CLAIMS

The invention claimed is:

1. A drum unit for a cartridge, the drum unit comprising:

(1) a photosensitive drum; and

(2) a coupling member operatively connected to the photosensitive drum, the coupling member including:

an engageable member having a driving force receiving portion configured to receive a driving force for rotating the photosensitive drum,

a holding member configured to slidably hold the engageable member, and

an urging member configured to urge the engageable member,

wherein the engageable member is provided with a projection including the driving force receiving portion, and

wherein the projection is disposed inside of the photosensitive drum and the projection projects inwardly at least in a radial direction of the drum unit.

2. A drum unit according to claim 1, wherein the urging member urges the engageable member inwardly at least in a radial direction of the drum unit.

3. A drum unit according to claim 1, wherein the holding member is provided with a locking portion for restricting movement of the engageable member in a radial direction of the drum unit.

4. A drum unit according to claim 3, wherein the engageable member is urged to the locking portion by the urging member.

5. A drum unit according to claim 1, wherein the driving force receiving portion is inclined relative to a moving direction of the engageable member.

6. A drum unit according to claim 1, wherein the driving force receiving portion is inclined such as to be urged inwardly at least in a radial direction by receiving the driving force.

7. A drum unit according to claim 1, wherein the driving force receiving portion faces outwardly at least in a radial direction of the drum unit.

8. A drum unit according to claim 1, wherein the engageable member is provided with a curved surface extended along a circumferential direction of the drum unit and faces inwardly of the drum unit in a radial direction, and

wherein the projection projects relative to the curved surface of the engageable member.

9. A drum unit according to claim 8, wherein at least a part of the curved surface of the engageable member is disposed upstream of the driving force receiving portion with respect to a rotational moving direction of the drum unit.

10. A drum unit according to claim 1, wherein the holding member has a hollow portion, and the engageable member is urged toward an inside of the hollow portion.

11. A drum unit according to claim 1, wherein the holding member has a hollow portion, and the driving force receiving portion is exposed to an inside of the hollow portion.

12. A drum unit according to claim 1, wherein the urging member is expandable and contractable.

13. A drum unit according to claim 1, wherein the urging member is an elastic member.

14. A drum unit according to claim 1, wherein the urging member is a coil spring.

15. A drum unit according to claim 1, wherein at least a part of the urging member is placed inside of the photosensitive drum.

16. A drum unit according to claim 1, wherein the coupling member includes an urging member supporting portion for receiving an urging force from the urging member to support the urging member, and

wherein at least a part of the urging member supporting portion is placed inside of the photosensitive drum.

17. A drum unit according to claim 1, wherein the holding member includes a receiving portion for receiving the driving force from the engageable member.

18. A drum unit according to claim 17, wherein the receiving portion is configured to urge the driving force receiving portion inwardly at least in a radial direction of the drum unit when receiving the driving force.

19. A drum unit according to claim 17, wherein the receiving portion is inclined relative to the driving force receiving portion.

20. A drum unit according to claim 17, wherein the receiving portion also functions as a guide for guiding the engageable member.

21. A drum unit according to claim 1, wherein the holding member is fixed to the photosensitive drum.

22. A drum unit according to claim 1, wherein the holding member is provided with a guide for guiding the engageable member.

23. A drum unit according to claim 22, wherein the guide guides an upstream side of the engageable member with respect to a rotational moving direction of the photosensitive drum.

24. A drum unit according to claim 22, wherein the guide guides a downstream side of the engageable member with respect to a rotational moving direction of the photosensitive drum.

25. A drum unit according to claim 22, wherein the guide is provided with an upstream guide for guiding an upstream side of the engageable member with

respect to a rotational moving direction of the photosensitive drum and a downstream guide for guiding a downstream side of the engageable member with respect to the rotational moving direction.

26. A drum unit according to claim 25, wherein the upstream guide and the downstream guide are arranged so as to be substantially parallel to each other.

