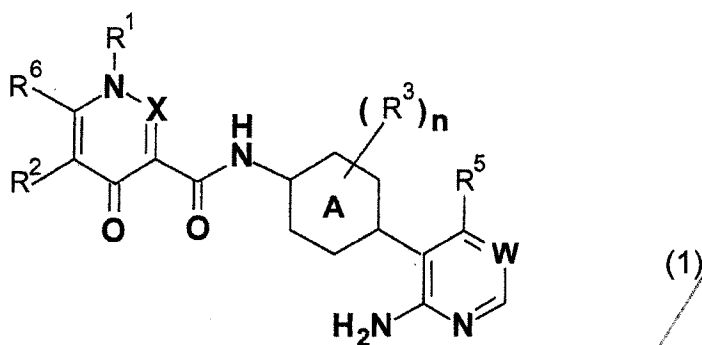


Claims

1. A compound represented by the general formula (1):



[wherein in the formula (1),

A represents a phenylene group or a six-membered heteroarylene group, where the amino group bonded to A and the nitrogen-containing heterocycle are para-positioned relative to each other,

R¹ represents a C₁-C₆ alkyl group which may have one or more substituents selected from Group 1, an aryl group which may have one or more substituents selected from Group 2, a heteroaryl group which may have one or more substituents selected from Group 2, or a hydrogen atom, R² represents a C₁-C₆ alkyl group which may have one or more substituents selected from Group 1, a C₁-C₆ alkoxy group which may have one or more substituents selected from a halogen atom and a hydroxyl group, -CONR^AR^B (where R^A and R^B each independently represents a C₁-C₆ alkyl group which may have one or more substituents selected from a halogen atom, a C₁-C₆ alkoxy group and a hydroxyl group, or a hydrogen atom, or R^A and R^B together with the

nitrogen atom to which they are bonded may form a three- to seven-membered heterocycloalkyl group which may have one or more substituents selected from a halogen atom, a C₁-C₆ alkyl group, a C₁-C₆ alkoxy group and a hydroxyl group), a cycloalkyl group which may have one or more substituents selected from Group 2, a phenyl group which may have one or more substituents selected from Group 2, a heteroaryl group which may have one or more substituents selected from Group 2, or a hydrogen atom, R³ is a substituent on A (where n represents an integer from 0 to 4, and each R³ may be identical to or different from each other when n is two or more), and represents a C₁-C₆ alkyl group which may have one or more substituents selected from Group 1, a C₁-C₆ alkoxy group which may have one or more substituents selected from a halogen atom and a hydroxyl group, a C₁-C₆ alkylthio group which may have one or more substituents selected from a halogen atom and a hydroxyl group, a halogen atom, or a hydroxyl group,

R⁵ represents a C₁-C₆ alkyl group which may have one or more substituents selected from Group 1, -OR^C (where R^C represents a C₁-C₆ alkyl group which may have one or more substituents selected from a C₁-C₆ alkoxy group, a halogen atom and a hydroxyl group, a three- to seven-membered heterocycloalkyl group which may have one or more substituents selected from a halogen atom, a C₁-C₆ alkyl group and a hydroxyl group, or a hydrogen atom), a

C₁-C₆ alkylthio group which may have one or more substituents selected from a halogen atom and a hydroxyl group, or a hydrogen atom,

R⁶ represents a hydrogen atom, or a C₁-C₆ alkyl group which may have one or more substituents selected from Group 1,

W represents C-R⁴ or a nitrogen atom (where R⁴ represents a C₁-C₆ alkyl group which may have one or more substituents selected from Group 1, a C₁-C₆ alkoxy group which may have one or more substituents selected from a C₁-C₆ alkoxy group, a heterocycloalkyl group, a halogen atom and a hydroxyl group, a cycloalkyl group which may have one or more substituents selected from Group 3, a cycloalkenyl group which may have one or more substituents selected from Group 3, a heterocycloalkyl group which may have one or more substituents selected from Group 3, a heterocycloalkenyl group which may have one or more substituents selected from Group 3, an aryl group which may have one or more substituents selected from Group 3, a heteroaryl group which may have one or more substituents selected from Group 3, a halogen atom, or a hydrogen atom), and
X represents CH or a nitrogen atom]
or a salt thereof.

