



Pneumatic Mine Dust Sampling Instrument

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Summary: A hand-held coal and rock dust sampling device suited to collect consistent mine dust samples

Description: Mine dust in underground coal mines is potentially explosive and must be sampled regularly. Samples are then analyzed in the laboratory to confirm that there are at least 80% inert components in the sample to prevent devastating coal dust explosions. A hand-held coal and rock dust sampling device suited to collect consistent dust samples off of the mine floor, ribs, and roof as well as other surfaces where mine dust settles has been designed and tested. The advantage of this sampling method, over current pan and brush methods, is that the device mimics the dust entrainment process that happens in an explosion. Thus, the samples that are collected are more representative of the portion of mine dust that would be scoured up during an explosion.

Main Advantages of this Invention

- Provides more representative mine dust samples
- Samples can be collected from elevated, inclined, vertical, and inverted surfaces

Potential Areas of Application

- Coal mining

Stage of Development: laboratory tested prototype

Intellectual Property Status: US provisional patent filed.

ID number: 15034

Opportunity: We are seeking an exclusive or non-exclusive licensee for marketing, manufacturing, and sale of this technology.

For more information contact:

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