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(54) **Title:** METHOD OF DETERMINING TOTAL PROVE TIME

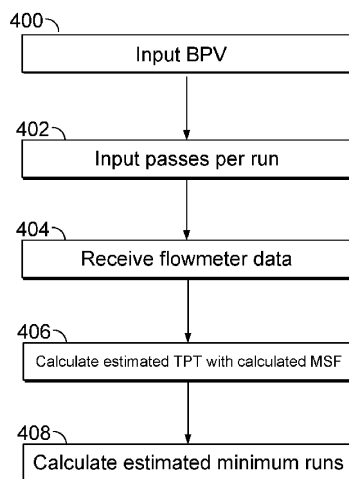


FIG. 3

(57) **Abstract:** Methods for operating a flowmeter diagnostic tool are provided that comprise interfacing the diagnostic tool with a flowmeter (5) sensor assembly (10). A base prover volume (BPV), a desired number of passes per run, and/or a maximum number of allowed runs may be input into the diagnostic tool. Flowmeter data is received. An estimated total prove time (TPT) necessary to pass a predetermined repeatability requirement, an estimated minimum number of runs needed to achieve the calculated TPT, and/or an estimated minimum BPV may be calculated. A standard deviation of the flowmeter sensor assembly flow rate (σ) is calculated, and the number of samples used to calculate σ is determined. A meter-specific factor (MSF) is calculated.

Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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