

Three-Dimensional Imaging Using A New Synthetic Aperture Focusing technique

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Summary

The drawbacks of the multifrequency automatic focusing technique (MF-AFT) have been eased considerably when the scanned-frequency signals are transmitted simultaneously in a pulse. While the focusing capabilities of the MF-AFT are maintained, substantial reduction in data processing is obtained when the new procedure is used. In addition, the derived pulse can be tailored to further enhance the quality of the image produced by this new procedure. Simulation results are included to demonstrate the focusing capabilities of the procedure for both two- and three-dimensional objects

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