

Marine Searchlight Powered by Laser Diodes

Abstract

The present invention discloses marine searchlights (100, 100a-100b) powered by two or more laser diodes (110a, 110b). Two or more laser beams are directed onto a transparent phosphor member (130, 130a-130b) and become up-converted to higher wavelengths. These up-converted emissions from the transparent phosphor member are combined to produce a near white light, which is collimated to produce an output beam of a predefined divergence, shape and illuminating distance. The laser diodes are operated individually or in gangs or modules to control the output power or output characteristics as a beacon, UV enhanced search-rescue light or blinding tool to deter piracy/intruder. A distance sensing beam is also provided to estimate a distance of a target.

FIG. 4 for publication.