Group 1:

a halogen atom,

$-\text{NR}^{\text{A}}\text{R}^{\text{B}}$ and $-\text{CONR}^{\text{A}}\text{R}^{\text{B}}$ (where R^{A} and R^{B} each independently represents a $\text{C}_1\text{-C}_6$ alkyl group which may have one or more substituents selected from a halogen atom, a $\text{C}_1\text{-C}_6$ alkoxy group and a hydroxyl group, or a hydrogen atom, or R^{A} and R^{B} together with the nitrogen atom to which they are bonded may form a three- to seven-membered heterocycloalkyl group which may have one or more substituents selected from a halogen atom, a $\text{C}_1\text{-C}_6$ alkyl group, a $\text{C}_1\text{-C}_6$ alkoxy group and a hydroxyl group),
 $-\text{OR}^{\text{C}}$ (where R^{C} represents a $\text{C}_1\text{-C}_6$ alkyl group which may have one or more substituents selected from a $\text{C}_1\text{-C}_6$ alkoxy group, a halogen atom and a hydroxyl group, a three- to seven-membered heterocycloalkyl group which may have one or more substituents selected from a halogen atom, a $\text{C}_1\text{-C}_6$ alkyl group and a hydroxyl group, or a hydrogen atom),
an aryl group which may have one or more substituents selected from a $\text{C}_1\text{-C}_6$ alkyl group which may have one or more substituents selected from a halogen atom and a hydroxyl group, a $\text{C}_1\text{-C}_6$ alkoxy group, an oxo group and a halogen atom,
a heteroaryl group which may have one or more substituents selected from a $\text{C}_1\text{-C}_6$ alkyl group which may have one or more substituents selected from a halogen atom and a hydroxyl group, a $\text{C}_1\text{-C}_6$ alkoxy group, an oxo group, a hydroxyl group and a halogen atom,

a three- to seven-membered cycloalkyl group which may have one or more substituents selected from a C₁-C₆ alkyl group which may have one or more substituents selected from a halogen atom and a hydroxyl group, a C₁-C₆ alkoxy group, an oxo group, a hydroxyl group and a halogen atom, and

a three- to seven-membered heterocycloalkyl group which may have one or more substituents selected from a C₁-C₆ alkyl group which may have one or more substituents selected from a halogen atom and a hydroxyl group, a C₁-C₆ alkoxy group, an oxo group, a hydroxyl group and a halogen atom

Group 2: a C₁-C₆ alkyl group which may have one or more substituents selected from a halogen atom and a hydroxyl group, a C₁-C₆ alkoxy group, an oxo group, a hydroxyl group and a halogen atom

Group 3: a C₁-C₆ alkyl group which may have one or more substituents selected from Group 1, a C₁-C₆ acyl group, a C₁-C₆ alkylthio group which may have one or more substituents selected from a halogen atom and a hydroxyl group,

-CONR^AR^B (where R^A and R^B each independently represents a C₁-C₆ alkyl group which may have one or more substituents selected from a halogen atom, a C₁-C₆ alkoxy group and a hydroxyl group, or a hydrogen atom, or R^A and R^B together with the nitrogen atom to which they are bonded may form a three- to seven-membered heterocycloalkyl group which

may have one or more substituents selected from a halogen atom, a C₁-C₆ alkyl group, a C₁-C₆ alkoxy group and a hydroxyl group),

