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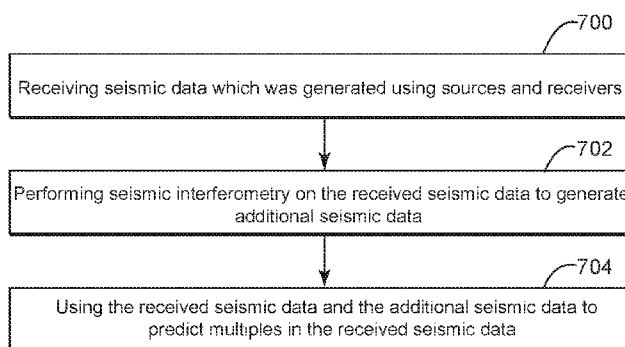
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[Continued on next page]

(54) Title: SEISMIC DATA PROCESSING INCLUDING SURFACE MULTIPLE MODELING FOR OCEAN BOTTOM CABLE SYSTEMS

Fig. 7



(57) Abstract: A system and method are disclosed for predicting, and optionally removing surface multiples from acquired seismic data that lacks surface consistency, such as seismic data acquired using an Ocean Bottom Cable (OBC) or Ocean Bottom Node (OBN) system where the sources are located at or near the water's surface and the receivers are located at or near the ocean's floor. By processing the acquired seismic data using seismic interferometry, source side and/or receiver side operators can be generated which satisfy the surface consistency requirement of techniques such as Surface Related Multiple Elimination (SRME) so that SRME or the like can be used to predict the surface multiples.



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