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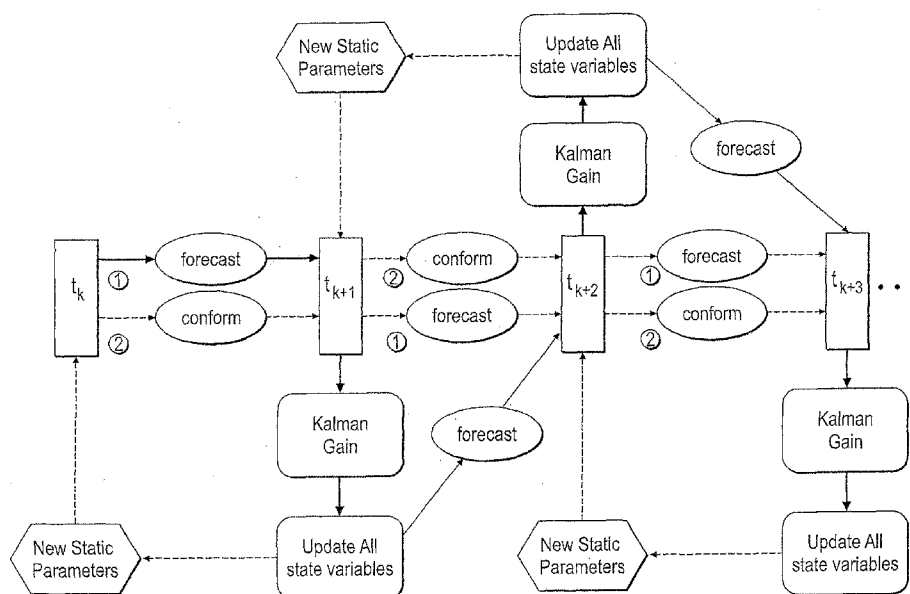
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(54) Title: METHOD, SYSTEM AND APPARATUS FOR REAL-TIME RESERVOIR MODEL UPDATING USING ENSEMBLE KALMAN FILTER



(57) Abstract: A method, system and apparatus for real-time reservoir model updating using ensemble Kalman filters is described. The method includes a conforming step for bringing static and dynamic state variables into conformance with one another during a time step of the updating. Also, an iterative damping method is used in conjunction with the conformance step to account for nonGaussian and nonlinear features in a system. Also, a re-sampling method is described which reduces the ensemble size of reservoir models which are to be updated.

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