CLAIMS:

1. A toner cartridge detachably mountable to a receiving device, said toner cartridge comprising:

a container including an accommodating portion for accommodating the toner and a discharge opening for discharging the toner from said accommodating portion into the receiving device; and

an open/close member including a closing portion for closing said discharge opening and an engaging portion movable relative to said closing portion, said open/close member being rotatable relative to said container between (a) an opening position for causing said closing portion to open said discharge opening and (b) a closing position for causing said closing portion to close said discharge opening,

wherein said engaging portion is movable relative to said closing portion between (c) an engaging position for engagement with the receiving device to receive a force for moving said open/close member from the opening position to the closing position when said toner cartridge is dismounted from the receiving device and (d) a retracted position retracted from the engaging position, and

wherein said engaging portion is movable from the retracted position to the engaging position with rotation of said open/close member from the closing position to the opening position.

2. A toner cartridge according to Claim 1, wherein said engaging portion is moved from the retracted position to the engaging position by rotation of said open/close member from the closing position to the opening position.

3. A toner cartridge according to Claim 1 or 2, further comprising an engaging position moving portion, provided on said container, for moving said engaging portion from the retracted position to the engaging position with rotation of said open/close member from the closing position to the opening position.

4. A toner cartridge according to Claim 3, wherein said engaging position moving portion includes an urging portion for urging said engaging portion toward the engaging position.

5. A toner cartridge according to Claim 3 or 4, wherein said engaging position moving portion is provided by a projection provided on said container.

6. A toner cartridge according to Claim 3 or 4, wherein said engaging position moving portion is provided by a recess provided on said container.

7. A toner cartridge according to any one of Claims 1 - 6, further comprising an engaging position holding portion, provided on said container, for holding said engaging portion in the engaging position when said open/close member is in the opening position.

8. A toner cartridge according to any one of claims 1 - 7, further comprising an elastic portion for moving said engaging portion from the retracted position to the engaging position with rotation of said open/close member from the closing position to the opening position.

9. A toner cartridge according to Claim 8, wherein said open/close member includes a supporting portion supporting said engaging portion, and said supporting portion includes said elastic portion.

10. A toner cartridge according to Claim 8, wherein said open/close member includes a supporting portion supporting said engaging portion and movable relative to said closing portion, and said elastic portion is an elastic member for urging said supporting portion.

11. A toner cartridge according to any one of Claims 8 - 10, wherein said elastic portion is made of metal.

12. A toner cartridge according to any one of Claims 1 - 11, wherein said engaging portion is moved from the engaging position to the retracted position with the rotation of said open/close member from the opening position to the closing position.

13. A toner cartridge according to Claim 12, wherein said engaging portion is moved from the engaging position to the retracted position by rotation of said open/close member from the opening position to the closing position.

14. A toner cartridge according to Claim 12 or 13, further comprising a retracted position moving portion, provided on said container, for moving said engaging portion from the engaging position to the retracted position with rotation of said open/close member from the opening

position to the closing position.

15. A toner cartridge according to Claim 14, wherein said retracted position moving portion includes an urging portion for urging said engaging portion toward the retracted position.

16. A toner cartridge according to Claim 14 or 15, wherein said retracted position moving portion is provided by a projection provided on said container.

17. A toner cartridge according to Claim 14 or 15, wherein said retracted position moving portion is provided by a recess provided on said container.

18. A toner cartridge according to any one of claims 1 - 17, further comprising a retracted position holding portion, provided on said container, for holding said engaging portion in the retracted position when said. Open/close member is in the closing position

19. A toner cartridge according to any one of Claims 1 - 18, further comprising a second elastic portion for moving said engaging portion from the from the engaging position to the retracted position with rotation of said open/close member from the opening position to the closing position.

20. A toner cartridge according to Claim 19, wherein said open/close member is provided with a supporting portion for supporting said engaging portion, and said supporting portion includes said second elastic portion.

21. A toner cartridge according to Claim 19, wherein said open/close member is provided with a supporting portion supporting said engaging portion and movable relative to said closing portion, and said second elastic portion includes an elastic member for supporting said supporting portion.

22. A toner cartridge according to any one of Claims 19 - 21, wherein said second elastic portion is made of metal.

23. A toner cartridge according to any one of Claims 1 - 22, wherein said engaging portion moves from the retracted position to the engaging position by movement of said

open/close member at least in a rotational axis direction.

