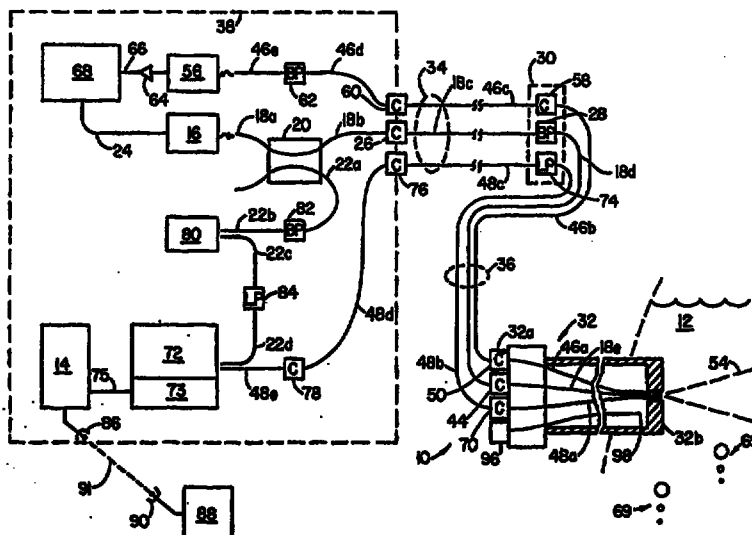




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(54) Title: **ELASTIC RADIATION SCATTER-DETECTING SAFETY DEVICE, ANALYZER APPARATUS PROVIDED WITH SAFETY DEVICE, AND METHOD FOR CONTROLLING A LASER EXCITATION SOURCE**



(57) Abstract

A device for detecting elastically scattered radiation comprising: a source (16) of monochromatic radiation having a controllable output, a detector (56) for detecting the elastically scattered radiation from a specimen (12), and a signal conditioning circuit (68) comprising a transducer and comparator. The output of the transducer is compared to a threshold signal to produce a control output signal for source (16). The device is further included in a raman spectrometry apparatus that further includes an optical probe (32). The probe comprises a fluid-tight body that encloses three optical channels, preferably comprising fibers that carry monochromatic radiation to the specimen and separately collect inelastically and elastically scattered radiation from the specimen.