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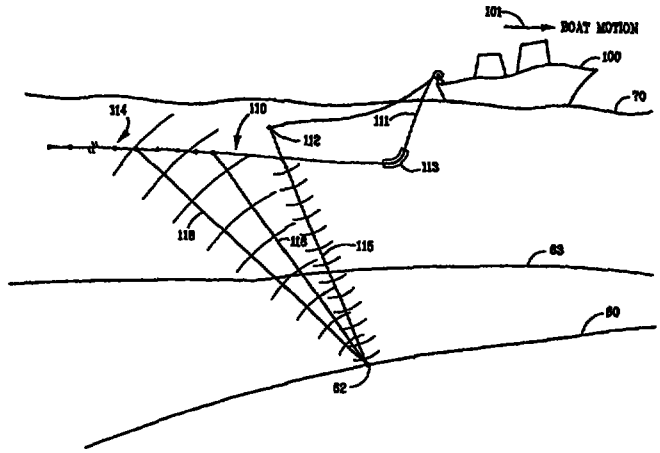
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(54) Title: METHOD FOR REMOVING SEISMIC NOISE CAUSED BY EXTERNAL ACTIVITY



(57) Abstract

A method for analyzing a target seismic trace (100), generally comprises selecting other traces in source receiver space (114), not including traces from the same shot record that contains the target trace (122), and comparing the selected traces (118), to the target trace (115). The method generally includes setting a distance value indicative of the number of shot gathers (114), to be considered in conjunction with analyzing a target trace, specifying which traces from a plurality of shot records to compare to the target trace based on the distance value, calculating a first amplitude value associated with the amplitude of the target trace (100), calculating a second amplitude valve associated with the amplitudes of the specified comparison traces (100), and comparing the first amplitude value to the second amplitude value. The comparison and target traces can be analyzed (100), in various windows of time. The target trace is modified in a suitable manner if it is found to contain noise (100). The preferred method can be implemented in a seismic processing system (100), that is included onboard a seismic ship (100). Because the method does not require all of the seismic data to be acquired and then sorted before analyzed for noise, as is the case for many conventional trace editing techniques, the method of the preferred embodiment can be performed in near real or real time. As such, real time data quality control is possible.