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(54) **APPARATUS FOR ACTIVITY CONTROLLED WASTE INCINERATOR AFTERBURNER**

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(57) **ABSTRACT**

This invention involves an improved technique for the

modulation of waste in an actively controlled compact waste incinerator afterburner. This improved technique utilizes acoustic driving to affect indirect modulation of waste flow velocities. The waste surrogate gases are modulated indirectly by periodic entrainment created by the roll-up of the main air vortex as well as indirect acoustic excitation of secondary air injection. One of the main advantages of this new configuration is the acoustic drivers used to phase inject the waste into the vortex for proper combustion are not in direct contact with the hot waste and therefore can be less expensive and more durable over the long term.

5 Claims, 7 Drawing Sheets

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