

Novel nano-actuator based curvature measurement system

Abstract:

Nano-actuator based curvature measurement system

A system for measuring curvature of a material is disclosed. The system comprises an actuation module arranged to provide displacement to a reflective material to bend the material, the material coupled to the system at a fixed end. There is also an optical transmission module comprised of a set of optics arranged to transmit a plurality of coherent light beams onto the material. There is also an optical reception module arranged to receive the plurality of coherent light beams reflected by the material and received through a second set of optics. The optical reception module is arranged to record the position of the plurality of the coherent light beams for a predetermined displacement of the free end of the material by the actuation module. There is also a computing module coupled to the optical reception module for storing the recorded position of the plurality of the coherent light beams.

Patent application No. 1784/MUM/2014