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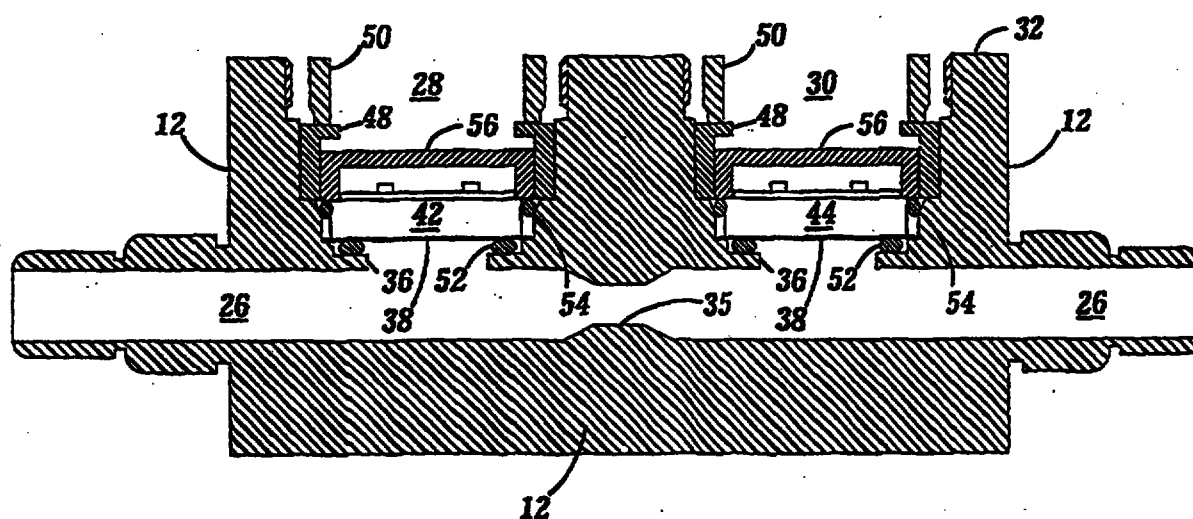
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(21) International Application Number: PCT/US97/00941 (22) International Filing Date: 22 January 1997 (22.01.97) (30) Priority Data: 08/601,786 15 February 1996 (15.02.96) US (71) Applicant: NT INTERNATIONAL, INC. [US/US]; Suite 406, 5155 East River Road, Fridley, MN 55421-1025 (US). (72) Inventors: CUCCI, Gerald, R.; 1201 Yale Place, Minneapolis, MN 55403 (US). ENGLUND, Diane, L.; 1201 Yale Place, Minneapolis, MN 55403 (US). (74) Agent: DIETZ, Paul, T.; Haugen and Nikolai, P.A., Suite 820, 900 Second Avenue South, Minneapolis, MN 55402-3325 (US).		(81) Designated States: BR, CA, JP, KR, NO, <u>SG</u>, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

(54) Title: FLOW METER WITHIN CAUSTIC FLUIDS HAVING NON-CONTAMINATING BODY



(57) Abstract

A non-contaminating flow meter having an isolation member. The flow meter includes two pressure sensor transducers (42, 44), located on opposite sides of a restriction (35) in a conduit. Each of the pressure transducers is isolated by an isolation member (38) from exposure to fluids flowing through the conduit. The flow meter may be placed in line within a fluid flow line carrying corrosive materials. The square root of the difference in pressure between the two pressure sensors is calculated to determine the rate of flow within the fluid line. The flow meter compensates for changes in temperature within the fluid flow line and activates an alarm if the pressure of flow rate within the fluid flow line exceeds or falls below a threshold level.