C L A I M S

1. A cassette housing comprising:

a storage unit ~~that stores~~ configured to store a semiconductor wafer ~~that includes~~including a plurality of nonvolatile memory chips;

a probe card that includes a probe configured to be brought into contact with a pad electrode provided on the semiconductor wafer; and

a container ~~that contains~~configured to contain heat transfer fluid for lowering or raising temperature of one or both of the probe card and the semiconductor wafer stored in the storage unit.

2. The cassette housing of claim 1, wherein

the probe card has a first surface and a second surface, the first surface facing the semiconductor wafer stored in the storage unit, the second surface being opposite to the first surface, and

the container is configured such that a printed circuit board provided on ~~a~~ the second surface ~~on a reverse side of a first surface~~ of the probe card is immersed in the heat transfer fluid~~, the first surface facing the semiconductor wafer stored in the storage unit~~.

3. The cassette housing of claim 1, wherein

the probe card has a first surface facing the semiconductor wafer stored in the storage unit, the probe being provided on the first surface,

the semiconductor wafer has a second surface, the second surface facing the first surface of the probe card when stored in the storage unit, the pad electrode being provided on the second surface, and

the housing is configured such that the probe provided on ~~a~~ the first surface of the probe card, ~~which faces the semiconductor wafer stored in the storage unit,~~ and ~~a~~ the pad electrode provided on ~~a~~ the second surface of the semiconductor wafer, ~~which faces the probe card,~~ are immersed in the heat transfer fluid liquid.

4. The cassette housing of claim 1, wherein

the container is configured such that the semiconductor wafer stored in the storage unit is immersed in the heat transfer fluid.

5. The cassette housing of ~~any one of claims 1 to 4~~claim 1, wherein

the heat transfer fluid includes fluorocarbon.

6. ~~A~~ The cassette housing of claim 1, ~~comprising:~~

~~a storage unit that stores a semiconductor wafer that includes a plurality of nonvolatile memory chips; and~~

~~a probe card that includes a probe to be brought into contact with a pad electrode provided on the semiconductor wafer;~~ wherein

the probe card includes an insulating member provided on a surface facing the semiconductor wafer stored in the storage unit, the insulating member being configured to be in physical contact with the semiconductor wafer and not electrically connected to the semiconductor wafer.

7. The cassette housing of claim 6, wherein

the insulating member has a shape of a pin, a projection, or a plane.

8. The cassette housing of claim 6, wherein

the insulating member is provided as a cushion that reduces propagation to the semiconductor wafer by impact given to the cassette housing and secures the semiconductor wafer within the cassette housing.

9. ~~A~~ The prober of claim 11, further comprising:

~~an attachment/detachment device that integrates or separates a semiconductor wafer and a cassette housing with or from each other, the semiconductor wafer including a plurality of nonvolatile memory chips, the cassette housing including a probe card, the probe card including a probe to be brought into contact with a pad electrode provided on the semiconductor wafer; and~~

a fluid device configured to inject or discharge the ~~that injects or discharges~~ heat transfer fluid ~~for lowering or raising temperature of one or both of the semiconductor wafer and the probe card to or from a container, the container being provided in the cassette housing, and containing the heat transfer fluid~~.

10. The prober of claim 9, wherein

the fluid device ~~circulates~~ is configured to circulate the heat transfer fluid in the cassette housing via the container.

11. A prober comprising:

an attachment/detachment device ~~that integrates or separates~~configured to integrate or separate a semiconductor wafer and a cassette housing with or from each other, the semiconductor wafer including a plurality of nonvolatile memory chips, the cassette housing including a probe card, the probe card including a probe configured to be brought

into contact with a pad electrode provided on the semiconductor wafer; and

a first container ~~that contains~~configured to contain heat transfer fluid for lowering or raising temperature of the cassette housing in which the semiconductor wafer is mounted by the attachment/detachment device.

12. The prober of claim 11, further comprising:

a fluid device ~~that injects or discharges~~configured to inject or discharge the heat transfer fluid to or from the container.

~~13. The prober of any one of claims 9 to 12, wherein the heat transfer fluid includes fluorocarbon.~~

~~14~~13. A server rack comprising:

a processor;

a first storage unit configured to store a cased memory device, the cased memory device including a first container, a memory device, and ~~that stores~~ a ~~cassette~~ housing in which the memory device is mounted, the first container being configured to contain heat transfer fluid for lowering or raising temperature of the memory device, the memory device ~~a semiconductor wafer~~ including a plurality of nonvolatile memory chips~~,~~ to or from which writing or reading of data is to be required from the processor~~, is mounted, and in which a probe card including a probe to be brought into contact with a pad electrode provided on the semiconductor wafer is provided~~; and

a first fluid device ~~that injects or discharges~~configured to inject or discharge the heat transfer fluid ~~for lowering or raising temperature of one or both of the semiconductor wafer and the probe card~~ to or

from ~~a~~ the first container when the cased memory device is stored in the first storage unit~~, the container being provided in the cassette housing, and containing the heat transfer fluid~~.

