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(54) Title: DIOPTRIC TELESCOPE FOR HIGH RESOLUTION IMAGING IN VISIBLE AND INFRARED BANDS

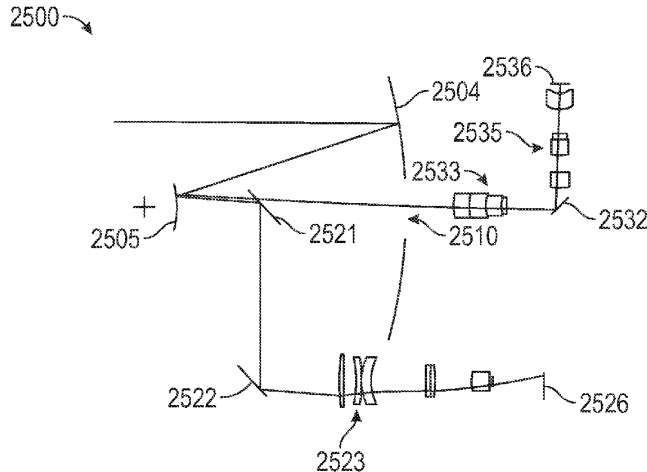


FIG. 30

(57) Abstract: A cata-dioptric optical system for high resolution imaging in visible and infrared bands. The system includes a concave primary mirror, a convex secondary mirror, at least one beam splitter, a first folding mirror, a first group of lenses, a second group of lenses, and at least two image planes. The image planes have one or more aggregated sensors, where a first image plane receives rays from the first group of lenses and a second image plane receives rays from the second group of lenses, and at least one image plane is positioned behind the primary mirror and at a radial distance from the optical axis that is no more than the radius of the primary mirror.

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