

METHOD AND APPARATUS FOR
CALIBRATING A LASER WAVELENGTH CONTROL MECHANISMABSTRACT OF THE INVENTION

Calibration of a wavelength adjustment mechanism of a laser is achieved using a hollow cathode absorption lamp. The lamp is provided with a vaporous material having a precisely known wavelength of maximum absorption. A photo-detector detects the amount of light from the laser beam absorbed by the vaporous material as a function of wavelength. The wavelength of the laser is adjusted to achieve maximum absorption such that the actual laser beam wavelength may be compared with an expected wavelength to determine a calibration offset. The hollow cathode lamp is operated to produce a vaporous material of known absorption characteristic but is illuminated at a level substantially below a level required for conventional opto-galvanic resonance.

Figure 2