-OR^C (where R^C represents a C₁-C₆ alkyl group which may have one or more substituents selected from a C₁-C₆ alkoxy group, a halogen atom, a three- to seven-membered heterocycloalkyl group and a hydroxyl group, a three- to seven-membered heterocycloalkyl group which may have one or more substituents selected from a halogen atom, a C₁-C₆ alkyl group and a hydroxyl group, or a hydrogen atom), and

a heterocycloalkyl group which may have one or more substituents selected from Group 2

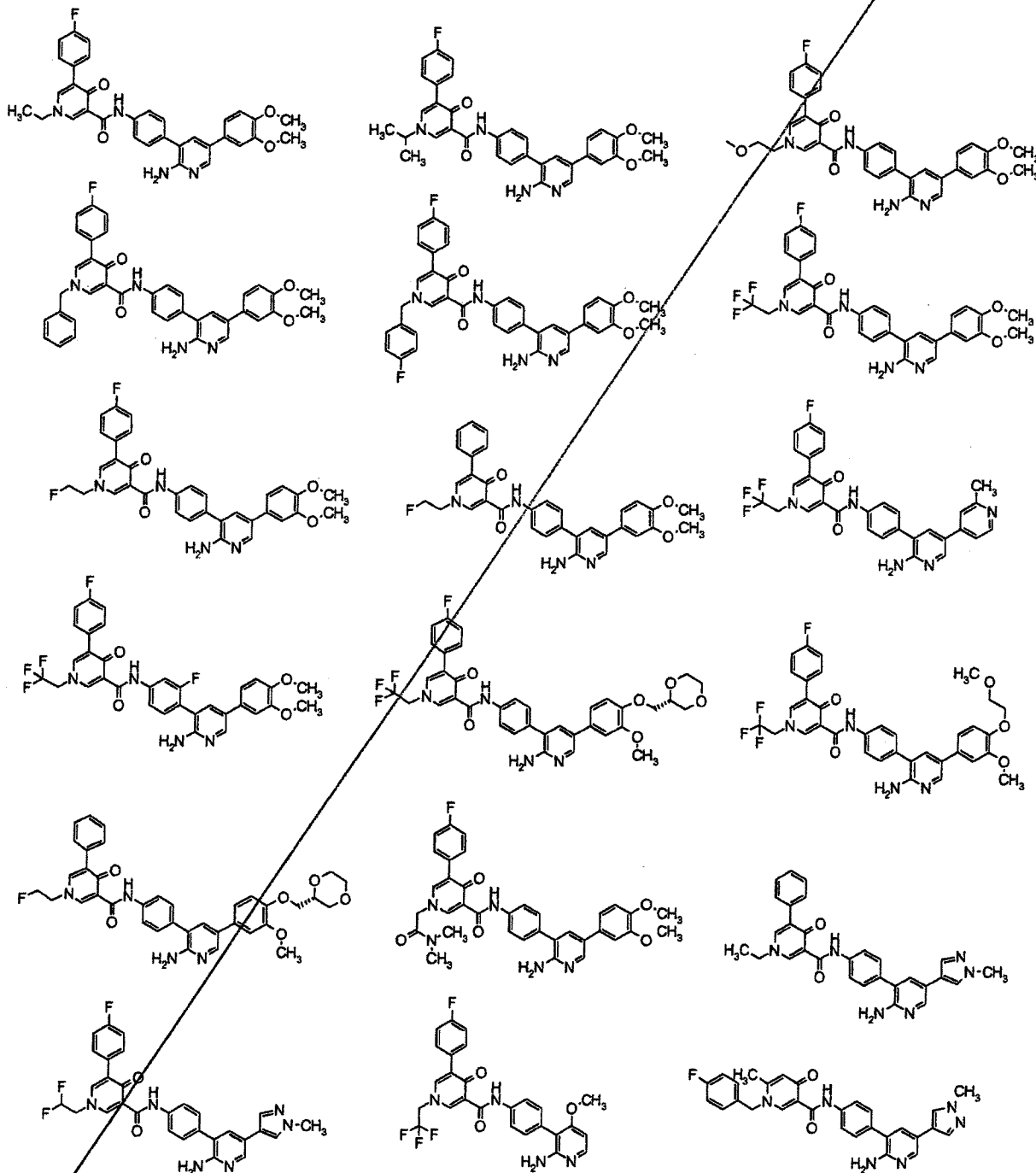
2. A compound or salt thereof according to claim 1, wherein A is a phenylene group.

