

ABSTRACT

METHODS AND SYSTEMS THAT COMBINE WAVEFIELDS ASSOCIATED WITH GENERALIZED SOURCE ACTIVATION TIMES AND NEAR-CONTINUOUSLY RECORDED SEISMIC DATA

Systems and methods to correct source responses and perform source deghosting of a pressure or particle motion wavefield recorded using near-continuous recording of seismic data along a vessel track with generalize source activation times. The methods and systems receive a near-continuously recorded seismic data and generate a near-continuous wavefield for approximately stationary-receiver locations. Time windows of different temporal lengths are applied to traces of the near-continuous wavefield in approximately stationary-receiver locations in order to compute common-receiver gathers. The common-receiver gathers are corrected source wavefield response and source ghost effects and are combined in weighted sums to generate broadband seismic data.

FIG. 14