WHAT IS CLAIMED IS:

1. A lithography apparatus which transfers a pattern of an original to a substrate, the apparatus comprising:

an electrode structure arranged so as to surround a side surface of one of the substrate and the original; and

a power supply configured to supply an alternating voltage to the electrode structure,

wherein the electrode structure includes a plurality of electrode groups electrically insulated from each other, each electrode group including a plurality of electrodes electrically connected to each other, and

the power supply supplies alternating voltages having different phases to the plurality of electrode groups.

2. The apparatus according to claim 1, further comprising a peripheral member arranged so as to surround a side surface of the one of the substrate and the original,

wherein the peripheral member includes an insulator member, and the electrode structure is embedded in the insulator member.

3. The apparatus according to claim 2, wherein the peripheral member has a flat surface.

4. The apparatus according to claim 3, wherein an array pitch between the electrodes in the plurality of electrode groups is smaller than a distance between a member that can face the flat surface of the peripheral member and the surface.

5. The apparatus according to any one of claims 1 to 4, wherein a frequency of the alternating voltage supplied to each electrode group by the power supply falls within a range of 1 to 1,000 Hz.

6. The apparatus according to any one of claims 1 to 5, further comprising a gas supplier configured to supply a gas to a space between the substrate and the

original such that a gas flow along the substrate is formed in the space.

7. The apparatus according to claim 6, further comprising a blowing portion arranged so as to surround the original and configured to blow the gas.

8. The apparatus according to any one of claims 1 to 7, further comprising a substrate chuck configured to hold the substrate,

wherein the one of the substrate and the original is the substrate, and

wherein the electrode structure includes a first electrode structure arranged so as to surround the substrate and the substrate chuck.

9. The apparatus according to claim 8, further comprising a second electrode structure arranged so as to surround a side surface of the other of the substrate and the original,

wherein the second electrode structure includes a plurality of second electrode groups electrically insulated from each other, each of the second electrode groups including a plurality of second electrodes electrically connected to each other, and

the power supply supplies alternating voltages having different phases to the plurality of second electrode groups.

10. The apparatus according to claim 9, further comprising an original chuck configured to hold the original,

wherein the second electrode structure is arranged so as to surround the original and the original chuck.

11. The apparatus according to any one of claims 1 to 10, wherein the electrodes which form the plurality of electrode groups are arranged concentrically.

12. The apparatus according to any one of claims 1 to 10, wherein the respective electrodes which form the plurality of electrode groups extend radially.

13. The apparatus according to any one of claims 1 to 12, wherein the

plurality of electrode groups form a standing wave of an electric field.

14. The apparatus according to any one of claims 1 to 12, wherein the plurality of electrode groups form a traveling wave of an electric field.

15. The apparatus according to claim 14, wherein the traveling wave is formed so as to travel in a direction away from the one of the substrate and the original.

16. An article manufacturing method comprising:

forming a pattern on a substrate by using a lithography apparatus defined in any one of claims 1 to 15; and

processing the substrate on which the pattern has been formed.