3. A compound or salt thereof according to claim 1 or 2, wherein W is C-R⁴.

4. A compound or salt thereof according to any one of claims 1 to 3, wherein n is 0.

5. A compound or salt thereof according to any one of claims 1 to 4, wherein R⁵ is a hydrogen atom.

6. Any one compound selected from the following group,
or a salt thereof.



7. N-{4-[2-Amino-5-(3,4-dimethoxyphenyl)pyridin-3-yl]phenyl}-5-(4-fluorophenyl)-4-oxo-1-(2,2,2-trifluoroethyl)-1,4-dihydropyridine-3-carboxamide or a salt thereof.

8. N-{4-[2-Amino-5-(3,4-dimethoxyphenyl)pyridin-3-yl]phenyl}-5-(4-fluorophenyl)-4-oxo-1-(2,2,2-trifluoroethyl)-1,4-dihydropyridine-3-carboxamide hydrochloride.

9. A crystal of N-{4-[2-amino-5-(3,4-dimethoxyphenyl)pyridin-3-yl]phenyl}-5-(4-fluorophenyl)-4-oxo-1-(2,2,2-trifluoroethyl)-1,4-dihydropyridine-3-carboxamide hydrochloride.

10. A crystal according to claim 9, which has an X-ray diffraction pattern shown in any one of Figures 1 to 16 in a powder X-ray diffraction diagram obtained by irradiation with copper K α radiation (wavelength $\lambda = 1.54 \text{ \AA}$).

11. A crystal according to claim 9, which has characteristic peaks at diffraction angles 2θ of 7.44, 10.00, 13.48, 14.86, 16.10, 19.30, 20.30, 22.62, 23.02, 23.70, 24.54, 25.92 and 28.46 in a powder X-ray diffraction diagram obtained by irradiation with copper K α radiation (wavelength $\lambda = 1.54 \text{ \AA}$).

12. A crystal according to claim 9, which has characteristic peaks at diffraction angles 2θ of 4.32, 9.10, 15.52, 18.32, 18.54, 19.22, 20.54, 20.70, 23.54, 24.14, 25.34 and 27.02 in a powder X-ray diffraction diagram obtained by irradiation with copper $K\alpha$ radiation (wavelength $\lambda = 1.54 \text{ \AA}$).

13. A crystal according to claim 9, which has characteristic peaks at diffraction angles 2θ of 13.86, 15.04, 19.76, 20.58, 22.26, 22.58, 23.82, 24.10, 24.36 and 24.88 in a powder X-ray diffraction diagram obtained by irradiation with copper $K\alpha$ radiation (wavelength $\lambda = 1.54 \text{ \AA}$).

14. A crystal according to claim 9, which has characteristic peaks at diffraction angles 2θ of 5.34, 7.22, 8.20, 11.68, 14.54, 15.74, 17.54, 23.24, 23.72, 25.12 and 26.16 in a powder X-ray diffraction diagram obtained by irradiation with copper $K\alpha$ radiation (wavelength $\lambda = 1.54 \text{ \AA}$).

15. A crystal according to claim 9, which has characteristic peaks at diffraction angles 2θ of 11.02, 11.86, 15.56, 18.20, 22.12, 24.70, 25.80, 26.04, 26.26 and

28.62 in a powder X-ray diffraction diagram obtained by irradiation with copper K α radiation (wavelength $\lambda = 1.54$ Å).

