CLAIMS

1. A desktop working apparatus for performing desired operations on a workpiece while the workpiece and a working head are relatively moved, the desktop working apparatus comprising:

a base body;

a working section disposed on the base body and including the working head and a working head driving mechanism;

a loader integrally disposed at a side of the desktop working apparatus;

an unloader integrally disposed at a side of the desktop working apparatus;

a conveying section disposed on the base body and conveying the workpiece supplied from the loader to the unloader; and

a control unit,

wherein the conveying section includes a fixing mechanism for fixedly holding the workpiece at a working position,

the working section includes the working head disposed above the working position, and

the control unit includes a first control unit disposed within the base body, and a second control unit disposed at a side or a top of the desktop working apparatus,

wherein the conveying section includes a conveying rail disposed on the base body and conveying the workpiece, an application stage arranged at the working position, and a fixing member for fixedly sandwiching the workpiece at the working position.

2. The desktop working apparatus according to Claim 1, wherein the working head driving mechanism includes an X-axis driving mechanism for moving the working head parallel to a conveying direction of the conveying section, a Y-axis driving mechanism for moving the working head in a direction perpendicular to the conveying direction of the conveying section, and a Z-axis driving mechanism for moving the working head in an up and down direction, the Y-axis driving mechanism being disposed in overhanging relation to the conveying section.

3. The desktop working apparatus according to Claim 1 or 2, further comprising a casing that is disposed on the base body and that covers the working section and the conveying section.

4. The desktop working apparatus according to Claim 3, wherein the second control unit is disposed at a side or a top of the casing.

5. The desktop working apparatus according to any one of Claims 1 to 4, wherein the first control unit is a control unit for controlling the working head driving mechanism and the conveying section, and the second control unit is a control unit for controlling the working head, or wherein the first control unit is a control unit for controlling the working head, and the second control unit is a control unit for controlling the working head driving mechanism and the conveying section.

6. The desktop working apparatus according to any one of Claims 1 to 5, wherein the loader moves a plurality of vertically stacked magazine tables up and down while always holding constant a relative distance between the adjacent magazine tables, and supplies the workpiece contained in a magazine to the conveying section, the magazine being placed on the magazine table, and

wherein the unloader moves a plurality of vertically stacked magazine tables up and down while always holding constant a relative distance between the adjacent magazine tables, and takes in the workpiece discharged from the conveying section into a magazine that is placed on the magazine table.

7. The desktop working apparatus according to Claim 6, wherein a height of the workpiece placed on the conveying section is greater than a length from a lower end of the magazine table to an upper end of the magazine placed on the magazine table.

8. The desktop working apparatus according to any one of Claims 1 to 7, wherein the loader includes a magazine charging portion that is positioned 80 cm or less above a desk.

9. The desktop working apparatus according to any one of Claims 1 to 7, wherein the loader includes a magazine charging portion that is positioned 60 cm or less above a desk.

10. The desktop working apparatus according to any one of Claims 1 to 9, wherein a height of the conveying section is set such that an upper surface of the workpiece placed on the conveying section is positioned 80 cm or less above a desk.

11. The desktop working apparatus according to any one of Claims 1 to 9, wherein a height of the conveying section is set such that an upper surface of the workpiece placed on the conveying section is positioned 60 cm or less above a desk.

12. A desktop working apparatus for performing desired operations on a workpiece while the workpiece and a working head are relatively moved, the desktop working apparatus comprising:

a base body;

a working section disposed on the base body and including the working head and a working head driving mechanism;

a loader integrally disposed at a side of the desktop working apparatus;

an unloader integrally disposed at a side of the desktop working apparatus;

a conveying section disposed on the base body and conveying the workpiece supplied from the loader to the unloader; and

a plurality of control units arranged in a distributed way,

wherein the conveying section includes a fixing mechanism for fixedly holding the workpiece at a working position,

the working section includes the working head disposed above the working position, and

a height of the conveying section is set such that an upper surface of the workpiece placed on the conveying section is positioned 80 cm or less above a desk,

wherein the conveying section includes a conveying rail disposed on the base body and conveying the workpiece, an application stage arranged at the working position, and a fixing member for fixedly sandwiching the workpiece at the working position.

13. The desktop working apparatus according to Claim 12, wherein the height of the conveying section is set such that the upper surface of the workpiece placed on the conveying section is positioned 60 cm or less above the desk.

14. The desktop working apparatus according to Claim 12 or 13, wherein at least one of the distributed control units is disposed within the base body.

15. The desktop working apparatus according to any one of Claims 1 to 14, wherein a height of the base body is 1/2 or less of a height of the desktop working apparatus.

16. The desktop working apparatus according to any one of Claims 1 to 14, wherein a height of the base body is 1/4 to 1/6 of a height of the desktop working apparatus.

17. The desktop working apparatus according to any one of Claims 1 to 16, wherein the working section includes the working head, a distance measurement device, and an image pickup device, which are integrally disposed in series parallel to the conveying direction of the conveying section.

18. The desktop working apparatus according to any one of Claims 1 to 17, wherein the working head is an ejection head.