New High-Resolution Imaging Technology

Application of Advanced Radar Technology for Medical Imaging

Dr. Ashok Gorwara, Dr. Pavlo Molchanov
Planar Monolithics Industries Inc. MD, USA

East Coast: 7311F GROVE ROAD, FREDERICK, MD 21704 USA • PHONE: 301-662-5019 • FAX: 301-662-2029
West Coast: 4921 ROBERT J. MATHEWS PARKWAY, SUITE 1, EL DORADO HILLS, CA 95762 USA • PHONE: 916-542-1401

EMAIL: sales@pmi-rf.com WEB: www.pmi-rf.com

ISO 9001 CERTIFIED
Ultra-wide band antenna integrated with front end circuit and digitizer.

Digital interface to processor.

Object signal

Reference signal

Diffraction of long wavelength signals

Digital hologram

Digital phase resolution

Transmitted signal OFF in this area

Detected signal

Diffraction components, consists information about identified content

Non-informative diffraction components, non-consists information about identified content

Application of Micro-Doppler Radar for Detection of Human Body Motions

Detection of Breathing or Heart motions

Identification of Body Tissues and Anomalies by Spectrum Signature

High Resolution Imaging with Low Power Long Wavelength RF Signals

Wavelength

Object signal

Reference signal

Phase

Digital hologram

Sampling period

Amplitude

Time

Ph1

Ph2

Ph3

Phn