27. A drum unit according to claim 1, wherein the holding member is provided with two guides that are substantially parallel to each other, and the engageable member is guided by the two guides.

28. A drum unit according to claim 1, wherein in an axial direction of the drum unit, an inside of the driving force receiving portion is disposed downstream of an outside of the driving force receiving portion with respect to a rotational moving direction of the drum unit.

29. A drum unit according to claim 1, wherein the driving force receiving portion faces inwardly at least in an axial direction of the drum unit.

30. A drum unit according to claim 1, wherein the urging member and the holding member are separate members.

31. A drum unit according to claim 1, wherein the urging member and the engageable member are separate members.

32. A drum unit according to claim 1, wherein the urging member and the engageable member are arranged along a radial direction of the drum unit.

33. A drum unit according to claim 1, wherein an open space is formed in the coupling member between the projection and a rotational axis of the coupling member.

34. A cartridge comprising:

(1) a rotatable member configured to rotate while carrying a developer on a surface thereof; and

(2) a coupling member including:

an engageable member having a driving force receiving portion configured to receive a driving force for rotating the rotatable member,

a holding member configured to slidably hold the engageable member so that the engageable member is slidable relative to the holding member at least in a radial direction of the coupling member, and

an urging member configured to urge the engageable member,

wherein the engageable member includes a projection provided with the driving force receiving portion.

35. A cartridge according to claim 34, wherein the urging member urges the engageable member inwardly at least in a radial direction of the coupling member.

36. A cartridge according to claim 34, wherein the holding member is provided with a locking portion for restricting movement of the engageable member in a radial direction of the coupling member.

37. A cartridge according to claim 36, wherein the engageable member is urged to the locking portion by the urging member.

38. A cartridge according to claim 34, wherein the driving force receiving portion is inclined relative to a moving direction of the engageable member.

39. A cartridge according to claim 34, wherein the driving force receiving portion is inclined so as to be urged inwardly at least in a radial direction of the coupling member by receiving the driving force.

40. A cartridge according to claim 34, wherein the driving force receiving portion faces outwardly at least in a radial direction of the cartridge.

41. A cartridge according to claim 34, wherein the engageable member is provided with a curved surface that is extended along a circumferential direction

of the cartridge and faces inwardly in a radial direction of the coupling member, and

wherein the projection projects relative to the curved surface of the engageable member.

42. A cartridge according to claim 41, wherein at least a part of the curved surface of the engageable member is disposed upstream of the driving force receiving portion with respect to a rotational moving direction of the cartridge.

43. A cartridge according to claim 34, wherein the projection projects inwardly at least in a radial direction of the cartridge.

44. A cartridge according to claim 34, wherein the holding member has a hollow portion, and the engageable member is urged toward an inside of the hollow portion.

45. A cartridge according to claim 34, wherein the holding member has a hollow portion, and the driving force receiving portion is exposed to an inside of the hollow portion.

46. A cartridge according to claim 34, wherein at least a part of the engageable member is placed inside of the rotatable member.

47. A cartridge according to claim 34, wherein at least a part of the driving force receiving member is placed inside of the rotatable member.

48. A cartridge according to claim 34, wherein the urging member is expandable and contractable.

49. A cartridge according to claim 34, wherein the urging member is an elastic member.

50. A cartridge according to claim 34, wherein the urging member is a coil spring.

51. A cartridge according to claim 34, wherein at least a part of the urging member is placed inside of the rotatable member.

52. A cartridge according to claim 34, wherein the coupling member includes an urging member supporting portion for receiving an urging force from the urging member to support the urging member, and

wherein at least a part of the urging member supporting portion is placed inside of the rotatable member.

53. A cartridge according to claim 34, wherein the holding member includes a receiving portion for receiving the driving force from the engageable member.

54. A cartridge according to claim 53, wherein the receiving portion is configured to urge the driving force receiving portion inwardly at least in a radial direction of the coupling member.

55. A cartridge according to claim 53, wherein the receiving portion is inclined relative to the driving force receiving portion.

