US00D496008S1

(12) **United States Design Patent** (10) **Patent No.: US D496,008 S**
Takahashi et al. (45) **Date of Patent: ** Sep. 14, 2004**

(54) **EXHAUST RING FOR MANUFACTURING SEMICONDUCTORS**

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(73) Assignee: **Tokyo Electron Limited**, Tokyo (JP)

(**) Term: **14 Years**

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(30) **Foreign Application Priority Data**

Dec. 12, 2002 (JP) 2002-034494

(51) **LOC (7) Cl.** **13-03**
(52) **U.S. Cl.** **D13/182**
(58) **Field of Search** D13/182; D8/399; D15/144; 118/666, 715, 733; 219/444.1; 414/147, 217, 247, 935–941; 438/482, 706, 716, 758; 451/285

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(57) **CLAIM**

We claim the ornamental design for exhaust ring for manufacturing semiconductors, as shown and described.

DESCRIPTION

FIG. **1:** is a front/top/left-side perspective view of an exhaust ring for manufacturing semiconductors showing our new design;
FIG. **2:** is a front elevational view thereof;
FIG. **3:** is a cross-sectional view taken along line **3—3** in FIG. **2**;
FIG. **4:** is an enlarged, partial, cross-sectional view taken along line **4—4** in FIG. **3**;
FIG. **5:** is a rear elevational view thereof;
FIG. **6:** is a top plan view thereof;
FIG. **7:** is a bottom plan view thereof; and,
FIG. **8:** is a right-side elevational view thereof, the left-side elevational view being a mirror image and, therefore, not shown.

The exhaust ring for manufacturing semiconductors is used in a vacuum vessel for manufacturing semiconductors. The through holes in the central band of the exhaust ring for manufacturing semiconductors shown in the front view are passageways for gas. The cross-sectional design of the ring shows that the holes reduce as much as possible the occurrence of a decline in gas flow caused by the adherence of deposits during use. The outer diameter of the exhaust ring for manufacturing semiconductors is about 580 millimeters and the internal diameter is about 400 millimeters It is made of anodized aluminum and other materials.

