ABSTRACT

REFERENCE ELECTRODE

An improved reference electrode (14) is disclosed for use in potentiometric measurements of the amount of ions in an aqueous solution. The reference electrode illustratively comprises a metal member (16) on a substrate (12), and a layer (18) of a salt reversible to the ion X overlying the metal member. The reference electrode is overlaid by a quantity of an electrolyte (30), which may be a polymer gel having a salt including the ion X dispersed therein. This structure is overlaid by a membrane (32) permeable to water but not to the ion X that extends beyond the portion of the electrolyte overlying the electrode, but leaves a portion of the electrolyte exposed.

Figure 2