56. A cartridge according to claim 53, wherein the receiving portion also functions as a guide for guiding the engageable member.

57. A cartridge according to claim 34, wherein the holding member is fixed to the rotatable member.

58. A cartridge according to claim 34, wherein the holding member is provided with a guide for guiding the engageable member.

59. A cartridge according to claim 58, wherein the guide guides an upstream side of the engageable member with respect to a rotational moving direction of the rotatable member.

60. A cartridge according to claim 58, wherein the guide guides a downstream side of the engageable member with respect to a rotational moving direction of the rotatable member.

61. A cartridge according to claim 58, wherein the guide is provided with an upstream guide for guiding an upstream side of the engageable member with respect to a rotational moving direction of the rotatable member and a downstream guide for guiding a downstream side of the engageable member with respect to the rotational moving direction.

62. A cartridge according to claim 61, wherein the upstream guide and the downstream guide are arranged so as to be substantially parallel to each other.

63. A cartridge according to claim 34, wherein the holding member is provided with two guides that are substantially parallel to each other, and the engageable member is slidable relative to the two guides.

64. A cartridge according to claim 34, wherein in an axial direction of the coupling member, an inside of the driving force receiving portion is disposed downstream of an outside of the driving force receiving portion with respect to a rotational moving direction of the coupling member.

65. A cartridge according to claim 34, wherein the driving force receiving portion faces inwardly at least in an axial direction of the cartridge.

66. A cartridge according to claim 34, wherein the urging member and the holding member are separate members.

67. A cartridge according to claim 34, wherein the urging member and the engageable member are separate members.

68. A cartridge according to claim 34, wherein the urging member and the engageable member are arranged along a radial direction of the coupling member.

69. A cartridge according to claim 34, wherein the rotatable member is a photosensitive drum.

70. A cartridge according to claim 34, wherein the rotatable member is a developing roller.

71. A cartridge according to claim 70, further comprising a supplying roller for supplying developer to the developing roller.

72. A cartridge according to claim 71, wherein the supplying roller is rotatable by the driving force received by the coupling member.

73. A cartridge according to claim 34, wherein the rotatable member is a supplying roller for supplying developer to a developing roller.

74. A cartridge according to claim 34, wherein the rotatable member includes a shaft to which the coupling member is mounted.

75. An electrophotographic image forming apparatus comprising a cartridge according to claim 34, and a main assembly.

76. A cartridge according to claim 34, wherein an open space is formed in the coupling member between the projection and a rotational axis of the coupling member.

77. A coupling member capable of engaging with and disengaging from a driving shaft provided in a main assembly of an electrophotographic image forming apparatus, the coupling member comprising:

(1) an engageable member including a driving force receiving portion configured to receive a driving force for rotating a rotatable member carrying a developer on a surface thereof;

(2) a holding member configured to slidably hold the engageable member so that the engageable member is slidable relative to the holding member inwardly at least in a radial direction of the coupling member; and

(3) an urging member configured to urge the engageable member,

wherein the driving force receiving portion extends inwardly at least in a radial direction of the coupling member.

78. A cartridge comprising:

a frame;

a drum unit rotatably supported by the frame, the drum unit including a photosensitive drum and a coupling member,

wherein the coupling member is operatively connected to the photosensitive drum, and the coupling member includes:

an engageable member having a driving force receiving portion configured to receive a driving force for rotating the photosensitive drum,

a holding member configured to slidably hold the engageable member, and

an urging member configured to urge the engageable member,

wherein the engageable member is provided with a projection including the driving force receiving portion, and

wherein the projection is disposed inside of the photosensitive drum and the projection projects inwardly at least in a radial direction of the drum unit.

79. A cartridge according to claim 78, wherein the urging member urges the engageable member inwardly at least in a radial direction of the drum unit.

80. A cartridge according to claim 78, wherein the holding member is provided with a locking portion for restricting movement of the engageable member in a radial direction of the drum unit.

