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(54) Title: VARIABLE-ZOOM IMAGING APPARATUS

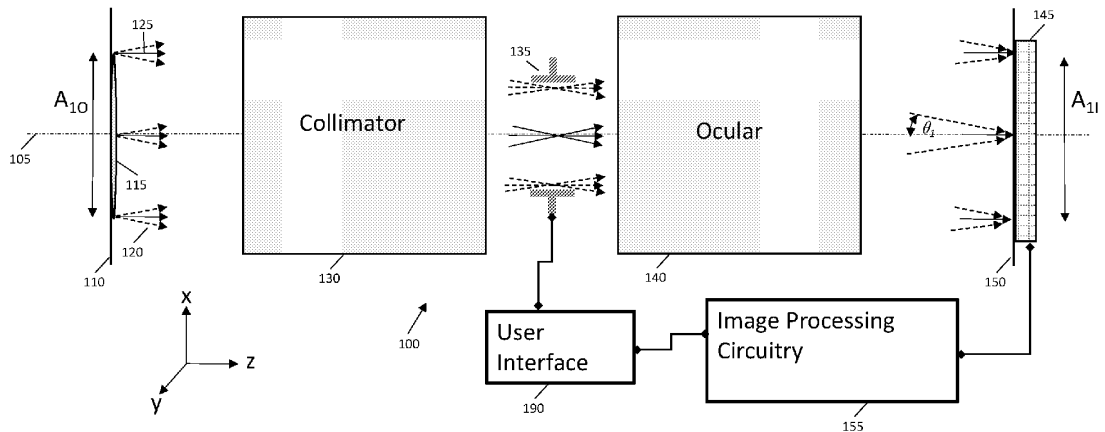


FIG. 1A

(57) Abstract: Disclosed is a variable-zoom imaging apparatus that includes: i) imaging optics configured to form an image in an imaging area of an object positioned in an object area; ii) an adjustable aperture stop to adjustably set a numerical aperture NA for the image formed by the imaging optics; iii) an electronic detector comprising an array of detector elements positioned in the imaging area to detect the image; and iv) image processing circuitry coupled to the electronic detector to produce a digital representation of the image based on signals from at least some of the detector elements. The image processing circuitry produces the digital representation with a different magnification of the object m for each of a plurality of different numerical apertures for the image set by the adjustable aperture stop.

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