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(54) **Title:** DEEP LEARNING MODEL FOR NOISE REDUCTION IN LOW SNR IMAGING CONDITIONS

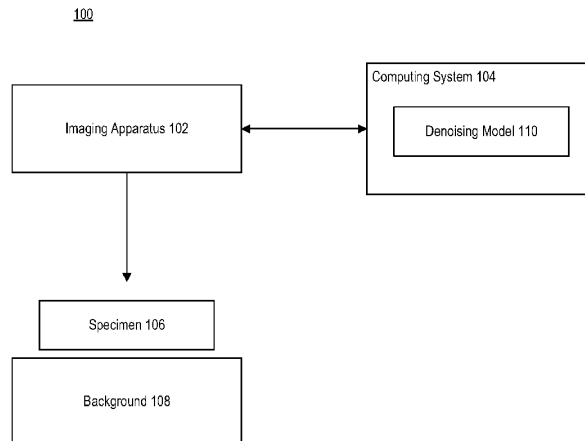


FIG. 1

(57) **Abstract:** Embodiments disclosed herein are generally related to a system for noise reduction in low signal to noise ratio imaging conditions. A computing system obtains a set of images of a specimen. The set of images includes at least two images of the specimen. The computing system inputs the set of images of the specimen into a trained denoising model. The trained denoising model is configured to output a single denoised image of the specimen. The computing system receives, as output from the trained denoising model, a single denoised image of the specimen.

[Continued on next page]

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