16. A crystal according to claim 9, which has characteristic peaks at diffraction angles 2θ of 3.58, 4.56, 6.60, 6.72, 7.20, 9.62, 10.28, 13.06 and 24.52 in a powder X-ray diffraction diagram obtained by irradiation with copper K α radiation (wavelength $\lambda = 1.54$ Å).

17. A crystal according to claim 9, which has characteristic peaks at diffraction angles 2θ of 7.78, 8.14, 8.88, 12.54, 15.68, 16.36, 18.76, 19.34, 20.08, 22.36, 24.66, 25.74, 26.70 and 28.02 in a powder X-ray diffraction diagram obtained by irradiation with copper K α radiation (wavelength $\lambda = 1.54$ Å).

18. A crystal according to claim 9, which has characteristic peaks at diffraction angles 2θ of 5.78, 8.90, 13.66, 14.42, 16.84, 17.56, 19.26, 20.74, 22.42, 24.66, 25.12, 25.60 and 26.96 in a powder X-ray diffraction diagram obtained by irradiation with copper K α radiation (wavelength $\lambda = 1.54$ Å).

19. A crystal according to claim 9, which has characteristic peaks at diffraction angles 2θ of 11.12, 14.82, 18.86, 20.32, 20.66, 21.64, 22.36, 22.68, 23.00, 24.10, 25.26 and 27.00 in a powder X-ray diffraction diagram obtained by irradiation with copper $K\alpha$ radiation (wavelength $\lambda = 1.54 \text{ \AA}$).

20. A crystal according to claim 9, which has characteristic peaks at diffraction angles 2θ of 7.80, 12.18, 12.78, 16.20, 16.82, 19.20, 19.66, 20.20, 21.20, 24.52, 25.68 and 26.78 in a powder X-ray diffraction diagram obtained by irradiation with copper $K\alpha$ radiation (wavelength $\lambda = 1.54 \text{ \AA}$).

21. A crystal according to claim 9, which has characteristic peaks at diffraction angles 2θ of 2.80, 6.86, 7.88, 11.60, 13.68, 14.86, 17.40, 22.40, 23.78 and 25.74 in a powder X-ray diffraction diagram obtained by irradiation with copper $K\alpha$ radiation (wavelength $\lambda = 1.54 \text{ \AA}$).

22. A crystal according to claim 9, which has characteristic peaks at diffraction angles 2θ of 5.32, 7.98, 10.68, 11.70, 14.84, 16.02, 19.78, 21.76, 23.08, 25.30 and 25.68 in a powder X-ray diffraction diagram

obtained by irradiation with copper K α radiation
(wavelength $\lambda = 1.54 \text{ \AA}$).

23. A crystal according to claim 9, which has
characteristic peaks at diffraction angles 2θ of 8.10,
10.60, 12.06, 14.16, 14.58, 15.60, 18.16, 20.72, 20.94,
22.86, 23.90, 24.32 and 27.14 in a powder X-ray
diffraction diagram obtained by irradiation with copper K α
radiation (wavelength $\lambda = 1.54 \text{ \AA}$).

24. A crystal according to claim 9, which has
characteristic peaks at diffraction angles 2θ of 3.60,
6.22, 9.56, 10.42, 14.04, 14.66, 15.30, 16.40, 19.52,
22.12 and 26.42 in a powder X-ray diffraction diagram
obtained by irradiation with copper K α radiation
(wavelength $\lambda = 1.54 \text{ \AA}$).

25. A crystal according to claim 9, which has
characteristic peaks at diffraction angles 2θ of 5.46,
7.98, 9.54, 11.00, 14.00, 15.36, 16.56, 22.00, 23.54,
24.00 and 26.56 in a powder X-ray diffraction diagram
obtained by irradiation with copper K α radiation
(wavelength $\lambda = 1.54 \text{ \AA}$).

