CLAIMS

1. A process cartridge comprising:

(i) a photosensitive drum;

(ii) a first frame configured and positioned to rotatably support said photosensitive drum;

(iii) a developing roller configured and positioned to develop an electrostatic latent image formed on said photosensitive drum;

(iv) a second frame configured and positioned (a) to rotatably support said developing roller, and (b) to be connected to said first frame so as to be movable relative to said first frame;

(v) a coupling member provided adjacent to an end of said second frame in a direction parallel to a rotational axis of said developing roller, said coupling member including:

(v-i) a driving force receiving portion configured and positioned (a) to receive a driving force for rotating said developing roller, and (b) to be movable relative to said second frame in a crossing direction crossing a rotational axis of said driving force receiving portion, and

(vi) an urging portion configured and positioned to urge said driving force receiving portion in the crossing direction.

2. A process cartridge according to claim 1, further comprising an urging member that includes said urging portion,

wherein said urging member includes an elastic member.

3. A process cartridge according to claim 2, wherein said elastic member is a spring.

4. A cartridge according to claim 1, further comprising a holding portion configured and positioned (a) to rotatably hold said driving force receiving portion, and (b) to be movable together with said driving force receiving portion relative to said developing roller in the crossing direction.

5. A cartridge according to claim 4, wherein said urging portion is configured and positioned to urge said driving force receiving portion via said holding portion.

6. A cartridge according to claim 5, further comprising a stopping portion configured and positioned to stop said holding portion that is urged by said urging portion.

7. A cartridge according to claim 6, further comprising a drum supporting portion configured and positioned to rotatably support said photosensitive drum,

wherein said stopping portion is provided on said drum supporting portion.

8. A cartridge according to claim 6, further comprising a guiding portion configured and positioned to guide a movement of said holding portion in the crossing direction.

9. A cartridge according to claim 5, further comprising a guiding portion configured and positioned to guide a movement of said holding portion in the crossing direction.

10. A cartridge according to claim 4, further comprising a stopping portion configured and positioned to stop said holding portion that is urged by said urging portion.

11. A cartridge according to claim 10, further comprising a drum supporting portion configured and positioned to rotatably support said photosensitive drum,
wherein said stopping portion is provided on said drum supporting portion.

12. A cartridge according to claim 10, further comprising a guiding portion configured and positioned to guide a movement of said holding portion in the crossing direction.

13. A cartridge according to claim 4, further comprising a guiding portion configured and positioned to guide a movement of said holding portion in the crossing direction.

14. A cartridge according to claim 1, wherein said second frame is movable, relative to said first frame, between a contact position in which said developing roller contacts said photosensitive drum, and a spaced position in which said developing roller is spaced from said photosensitive drum.

15. A cartridge according to claim 14, wherein, when said second frame takes the spaced position, an axis of said driving force receiving portion is not aligned with the axis of said developing roller.

16. A cartridge according to claim 14, wherein, when said second frame takes the contact position, an axis of said driving force receiving portion and the axis of said developing roller are substantially aligned with each other.

17. A cartridge according to claim 1, wherein said second frame is rotatable, relative to said first frame, between a contact position in which said developing roller contacts said photosensitive drum, and a spaced position in which

said developing roller is spaced from said photosensitive drum.

18. A cartridge according to claim 17, wherein, when said second frame takes the spaced position, an axis of said driving force receiving portion is not aligned with the axis of said developing roller.

19. A cartridge according to claim 17, wherein, when said second frame takes the contact position, an axis of said driving force receiving portion and the axis of said developing roller are substantially aligned with each other.

20. A cartridge according to claim 1, wherein said coupling member is an Oldham coupling.

21. A cartridge according to claim 1, further comprising a drum coupling member, provided adjacent to an axial end of said photosensitive drum, to receive a driving force for rotating said photosensitive drum.

22. A cartridge according to claim 1, wherein said photosensitive drum is unified together, into said first frame, with (a) a charging member configured and positioned to electrically charge said photosensitive drum, and (b) a cleaning member configured and positioned to clean said photosensitive drum,

wherein said developing roller is unified together, into said second frame, with a developer container configured and positioned to contain developer, and

wherein said first frame and said second frame are connected so as to be rotatable relative to each other.

23. A cartridge according to claim 1, wherein said first frame and said second frame are connected by a shaft.

24. A process cartridge according to claim 1, further comprising a supplying roller configured and positioned to supply said developing roller with developer and to be rotatably supported by said second frame.

