LASER BEAM POSITIONING SYSTEM

ABSTRACT OF THE DISCLOSURE

A method and apparatus for targeting a beam of radiation is provided. A beam steering mirror and a beam capture mirror are movably disposed along an optical pathway. A controller moves the beam steering mirror and the beam capture mirror in an x-y plane, and rotates the mirrors, to target the beam to a target location on a surface, while keeping the optical path length substantially constant for all target locations on the surface. The surface is rotated by a rotational actuator to bring all target locations to positions accessible by the beam targeting optics. Imprecision in targeting and optical path length may be compensated by providing an actuated aperture at the beam entry point and/or a variable focus lens with an optical range finding detector, all in communication with the controller.

FIG. 1A