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(57) Abstract :

The present invention relates to the field of a figure of merit. The invention more particularly relates to a new figure of merit for pulse compression radar. The present measure is one the desirable metric to determine goodness of a Radar Pulse Compression Codes, eg Binary ( $\pm 1$ ), Ternary (0,  $\pm 1$ ), Polyphase etc. Usually the metrics in practice are Discrimination Factor D, Merit Factor F. In the recent literature D and F have been changed to Peak Side Lobe Ratio (PSLR) and Integrated Side Lobe Ratio (ISLR) as a dB measure for convenience sake. The measure of metric proposed here is New Figure of Merit in a different scenario. This parameter will take care about if any disturbance is there in the received signal that occur due to atmospheric effects.

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