26. A crystal according to claim 9, which has characteristic peaks at diffraction angles 2θ of 5.64, 6.92, 8.06, 11.32, 14.40, 16.18, 17.04, 21.84, 22.50, 23.82 and 24.28 in a powder X-ray diffraction diagram obtained by irradiation with copper K α radiation (wavelength $\lambda = 1.54 \text{ \AA}$).

27. An Axl inhibitor comprising a compound or salt thereof according to any one of claims 1 to 6, or a crystal thereof.

28. A medicine comprising a compound or salt thereof according to any one of claims 1 to 6, or a crystal thereof as an active ingredient.

29. A medicine for treating a disease caused by Axl kinase hyperfunction, a disease associated with Axl kinase hyperfunction and/or a disease accompanied by Axl kinase hyperfunction, comprising a compound or salt thereof according to any one of claims 1 to 6, or a crystal thereof as an active ingredient.

30. A medicine for treating hyperproliferative disease, treating cancer, preventing cancer metastasis or overcoming drug resistance, comprising a compound or salt

thereof according to any one of claims 1 to 6, or a crystal thereof as an active ingredient.

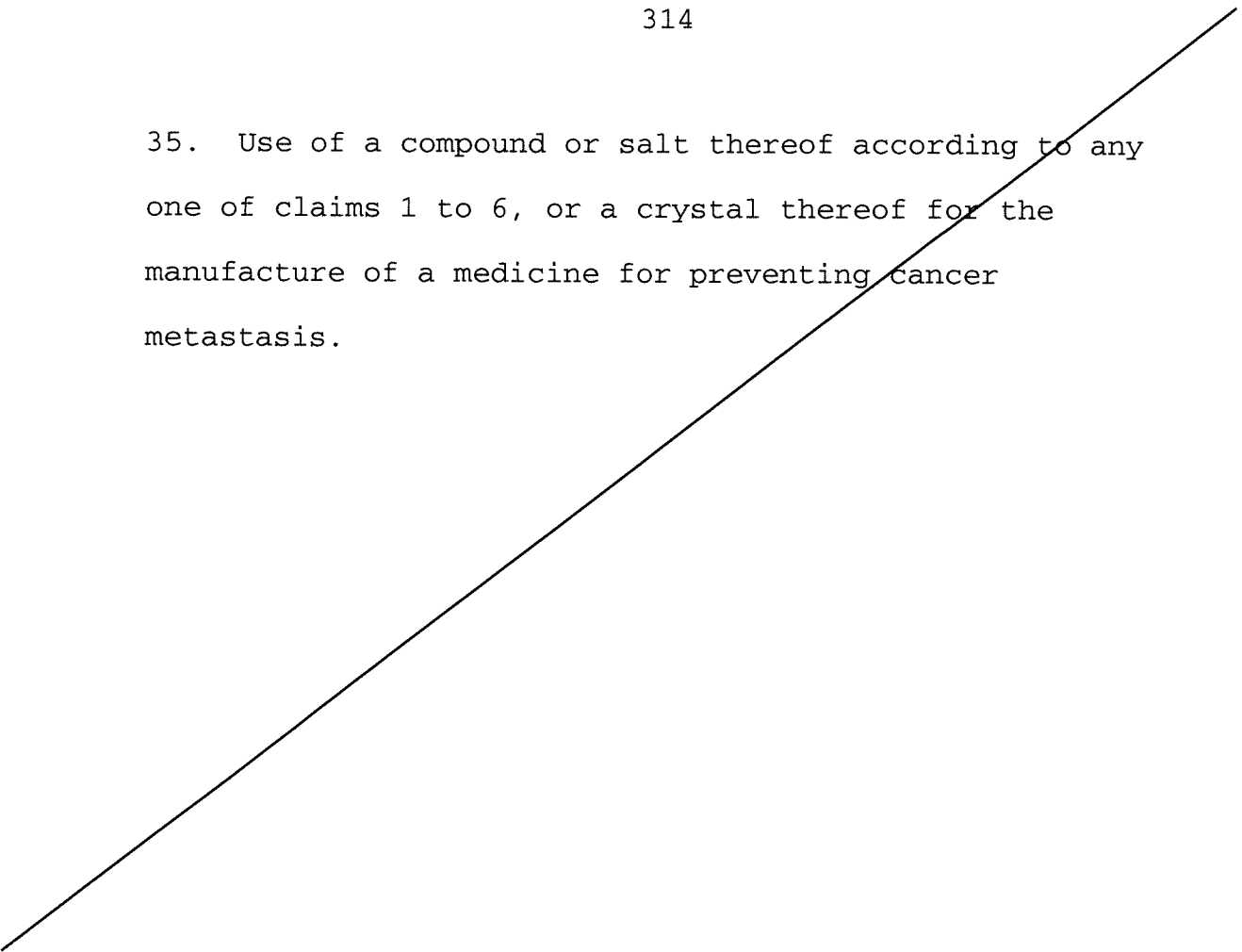
31. A medicine according to claim 30, wherein the cancer is selected from breast cancer, colon cancer, prostate cancer, lung cancer, gastric cancer, ovarian cancer, endometrial cancer, renal cancer, hepatocellular carcinoma, thyroid cancer, uterine cancer, esophageal cancer, squamous cell carcinoma, leukemia, osteosarcoma, melanoma, glioblastoma, neuroblastoma and pancreatic cancer.

