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(54) **Title:** METHOD AND APPARATUS FOR REORIENTATED RECONSTRUCTION OF COMPUTED TOMOGRAPHY IMAGES OF PLANAR OBJECTS

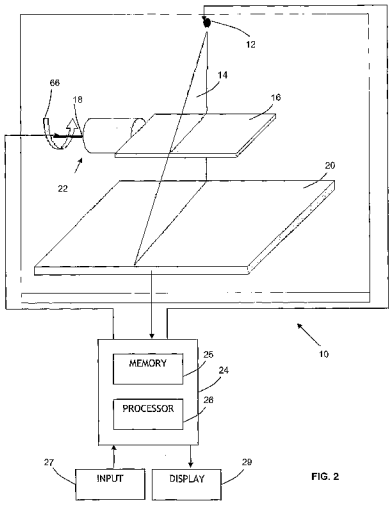


FIG. 2

(57) **Abstract:** A system and method for micro computed tomography (CT) reconstruction of position scan data of planar objects, such as stacked integrated circuit chips and/or PCB, that automatically determines object orientation is disclosed for a preferred orientation of the reconstructed images. The object orientation of the sinogram of the scanning data is determined such that the reconstruction may be performed with any starting position. Additionally, planar object scan reconstructions with either a higher resolution in the thickness dimension without increasing the total computation resource or a faster processing speed under a given resolution in the thickness dimension may be achieved. The tilting angle with respect to the rotation axis may also be determined to perform a image rotation after a multi-slice reconstruction or cone-beam reconstruction.

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