

Improved Liquid Sampling Atmosphere Pressure Glow Discharge

Description:

This technology features a new, simple, and compact system to analyze laser ablated particulates using low-power micro plasma. Current systems require high power sources and large volume plasmas in order to function. This new method reduces the power required and can measure plasmas in small volumes, and also simplifies the process of introducing particles to the plasma. This system is beneficial for material characterization, particularly for aerosols, microparticles, and nanoparticles.

Applications:

- Atmospheric pressure glow discharge
- Microanalysis of bulk materials
- Analysis of ambient particles/aerosols

Benefits:

- Analyzes particles formed by laser ablation
- Simple method
- Size/portability
- Lower cost

Inventors:	K
Protection Status:	Pa
Licensing Status:	A
CURF Ref No:	20

Kenneth Marcus, *et al* Patent application filed Available for licensing 2011-109



Figure 1: LS-APGD setup for ionization of laser ablated particles