

ABSTRACT

SMOKELESS INCINERATOR AND SYSTEM USING THE SAME

A smokeless incinerator arranged to completely burn unburned gas so as to inhibiting generation of black smoke without damaging a burner of combustion chamber even in sufficient burning. The incinerator contains a first combustion chamber A provided with a main combustor A1 into which wastes are thrown having firebrick walls A12 and an auxiliary burner A31 for supporting burning of the wastes, and a water cooling jacket A2 that is located above the main combustor A1 and has water cooling jacket walls A27; a second combustion chamber B that is located on top of the first combustion chamber A and has a re-burning burner B1 for burning unburned gas; a filter-equipped combustion chamber C that is aligned with and adjacent to the second combustion chamber B and has a ceramic filter C1; a third combustion chamber D that is aligned with and adjacent to the filter-equipped combustion chamber C and has a dust collection cyclone D3; a fourth combustion chamber E that is located on top of the third combustion chamber D and has a re-burning burner E1 for burning unburned gas; and an exhaust stack F that is located on top of the fourth combustion chamber E and has a unit of forced exhaust (F2, F5).

FIG. 1