CLAIMS

1. A controlled release oral solid pharmaceutical composition comprising a salt of 7-[4-(4-benzo[b]thiophen-4-yl-piperazin-1-yl)butoxy]-1H-quinolin-2-one as an active ingredient, and further comprising an additive containing an ion in common with the salt.

2. The composition according to claim 1, wherein the active ingredient is a fumaric acid salt, a phosphoric acid salt, a hydrochloric acid salt, a sulfuric acid salt, a citric acid salt, or a tartaric acid salt of 7-[4-(4-benzo[b]thiophen-4-yl-piperazin-1-yl)butoxy]-1H-quinolin-2-one.

3. The composition according to claim 1, wherein the active ingredient is a fumaric acid salt of 7-[4-(4-benzo[b]thiophen-4-yl-piperazin-1-yl)butoxy]-1H-quinolin-2-one, and the additive containing an ion in common with the salt is at least one member selected from the group consisting of fumaric acid, monosodium fumarate, and disodium fumarate.

4. The composition according to any one of claims 1 to 3, further comprising a cellulose-based water-soluble polymer.

5. The composition according to claim 4, wherein the cellulose-based water-soluble polymer is at least one member selected from the group consisting of hydroxypropyl methylcellulose, hydroxypropyl cellulose, and methyl cellulose.

6. The composition according to any one of claims 1 to 5, which is an osmotic pump composition.

7. The composition according to claim 6, wherein the osmotic pump composition comprises a drug layer comprising a cellulose-based water-soluble polymer.

8. The composition according to claim 7, wherein the cellulose-based water-soluble polymer is hydroxypropyl methyl cellulose.

9. The composition according to any one of claims 1 to 5, which is a hydrogel sustained release formulation.

10. The composition according to claim 9 comprising an enteric coating.

11. The composition according to any one of claims 1 to 10, which contains 5 mg to 60 mg of the active ingredient in terms of the weight of 7-[4-(4-benzo[b]thiophen-4-yl-piperazin-1-yl)butoxy]-1H-quinolin-2-one.

12. The composition according to any one of claims 1 to 11 for use in preventing or treating a central nervous system (CNS) disease.

13. The composition according to claim 12 for use in preventing or treating a central nervous system (CNS) disease, wherein the composition is to be administered once a week at a dose of 5 mg to 60 mg in terms of the weight of the free base.

14. The composition according to claim 12 or 13 for use in preventing or treating a central nervous system (CNS) disease, wherein the composition is for preventing or treating a CNS disease selected from the group consisting of schizophrenia; treatment-resistant, refractory, or chronic schizophrenia; emotional disturbance; psychotic disorder; mood disorder; bipolar disorder; depression, endogenous depression; major depression; melancholic and treatment-resistant depression; dysthymic disorder; cyclothymic disorder; anxiety disorder; somatoform disorder; factitious disorder; dissociative disorder; sexual disorder; eating disorder; sleep disorder; adjustment disorder; substance-related disorder; anhedonia; delirium; cognitive impairment; cognitive impairment associated with neurodegenerative disease; cognitive impairment caused by neurodegenerative disease; cognitive impairment of schizophrenia; cognitive impairment caused by treatment-resistant, refractory, or chronic schizophrenia; vomiting; motion sickness; obesity; migraine; pain; mental retardation; autism disorder; Tourette's disorder; tic disorder; attention deficit hyperactivity disorder; conduct disorder; Down syndrome; impulsive symptoms associated with dementia; and borderline personality disorder.

15. The composition according to any one of claims 1 to 15, wherein the composition comprises a hydrate of the salt of 7-[4-(4-benzo[b]thiophen-4-yl-piperazin-1-yl)butoxy]-1H-quinolin-2-one as an active ingredient.

16. Use of the composition according to any one of claims 1 to 11 in the manufacture of a medicament for the treatment of a central nervous system (CNS) disease.

17. The use according to claim 16, wherein the CNS disease is at least one selected from the group consisting of schizophrenia; treatment-resistant, refractory, or chronic schizophrenia; emotional disturbance; psychotic disorder; mood disorder; bipolar disorder; depression, endogenous depression; major depression; melancholic and treatment-resistant depression; dysthymic disorder; cyclothymic disorder; anxiety disorder; somatoform disorder; factitious disorder; dissociative disorder; sexual disorder; eating disorder; sleep disorder; adjustment disorder; substance-related disorder; anhedonia; delirium; cognitive impairment; cognitive impairment associated with neurodegenerative disease; cognitive impairment caused by neurodegenerative disease; cognitive impairment of schizophrenia; cognitive impairment caused by treatment-resistant, refractory, or chronic schizophrenia; vomiting; motion sickness; obesity; migraine; pain; mental retardation; autism disorder; Tourette’s disorder; tic disorder; attention deficit hyperactivity disorder; conduct disorder; Down syndrome; impulsive symptoms associated with dementia; and borderline personality disorder.