CLAIMS:

1. A substrate processing apparatus comprising a chemical liquid processing apparatus configured to perform processing on substrates, wherein the chemical liquid processing apparatus includes:

   a first chemical liquid processing part configured to supply a first chemical liquid to the substrates and perform first chemical processing on the substrates;

   a second chemical liquid processing part configured to be stacked with the first chemical liquid processing part and to supply a second chemical liquid to the substrates and perform second chemical processing on the substrates;

   a heating processing part located opposite the first chemical liquid processing part and the second chemical liquid processing part and configured to perform a heating treatment operation on the substrates before and after the first chemical processing on the substrates or the second chemical processing on the substrates;

   a substrate transferring part located between the first and second chemical liquid processing parts and the heating processing part, wherein the substrate transferring part is configured to have:

   at least two first robots, at least one second robot and at least one third robot, all of which are arranged in parallel layers, the at least two first robots are configured to transfer the substrates between the first chemical liquid processing part and the heating processing part and the at least one third robot is configured to transfer the substrates between the second chemical liquid processing part and the heating processing part; and

   at least one pair of first buffer units located between two adjacent first robots and configured for loading and unloading the substrates therein and therefrom via the at least one second robot.

2. The substrate processing apparatus as claimed in claim 1, wherein the first chemical liquid processing part is configured to perform coating process on the substrates and the second chemical liquid processing part is configured to perform developing process on the substrates.

3. The substrate processing apparatus as claimed in claim 2, wherein the first chemical liquid processing part is located below the second chemical liquid processing part, or the first chemical liquid processing part is located above the second chemical liquid processing part.
4. The substrate processing apparatus as claimed in claim 1, wherein the chemical liquid processing apparatus further comprises fan filter units respectively located above the at least two first robots, the at least one second robot and the at least one third robot.
5. The substrate processing apparatus as claimed in claim 1, wherein at least one of the pair of first buffer units is configured to be capable of ascending and descending.
6. The substrate processing apparatus as claimed in claim 5, wherein the pair of first buffer units is configured to be arranged in one of the following manners: a) the two first buffer units are arranged side by side and parallel to the move direction of the second robot and both of the two first buffer units are configured to be capable of ascending and descending; b) the two first buffer units are arranged to be stacked and both of the two first buffer units are configured to be capable of ascending and descending; c) the two first buffer units are arranged side by side and perpendicular to the move direction of the second robot and both of the two first buffer units are configured to be capable of ascending and descending; d) the two first buffer units are arranged to be stacked and the first buffer unit located above is fixed and the other first buffer unit located below is configured to be capable of ascending and descending.
7. The substrate processing apparatus as claimed in claim 1, further comprising:
   a process block in which the chemical liquid processing apparatus is disposed;
   a first carrying block configured to carry the substrates which are accommodated in a cassette and are to be processed in the process block to the process block or carry the substrates processed in the process block to the cassette;
   a second carrying block configured to carry the substrates processed in the process block or the substrates to be processed in the process block; and

an interface block configured to perform interfacing between the second carrying block and an external apparatus.

8. The substrate processing apparatus as claimed in claim 7, wherein the process block further comprises:

a pair of second buffer units, one of the second buffer units configured to be corresponding to the first carrying block and one of the first robots, and the other of the second buffer units configured to be corresponding to another of the first robots and the second carrying block;

a pair of third buffer units, one of the third buffer units configured to be corresponding to the first carrying block and the second robot, and the other of the third buffer units configured to be corresponding to the second robot and the second carrying block; and

at least a pair of fourth buffer units, one of the fourth buffer units configured to be corresponding to the second carrying block and the third robot, and the other of the fourth buffer units configured to be corresponding to the third robot and the first carrying block.

9. The substrate processing apparatus as claimed in claim 8, wherein the pair of third buffer units is configured to be capable of ascending and descending.

10. The substrate processing apparatus as claimed in claim 8, wherein the fourth buffer units include at least one fourth buffer unit configured to be corresponding to the second carrying block and the third robot and one or more fourth buffer units configured to be corresponding to the third robot and the first carrying block.

11. The substrate processing apparatus as claimed in claim 1, wherein the second robot is arranged below the at least two first robots.

12. The substrate processing apparatus as claimed in claim 1, wherein the second robot is arranged above the at least two first robots.

13. The substrate processing apparatus as claimed in claim 1, wherein two second robots are arranged at both sides of one pair of first buffer units.

14. The substrate processing apparatus as claimed in claim 1, wherein the first chemical liquid processing part includes a plurality of first processing modules,

the plurality of first processing modules are arranged into a plurality of columns, and every column has one or more layers.

15. The substrate processing apparatus as claimed in claim 1, wherein the substrate transferring part has a plurality of first robots, and one pair of first buffer units is located between every two adjacent first robots.
16. The substrate processing apparatus as claimed in claim 1, wherein the second chemical liquid processing part includes a plurality of second processing modules, the plurality of second processing modules are arranged into a plurality of columns, and every column has one or more layers.
17. The substrate processing apparatus as claimed in claim 16, wherein the substrate transferring part has a plurality of third robots and every third robot is corresponding to one layer of the second processing modules.
18. The substrate processing apparatus as claimed in claim 1, wherein the heating processing part has a plurality of heating modules, the plurality of heating modules are arranged into a plurality of columns and every column has a plurality of layers, the plurality of heating modules in every column is configured in a wafer cassette form and the interval between the heating modules is adjustable.