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(54) Title: MULTILENS OPTICAL ASSEMBLY FOR A DIAGNOSTIC DEVICE

(57) Abstract: A diagnostics apparatus for detecting fluorescence events related to the presence of an analyte in a sample is disclosed. The apparatus includes a housing, a source of excitation light and a photodetector, and a unitary multi surface optical module. The optical module is integrally formed and composed of an upstream portion having a focusing optical surface for directing excitation light from the light source to a focal region within an analyte-detection zone in the apparatus, and a downstream portion having a second focusing powered optical surface and at least one reflecting surface for directing fluorescence-emission light produced by fluorescence events within the detection zone, in a direction substantially normal to the path of the excitation light onto the photodetector. The optical module is adaptable to a variety of assay formats, including multiplesample, sample-array, and disposable-cartridge formats.