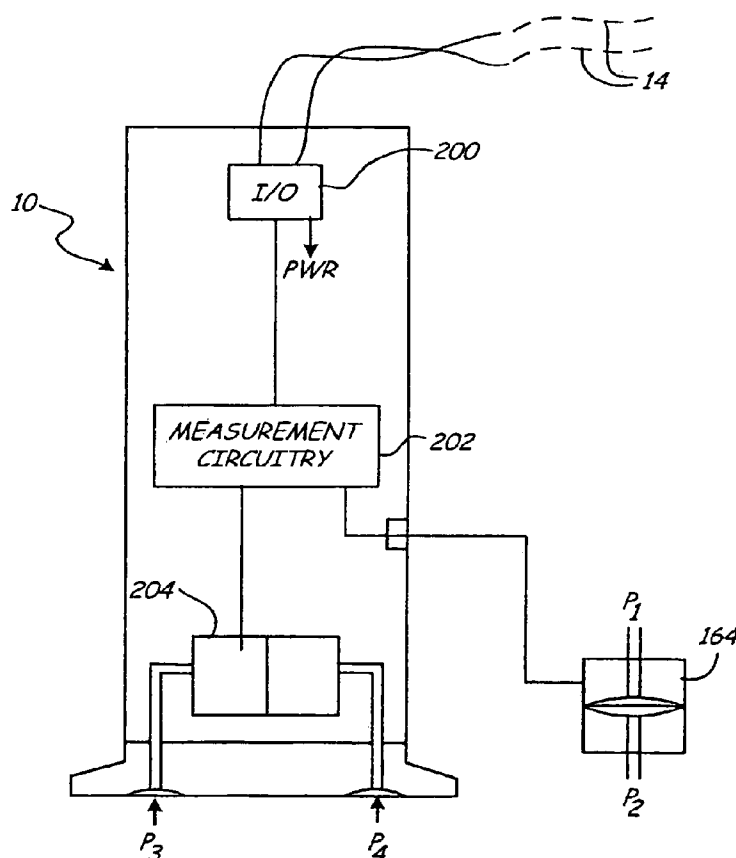
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(72) **Inventor; and**

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[Continued on next page]

(54) **Title:** PROCESS DEVICE WITH DENSITY MEASUREMENT



(57) **Abstract:** A process variable transmitter (10) for measuring a process variable of a process fluid in a vessel includes first and second pressure couplings (166,168) arranged to receive a first pressure P_1 and a second pressure P_2 of process fluid in the vessel. These pressures are related to the density of the process fluid. A sensor (204) provides a sensor output related to the process fluid in the vessel. Measurement circuitry (202) is configured to calculate a calculated process variable of the process fluid in the vessel based upon the first and second pressures P_1 , P_2 and the sensed process variable.

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ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
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FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL,
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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

INV. G01F1/42 G01F1/84 G01F1/36

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)

G01F

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 practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 606 513 A (LOUWAGIE BENNETT L [US] ET AL) 25 February 1997 (1997-02-25) column 4, line 59 - column 8, line 20; figure 2	1-24
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X	WO 01/20267 A (ROSEMOUNT INC [US]) 22 March 2001 (2001-03-22) the whole document	1-24

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

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.

G document member of the same patent family

Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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