~~15~~14. ~~A~~ The server rack of claim 13, further comprising:

~~a processor;~~

~~a storage unit that stores a cassette housing in which a semiconductor wafer including a plurality of nonvolatile memory chips, to or from which writing or reading of data is to be required from the processor, is mounted, and in which a probe card including a probe to be brought into contact with a pad electrode provided on the semiconductor wafer is provided; and~~

a second container ~~that contains~~ configured to contain the heat transfer fluid ~~for lowering or raising temperature of the cassette housing stored in the storage unit~~.

~~16. The server rack of claim 15, further comprising a fluid device that injects or discharges the heat transfer fluid to or from the container.~~

~~17. The server rack of any one of claims 14 to 16, wherein the heat transfer fluid includes fluorocarbon.~~

~~18~~15. A storage system comprising:

~~a cassette housing;~~

a prober; and

a server rack of claim 13, wherein

~~the cassette housing includes:~~

~~a first storage unit that stores a semiconductor wafer that includes a plurality of nonvolatile memory chips,~~

~~a probe card that includes a probe to be brought into contact with a pad electrode provided on the semiconductor wafer, and~~

~~a container that contains heat transfer fluid for lowering or raising temperature of one or both of the probe card and the semiconductor wafer stored in the first storage unit,~~

the prober includes:

an attachment/detachment device ~~that integrates or separates~~configured to integrate or separate the semiconductor wafer and the cassette housing with or from each other, and

a ~~first~~ second fluid device ~~that injects or discharges~~ configured to inject or discharge the heat transfer fluid ~~for lowering or raising temperature of one or both of the semiconductor wafer and the probe card~~ to or from the first container ~~that is provided in the cassette housing, and~~

~~the server rack includes:~~

~~a processor that requests writing or reading of data to or from the plurality of nonvolatile memory chips;~~

~~a second storage unit that stores the cassette housing in which the semiconductor wafer is stored; and~~

~~a second fluid device that injects or discharges the heat transfer fluid to or from the container that is provided in the cassette housing stored in the second storage unit~~.

~~19~~16. A storage system comprising:

a prober; and

a server rack of claim 14, wherein

the prober includes:

an attachment/detachment device ~~that integrates or separates~~configured to integrate or separate ~~a~~ the semiconductor wafer and ~~a~~ the cassette housing with or from each other~~, the semiconductor wafer including a plurality of nonvolatile memory chips, the cassette housing including a probe card, the probe card including a probe to be brought into contact with a pad electrode provided on the semiconductor wafer~~; and

a ~~first~~ third container ~~that contains~~configured to contain the heat transfer fluid~~ for lowering or raising temperature of the cassette housing in which the semiconductor wafer is mounted by the attachment/detachment device,~~

~~the server rack includes:~~

~~a processor that requests writing or reading of data to or from the plurality of nonvolatile memory chips,~~

~~a storage unit that stores the cassette housing in which the semiconductor wafer is stored, and~~

~~a second container that contains heat transfer fluid for lowering or raising temperature of the cassette housing stored in the storage unit~~.

17. The server rack of claim 13, wherein

the memory device is a semiconductor wafer,

the housing is a cassette housing in which a probe card is disposed, the probe card including a probe configured to be brought into contact with a pad electrode provided on the semiconductor wafer, and

the first fluid device is configured to inject or discharge the heat transfer fluid for lowering or raising temperature of one or both of the semiconductor wafer and the probe card, to or from the first container.

18. The server rack of claim 13, further comprising:

a second container configured to contain the heat transfer fluid.

19. A storage system comprising:

a prober; and

a server rack of claim 18,

wherein the prober includes:

an attachment/detachment device configured to integrate or separate the memory device and the housing with or from each other; and

a third container unit that contains the heat transfer fluid.

20. A storage system comprising:

a prober; and

a server rack of claim 13,

wherein the prober includes:

an attachment/detachment device configured to integrate or separate the memory device and the housing with or from each other, and

a second fluid device configured to inject or discharge the heat transfer fluid to or from the first container.