

ABSTRACT

SYSTEM AND METHOD FOR CONSTRUCTING FUSED TRACKS FROM RADAR DETECTIONS

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A fusion system and method for constructing fused tracks for a plurality of targets from radar detections are described. The fusion system includes a plurality of Ground Moving Target Indicator (GMTI) radars for detecting targets in an area of interest and providing GMTI plots in the form of location vectors including location data of the targets in polar coordinates. The fusion system also includes a plurality of conversion units for converting coordinates of the GMTI plots from polar coordinates to Cartesian coordinates to provide converted plots. The fusion system also includes a plurality of GMTI trackers creating preliminary GMTI tracks of the targets from the converted plots. The fusion system also includes a fused plots generator for constructing fused plots by using the converted plots and the preliminary GMTI tracks. The fusion system also includes a fused track generator for generating fused tracks for the targets from the fused plots.

Fig. 1