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(54) Title: BAYESIAN MODELLING TO PREDICT CHEMICAL KINETICS

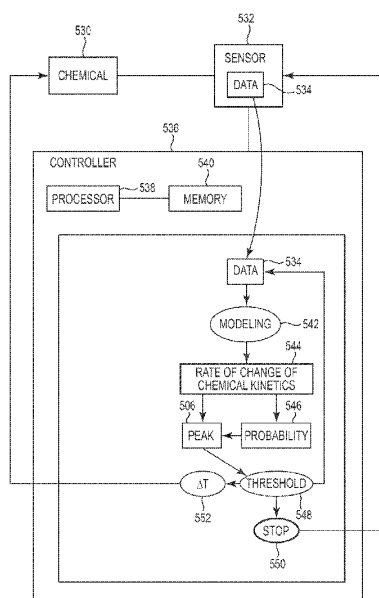


Fig. 5

(57) Abstract: Bayesian modeling can be used to predict chemical kinetics. Measurement of chemical kinetics can be initiated over a period of time. Data collected from the measurement can be modeled recursively to an expected rate of change of the chemical kinetics over the period of time using Bayesian modeling before completion of the measurement over an entirety of the period of time. A peak in the predicted rate of change can be predicted and a probability of the peak can be calculated recursively according to the data before completion of the measurement over the entirety of the period of time. The measurement can be stopped before completion thereof over the entirety of the period of time in response to the probability being greater than a threshold value.

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