25. A process cartridge comprising:

(i) a photosensitive drum;

(ii) a first frame configured and positioned to rotatably support said photosensitive drum;

(iii) a developing roller configured and positioned to develop an electrostatic latent image formed on said photosensitive drum;

(iv) a second frame configured and positioned (a) to rotatably support said developing roller, and (b) to be connected to said first frame so as to be movable relative to said first frame;

(v) a coupling member provided adjacent to an end of said second frame in a

direction parallel to a rotational axis of said developing roller, said coupling member including:

(v-i) a driving force receiving portion including a plurality of projections, the driving force receiving portion being configured and positioned (a) to receive a driving force for rotating said developing roller, and (b) to be movable relative to said second frame in a crossing direction crossing a rotational axis of said driving force receiving portion, and

(vi) a spring configured and positioned to urge said driving force receiving portion in the crossing direction.

26. A cartridge according to claim 25, further comprising a coupling bearing configured and positioned (a) to rotatably bear said driving force receiving portion, and (b) to be movable together with said driving force receiving portion relative to said developing roller in the crossing direction.

27. A cartridge according to claim 26, further comprising a stopper configured and positioned to stop said coupling bearing that is urged by said spring.

28. A cartridge according to claim 27, further comprising a drum bearing configured and positioned to rotatably bear said photosensitive drum,

wherein said stopper is provided on said drum bearing.

29. A cartridge according to claim 28, further comprising a guide configured and positioned to guide a movement of said coupling bearing in the crossing direction.

30. A cartridge according to claim 27, further comprising a guide configured and positioned to guide a movement of said coupling bearing in the crossing direction.

31. A cartridge according to claim 25, further comprising a coupling bearing configured and positioned (a) to rotatably bear said driving force receiving portion, and (b) to be movable together with said driving force receiving portion relative to said developing roller in the crossing direction,

wherein said spring is configured and positioned to urge said driving force receiving portion via said coupling bearing.

32. A cartridge according to claim 31, further comprising a stopper configured and positioned to stop said coupling bearing that is urged by said spring.

33. A cartridge according to claim 32, further comprising a drum bearing configured and positioned to rotatably bear said photosensitive drum,

wherein said stopper is provided on said drum bearing.

34. A cartridge according to claim 33, further comprising a guide configured and positioned to guide a movement of said coupling bearing in the crossing direction.

35. A cartridge according to claim 32, further comprising a guide configured and positioned to guide a movement of said coupling bearing in the crossing direction.

36. A cartridge according to claim 25, wherein said second frame is movable, relative to said first frame, between a contact position in which said developing roller contacts said photosensitive drum, and a spaced position in which said developing roller is spaced from said photosensitive drum.

37. A cartridge according to claim 36, wherein, when said second frame takes the spaced position, an axis of said driving force receiving portion is not aligned with the axis of said developing roller.

38. A cartridge according to claim 36, wherein, when said second frame takes the contact position, an axis of said driving force receiving portion and the axis of said developing roller are substantially aligned with each other.

39. A cartridge according to claim 25, wherein said second frame is rotatable, relative to said first frame, between a contact position in which said developing roller contacts said photosensitive drum, and a spaced position in which said developing roller is spaced from said photosensitive drum.

40. A cartridge according to claim 39, wherein, when said second frame takes the spaced position, an axis of said driving force receiving portion is not aligned with the axis of said developing roller.

41. A cartridge according to claim 39, wherein, when said second frame takes the contact position, an axis of said driving force receiving portion and the axis of said developing roller are substantially aligned with each other.

42. A cartridge according to claim 25, wherein said coupling member is an Oldham coupling.

43. A cartridge according to claim 25, further comprising a drum coupling member, provided adjacent to an axial end of said photosensitive drum, to receive a driving force for rotating said photosensitive drum.

44. A cartridge according to claim 25, wherein said photosensitive drum

is unified together, into said first frame, with (a) a charging member configured and positioned to electrically charge said photosensitive drum, and (b) a cleaning member configured and positioned to clean said photosensitive drum,

wherein said developing roller is unified together, into said second frame, with a developer container configured and positioned to contain developer, and wherein said first frame and said second frame are connected so as to be rotatable relative to each other.

45. A cartridge according to claim 25, wherein said first frame and said second frame are connected by a shaft.

46. A process cartridge according to claim 25, further comprising a supplying roller configured and positioned to supply said developing roller with developer and to be rotatably supported by said second frame.

47. A process cartridge comprising:

(i) a photosensitive drum;

(ii) a first frame configured and positioned to rotatably support said photosensitive drum;

(iii) a developing roller configured and positioned to develop an electrostatic latent image formed on said photosensitive drum;

(iv) a second frame configured and positioned (a) to rotatably support said developing roller, and (b) to be connected to said first frame so as to be movable relative to said first frame; and

(v) a coupling member provided adjacent to an end of said second frame in a direction parallel to a rotational axis of said developing roller, said coupling member including:

(v-i) a driving force receiving portion configured and positioned to receive a driving force for rotating said developing roller, and

(v-ii) a driving force transmitting portion configured and positioned to transmit the driving force from the driving force receiving portion toward said developing roller, wherein said driving force receiving portion is movable relative to said driving force transmitting portion; and

(vi) an urging portion configured and positioned to urge said driving force receiving portion to move said driving force receiving portion relative to said driving force transmitting portion.

