

Abstract

A method, a system, and a computer-readable medium for motion detection and correction of a medical image are provided, including segmenting a medical image about a target organ into a plurality of frame images in accordance with list mode data, and analyzing a plurality of centers of mass of a volume of interest in the plurality of frame images to compute a motion curve of the target organ during scanning, and executing a reconstruction optimization of the medical image based on the motion curve, and therefore being able to take into account the movement of a human organ or a lesion without installing an additional monitoring device in order to perform motion detection and correction of the medical image.

Fig. 4