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(54) Title: AUTOMATIC PROCEDURE FOR MERGING TRACKS AND ESTIMATING HARMONIC COMBS

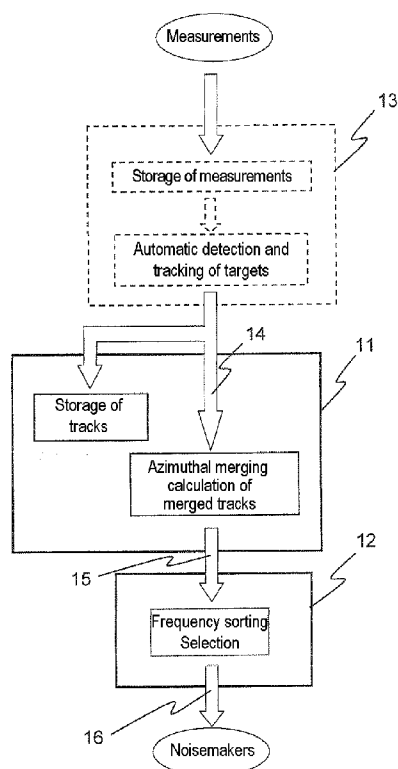


FIG.1

(57) Abstract: The present invention relates to the field of data merging, the term "data" being taken within the broad sense of "observation data". It relates notably to the data obtained on the basis of the processing of sonar, radar or optronic signals. The subject of the invention is a method for carrying out the spectral merging and characterization of tracks, each track consisting of the data relating to the evolution over time of the bearing position and of the Doppler frequency of an assumed object. This method comprises: a first step of merging the initial tracks which correspond substantially to identical observation directions (azimuths), a second step of frequency analysis of the tracks resulting from merging the initial tracks and of characterizing the merged tracks whose spectrum takes the form of a harmonic comb characteristic of a single real object. The invention finds for example its application in data merging and echo classification, for narrowband passive sonar applications.



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