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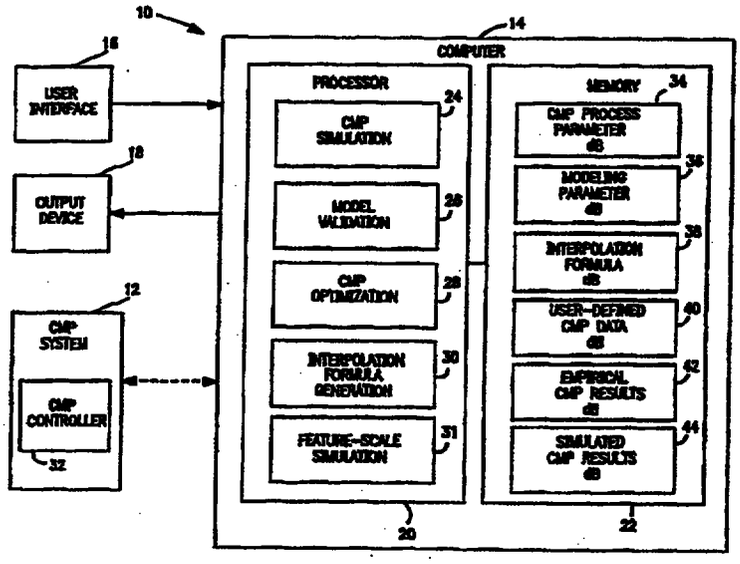
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(54) Title: METHOD AND APPARATUS FOR MODELING A CHEMICAL MECHANICAL POLISHING PROCESS



(57) Abstract

A chemical mechanical polishing (CMP) modeling system is capable of simulating both wafer-scale uniformity and feature-scale planarity results associated with a given CMP procedure. The modeling system optimizes its modeling parameters by comparing the simulated CMP results to corresponding empirical CMP results. The modeling system is also capable of optimizing the CMP process parameters such that the empirical CMP result approximates an ideal or predetermined CMP result defined by the user. The modeling system leverages historical empirical data to generate interpolation formulas for the modeling parameters. The use of such interpolation formulas enables the modeling system to simulate CMP procedures for which no empirical data exists.