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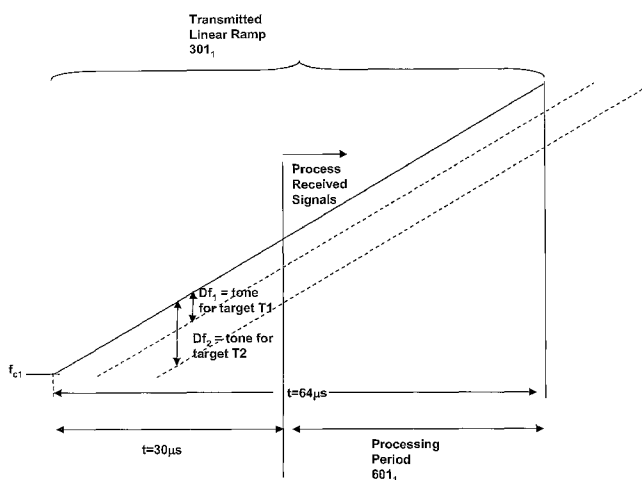
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(54) Title: IMPROVEMENTS TO DOPPLER RADAR SYSTEMS



(57) Abstract: Embodiments of the invention are concerned with improvements to Doppler radar systems, and are suitable for use with frequency scanning radar systems. In one arrangement the improvements are embodied in a frequency scanning radar controller for use in controlling a frequency generator; the frequency generator is arranged to generate a plurality of sets of signals, each set of signals having a different characteristic frequency and comprising a plurality of signals transmitted at a selected rate, and the radar controller is arranged to select the rate in dependence on the characteristic frequency. The invention can be embodied in a pulsed radar, for which each set of signals comprises a set of pulsed signals and each pulsed signal is repeated at a selected repetition rate. The radar controller is then arranged to modify the repetition rate in dependence on the characteristic frequency of the pulsed signal. The invention can alternatively be embodied in a frequency modulated radar system, for which each set of signals comprises a sequence of modulation patterns. The radar controller is then arranged to modify a given modulation pattern in dependence on the characteristic frequency of the signal being modulated.

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