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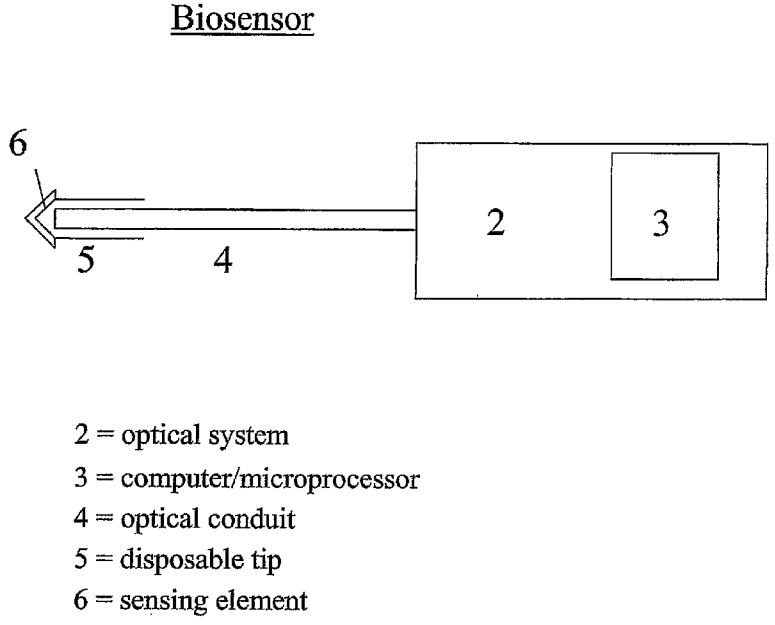
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(54) Title: FIBER OPTIC DEVICE FOR SENSING ANALYTES



(57) Abstract: A device for sensing analyte concentration, and in particular glucose concentration, in vivo or in vitro is disclosed. An optical conduit, preferably an optical fiber has an optical system at the proximal end of the optical conduit. A sensing element is attached to the distal end of the optical conduit, and comprises at least one binding protein adapted to bind with at least one target analyte. The sensing element further comprises at least one reporter group that undergoes a luminescence change with changing analyte concentrations. Optionally, the sensing element includes reference groups with luminescence properties that are substantially unchanged by variations in the analyte concentrations.

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