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(54) Title: BASIN-TO-RESERVOIR MODELING

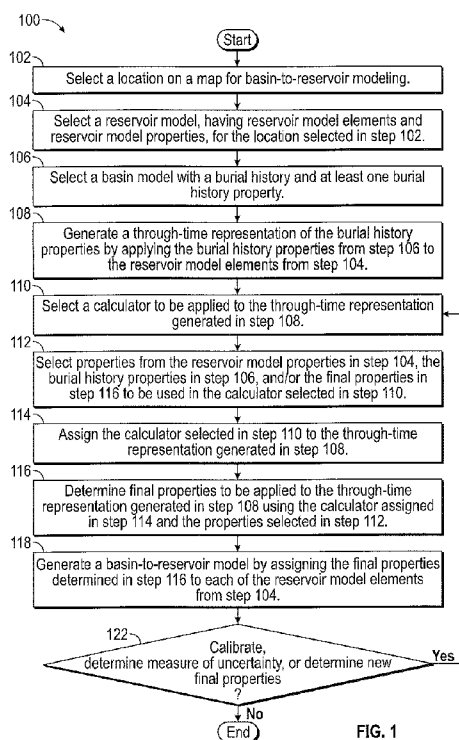


FIG. 1

(57) Abstract: Systems and methods for basin to reservoir modeling to identify any hi-grade drilling targets based on the linking of static and dynamic reservoir rock and fluid properties. Static, present-day, reservoir and field scale description grids or unstructured meshes are transformed into dynamic (through time) simulation grids or unstructured meshes that can subsequently be used for input to dynamic calculators. Basin modeling may be performed at the reservoir scale, providing a link between present-day and the historical process that acted on the rocks and fluids.