

WHAT IS CLAIMED IS:

1. A developing cartridge that is attachable to and detachable from an image forming apparatus, comprising:

a developing roller that includes a developing roller shaft, which rotates at a time of development; a developing roller member provided at a circumference of the developing roller shaft to carry a developer, and a developing roller gear provided to rotate integrally with the developing roller shaft at one side of the developing roller shaft in an axial direction;

a driving force transmitting unit that is disposed on the one side of the developing roller shaft in the axial direction and transmits a driving force from a driving rotator provided in the image forming apparatus to the developing roller gear, the driving force transmitting unit including a driven rotator connectable to the driving rotator and a transmission gear that engages with the developing roller gear; and

an electrode member that is disposed on an other side of the developing roller shaft in the axial direction and comes into contact with a power supply member to apply a bias supplied by the power supply member to the developing roller shaft,

wherein a direction of the driving force applied to the developing roller gear at an engagement portion between the developing roller gear and the transmission gear when the developing roller gear and the transmission gear rotate, and a direction of a force applied to the electrode member at a

contact portion between the power supply member and the electrode member when the power supply member presses on the electrode member are substantially equal to a direction orthogonal to the axial direction of the developing roller shaft.

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2. The developing cartridge according to claim 1, wherein the engagement portion between the developing roller gear and the transmission gear, and the contact portion between the power supply member and the electrode member are disposed on a straight
10 line that is parallel to the developing roller shaft.

3. The developing roller cartridge according to claim 1, wherein the electrode member includes a developing roller supporting portion that supports the developing roller shaft
15 and a contact portion that comes into contact with the power supply member, which are integrally provided.

4. The developing cartridge according to claim 1, further comprising a casing that contains the developing roller and
20 has an opening through which the developing roller member is partially exposed,

wherein a direction of the driving force applied to the developing roller gear and a direction of the force applied to the electrode member extend toward the opening from the
25 engagement portion between the developing roller gear and the

transmission gear and the contact portion between the power supply member and the electrode member, respectively, in the direction orthogonal to the axial direction of the developing roller shaft.

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5. The developing cartridge according to claim 1, wherein the driving force transmitting unit includes the driven rotator and the transmission gear, which are integrally provided on a same rotation axial line.

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6. A process cartridge that is attachable to and detachable from an image forming device, comprising:

a developing cartridge comprising:

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a developing roller that includes a developing roller shaft, which rotates at a time of development, a developing roller member provided at a circumference of the developing roller shaft to carry a developer, and a developing roller gear provided to rotate integrally with the developing roller shaft at one side of the developing roller shaft in an axial direction;

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a driving force transmitting unit that is disposed on the one side of the developing roller shaft in the axial direction and transmits a driving force from a driving rotator provided in the image forming apparatus to the developing roller gear, the driving force

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transmitting unit including a driven rotator connectable to the driving rotator and a transmission gear that engages with the developing roller gear; and

an electrode member that is disposed on an other side of the developing roller shaft in the axial direction and comes into contact with a power supply member to apply a bias supplied by the power supply member to the developing roller shaft,

wherein a direction of the driving force applied to the developing roller gear at an engagement portion between the developing roller gear and the transmission gear when the developing roller gear and the transmission gear rotate, and a direction of a force applied to the electrode member at a contact portion between the power supply member and the electrode member when the power supply member presses on the electrode member are substantially equal to a direction orthogonal to the axial direction of the developing roller shaft;

a photosensitive member on which an electrostatic latent image is formed; and

a developing cartridge containing portion that contains the developing cartridge.

7. The process cartridge according to claim 6, wherein the

developing roller member comes into contact with the photosensitive member, and

the direction of the driving force applied to the developing roller gear, and the direction of the force applied to the electrode member are substantially equal to a direction in which the developing roller member presses on the photosensitive member to increase a contact area between the developing roller member and the photosensitive member.

10 8. An image forming apparatus comprising:

a process cartridge;

a process cartridge containing portion that contains the process cartridge;

a driving rotator; and

15 a power supply member,

wherein the process cartridge comprises:

a developing cartridge comprising:

a developing roller that includes a developing roller shaft, which rotates at a time of development,

20 a developing roller member provided at a circumference of the developing roller shaft to carry a developer, and a developing roller gear provided to rotate integrally with the developing roller shaft at one side of the developing roller shaft in an axial direction;

25 a driving force transmitting unit that is disposed

on the one side of the developing roller shaft in the axial direction and transmits a driving force from the driving rotator provided in the image forming apparatus to the developing roller gear, the driving force transmitting unit including a driven rotator connectable to the driving rotator and a transmission gear that engages with the developing roller gear; and

an electrode member that is disposed on an other side of the developing roller shaft in the axial direction and comes into contact with the power supply member to apply a bias supplied by the power supply member to the developing roller shaft,

wherein a direction of the driving force applied to the developing roller gear at an engagement portion between the developing roller gear and the transmission gear when the developing roller gear and the transmission gear rotate, and a direction of a force applied to the electrode member at a contact portion between the power supply member and the electrode member when the power supply member presses on the electrode member are substantially equal to a direction orthogonal to the axial direction of the developing roller shaft;

a photosensitive member on which an electrostatic latent image is formed; and

a developing cartridge containing portion that contains the developing cartridge.

9. The image forming apparatus according to claim 8, wherein
5 the power supply member is made of a conductive wire rod and includes a winding portion at which the conductive wire rod is wound around, and two arms that extend respectively in different directions from the winding portion, and

supporting portions for supporting the two arms are
10 provided in the process cartridge containing portion such that the electrode member of the developing cartridge comes into contact with the winding portion.

10. An image forming apparatus comprising:
15 a developing cartridge;
a developing cartridge containing portion that contains the developing cartridge;

a driving rotator; and
a power supply member,
20 wherein the developing cartridge comprises:

a developing roller that includes a developing roller shaft, which rotates at a time of development, a developing roller member provided at a circumference of the developing roller shaft to carry a developer, and a developing roller gear
25 provided to rotate integrally with the developing roller shaft

at one side of the developing roller shaft in an axial direction;

a driving force transmitting unit that is disposed on the one side of the developing roller shaft in the axial direction and transmits a driving force from the driving rotator provided in the image forming apparatus to the developing roller gear, the driving force transmitting unit including a driven rotator connectable to the driving rotator and a transmission gear that engages with the developing roller gear; and

an electrode member that is disposed on an other side of the developing roller shaft in the axial direction and comes into contact with the power supply member to apply a bias supplied by the power supply member to the developing roller shaft,

wherein a direction of the driving force applied to the developing roller gear at an engagement portion between the developing roller gear and the transmission gear when the developing roller gear and the transmission gear rotate, and a direction of a force applied to the electrode member at a contact portion between the power supply member and the electrode member when the power supply member presses on the electrode member are substantially equal to a direction orthogonal to the axial direction of the developing roller shaft.

11. The image forming apparatus according to claim 10, wherein the power supply member is made of a conductive wire rod, and includes a winding portion at which the conductive wire rod

is wound around, and two arms that extend respectively in different directions from the winding portion, and

supporting portions for supporting the two arms are provided in the developing cartridge containing portion such
5 that the electrode member of the developing cartridge comes into contact with the winding portion.