

ABSTRACT

In an apparatus for heating high-temperature air
5 for use in recovering, by heat exchange, the heat of an
exhaust gas of elevated temperature generated from an
apparatus for disposing of wastes, prolonged service life,
improved working efficiency, improved efficiency of heat
recovery on heat exchange are attainable with least
10 thermal deformation and reduced dust deposition.

Solving Means

In the apparatus for heating high-temperature air
located in a gas atmosphere of elevated temperature, an
air to be heated and caused to flow through a heat
15 transfer conduit is heated upon heat exchange with the gas
of elevated temperature. The heat transfer conduit is
constructed with a heat transfer pipe in which the air to
be heated is flowed, and a refractory protective pipe held
in coaxially covered relation to the heat transfer pipe
20 with a gapping defined between both pipes. The refractory
protective pipe is formed to be angular when seen
sectionally, and the heat transfer pipe is disposed in a
plural number and secured in face-to-face contact with
adjoining heat transfer pipes and one sectionally angular
25 face of the refractory protective pipe.