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(54) **Title:** MACHINE-LEARNING MODEL FOR REFINING STRUCTURAL VARIANT CALLS

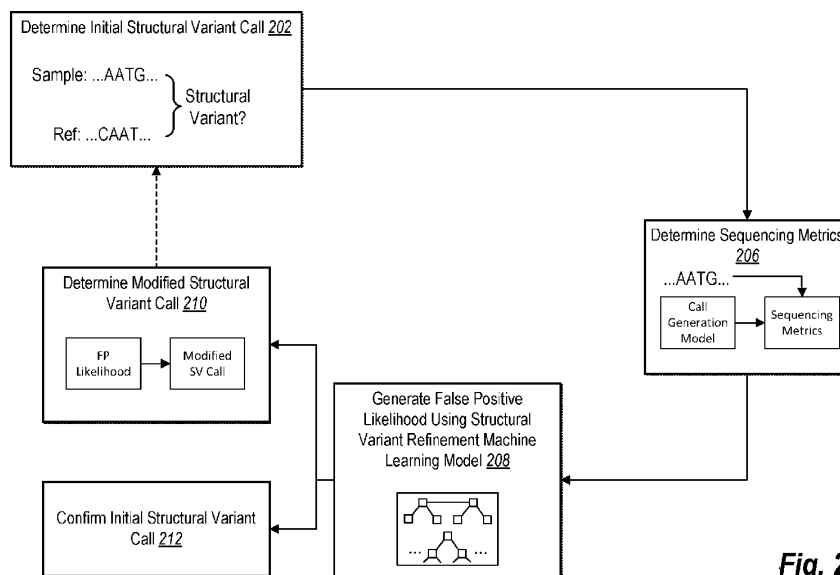


Fig. 2

(57) **Abstract:** This disclosure describes methods, non-transitory computer readable media, and systems that can utilize a machine-learning model to refine structural variant calls of a call generation model. For example, the disclosed systems can train and utilize a structural variant refinement machine-learning model to reduce false positives and/or false negatives. Indeed, the disclosed systems can improve or refine structural variant calls (e.g., between 50-200 base pairs in length) determined by a call generation model by training and utilizing the structural variant refinement machine-learning model. As disclosed, the systems can determine sequencing metrics and can customize training data for a structural variant refinement machine-learning model to generate modified structural variant calls.

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