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(54) Title: MULTI-LINEAR X-RAY SCANNING SYSTEMS AND METHODS FOR X-RAY SCANNING

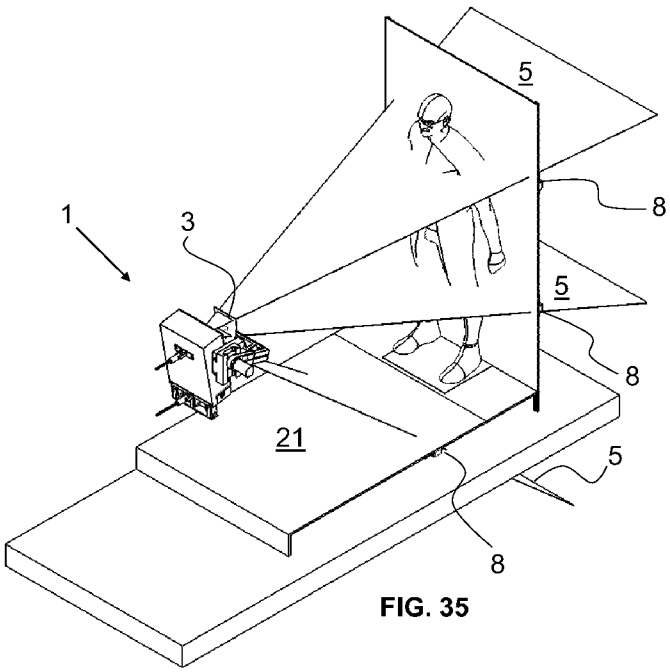


FIG. 35

(57) Abstract: An x-ray scanner includes an x-ray source producing a fan of x-rays, an x-ray detector array, a collimator disposed between the source and the array, fixed to the source, and defining a slit collimating the fan of x-rays into a linear x-ray beam. The array is spaced from the source such that a linear extent of the linear x-ray beam is no greater than a detector dimension of the array. An x-ray processing unit processes detection of the linear x-ray beam by the array. A processor-controlled motor moves the x-ray source about a source movement axis to pan the linear x-ray beam and create an x-ray emission cone and moves the array correspondingly with the source. The x-ray processing unit form an x-ray scanned image of an object disposed between the collimator and the array within the x-ray emission cone when the linear x-ray beam is panned across the object.

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