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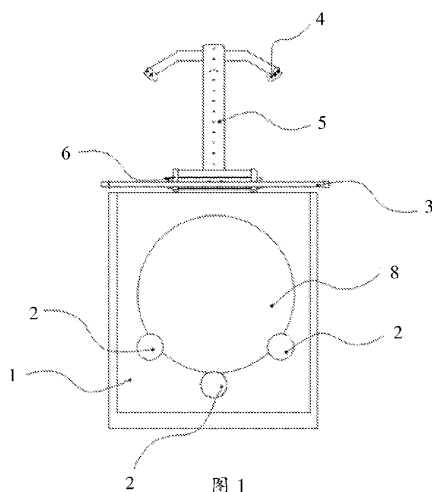
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(54) Title: WAFER CLEANING AND DRYING DEVICE

(54) 发明名称: 一种晶圆清洗干燥装置



(57) Abstract: Disclosed is a wafer cleaning and drying device, comprising: a box body for cleaning a wafer, the top of the box body being provided with an opening for the wafer to enter and exit from the box body; supporting mechanisms provided in the box body and used for bearing the wafer, the supporting mechanisms being capable of ascending and descending; and spraying pipes provided at the opening and used for spraying dry gas to the surface of the cleaned wafer. According to the wafer cleaning and drying device, the spraying pipes are provided at the opening of the box body, and the spraying pipes are used for spraying dry gas to the cleaned wafer to dry the surface of the wafer. What can be understood is that the Marangoni effect is utilized in the mode, that is, a surface tension gradient difference is utilized to remove water attached to the surface of the wafer, and compared with the prior art that a cleaning liquid on the surface of the wafer is spin-dried by means of centrifugal force, the wafer cleaning and drying device can effectively reduce water stain residues and prevent the number of particles of the whole wafer from exceeding the standard.

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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：本发明公开了一种晶圆清洗干燥装置，包括：用于对晶圆进行清洗的箱体，箱体的顶部设有用于供晶圆进、出所述箱体的开口；设于箱体内且用于承接晶圆的支撑机构，支撑机构可升降；设于开口处且用于对清洗后的晶圆表面喷洒干燥气体的喷淋管。该晶圆清洗干燥装置通过在箱体的开口处设置喷淋管，利用喷淋管对清洗后的晶圆喷洒干燥气体，来干燥晶圆表面。可以理解的是，该方式利用了马兰戈尼效应，也即，利用表面张力梯度差，将附着在晶圆表面的水去除，相比于现有技术利用离心力甩干晶圆表面的清洗液，该晶圆清洗干燥装置可以有效地减少水渍残留，避免整片晶圆的颗粒物数量超标。