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(54) Title: MODEL PARAMETER DETERMINATION USING A PREDICTIVE MODEL

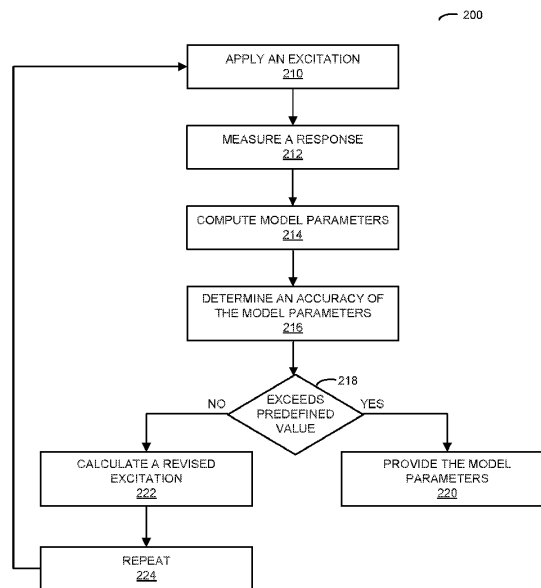


FIG. 2

(57) Abstract: A system may measure, using a measurement device, a response associated with a sample to an excitation. Then, the system may compute, using the measured response and the excitation as inputs to a predetermined predictive model, model parameters on a voxel-by-voxel basis in a forward model with multiple voxels that represent the sample. The forward model may simulate response physics occurring within the sample to a given excitation. For example, the forward model may be based on differential or phenomenological equations that approximates the response physics. Moreover, the system may determine an accuracy of the model parameters by comparing at least the measured response and a calculated predicted value of the response using the forward model, the model parameters and the excitation. When the accuracy exceeds a predefined value, the system may provide the model parameters as an output to: a user, another electronic device, a display, and/or a memory.

SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR,
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