Device to Reduce Diagnostic X-ray Exposure

**Background:** X-ray is the most widely used diagnostic medical imaging technology. However, the need remains to reduce x-ray dose while preserving diagnostic image quality. This is particularly acute for imaging children, where varying patient size and a tendency for motion can lead to up to 48-fold variation in dose and a 25% repeat rate.

**Technology Description:** The x-Vue technology was developed by pediatric radiologists to reduce patient exposure by leveraging augmented reality technology. The imaging and computational system allows the setting of proper technique based upon the size of the individual patient, detects when a patient is properly positioned for exposure, and informs the technician if the patient is moving. The technology may be extended to CT and fluoroscopy.

**Stage of Development:** First and second-generation prototypes have been developed with clinical testing in progress. Evaluation underway.

**Patent Status:** US 15/100,022 and EP 14866125.9 (pending)

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