What is Claimed is:

1. A developing method comprising:

causing an exposed substrate to be held by a rotatable, substrate holding unit;

a developer spreading step including:

a step of forming a puddle of a developer on a surface of the substrate held by the substrate holding unit, by discharging the developer from a discharging port of a first developer nozzle, the first developer nozzle comprising a nozzle having a contacting part arranged to face the surface of the substrate, the contacting part being smaller than the surface of the substrate; and

a step of subsequently spreading the puddle of the developer over the whole surface of the substrate, by moving the first developer nozzle discharging the developer from one of a central part and a peripheral part to the other of the central part and the peripheral part of the rotating substrate, with the contacting part contacting with the puddle;

a developer supplying step that supplies the developer from a second developer nozzle onto the surface of the substrate with the substrate being rotated, thereby to uniformize, in a plane of the substrate, distribution of a degree of progress of development by the developer spreading step, wherein the developer supplying step is a development adjusting step that supplies the developer to an underdeveloped area as compared with other areas, thereby to accelerate development in the underdeveloped area; and

a developer removing step that is performed between the developer spreading step and the developer supplying step to remove the developer on the surface of the substrate.

2. The developing method according to claim 1, wherein the developer spreading step is performed prior to the development adjusting step.

3. The developing method according to claim 1, wherein the step of spreading the puddle of the developer moves the first developer nozzle from the central part to the peripheral part of the rotating substrate, and wherein the development adjusting step comprises a step of discharging the developer from the second developer nozzle while moving a supply position of the developer from one of the central part and the peripheral part to the other of the central part and the peripheral part of the substrate.

4. The developing method according to claim 1, wherein the development adjusting step comprises a step of discharging the developer from the second developer nozzle locally to a radial position on the substrate.

5. The developing method according to claim 4, wherein the step of discharging the developer locally is performed with the second developer nozzle being stopped.

6. The developing method according to claim 4, wherein in the development adjusting step, a plurality of radial positions, to which the second developer nozzle discharges the developer, are set on the substrate, and wherein the radial positions are separated from each other with respect to a radial direction of the substrate.

7. The developing method according to claim 6, wherein the step of discharging the developer locally is performed with the second developer nozzle being stopped, and wherein at least one of a developer discharging rate, a number of revolution of the substrate per unit time and a developer supplying period from the second developer nozzle at one of the plurality of radial positions is different from that at another one of the plurality of radial positions.

8. The developing method according to claim 1, wherein the developer supplying step is a development preparation step that supplies the

developer to form a liquid film on the surface of the substrate so as to make preparation for the developer spreading step.

9. The developing method according to claim 8, wherein the first developer nozzle moves from the central part to the peripheral part of the substrate in the step of spreading the puddle of the developer.

10. The developing method according to claim 1, wherein the second developer nozzle is composed of the nozzle having the contacting part.

11. The developing method according to claim 10, wherein the first developer nozzle and the second nozzle are composed of a common nozzle.

12. The developing method according to claim 1, wherein the developer removing step is a step of rotating the substrate thereby spinning off the developer from the substrate.

13. A non-transient computer-readable storage medium storing computer program, which is to be used in the developing apparatus, which performs a developing process by supplying a developer onto a surface of the substrate, on which an exposed resist film is provided, wherein the computer program includes steps for performing the developing method according to claim 1.

14. A developing apparatus comprising:

a rotatable, substrate holding unit that holds an exposed substrate horizontally;

a first developer nozzle that comprises a nozzle having a contacting part and a developer discharge port, the contacting part being arranged to face the surface of the substrate and being smaller than the surface of the substrate, wherein first developer nozzle is configured to form a puddle of a developer on a surface of the substrate held by the substrate holding unit by discharging the

developer from the discharging port, and subsequently spread the puddle of the developer over the whole surface of the substrate by supplying the developer to the puddle with the contacting part contacting with the puddle and with the first developer nozzle moving from one of a central part and a peripheral part to the other of the central part and the peripheral part of the rotating substrate, thereby to perform a developing process of the substrate; and

a second developer nozzle configured to supply, before or after preforming development using the first developer nozzle, the developer onto an underdeveloped area of the surface of the substrate with the substrate being rotated, thereby to accelerate development in the underdeveloped area and to uniformize, in a plane of the substrate, distribution of a degree of progress of development in the developing process using the first developer nozzle,

wherein a developing process using the first developer nozzle and the supplying of the developer using the second developer nozzle are performed after removing the developer, having been supplied beforehand, from the surface of the substrate.

15. The developing apparatus according to claim 14, wherein the second developer nozzle is composed of the nozzle having the contacting part, and wherein the second developer nozzle performs a developing process with the contacting surface contacting with the puddle, which is formed on the substrate held by the substrate holding unit and is formed by discharging the developer from the discharging port.

16. The developing apparatus according to claim 15, wherein the first developer nozzle and the second nozzle are composed of a common nozzle.