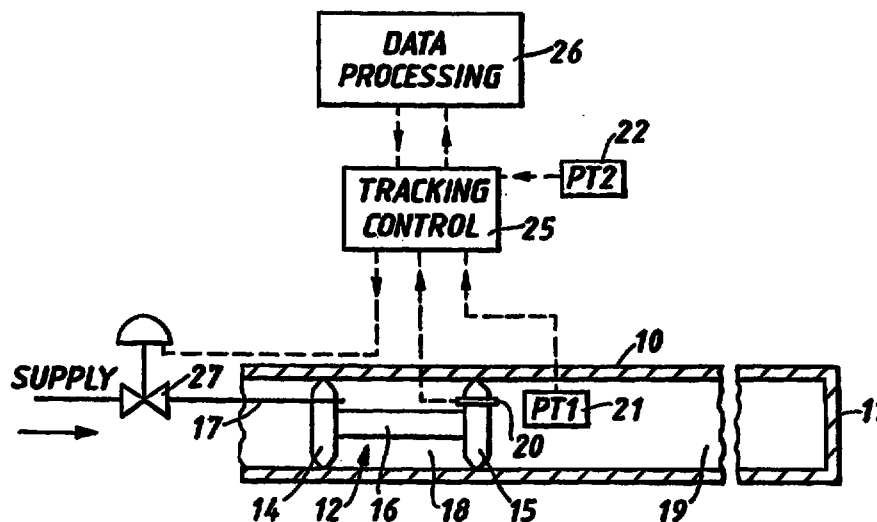


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(54) Title: PIPE LEAK DETECTION



(57) Abstract

A pipe leak testing arrangement includes a device (12) having a sealing bags (14 and 15) joined by coupling (16). The bags when inflated form a seal volume chamber (18). The bags may not form a perfect seal and leakage past then could occur when differential pressure is present. The remaining portion of the pipe forms a test volume chamber (19). A transducer (20) measures differential pressure between the chambers, and transducer (21) measures the test chamber pressure. Measured pressure information is used by control device to track pressure change and adjust the seal pressure so as to maintain equal pressures even if the test pressure decays due to pipe fracture. In an alternative arrangement two separate devices with associated circuitry are provided to facilitate two temporary seal pressure chambers with the test chamber therebetween.