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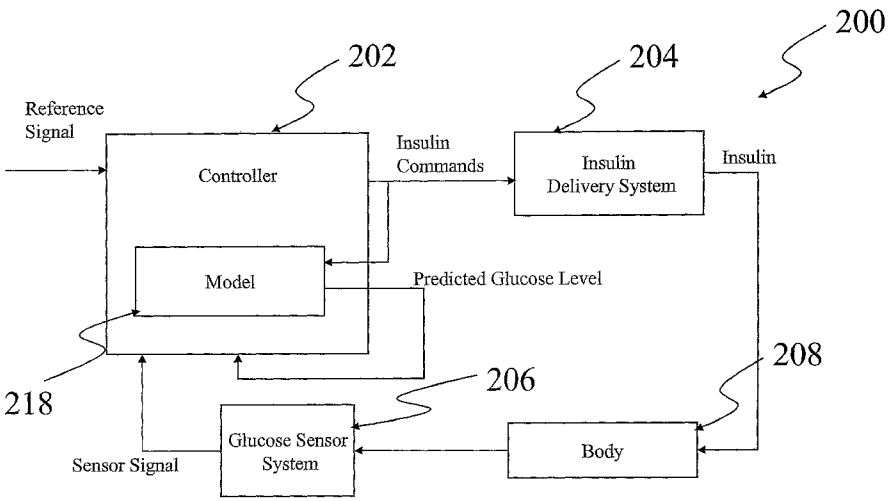
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(54) Title: INSULIN DELIVERY SYSTEM WITH SENSOR



Model-Based Control Loop for Glucose

(57) Abstract: A closed loop therapy system (200) for controlling a concentration of a substance, such as blood glucose concentration, in the body of a user. The system and method employ a sensor system (206) that measures a glucose level in the body, a controller (202) that uses the measured glucose levels to generate an output that can be used to automatically or manually control an intradermal insulin infusion system to set a constant or time-varying profile of target blood glucose concentrations in a user, and then infuse an appropriate amount of insulin into the body of the user so as to reach and maintain the target values of the blood glucose concentration.

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