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Ahmed et al.

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(54) **DEFORMOMETER FOR DETERMINING DEFORMATION OF AN OPTICAL CAVITY OPTIC**

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(58) **Field of Classification Search**
None
See application file for complete search history.

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(57) **ABSTRACT**

A deformometer includes: a cavity body; entry and exit optical cavity optics, such that the optical cavity produces filtered combined light from combined light; a first laser that provides first light; a second laser that provides second light; an optical combiner that: receives the first light; receives the second light; combines the first light and the second light; produces combined light from the first light and the second light; and communicates the combined light to the entry optical cavity optic; a beam splitter that: receives the filtered combined light; splits the filtered combined light; a first light detector in optical communication with the beam splitter and that: receives the first filtered light from the beam splitter; and produces a first cavity signal from the first filtered light; and a second light detector that: receives the second filtered

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