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(54) Title: FOURIER PTYCHOGRAPHIC IMAGING SYSTEMS, DEVICES, AND METHODS

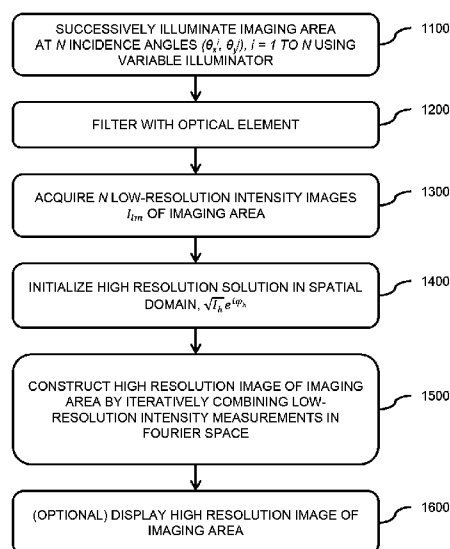


FIG. 6A

(57) Abstract: A Fourier ptychographic imaging device includes a variable illuminator for providing illumination to a specimen from a plurality of incidence angles; an optical element for filtering illumination issuing from the specimen; a detector for acquiring a plurality of variably-illuminated, low-resolution intensity images of the specimen based on light filtered by the optical element; and a processor for computationally reconstructing a high-resolution image of the specimen by iteratively updating overlapping regions in Fourier space with the variably-illuminated, low-resolution intensity images.



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