24. A toner cartridge according to Claim 23, wherein said engaging portion moves from the retracted position to the engaging position by inward movement at least in the rotational axis direction.

25. A toner cartridge according to any one of claims 1 - 24, wherein said engaging portion is moved from the retracted position to the engaging position by movement of said open/close member at least in a direction of a rotation radius.

26. A toner cartridge according to Claim 25, wherein said engaging portion is moved from the retracted position to the engaging position by outward movement of said open/close member at least in a direction of a rotation radius.

27. A toner cartridge according to any one of Claims 1 - 26, wherein said engaging portion is provided with a first projection projecting at least in an outward direction of a rotation radius of said open/close member.

28. A toner cartridge according to Claim 27, wherein said engaging portion is provided with a second projection projecting downstream with respect to the rotational direction of said open/close member relative to said container.

29. A toner cartridge according to Claim 28, wherein said second projection is provided on said first projection.

30. A toner cartridge according to Claim 28 or 29, wherein a height of said second projection is smaller than that of said first projection.

31. A toner cartridge according to any one of claims 1 - 30, wherein said open/close member is provided with a supporting portion supporting said engaging portion.

32. A toner cartridge according to Claim 31, wherein said engaging portion is movable between the retracted position and the engaging position by deformation of said supporting portion.

33. A toner cartridge according to Claim 31 or 32, wherein said engaging portion is movable between the retracted position and the engaging position by sliding movement of said supporting portion.

34. A toner cartridge according to any one of Claims 31 - 33, wherein said engaging portion is movable between the retracted position and the engaging position by rotation of said supporting portion.

35. A toner cartridge according to any one of Claims 1 - 34, wherein said open/close member is provided with an arm portion extending toward a free end side of said closing portion, and said engaging portion is provided at the free end side of said arm portion.

36. A toner cartridge according to any one of Claims 1 - 35, wherein said open/close member is provided with a locking portion for locking said open/close member by engagement with said container.

37. A toner cartridge according to Claim 36, wherein said locking portion is movable between a locking position for locking said open/close member and a unlocking position for releasing the locking, relative to said closing portion.

38. A toner cartridge according to Claim 37, wherein said open/close member includes an unlocking force receiving portion for receiving a force for moving said locking portion from the locking position to the unlocking position.

39. A toner cartridge according to Claim 38, wherein said release force receiving portion receives a force from the receiving device with mounting of said toner cartridge to the receiving device.

40. A toner cartridge according to any one of claims 36 - 37, further comprising a covering portion for covering said locking portion.

41. A toner cartridge according to any one of Claims 1 - 40, wherein the receiving device includes a receiving opening for receiving the toner discharged through said discharge opening and a receiving device side open/close member for opening and closing said receiving opening,

and wherein said toner cartridge includes a closing force applying portion for applying a force to the receiving device side open/close member to cause the receiving port to close, with dismounting of said toner cartridge from the receiving device.

42. A toner cartridge according to Claim 41, wherein said closing force applying portion includes a projection engageable with the receiving device side open/close member.

43. A toner cartridge according to Claim 41 or 42, wherein said closing force applying portion is engageable with a hole provided in the receiving device side open/close member.

44. A toner cartridge according to any one of Claims 41 - 43, further comprising an attitude regulating portion for regulating an attitude at the time when said toner cartridge is inserted into the receiving device, said attitude regulating portion regulates the attitude of said toner cartridge so that said closing force applying portion is engageable with the receiving device side open/close member.

45. A toner cartridge according to any one of Claims 41 - 44, wherein the receiving device side open/close member is locked in a position for closing the receiving opening, and wherein said closing force applying portion releases the receiving device side open/close member by engagement with the receiving device side open/close member.

46. A toner cartridge according to any one of Claims 41 - 45, wherein when said open/close member is in the closing position, said engaging portion is disposed downstream of said discharge opening and upstream of said closing force applying portion with respect to an rotational direction in which said open/close member moves relative to said container from the opening position to the closing position.

47. A toner cartridge according to any one of Claims 41 - 46, wherein said closing force applying portion causes the receiving device side open/close member to open the receiving port, with mounting of said toner cartridge to the receiving device.

