up-and-down direction causes the core wire support boards 31 to reciprocate in the up-and-down direction, so that the silicon core wires C1 are likely to separate from the core wire support boards 31 when the core wire support boards 31 start to move downward after moving upward. This makes the entire surfaces of the silicon core wires C1 likely to have contact with the first etching solution L1 during etching. It is therefore possible to evenly etch the entire surfaces of the silicon core wires C1. Since the core wire holder 30 does not need to move in a horizontal direction, it is further possible to reduce the size of the etching device 1 in the horizontal direction and therefore make the etching device 1 more compact.

[0048]

It is preferable to shape the peripheries of the through holes 31A in the core wire support boards 31 into a continuous, curved line. In this case, the area of contact between the silicon core wires C1 and the core wire support boards 31 is likely to decrease, and the silicon core wires C1 is therefore likely to separate from the core wire support boards 31. Further, since the peripheries of the through holes 31A in the core wire support boards 31 are each continuous, it is possible to prevent the silicon core wires C1 from dropping off the core wire support boards 31. As a result, it is possible to evenly etch the entire surfaces of the silicon core

the core wire holder 30 are fixed to the mounting cassette 20. Subsequently, the hooks 233 of the mounting cassette 20 are attached to the arms 41. After this, the same process flow as in Embodiment 1 follows.

[0072]

With the configuration in which the mounting cassette 20 includes the hooks 233 which are attachable and detachable as described above, it is possible to easily adjust the positions of the hooks 233 by, for example, changing the positions of the fixing members 23. This makes it possible to easily keep, in a substantially horizontal position, the rod-shaped sections of the mounting cassette 20 that each extend in the front-and-rear direction or in the right-and-left direction even when the mounting cassette 20 is moved upward or downward by the crane 40.

[0073]

<Variation>

In Embodiment 3, as in Embodiment 2, the short-length core wire holder 70 and the middle-length core wire holder 80 may be designed so as to be mounted in the mounting cassette 60 and fixed, by using the fixing members 23, to the mounting cassette 60. Even in this case, it is possible to easily adjust the positions of the hooks 233 by changing the positions of the fixing members 23. This makes it possible to easily keep, in a substantially horizontal

position, the rod-shaped sections of the mounting cassette 20 that each extend in the front-and-rear direction or in the right-and-left direction even when the mounting cassette 20 is moved upward or downward by using the crane 40. Since a single mounting cassette 20 includes two hooks 233, the crane 40 may include only two arms 41. This eliminates the need to give a complex configuration to the etching device 1.

[0074]

[Main points]

A silicon core wire etching device in accordance with an aspect of the present invention includes: an etching bath for holding an etching solution in which a silicon core wire is to be immersed; a plurality of core wire support members for supporting the silicon core wire, the plurality of core wire support members each having at least one hole, the at least one hole including a hole through which the silicon core wire is to pass; and a position change mechanism for changing, while the silicon core wire is passed through the plurality of core wire support members and immersed in the etching solution, a relative position where the silicon core wire passes through in relation to the hole.

[0075]

It should be noted that, in this specification, "hole" includes not only a hole formed by a periphery having a continuous shape, i.e., a closed shape but also a hole formed