

ABSTRACT

Method and Device for Dynamic Control of Delays in Gun Controller

A method controls a delay of an air-gun in an aquatic seismic source. The method includes a step of receiving an attribute of the air-gun during the aquatic seismic survey; a step of calculating, based on a time-delay algorithm that uses the attribute, the asynchronization time of the air-gun; a step of determining whether the asynchronization time is smaller than a given time threshold; a step of instructing a controller to (1) wait for a predetermined time before calculating again the asynchronization time of the air-gun if the asynchronization time is smaller than the given time threshold, or (2) calculate an updated asynchronization time for the air-gun based on the attribute if the asynchronization time is larger than the given time threshold; and a step of sending the updated asynchronization time to a gun controller of the air-gun for adjusting a delay time for firing the air-gun.

Fig. 4