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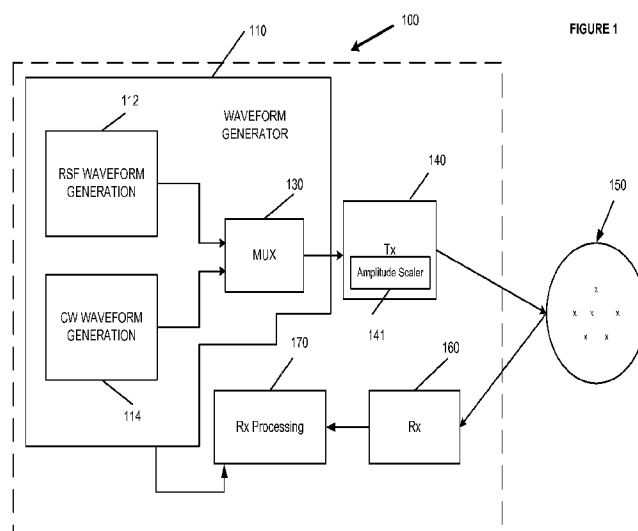
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(54) Title: A METHOD OF TARGET DETECTION



(57) Abstract: A method of target detection comprising transmitting a continuous wave (CW) waveform and a random step frequency (RSF) waveform from which return signals are to be monitored in a detection period, processing return signals received in the detection period based on the transmitted CW waveform to obtain Doppler shift data indicative of Doppler frequency shifts corresponding to one or more targets, and processing the return signals of the detection period based on the transmitted RSF waveform and the obtained Doppler shift data to obtain range information corresponding to one or more targets.