

ABSTRACT

In a photocatalytic device, a photocatalytic filter is formed of a corrugated member and a gas is allowed to flow over front and rear surfaces of the filter from one end toward the other end thereof along a direction in which ridges and valleys extend, and a gas inflow part and a gas outflow part are provided at both end positions of a photocatalytic filter instead of providing a gas inlet-side flow channel and a gas output-side flow channel at positions facing filter surfaces. Thus, a contact area between a gas and the filter surfaces can be maintained, and miniaturization of the device such as reduction in the thickness or diameter can be realized without increasing gas circulation resistance. In addition, enhanced light irradiation efficiency, simplified structure, energy saving, and cost reduction can be realized. Moreover, the problem of heat can be solved.