1 Claim, 2 Drawing Sheets

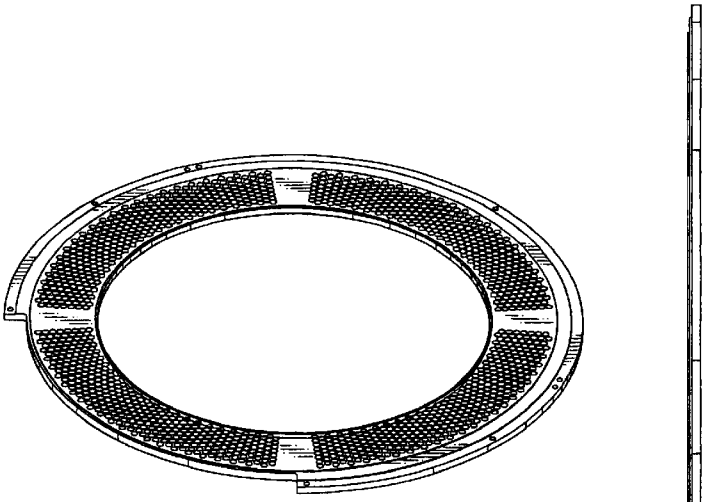

FIG. 1

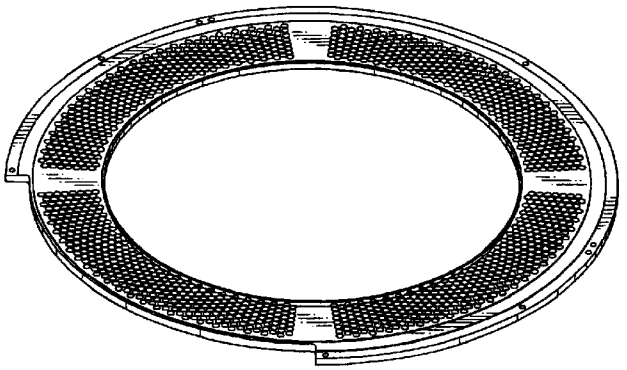

FIG. 2

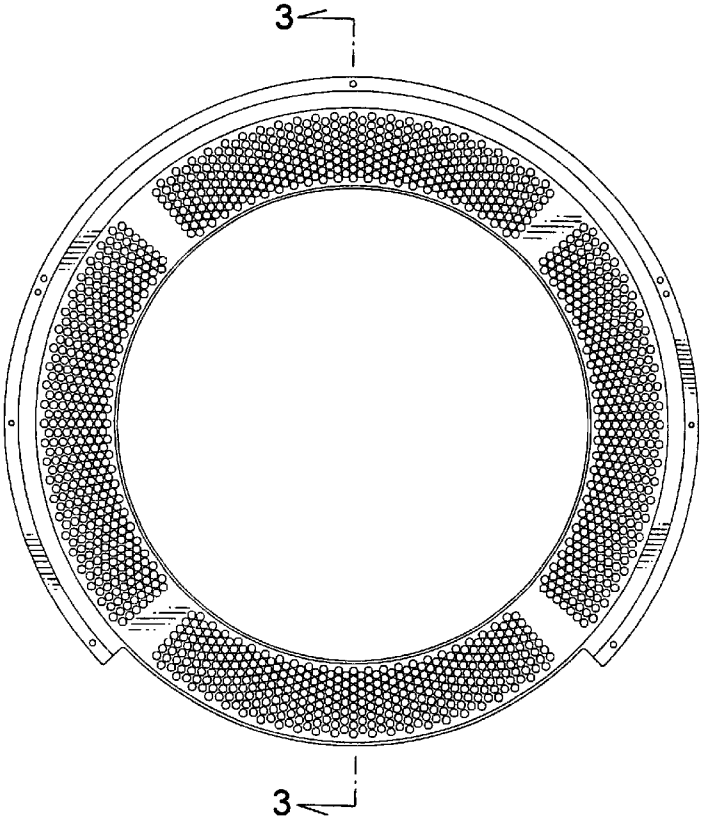

FIG. 4

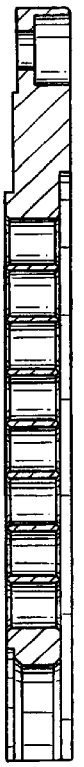

FIG. 3

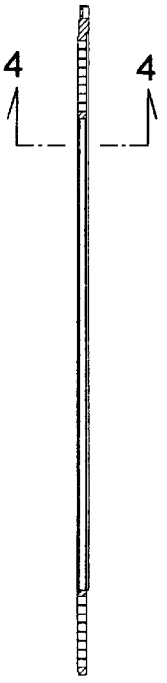

FIG. 5

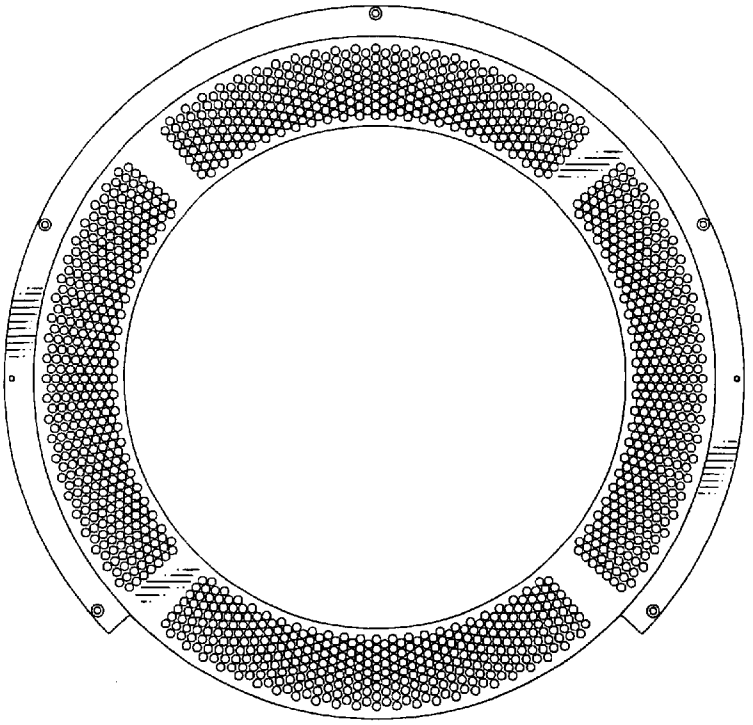

FIG. 8

FIG. 6

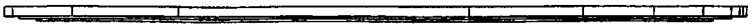

FIG. 7