32. A pharmaceutical composition comprising a compound or salt thereof according to any one of claims 1 to 6, or a crystal thereof, and a pharmaceutically acceptable carrier.

33. Use of a compound or salt thereof according to any one of claims 1 to 6, or a crystal thereof for manufacturing a medicine.

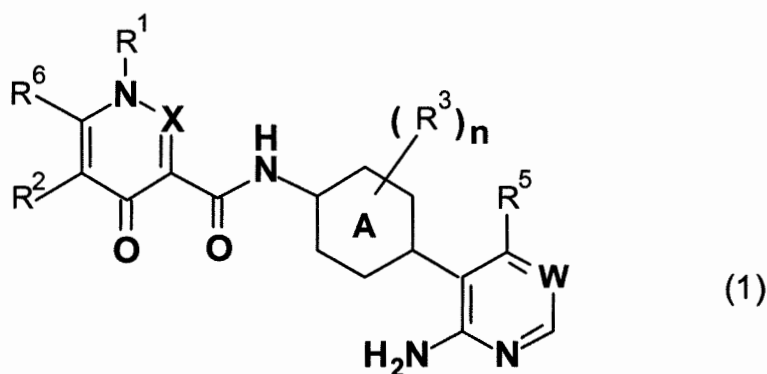
34. Use of a compound or salt thereof according to any one of claims 1 to 6, or a crystal thereof for the manufacture of a medicine for treating cancer.

35. Use of a compound or salt thereof according to any one of claims 1 to 6, or a crystal thereof for the manufacture of a medicine for preventing cancer metastasis.



Claims

1. A compound represented by the general formula (1):



wherein in the formula (1),

A represents a phenylene group or a six-membered heteroarylene group, where the amino group bonded to A and the nitrogen-containing heterocycle are para-positioned relative to each other,

R^1 represents a C_1 - C_6 alkyl group which may have one or more substituents selected from Group 1, an aryl group which may have one or more substituents selected from Group 2, a heteroaryl group which may have one or more substituents selected from Group 2, or a hydrogen atom,

