General B-mode (GB) Surface Imaging

Published date: March 17, 2017

Technology description

3D ultrasound imaging is widely used in the medical diagnostic area. Currently the dominant method for 3D ultrasound image acquisition is using wobbler scanning probe. In these probes, a 1-D array is used to generate 2D B-mode images. The array is driven by a motor, mechanically scanning along the lateral direction. As a result, a series of b-mode slices can be acquired to form the 3D image. As a replacement of wobbler probe, 2D array, also called matrix array, becomes commercially available recently. It is composed of a much larger number of transducer elements which is permutated as a 2D array. The mechanical scanning is replaced by electronic steering or scanning. The purpose of performing volume imaging is to acquire the spatial information of the target.

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