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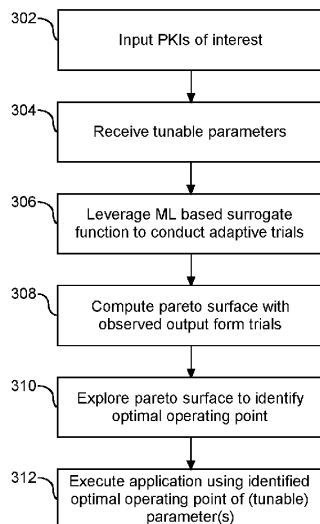


FIG. 3

(57) Abstract: A system, computer program product, and method are provided for orchestrating a multi objective optimization of an application. A set of two or more key performance indicators (KPIs) and one or more parameters associated with the application are received. A machine learning (ML) based surrogate function learning model in combination with an acquisition function is leveraged to conduct one or more adaptive trials. Each trial consists of a specific configuration of the one or more parameters. A pareto surface of the KPIs of the application is computed based on the observations of KPI values from each adaptive trial. The pareto surface is explored and an optimal operating point is selected for the application. The application is then executed at the selected operating point.

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