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(54) Title: SENSOR ASSEMBLY FOR MEASURING THE AVERAGE VELOCITY IN CONDUITS OR OPEN CHANNELS

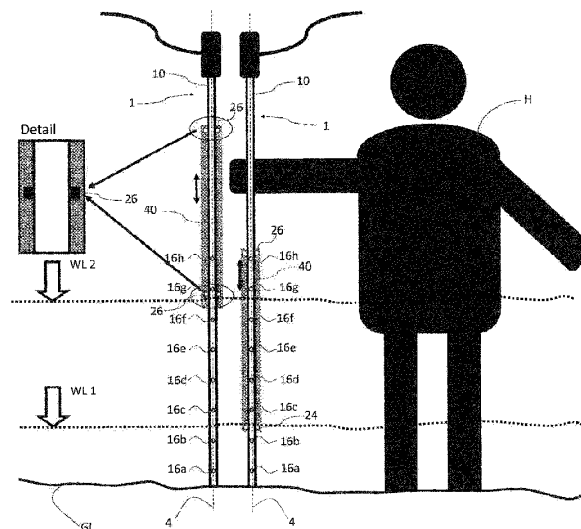


FIG 2

(57) Abstract: The invention relates to a sensor assembly (1) for measuring the average velocity of a fluid flowing in a closed conduit (4) or in an open channel, said sensor assembly (1) being adapted for measuring the average velocity through closed conduits (4) of different sizes or through open channels with different fluid levels, the sensor assembly (1) comprising: - a housing (10) intended to extend across the inside of the closed conduit (4) or to extend vertically in the section of the open channel, said housing (10) comprising pairs of electrodes (16, 14) and at least one associated electromagnet (30) for measuring the velocity distribution in the closed conduit (4) or in the open channel; - isolation means allowing the isolation from the pairs of electrodes (16, 14) or from the signals of the pairs of electrodes (16, 14) that are not in contact with the fluid flow to be measured; said isolation means being configured to be adapted depending on the water level in the open channel or on the size of the closed conduit (4).

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