48. A toner cartridge according to any one of Claims 1 - 47, wherein the receiving device is provided with a receiving opening for receiving the toner discharged through said discharge opening and a receiving device side open/close member for opening and closing the receiving

opening, and wherein said toner cartridge includes an opening force applying portion for applying a force to the receiving device side open/close member to open the receiving port with mounting of said toner cartridge to the receiving device.

49. A toner cartridge according to Claim 48, wherein said opening force applying portion includes a step portion provided on said container.

50. A toner cartridge according to any one of Claims 1 - 49, wherein the receiving device is provided with a receiving opening for receiving the toner discharged through said discharge opening, a receiving device side open/close member for opening and closing the receiving opening, and a receiving device side locking member for locking the receiving device side open/close member, and wherein said toner cartridge is provided with an unlocking portion for releasing locking of the receiving device side locking member.

51. A toner cartridge according to Claim 50, wherein said release portion includes a projection contactable to the receiving device side locking member.

52. A toner cartridge according to Claim 50 or 51, wherein said release portion is capable of entering a hole provided in the receiving device side open/close member.

53. A toner cartridge according to any one of Claims 50 - 52, further comprising an attitude regulating portion for regulating an insertion attitude of said toner cartridge when said toner cartridge is inserted into the receiving device, and wherein said attitude regulating portion regulates the insertion attitude of said toner cartridge so that said release portion is brought into contact to the receiving device side locking member.

54. A toner cartridge according to any one of Claims 50 - 53, wherein said release portion permits the receiving device side locking member to lock the receiving device side open/close member, with dismounting of said toner cartridge from the receiving device.

55. A toner cartridge according to any one of Claims 1 - 54, wherein said open/close member is provided with an opening force receiving portion capable of receiving a force for moving said open/close member from the closing position to the opening position, with mounting of said toner cartridge to the receiving device.

56. A toner cartridge according to any one of Claims 1 - 55, wherein said toner cartridge is mounted to the receiving device by a mounting operation including a rotating operation.

57. A toner cartridge according to Claim 56, wherein said open/close member rotates from the opening position to the closing position with the rotating operation.

58. A toner cartridge according to Claim 56 or 57, wherein said toner cartridge is mounted to the receiving device by being inserted substantially linearly into the receiving device and then being rotated.

59. A toner cartridge according to any one of Claims 1 - 58, further comprising a guiding portion for guiding mounting of said toner cartridge to the receiving device.

60. A toner cartridge according to any one of Claims 1 - 59, wherein said container is provided with an opening and closing guide for guiding rotation of said open/close member.

61. A toner cartridge according to any one of Claims 1 - 60, further comprising a feeding member for feeding the toner in said accommodating portion toward said discharge opening.

62. A toner cartridge according to Claim 61, further comprising a rotational force receiving portion for receiving a rotational force for driving said feeding member from an outside of said toner cartridge.

63. A toner cartridge according to Claim 62, wherein a rotational moving direction of said rotational force receiving portion is the same as a rotational moving direction in which said open/close member rotates relative to rotational force receiving portion from the opening position to the closing position.

64. A toner cartridge according to Claim 63, wherein a rotational axis of said rotational force receiving portion and a rotational axis of said open/close member.

65. A toner cartridge according to any one of claims 1 - 64, wherein said container includes a substantially accurate portion, and said discharge opening is provided in said arcuate portion, and wherein said open/close member rotates along said arcuate portion.

66. A toner cartridge according to any one of Claims 1 - 65, wherein said container includes a substantially cylindrical portion.

67. A toner cartridge according to Claim 66, wherein said open/close member rotates along a curved surface of said cylindrical portion.

68. A toner cartridge according to Claim 66 or 67, wherein a diameter of said container at a longitudinal end portion is larger than that adjacent said discharge opening of said container.

69. A toner cartridge according to any one of Claims 1 - 68, wherein said closing portion has a substantially arcuate configuration.

70. A toner cartridge according to any one of Claims 1 - 69, further comprising a grip portion to be gripped to hold said toner cartridge.

71. A toner cartridge according to Claim 70, further comprising a guide portion, provided on said container, for guiding said toner cartridge in a predetermined inserting direction, wherein in a plane perpendicular to a rotational axis of said open/close member, said grip portion and said discharge opening are in the same side with respect to a phantom line passing through the rotational axis and parallel with the inserting direction.

72. A toner supply mechanism comprising a toner cartridge according to any one of Claims 1-71 and the receiving device having a mounting portion for mounting said toner cartridge.