

Grid Pattern Recognition and Suppression in Computed Radiographic Images

Authors : Igor Belykh

Abstract : Anti-scatter grids used in radiographic imaging for the contrast enhancement leave specific artifacts. Those artifacts may be visible or may cause Moiré effect when a digital image is resized on a diagnostic monitor. In this paper, we propose an automated grid artifacts detection and suppression algorithm which is still an actual problem. Grid artifacts detection is based on statistical approach in spatial domain. Grid artifacts suppression is based on Kaiser bandstop filter transfer function design and application avoiding ringing artifacts. Experimental results are discussed and concluded with description of advantages over existing approaches.

Keywords : grid, computed radiography, pattern recognition, image processing, filtering

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