

(54) Title of the invention : RESPIRATORY MOTION DETERMINATION APPARATUS

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(57) Abstract :

The invention relates to a respiratory motion determination apparatus for determining respiratory motion of a living being (3). A raw data providing unit (2) provides raw data assigned to different times wherein the raw data are indicative of a structure like the apex of the heart muscle which is influenced by cardiac motion and by respiratory motion and a reconstruction unit (6) reconstructs intermediate images of the structure from the provided raw data. A structure detection unit (7) detects the structure in the reconstructed intermediate images and a respiratory motion determination unit (10) determines the respiratory motion of the living being based on the structure detected in the reconstructed intermediate images. This allows determining respiratory motion with high accuracy without relying on for example a stable correlation between a tracking signal of an external respiratory gating device and respiratory phases.

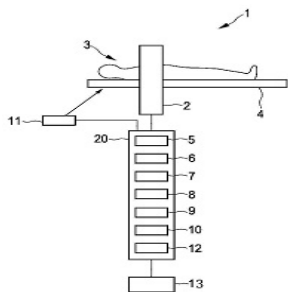


FIG. 1

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