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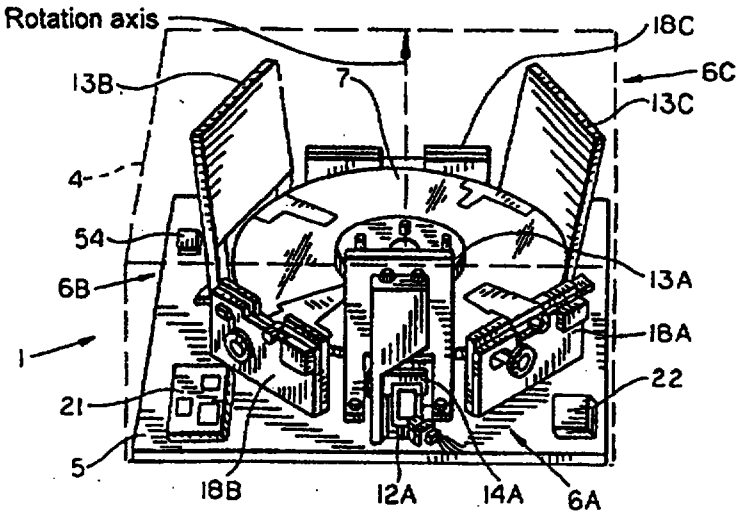

(57) Abstract

Holographic laser scanner (1) of ultra-compact design which produces a three-dimensional laser scanning volume that is capable of reading one-dimensional and two-dimensional bar code symbols and other types of graphical indicia within large or small scanning volumes of highly confined (i.e., controlled) geometry, using holographic optical elements (13A, 13B, 13C) including a rotating disc (7) that supports a plurality of facets (9), and at least one visible laser diode(s) (12A, 12B, 12C). The three-dimensional laser scanning volume has multiple focal planes and a highly confined geometry extending about a projection axis extending from the scanning window, including an aperture, of the holographic scanner (1).