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(54) Title: GAS MIXING DEVICE AND SEMICONDUCTOR PROCESS APPARATUS

(54) 发明名称: 混气装置及半导体工艺设备

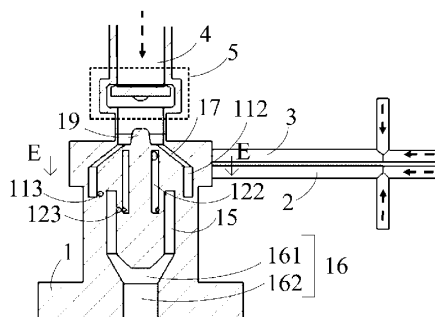


图 11

(57) Abstract: Provided in the present invention is a gas mixing device. In gas mixing components of the gas mixing device, gas intake ends of a first gas intake channel and a second gas intake channel are respectively in communication with gas output ends of a first gas intake pipeline and a second gas intake pipeline; gas output ends of the first gas intake channel and the second gas intake channel are both in communication with an annular gas mixing channel; a gas output end of the annular gas mixing channel is used for being in communication with a process chamber of a semiconductor process apparatus; and gas output directions of the first gas intake channel and the second gas intake channel are configured to enable gases respectively flowing into the annular gas mixing channel from the gas output ends of the first gas intake channel and the second gas intake channel to both flow in a rotational manner in the same direction of the annular gas mixing channel circumferentially, when the gases are mixed. By means of the gas mixing device and the semiconductor process apparatus provided in the present invention, the gas mixing time can be shortened, and the gas mixing efficiency is thus improved; and the mixing uniformity can also be effectively improved, and the product performance is thus improved.

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本国际公布:

— 包括国际检索报告(条约第21条(3))。

(57) 摘要: 本发明提供一种混气装置, 其混气部件中, 第一进气通道和第二进气通道的进气端分别与第一进气管路和第二进气管路的出气端连通; 第一进气通道和第二进气通道的出气端均与环形混气通道连通; 环形混气通道的出气端用于与半导体工艺设备的工艺腔室连通; 第一进气通道和第二进气通道的出气方向被设置为能够使分别从第一进气通道和第二进气通道的出气端流入环形混气通道中的气体在混合时, 均沿环形混气通道的周向上的同一方向旋转流动。本发明提供的混气装置及半导体工艺设备, 其不仅可以缩短混气时间, 提高混气效率, 而且可以有效提高混合均匀性, 提高产品性能。