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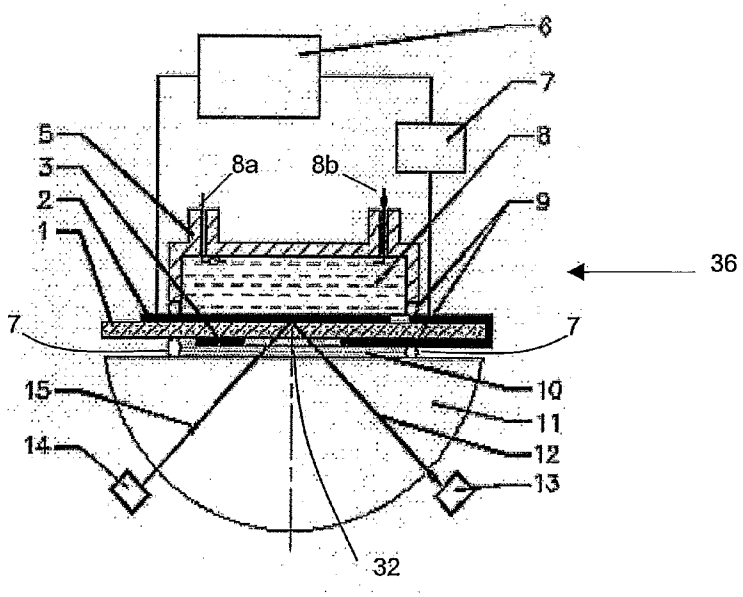
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(54) Title: SURFACE PLASMON RESONANCE AND QUARTZ CRYSTAL MICROBALANCE SENSOR



(57) Abstract: A sensor chip assembly for use in a sensor capable of Surface Plasmon Resonance (SPR) and gravimetric sensing. The assembly comprising a transparent piezoelectric substrate (1) having a first surface and a second surface opposite to the first surface. The assembly also comprising first and second thin film metal electrodes (2,3) respectively provided on the first and second surfaces of the substrate (1). The second thin film metal electrode (3) being position on the second surface of the substrate (1) such that a light beam is capable of being transmitted through the second surface of the substrate and reflected from the first thin film metal electrode. The assembly also comprising an attenuated total reflection (ATR) coupler (11) disposed adjacent to the second thin film metal electrode (3).

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