

SUBSTRATE PROCESSING APPARATUS

ABSTRACT

5 A substrate processing apparatus has a chamber, which
has an opening and is cylindrical, a shutter mechanisms to
open and close the opening, a substrate support unit, and a
baffle plate provided between the substrate support unit
and the shutter mechanism. The shutter mechanism includes:
10 a valve body having a length that is half of the inner
circumference of the chamber or longer; a first
electrically conductive surface that comes into contact
with a reverse face of the baffle plate, at a lower portion
of the valve body; a second electrically conductive surface
15 that comes into contact with an electrically conductive
upper member in an upper portion of the chamber, at an
upper portion of the valve body; a plurality of arc-shaped
electrically conductive members arranged in arc-shaped
grooves provided on the first and second electrically
20 conductive surfaces; and two or more lifting/lowering
mechanisms to lift and lower the valve body. In a case
where the opening has been closed, the first electrically
conductive surface comes into contact with the reverse face
of the baffle plate in a vertical direction and becomes
25 electrically continuous with the reverse face of the baffle
plate by means of the electrically conductive members. In
the case where the opening has been closed, the second
electrically conductive surface comes into contact with the
upper member in the vertical direction and becomes
30 electrically continuous with the upper member by means of
the electrically conductive members.

Figure 2