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(54) **Title**: STATIC EARTH MODEL CALIBRATION METHODS AND SYSTEMS USING PERMEABILITY TESTING

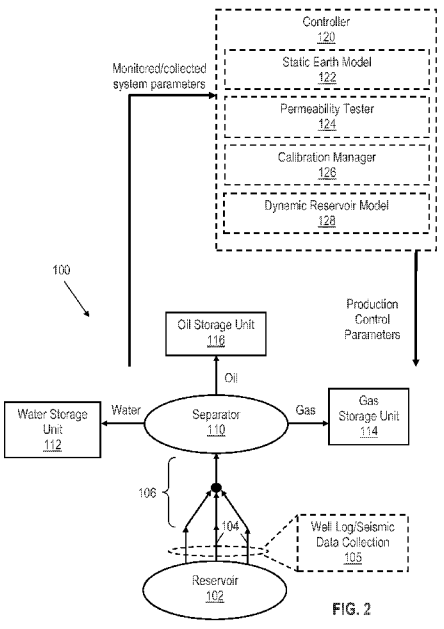


FIG. 2

(57) **Abstract**: At least some of the disclosed systems and methods obtain a static earth model having multiple layers. Further, at least some of the disclosed systems and methods test a permeability associated with at least part of the static earth model. Further, at least some of the disclosed systems and methods calibrate the static earth model by adjusting a distribution or proportion of geological features in at least one of the multiple layers based on the testing. Further, at least some of the disclosed systems and methods use the calibrated static earth model to predict fluid flow in a formation.