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(54) **Title:** CLEANING METHOD AND DEVICE FOR PACKAGING STRUCTURE

(54) 发明名称: 封装结构的清洗方法和设备

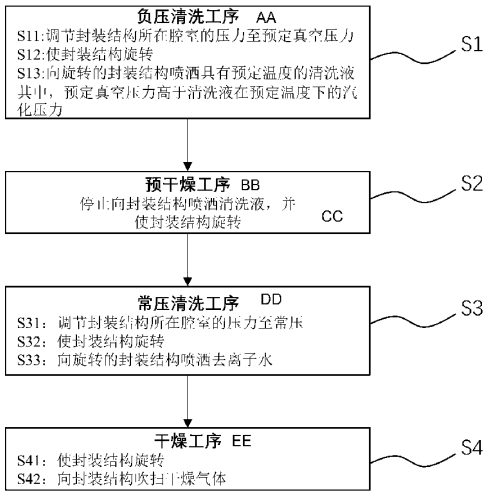


图 5

S11 Adjust the pressure of a chamber where a packaging structure is located to a preset vacuum pressure
S12, S32, S41 Rotate the packaging structure
S13 Spray a cleaning fluid having a preset temperature to the rotating packaging structure, wherein the preset vacuum pressure is higher than the vaporization pressure of the cleaning fluid at the preset temperature
S31 Adjust the pressure of the chamber where the packaging structure is located to the atmospheric pressure
S33 Spray deionized water to the rotating packaging structure
S42 Purge dry gas to the packaging structure
AA Negative pressure cleaning process
BB Pre-drying process
CC Stop spraying the cleaning fluid to the packaging structure, and rotate the packaging structure
DD Atmospheric pressure cleaning process
EE Drying process

(57) **Abstract:** A cleaning method and device for a packaging structure. The cleaning method comprises a negative pressure cleaning process, the negative pressure cleaning process comprising: adjusting the pressure of a chamber where a packaging structure (10) is located to a preset vacuum pressure; rotating the packaging structure; and spraying a cleaning fluid having a preset temperature to the rotating packaging structure so as to carry out negative pressure cleaning on the packaging structure, wherein the preset vacuum pressure is higher than the vaporization pressure of the cleaning fluid at the preset temperature. By using the principle that the surface tension of a cleaning fluid is reduced under a negative pressure condition, the cleaning fluid is promoted to flow in tiny gaps of a packaging structure, and the cleaning fluid is prevented from being vaporized before reaching a part to be cleaned of the packaging structure.

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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: 一种封装结构的清洗方法及设备。清洗方法包括负压清洗工序，负压清洗工序包括：调节封装结构（10）所在腔室的压力至预定真空压力；使封装结构旋转；向旋转的封装结构喷洒具有预定温度的清洗液，以对封装结构进行负压清洗；其中，预定真空压力高于清洗液在预定温度下的汽化压力。利用负压条件下清洗液表面张力下降的原理促进清洗液在封装结构的微小间隙中流动，并避免清洗液到达封装结构的清洗部位之前汽化。