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(54) Title: SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR ANALYZING LARGE LANGUAGE MODELS

(57) **Abstract:** Systems, methods, and computer program products are provided for analyzing large language models. An example system includes at least one processor configured to generate a plurality of model queries based on a semantic input, each model query of the plurality of model queries includes the semantic input and a different non-semantic input, input the semantic input into a language model, resulting in a first model output, perturb the language model with the plurality of model queries, resulting in a plurality of perturbed model outputs, determine a model harmonic value for the language model based on an angle between the first model output and the plurality of perturbed model outputs, and retrain or select the language model based on the model harmonic value satisfying at least one threshold.

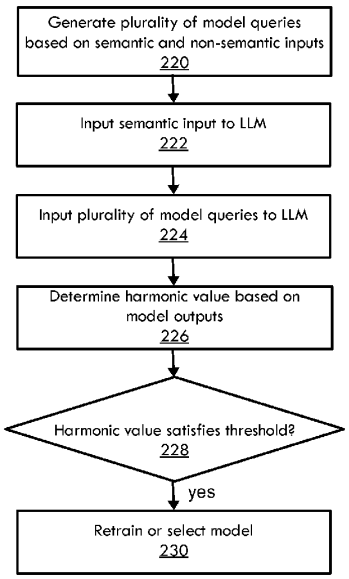

FIG. 2

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