48. A process cartridge according to claim 47, further comprising an urging member that includes said urging portion, wherein said urging member includes an elastic member.

49. A process cartridge according to claim 48, wherein said elastic member is a spring.

50. A process cartridge according to claim 47, wherein said driving force receiving portion is movable in a crossing direction crossing a rotational axis of said driving force transmitting portion.

51. A process cartridge according to claim 50, wherein said urging portion is configured and positioned to urge said driving force receiving portion in the crossing direction.

52. A cartridge according to claim 51, further comprising a holding portion configured and positioned (a) to rotatably hold said driving force receiving portion, and (b) to be movable together with said driving force receiving portion relative to said driving force transmitting portion in the crossing direction,

wherein said urging portion is configured and positioned to urge said driving force receiving portion via said holding portion.

53. A cartridge according to claim 52, further comprising a stopping portion configured and positioned to stop said holding portion that is urged by said urging portion.

54. A cartridge according to claim 53, further comprising a drum supporting portion configured and positioned to rotatably support said photosensitive drum,

wherein said stopping portion is provided on said drum supporting portion.

55. A cartridge according to claim 53, further comprising a guiding portion configured and positioned to guide a movement of said holding portion in the crossing direction.

56. A cartridge according to claim 52, further comprising a guiding portion configured and positioned to guide a movement of said holding portion in the crossing direction.

57. A cartridge according to claim 50, further comprising a holding portion configured and positioned (a) to rotatably hold said driving force receiving portion, and (b) to be movable together with said driving force receiving portion relative to said driving force transmitting portion in the crossing direction.

58. A cartridge according to claim 57, further comprising a stopping portion configured and positioned to stop said holding portion that is urged by said urging portion.

59. A cartridge according to claim 58, further comprising a drum

supporting portion configured and positioned to rotatably support said photosensitive drum,
wherein said stopping portion is provided on said drum supporting portion.

60. A cartridge according to claim 58, further comprising a guiding portion configured and positioned to guide a movement of said holding portion in the crossing direction.

61. A cartridge according to claim 57, further comprising a guiding portion configured and positioned to guide a movement of said holding portion in the crossing direction.

62. A cartridge according to claim 47, wherein said second frame is movable, relative to said first frame, between a contact position in which said developing roller contacts said photosensitive drum, and a spaced position in which said developing roller is spaced from said photosensitive drum.

63. A cartridge according to claim 62, wherein, when said second frame takes the spaced position, an axis of said driving force receiving portion is not aligned with an axis of said driving force transmitting portion.

64. A cartridge according to claim 62, wherein, when said second frame takes the contact position, an axis of said driving force receiving portion and an axis of said driving force transmitting portion are substantially aligned with each other.

65. A cartridge according to claim 47, wherein said second frame is rotatable, relative to said first frame, between a contact position in which said developing roller contacts said photosensitive drum, and a spaced position in which said developing roller is spaced from said photosensitive drum.

66. A cartridge according to claim 65, wherein, when said second frame takes the spaced position, an axis of said driving force receiving portion is not aligned with an axis of said driving force transmitting portion.

67. A cartridge according to claim 65, wherein, when said second frame takes the contact position, an axis of said driving force receiving portion and an axis of said driving force transmitting portion are substantially aligned with each other.

68. A cartridge according to claim 47, wherein said coupling member is an Oldham coupling.

69. A cartridge according to claim 47, further comprising a drum coupling member, provided adjacent to an axial end of said photosensitive drum, to receive a

driving force for rotating said photosensitive drum.

70. A cartridge according to claim 47, wherein said photosensitive drum is unified together, into said first frame, with (a) a charging member configured and positioned to electrically charge said photosensitive drum, and (b) a cleaning member configured and positioned to clean said photosensitive drum,
wherein said developing roller is unified together, into said second frame, with a developer container configured and positioned to contain developer, and
wherein said first frame and said second frame are connected so as to be rotatable relative to each other.

71. A cartridge according to claim 47, wherein said first frame and said second frame are connected by a shaft.

72. A process cartridge according to claim 47, further comprising a supplying roller configured and positioned to supply said developing roller with developer and to be rotatably supported by said second frame.

