All combinations of at least two features specified in the description, the claims and/or the drawings also fall within the scope of the invention. In the case of value ranges, values lying within the limits mentioned should also be disclosed as limit values and be claimable in any desired combination.

According to a first aspect of the invention, there is provided a method for aligning first and second substrates, the method including: detecting alignment marks on the first and second substrates; and aligning the first and second substrates with respect to one another in dependence on detection of the alignment marks, wherein at least two alignment marks are arranged parallel to a direction of a linear movement of the first and second substrates, wherein alignment of the first and second substrates takes place along a single alignment axis, wherein the alignment axis runs parallel to a loading and an unloading direction of the first and second substrates, and wherein the detecting of the alignment marks on the first and second substrate is performed along the alignment axis in alignment with the loading and the unloading direction of the first and second substrates.

According to a second aspect of the invention, there is provided a device for aligning first and second substrates, said device including: a first substrate holder for holding the first substrate; a second substrate holder for holding the second substrate; a first movement device for moving the first substrate holder; a second movement device for moving the second substrate holder; a first linear guide for the first movement device; a second linear guide for the second movement device; and detection units for detecting alignment marks on the first and second substrates, wherein the first and second substrates are aligned with respect to one another in dependence on detection of the alignment marks by the detection units, wherein at least two alignment marks are arranged parallel to a direction of a linear movement of the first and second substrates, wherein alignment of the first and second substrates takes place along a single alignment axis, the alignment axis running parallel to a loading and an unloading direction of the first and second substrates, and wherein the detection units detect the alignment marks on the first and second substrate along the alignment axis in alignment with the loading and the unloading direction of the first and second substrates.

Preferably, it is provided that at least three alignment marks are arranged flush with the linear movement of the substrates.

Preferably, it is provided that at least one alignment mark is arranged at or on a substrate holder.

Preferably, it is provided that at least two alignment marks are arranged on a substrate and at least one alignment mark is arranged on the substrate holder,

Claims:

1. A method for aligning first and second substrates, the method comprising:

detecting alignment marks on the first and second substrates; and

aligning the first and second substrates with respect to one another in dependence on detection of the alignment marks,

wherein at least two alignment marks are arranged parallel to a direction of a linear movement of the first and second substrates,

wherein alignment of the first and second substrates takes place along a single alignment axis,

wherein the alignment axis runs parallel to a loading and an unloading direction of the first and second substrates, and

wherein the detecting of the alignment marks on the first and second substrate is performed along the alignment axis in alignment with the loading and the unloading direction of the first and second substrates.

2. The method according to claim 1, wherein at least three alignment marks are arranged parallel to the direction of the linear movement of the first and second substrates.

3. The method according to claim 1, wherein at least one of said alignment marks is arranged at or on a first substrate holder for holding the first substrate or on a second substrate holder for holding the second substrate.

4. The method according to claim 1, wherein at least two alignment marks are arranged on the first substrate or on the second substrate, and at least one alignment mark is arranged on a first substrate holder for holding the first substrate or on the second substrate holder for holding the second substrate, and

wherein the alignment marks are arranged parallel to the direction of the linear movement of the first and second substrates.

5. The method according to claim 1, wherein detection units for detecting the alignment marks are arranged in at least one annular measuring portal.

6. The method according to claim 1, wherein detection units for detecting the alignment marks are arranged in at least one fully closed annular measuring portal.

7. The method according to claim 1, wherein detection units for detecting the alignment marks are arranged in two annular measuring portals.

8. The method according to claim 1, wherein detection units for detecting the alignment marks are arranged in two fully closed annular measuring portals.

9. The method according to claim 1, wherein detection units for detecting the alignment marks are arranged in an annular measuring portal.

10. The method according to claim 1, wherein detection units for detecting the alignment marks are arranged in a fully closed annular measuring portal and in a C-shaped column.

11. A device for aligning first and second substrates, said device comprising:

a first substrate holder for holding the first substrate;

a second substrate holder for holding the second substrate;

a first movement device for moving the first substrate holder;

a second movement device for moving the second substrate holder;

a first linear guide for the first movement device;

a second linear guide for the second movement device; and

detection units for detecting alignment marks on the first and second substrates,

wherein the first and second substrates are aligned with respect to one another in dependence on detection of the alignment marks by the detection units,

wherein at least two alignment marks are arranged parallel to a direction of a linear movement of the first and second substrates,

wherein alignment of the first and second substrates takes place along a single alignment axis, the alignment axis running parallel to a loading and an unloading direction of the first and second substrates, and

wherein the detection units detect the alignment marks on the first and second substrate along the alignment axis in alignment with the loading and the unloading direction of the first and second substrates.

12. The device according to claim 11, wherein at least three alignment marks are arranged parallel to the direction of the linear movement of the first and second substrates.

13. The device according to claim 11, wherein at least one alignment mark is arranged at or on the first substrate holder or the second substrate holder.

14. The device according to claim 11, wherein at least two alignment marks are arranged on the first substrate or the second substrate, and at least one alignment mark is arranged on the first substrate holder or the second substrate holder, and

wherein the alignment marks are arranged parallel to the direction of the linear movement of the first and second substrates.

15. The device according to claim 11, wherein the detection units for detecting the alignment marks are arranged in at least one annular measuring portal.

16. The device according to claim 11, wherein the detection units for detecting the alignment marks are arranged in at least one fully closed annular measuring portal.

17. The device according to claim 11, wherein the detection units for detecting the alignment marks are arranged in two annular measuring portals.

18. The device according to claim 11, wherein the detection units for detecting the alignment marks are arranged in two fully closed annular measuring portals.

19. The device according to claim 11, wherein the detection units for detecting the alignment marks are arranged in an annular measuring portal.

20. The device according to claim 11, wherein the detection units for detecting the alignment marks are arranged in a fully closed annular measuring portal, and in a C-shaped column.