

REACTOR FOR TREATING GASEOUS POLLUTANTS AND HEAD ASSEMBLY THEREOF

Abstract

A head assembly, comprising an upper cover assembly, one or more
5 plasma modules, and one or more guide pipe assemblies, wherein the upper
cover assembly is provided above a plasma reaction area; the upper cover
assembly comprises a top plate and a bottom plate; an area for
accommodating a cooling fluid is defined between the top plate and the
bottom plate; the bottom plate comprises one or more openings; the plasma
10 module is connected to the plasma reaction area by means of the openings;
the plasma module comprises a microwave source that generates a
microwave oscillation, a waveguide assembly, and a resonant cavity; the
microwave oscillation reacts with a reactive gas; and the guide pipe
assembly is configured to guide to the plasma reaction area an effluent from
15 a semiconductor process.

Fig. 9A