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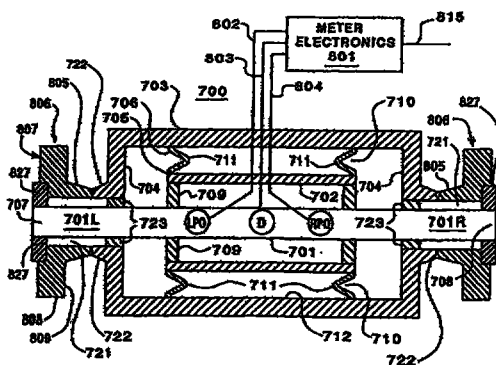
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(54) Title: APPARATUS FOR CONNECTING A CORIOLIS FLOWMETER TO A CASE



(57) Abstract: A flowmeter having a case enclosing a single straight tube surrounded by a balance bar. The balance bar ends are coupled by a brace bar to the flow tube as well as by case connect links to the inner wall of the case. The flow tube ends are coupled to end flanges by means of a raised element having a center opening for sealably receiving the flow tube terminus. The flow tube projects beyond the case end and is sealably coupled to a cone connect element in the case end. A void is defined by the space between the flow tube outer surface and the inner surface of the cone connect element and the end flanges to minimize the surface area of the flow tube that is affected by the weld between the case end and raised element of the end flanges. The case connect links contain out of plane bends to accommodate a change in the effective diameter of the case and the balance bar with respect to each other due to changing thermal conditions. Another embodiment of the invention includes a flowmeter without the end flanges. The flow tube ends project beyond the case ends while being sealably coupled to the cone connect element in the case ends. The flowmeter may be manufactured, tested, and balanced and stored without a flange. The flowmeter is stored in this condition until its commercial use is imminent at which time it is fitted with the appropriate end flange required by the end user.

WO 01/02814 A1