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Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

[Continued on next page]

(54) Title: SIMULTANEOUS SOURCE ENCODING AND SOURCE SEPARATION AS A PRACTICAL SOLUTION FOR FULL WAVEFIELD INVERSION

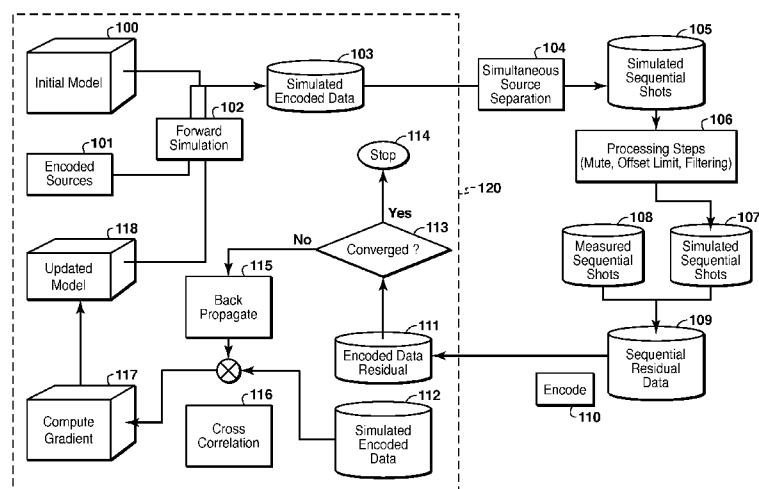


FIG. 1

(57) Abstract: Method for simultaneous full-wavefield inversion of gathers of source (or receiver) encoded geophysical data to determine a physical properties model (118) for a subsurface region, especially suitable for surveys where fixed receiver geometry conditions were not satisfied in the data acquisition. Simultaneous source separation (104) is performed to lessen any effect of the measured geophysical data's not satisfying the fixed-receiver assumption. A data processing step (106) coming after the simultaneous source separation acts to conform model-simulated data (105) to the measured geophysical data (108) for source and receiver combinations that are missing in the measured geophysical data.



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- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*
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