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(54) Title: SIGNAL RECOVERY DURING SIMULTANEOUS SOURCE DEBLENDING AND SEPARATION

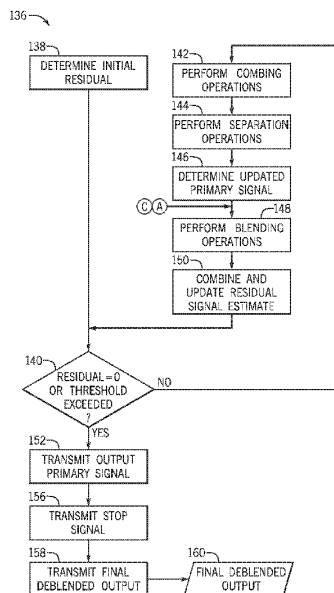


FIG. 7

(57) Abstract: A device may include a processor that may recover the signals misallocated in the deblending process of seismic data acquired with simultaneous sources. The processor may update the primary signal estimate based at least in part on a separation operation that separates coherence signals from noise signals in an output associated with the residual determined to be remaining energy for separation. The processor may be incorporated into the iterative primary signal estimate of the deblending process or be applied towards preexisting deblending output. In response to satisfying an end condition, the processor may transmit a deblended output that includes the weak coherence signals recovered from the misallocation or error in the primary signal estimate. The processor may also transmit the deblended output for use in generating a seismic image. The seismic image may represent hydrocarbons in a subsurface region of Earth or subsurface drilling hazards.

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