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Title:	Photo Acoustic Induced Ultrasound Imaging using F-k migration
Authors:	Burman, Nitin (/jspui/browse?type=author&value=Burman%2C+Nitin)
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Abstract:	Photoacoustic tomography(PAT) is emerging nowadays. It is offering a new perspective and opportunity in medical imaging. Due to its cost effective instrumentation, fast computation and better resolution, this particular area of the medical physics is growing rapidly. Recently, Dr. S.K. Biswas delineated the surface of the bone surface which was previously not possible using the PAT. He used the photo-acoustically induced ultrasound signal from the epidermis and recorded its reflection from the surface of the bone surface in the pulse echo mode. But, due to the inconsistency between the geometry of the detector array and shape of the reflector, the artefacts were produced in the reconstructed image as shown in his work. In this thesis we have tried to solve this problem by using the Stolt's F-K migration. We test the proposed solution on the simulated signal and on the experimental data of finger like phantom.
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