TECHNOLOGY LICENCING OPPORTUNITY

Dual-Modal Breast Imaging System

Technology Details

This dual-modal breast imaging system combines two distinct imaging modalities — acoustic imaging and electromagnetic imaging — to provide comprehensive, high-resolution diagnostic imaging for breast tissues with minimal to no movement of the breast between scans. This system includes a static receptacle to hold the breast or other target objects in place, reducing patient discomfort and positioning errors. The system integrates an acoustic imaging fixture with acoustic transducers and an electromagnetic imaging chamber equipped with electromagnetic antennae. Both imaging modalities function synergistically, improving the accuracy and sensitivity of tumor detection.

Applications

Breast Cancer Detection

Technology Benefits

This novel, integrated dual-modal breast imaging system represents a significant advancement in breast cancer detection. By minimizing patient movement, integrating acoustic and electromagnetic data, and automating the workflow, this system offers high-quality imaging with improved tumor detection capabilities. It enhances both the speed and accuracy of diagnosis, making it a valuable tool in clinical settings for breast health monitoring.

- **Improved Tumor Detection:** The integration of acoustic sound-speed data with electromagnetic imaging enhances the ability to detect and accurately characterize tumors, especially in dense breast tissues.
- **Patient Comfort:** Minimal movement of the breast between scans ensures a more comfortable experience for the patient, reducing the potential for motion artifacts and eliminating the need for repositioning.
- **Efficiency**: The system's design allows for quicker and more accurate imaging, reducing time spent on each scan while increasing diagnostic confidence.

Development Stage

Investment in the further development and commercialization of this technology will accelerate the transition to a more effective breast cancer detection. Stakeholders in the cancer sector, including health practitioners, med-tech companies, and technology investors, are encouraged to explore partnerships and collaborations to bring this innovative solution to market.

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