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A handwritten signature in black ink that reads "Jon W. Dudas".

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(12) **United States Patent**  
**Grady**

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(54) **ANGIO CAPABLE PORTABLE X-RAY FLUOROSCOPY UNIT WITH SLIDING C-ARM AND VARIABLE PIVOT**

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(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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**H05G 1/06** (2006.01)

(52) **U.S. Cl.** ..... **378/198; 378/197**

(58) **Field of Classification Search** ..... **378/195-198**  
See application file for complete search history.

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(57) **ABSTRACT**

An “Angio Capable Portable X-Ray Fluoroscopy Unit with Sliding C-Arm and Variable Pivot Point” is disclosed. It is a new Portable C-Arm x-ray system for fluoroscopy (e.g., angio fluoroscopy) that permits head-to-foot, or cranio-caudal, angulation without appreciable degradation or rotation of the recorded image in the segment of possible views most desired to be used for cardiac angiography, generally between a vertical beam and 60 degrees to the patient’s left side from vertical. Applicant’s preferred embodiment comprises a portable x-ray device of the type having a C-arm which “slides” through a fixed C-slider housing or sleeve mounted onto a portable base, wherein: the C-slider housing is mounted onto the portable base through a rotatable tilt bearing, and the rotation axis of the bearing and fixed sleeve can be repositioned, within an arcuate slot in the base, from approximately horizontal, when the x-ray beam is vertical, to between approximately 60 degrees and 40 degrees below horizontal in a vertical plane.

**8 Claims, 7 Drawing Sheets**

