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(71) Applicant: **KLA CORPORATION** [US/US]; Legal Department, One Technology Drive, Milpitas, California 95035 (US).

(72) Inventors: **ROMANOVSKY, Anatoly**; 1044 Amarillo, Palo Alto, California 94303 (US). **LEONG, Jenn-Kuen**; 1187 Lockhaven Way, San Jose, California 95129 (US). **KAVALDJIEV, Daniel**; 5645 Begonia Drive, San Jose, California 95124 (US). **WANG, Chunhai**; 5026 Blackbird Way, Pleasanton, California 94566 (US). **WHITESIDE, Bret**; 3048 Valley of Hearts Delight Place, San Jose, California 95136 (US). **XU, Zhiwei Steve**; 1780 Laurentian Wy., Sunnyvale, California 94087 (US).

(74) Agent: **MCANDREWS, Kevin** et al.; KLA CORPORATION, Legal Department, One Technology Drive, Milpitas, California 95035 (US).

(54) Title: APPARATUS AND METHOD FOR ROTATING AN OPTICAL OBJECTIVE

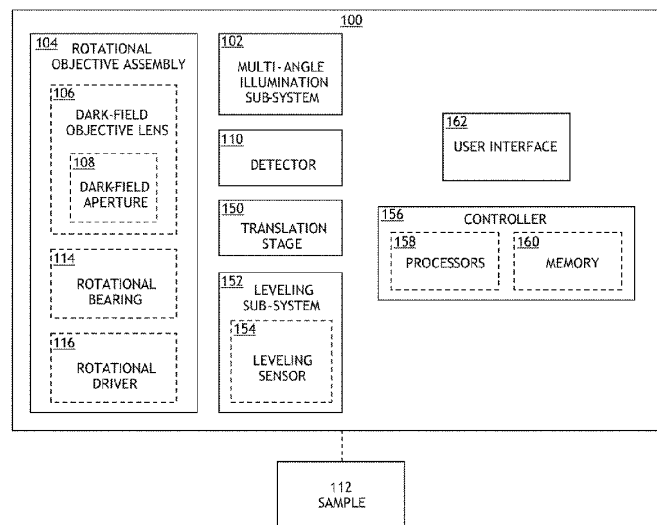


FIG. 1A

(57) **Abstract:** A dark-field optical system may include a rotational objective lens assembly with a dark-field objective lens to collect light from a sample within a collection numerical aperture, where the dark-field objective lens includes an entrance aperture and an exit aperture at symmetrically-opposed azimuth angles with respect to an optical axis, a rotational bearing to allow rotation of at least a part of the dark-field objective lens including the entrance aperture and the exit aperture around the optical axis, and a rotational driver to control a rotational angle of the entrance aperture. The system may also include a multi-angle illumination sub-system to illuminate the sample with an illumination beam through the entrance aperture at two or more illumination azimuth angles, where an azimuth angle of the illumination beam on the sample is selectable by rotating the objective lens to any of the two or more illumination azimuth angles.

[Continued on next page]

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