



TECHNOLOGY AVAILABLE FOR LICENSING

Diesel Engine Exhaust Gas Recirculation System for NOX Control Incorporating a Compressed Air Regenerative Particulate Control System

US Patent #5,426,936

Inventors: Yiannis Levendis, Richard Abrams

Flow-Through Particulate Incineration System Coupled to an Aerodynamically Regenerated Particulate Trap for Diesel Engine Exhaust Gas

US Patent #5,390,492

Inventors: Yiannis Levendis

Invention Details:

A flow-through particulate incineration system is coupled to an aerodynamically regenerated diesel engine exhaust gas particulate trap. An incineration chamber is provided downstream from a particulate trap. A clean pulse of compressed air dislodges particles and regenerates the trap. During regeneration, a valve between the particulate trap and the incineration chamber opens to allow the air and entrapped particles to pass into the incineration chamber. The regenerated air passes through the incineration chambers and the particulates are retained in the incineration chamber. A heater in the incineration chamber is periodically activated to burn the particulates collected in the trap. The oxidation products may be exhausted to ambient air or may be returned to the engine intake in an exhaust gas recirculation system.

Benefits of the Invention:

Advantages:

Overcomes shortcomings of incineration systems
Filters submicron particles of soot
Satisfies emissions standard requirements

Uses:

Cleans exhaust for industrial plants, vehicles

The Bottom Line:

The technology is a filter system for cleaning particulate contaminated exhaust.

For More Information:

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