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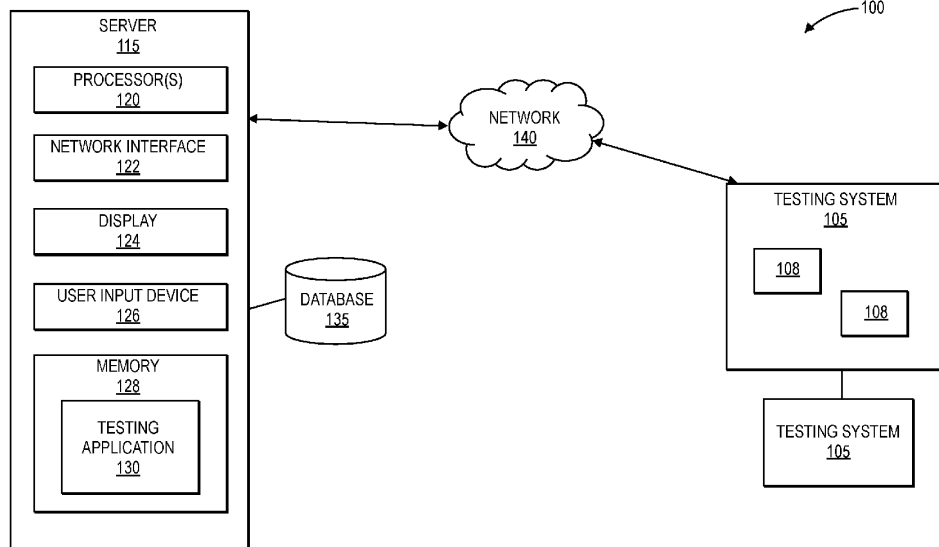
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(54) Title: VALIDATING A DEVICE UNDER TEST USING TOLERANCE STACKING AND MONTE CARLO SIMULATION

FIG. 1



(57) Abstract: A system for validating a device under test using a testing system having a testing component. The system may be configured to obtain a model of a testing component having a tolerance that impacts test results for a test performed by the testing system, determine an absolute component tolerance metric associated with a dimension of a testing component of the testing system, determine a test result delta based upon the absolute component tolerance metric associated with the dimension of the testing component, obtain a historical test results dataset indicative of historical tests performed using the testing system, generate a plurality of adjusted test results datasets via a Monte Carlo simulation, determine a plurality of sets of statistical characteristics respectively corresponding to the plurality of adjusted test results datasets, and determine acceptance or failure of the device under test based upon the plurality of sets of statistical characteristics.

[Continued on next page]

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