73. A process cartridge comprising:

(i) a photosensitive drum;

(ii) a first frame configured and positioned to rotatably support said photosensitive drum;

(iii) a developing roller configured and positioned to develop an electrostatic latent image formed on said photosensitive drum;

(iv) a second frame configured and positioned (a) to rotatably support said developing roller, and (b) to be connected to said first frame so as to be movable relative to said first frame;

(v) a coupling member provided adjacent to an end of said second frame in a direction parallel to a rotational axis of said developing roller, said coupling member including:

(v-i) a driving force receiving portion including a plurality of projections, said driving force receiving portion being configured and positioned to receive a driving force for rotating said developing roller, and

(v-ii) a driving force transmitting portion configured and positioned to transmit said driving force from the driving force receiving portion toward said developing roller, wherein said driving force receiving portion is movable relative to said driving force transmitting portion; and

(vi) a spring configured and positioned to urge said driving force receiving portion to move said driving force receiving portion relative to said driving force transmitting portion.

74. A process cartridge according to claim 73, wherein said driving force receiving portion is movable in a crossing direction crossing a rotational axis of said

driving force transmitting portion.

75. A process cartridge according to claim 74, wherein said spring configured and positioned to urge said driving force receiving portion in the crossing direction.

76. A cartridge according to claim 75, further comprising a coupling bearing configured and positioned (a) to rotatably bear said driving force receiving portion, and (b) to be movable together with said driving force receiving portion relative to said driving force transmitting portion in the crossing direction,

wherein said spring is configured and positioned to urge said driving force receiving portion via said coupling bearing.

77. A cartridge according to claim 76, further comprising a stopper configured and positioned to stop said coupling bearing that is urged by said spring.

78. A cartridge according to claim 77, further comprising a drum bearing configured and positioned to rotatably bear said photosensitive drum,

wherein said stopper is provided on said drum bearing.

79. A cartridge according to claim 78, further comprising a guide configured and positioned to guide a movement of said coupling bearing in the crossing direction.

80. A cartridge according to claim 77, further comprising a guide configured and positioned to guide a movement of said coupling bearing in the crossing direction.

81. A cartridge according to claim 74, further comprising a coupling bearing configured and positioned (a) to rotatably bear said driving force receiving portion, and (b) to be movable together with said driving force receiving portion relative to said driving force transmitting portion in the crossing direction.

82. A cartridge according to claim 81, further comprising a stopper configured and positioned to stop said coupling bearing that is urged by said spring.

83. A cartridge according to claim 82, further comprising a drum bearing configured and positioned to rotatably bear said photosensitive drum,

wherein said stopper is provided on said drum bearing.

84. A cartridge according to claim 83, further comprising a guide configured and positioned to guide a movement of said coupling bearing in the crossing direction.

85. A cartridge according to claim 82, further comprising a guide configured and positioned to guide a movement of said coupling bearing in the crossing direction.

86. A cartridge according to claim 73, wherein said second frame is movable, relative to said first frame, between a contact position in which said developing roller contacts said photosensitive drum, and a spaced position in which said developing roller is spaced from said photosensitive drum.

87. A cartridge according to claim 86, wherein, when said second frame takes the spaced position, an axis of said driving force receiving portion is not aligned with an axis of said driving force transmitting portion.

88. A cartridge according to claim 86, wherein, when said second frame takes the contact position, an axis of said driving force receiving portion and an axis of said developing roller are substantially aligned with each other.

89. A cartridge according to claim 73, wherein said second frame is rotatable, relative to said first frame, between a contact position in which said developing roller contacts said photosensitive drum, and a spaced position in which said developing roller is spaced from said photosensitive drum.

90. A cartridge according to claim 89, wherein, when said second frame takes the spaced position, an axis of said driving force receiving portion is not aligned with an axis of said driving force transmitting portion.

91. A cartridge according to claim 89, wherein, when said second frame takes the contact position, an axis of said driving force receiving portion and an axis of said driving force transmitting portion are substantially aligned with each other.

92. A cartridge according to claim 73, wherein said coupling member is an Oldham coupling.

93. A cartridge according to claim 73, further comprising a drum coupling member, provided adjacent to one axial end of said photosensitive drum, to receive a driving force for rotating said photosensitive drum.

94. A cartridge according to claim 73, wherein said photosensitive drum is unified together, into said first frame, with (a) a charging member configured and positioned to electrically charge said photosensitive drum, and (b) a cleaning member configured and positioned to clean said photosensitive drum,

wherein said developing roller is unified together, into said second frame, with

a developer container configured and positioned to contain the developer, and wherein said first frame and said second frame are connected so as to be rotatable relative to each other.

95. A cartridge according to claim 73, wherein said first frame and said second frame are connected by a shaft.

96. A process cartridge according to claim 73, further comprising a supplying roller configured and positioned to supply said developing roller with the developer and to be rotatably supported by said second frame.