OPTICAL FIBRE SCANNER

ABSTRACT

An optical fibre scanner, a method of operating the optical fibre scanner, and a method of fabricating an optical fibre scanner. The optical fibre scan comprises a one dimensional, 1-D, actuator; a clamping structure for mounting the 1-D actuator such that a free end of the 1-D actuator can be actuated to vibrate in a major axis; and at least one optical fiber attached to the 1-D actuator such that vibration of the free end of the 1-D actuator in the major axis is transferrable to the at least one optical fibre, wherein the optical fibre protrudes the 1-D actuator with a free end of the at least one optical fibre disposed at a distance from the actuator; wherein the clamping structure is configured for adjusting the force applied on the 1-D actuator in a direction along the major axis and a minor axis perpendicular to the major axis, whereby coupling of vibration of the free end of the at least one optical fiber in the major axis to vibration in the minor axis is tunable for two dimensional, 2-D, optical fibre scanning.

Figure 2A