81. A cartridge according to claim 80, wherein the engageable member is urged to the locking portion by the urging member.

82. A cartridge according to claim 78, wherein the driving force receiving portion is inclined relative to a moving direction of the engageable member.

83. A cartridge according to claim 78, wherein the driving force receiving portion is inclined such as to be urged inwardly at least in a radial direction by receiving the driving force.

84. A cartridge according to claim 78, wherein the driving force receiving portion faces outwardly at least in a radial direction of the drum unit.

85. A cartridge according to claim 78, wherein the engageable member is provided with a curved surface extended along a circumferential direction of the drum unit and faces inwardly of the drum unit in a radial direction, and

wherein the projection projects relative to the curved surface of the engageable member.

86. A cartridge according to claim 85, wherein at least a part of the curved surface of the engageable member is disposed upstream of the driving force receiving portion with respect to a rotational moving direction of the drum unit.

87. A cartridge according to claim 78, wherein the holding member has a hollow portion, and the engageable member is urged toward an inside of the hollow portion.

88. A cartridge according to claim 78, wherein the holding member has a hollow portion, and the driving force receiving portion is exposed to an inside of the hollow portion.

89. A cartridge according to claim 78, wherein the urging member is expandable and contractable.

90. A cartridge according to claim 78, wherein the urging member is an elastic member.

91. A cartridge according to claim 78, wherein the urging member is a coil spring.

92. A cartridge according to claim 78, wherein at least a part of the urging member is placed inside of the photosensitive drum.

93. A cartridge according to claim 78, wherein the coupling member includes an urging member supporting portion for receiving an urging force from the urging member to support the urging member, and

wherein at least a part of the urging member supporting portion is placed inside of the photosensitive drum.

94. A cartridge according to claim 78, wherein the holding member includes a receiving portion for receiving the driving force from the engageable member.

95. A cartridge according to claim 94, wherein the receiving portion is configured to urge the driving force receiving portion inwardly at least in a radial direction of the drum unit when receiving the driving force.

96. A cartridge according to claim 94, wherein the receiving portion is inclined relative to the driving force receiving portion.

97. A cartridge according to claim 94, wherein the receiving portion also functions as a guide for guiding the engageable member.

98. A cartridge according to claim 78, wherein the holding member is fixed to the photosensitive drum.

99. A cartridge according to claim 78, wherein the holding member is provided with a guide for guiding the engageable member.

100. A cartridge according to claim 99, wherein the guide guides an upstream side of the engageable member with respect to a rotational moving direction of the photosensitive drum.

101. A cartridge according to claim 99, wherein the guide guides a downstream side of the engageable member with respect to a rotational moving direction of the photosensitive drum.

102. A cartridge according to claim 99, wherein the guide is provided with an upstream guide for guiding an upstream side of the engageable member with respect to a rotational moving direction of the photosensitive drum and a downstream guide for guiding a downstream side of the engageable member with respect to the rotational moving direction.

103. A cartridge according to claim 102, wherein the upstream guide and the downstream guide are arranged so as to be substantially parallel to each other.

104. A cartridge according to claim 78, wherein the holding member is provided with two guides that are substantially parallel to each other, and the engageable member is guided by the two guides.

105. A cartridge according to claim 78, wherein in an axial direction of the drum unit, an inside of the driving force receiving portion is disposed downstream of an outside of the driving force receiving portion with respect to a rotational moving direction of the drum unit.

106. A cartridge according to claim 78, wherein the driving force receiving portion faces inwardly at least in an axial direction of the drum unit.

107. A cartridge according to claim 78, wherein the urging member and the holding member are separate members.

108. A cartridge according to claim 78, wherein the urging member and the engageable member are separate members.

109. A cartridge according to claim 78, wherein the urging member and the engageable member are arranged along a radial direction of the drum unit.

110. A cartridge according to claim 78, wherein an open space is formed in the coupling member between the projection and a rotational axis of the coupling member.