



ABSTRACT

An apparatus for removing surface contaminants from a planar or irregularly shaped surface of a substrate (12, 70) by high-energy irradiation is provided. The invention enables removal of surface contaminants without altering the underlying molecular crystal structure of the substrate (12, 70). The source of high-energy irradiation includes a pulsed or continuous wave laser (14) or high-energy lamp (59). (Fig. 1)