ABSTRACT OF THE DISCLOSURE

PROCESS AND SYSTEM FOR TREATING
MATERIAL CONTAINING NOXIOUS COMPONENTS

A process for treating a waste or treatable material containing noxious component(s), comprising the following steps: (1) carrying out a first step for the treatable material, the first step including (a) mixing a treatment agent with the treatable material to form a mixture, the treatment agent containing alkali metal compound, and (b) heating the mixture in a first furnace at a first temperature in a low oxygen atmosphere to thermally decompose the treatable material to generate a substance containing the noxious component, the substance contacting and reacting with the treatment agent to form a harmless salt; and (2) carrying out a second step for the treatable material, the second step including heating the treatable material in a second furnace separate from the first furnace, at a second temperature higher than the first temperature so as to reduce volume of the treatable material.

(Figure 1)