

Title (en)  
Incinerators, and gasifiers and burners forming part of same.

Title (de)  
Verbrennungsöfen und dazugehörige Vergaser und Brenner.

Title (fr)  
Incinérateurs et gazogènes et brûleurs en faisant partie.

Publication  
**EP 0117765 A2 19840905 (EN)**

Application  
**EP 84301358 A 19840301**

Priority  
CA 422624 A 19830301

Abstract (en)  
A gasifier for generating a producer gas output from a cellulosic waste material input has an axially aligned top fuel feed (20) down onto a conical grate (40) with provision for removing fuel pile ash from around the base perimeter (46) of the grate. A preferred embodiment includes means (20, 30, 32) for adjusting the fuel feed above the level of the grate and to control underfire admission air through plenums 50A to 50E from beneath the grate so as to control the fuel pile size. An annular top opening 16 is provided for guiding producer gas from the chamber. A producer gas burner 300 has a cyclonic combustion chamber 320 with an upper inlet 352 for spirally directing producer gas down into the chamber and secondary combustion air inlet means 342 at the lower end of the chamber for directing secondary air tangentially and upwardly into the chamber. An exhaust outlet 334 is disposed at the lower end of the chamber with an exhaust inlet 330 axially aligned with the chamber. In a preferred embodiment, the gasifier and burner are combined using a double scrolled duct 400 to transport producer gas from the gasifier to the burner, and the gasifier and burner share a common ash removal system 500.

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