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(54) Title: METHOD FOR WAVEFIELD-BASED DATA PROCESSING INCLUDING UTILIZING MULTIPLES TO DETERMINE SUBSURFACE CHARACTERISTICS OF A SUBSURFACE REGION

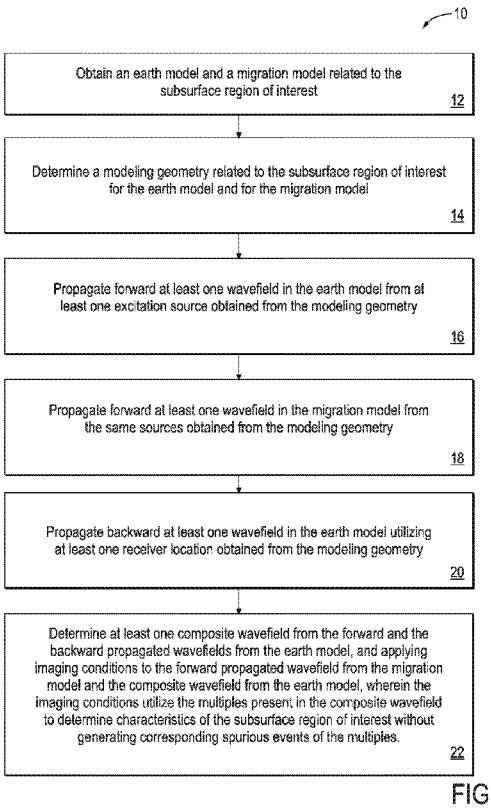

FIG. 1

(57) Abstract: Despite full waveform propagation capabilities offered by reverse time migration or inversion, prior art methods can generate spurious events from multiples and therefore are limited to using data without free-surface multiples. By eliminating or largely reducing artificial transmission of multiples, the enhanced reverse time migration or inversion in the present invention can correctly use data that contain free-surface and internal multiples and improve image quality or properties estimation.

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