When a cleaning member such as new roll cleaning member or new pencil cleaning member is used, the new cleaning member cannot be used to clean a substrate as it is in order to prevent a failure on the substrate such as wafer, and needs to be subjected to a break-in processing.

SUMMARY OF INVENTION

PROBLEMS TO BE SOLVED BY INVENTION

[0005]

A cleaning member break-in processing has been conventionally performed by a substrate cleaning apparatus itself, and there is a problem that a substrate cannot be cleaned by the substrate cleaning apparatus during the break-in processing and the substrate cleaning apparatus can be used to clean a substrate for a short time in a certain period.

[0006]

Embodiments of the present invention seek to eliminate or reduce a break-in processing by a substrate cleaning apparatus, thereby shortening a time in which the substrate cleaning apparatus stops operating.

MEANS OF SOLVING PROBLEMS

[0007]

[Concept 1]

A break-in apparatus according to an aspect of the present invention may be a break-in apparatus for performing a break-in processing on a cleaning member comprising:

for the cleaning member when receiving information from the first communication unit.

[0015]

[Concept 9]

The break-in apparatus, according to any one of Concepts 1 to 8, may further comprise

a recovery and use unit for recovering and using the cleaning liquid supplied to the dummy substrate, wherein

the supply unit may supply the dummy substrate with the cleaning liquid recovered by the recovery and use unit.

[0016]

[Concept 10]

In the break-in apparatus according to any one of Concepts 1 to 9,

the cleaning member holding unit may be able to hold a dummy cleaning member.

[0017]

[Concept 11]

A break-in system according to another aspect of the present invention may comprise:

a break-in apparatus having a supply unit for supplying a cleaning liquid, a substrate support unit for holding a dummy substrate, and a cleaning member holding unit for holding a cleaning member removably and performing a break-in processing on the cleaning member by rotating the cleaning member and bringing the cleaning member into contact with the dummy substrate; and

a substrate cleaning apparatus for cleaning a substrate by a cleaning member, wherein

the substrate cleaning apparatus may be able to transmit information about exchanging the cleaning member used in the substrate cleaning apparatus to the break-in apparatus.

[0018]

[Concept 12]

A break-in system according to another aspect of the present invention may comprise:

a break-in apparatus having a supply unit for supplying a cleaning liquid, a substrate support unit for holding a dummy substrate, a cleaning member holding unit for holding a cleaning member removably and performing a break-in processing on the cleaning member by rotating the cleaning member and bringing the cleaning member into contact with the dummy substrate, and a first communication unit for receiving information about exchanging the cleaning member from outside;

a substrate cleaning apparatus for cleaning a substrate by a cleaning member, the substrate cleaning apparatus having a second communication unit for transmitting the information about exchanging the cleaning member to the break-in apparatus; and

a break-in control unit having a program for controlling the break-in apparatus based on the information about exchanging the cleaning member, wherein

the information about exchanging the cleaning member may include cleaning member identification information and

apparatus identification information.

[0019]

[Concept 13]

A storage media according to another aspect of the present invention may be a readable storage media storing a program, which works in a computer, for controlling the break-in system according to Concept 12, wherein

the program, in operation, may make the computer control the break-in system so that the break-in system according to Concept 12 performs the break-in processing on the cleaning member.

EFFECT OF INVENTION

[0020]

If the break-in apparatus according to the embodiments of present invention is employed, the break-in processing by the substrate cleaning apparatus may be eliminated or reduced, thereby shortening a time in which the substrate cleaning apparatus stops operating. Further, it is possible to more appropriately perform the break-in processing depending on the sizes, the shapes, and the surface properties of the respective cleaning members used in the substrate cleaning apparatus.

BRIEF DESCRIPTION OF DRAWINGS

[0021]

FIG. 1 is a plan view showing an entire configuration of a processing apparatus including a substrate processing