R^2 represents a C_1 - C_6 alkyl group which may have one or more substituents selected from Group 1, a C_1 - C_6 alkoxy group which may have one or more substituents selected from a halogen atom and a

hydroxyl group, $-\text{CONR}^{\text{A}}\text{R}^{\text{B}}$ where R^{A} and R^{B} each independently represents a $\text{C}_1\text{-C}_6$ alkyl group which may have one or more substituents selected from a halogen atom, a $\text{C}_1\text{-C}_6$ alkoxy group and a hydroxyl group, or a hydrogen atom, or R^{A} and R^{B} together with the nitrogen atom to which they are bonded may form a three- to seven-membered heterocycloalkyl group which may have one or more substituents selected from a halogen atom, a $\text{C}_1\text{-C}_6$ alkyl group, a $\text{C}_1\text{-C}_6$ alkoxy group and a hydroxyl group, a cycloalkyl group which may have one or more substituents selected from Group 2, a phenyl group which may have one or more substituents selected from Group 2, a heteroaryl group which may have one or more substituents selected from Group 2, or a hydrogen atom,

R^3 is a substituent on A where n represents an integer from 0 to 4, and each R^3 may be identical to or different from each other when n is two or more, and represents a $\text{C}_1\text{-C}_6$ alkyl group which may have one or more substituents selected from Group 1, a $\text{C}_1\text{-C}_6$ alkoxy group which may have one or more substituents selected from a halogen atom and a hydroxyl group, a $\text{C}_1\text{-C}_6$ alkylthio group which may have one or more substituents

selected from a halogen atom and a hydroxyl group, a halogen atom, or a hydroxyl group, R^5 represents a C_1 - C_6 alkyl group which may have one or more substituents selected from Group 1, $-OR^C$ where R^C represents a C_1 - C_6 alkyl group which may have one or more substituents selected from a C_1 - C_6 alkoxy group, a halogen atom and a hydroxyl group, a three- to seven-membered heterocycloalkyl group which may have one or more substituents selected from a halogen atom, a C_1 - C_6 alkyl group and a hydroxyl group, or a hydrogen atom, a C_1 - C_6 alkylthio group which may have one or more substituents selected from a halogen atom and a hydroxyl group, or a hydrogen atom,

R^6 represents a hydrogen atom, or a C_1 - C_6 alkyl group which may have one or more substituents selected from Group 1,

W represents $C-R^4$ or a nitrogen atom where R^4 represents a C_1 - C_6 alkyl group which may have one or more substituents selected from Group 1, a C_1 - C_6 alkoxy group which may have one or more substituents selected from a C_1 - C_6 alkoxy group, a heterocycloalkyl group, a halogen atom and a hydroxyl group, a cycloalkyl group which may have one or more substituents selected from

Group 3, a cycloalkenyl group which may have one or more substituents selected from Group 3, a heterocycloalkyl group which may have one or more substituents selected from Group 3, a heterocycloalkenyl group which may have one or more substituents selected from Group 3, an aryl group which may have one or more substituents selected from Group 3, a heteroaryl group which may have one or more substituents selected from Group 3, a halogen atom, or a hydrogen atom, and X represents CH or a nitrogen atom, or a salt thereof,

Group 1:

a halogen atom,

$-NR^A R^B$ and $-CONR^A R^B$ where R^A and R^B each

independently represents a C_1 - C_6 alkyl group

which may have one or more substituents selected

from a halogen atom, a C_1 - C_6 alkoxy group and a

hydroxyl group, or a hydrogen atom, or R^A and R^B

together with the nitrogen atom to which they

are bonded may form a three- to seven-membered

heterocycloalkyl group which may have one or

more substituents selected from a halogen atom,

a C_1 - C_6 alkyl group, a C_1 - C_6 alkoxy group and a

hydroxyl group,

-OR^C where R^C represents a C₁-C₆ alkyl group which may have one or more substituents selected from a C₁-C₆ alkoxy group, a halogen atom and a hydroxyl group, a three- to seven-membered heterocycloalkyl group which may have one or more substituents selected from a halogen atom, a C₁-C₆ alkyl group and a hydroxyl group, or a hydrogen atom,

an aryl group which may have one or more substituents selected from a C₁-C₆ alkyl group which may have one or more substituents selected from a halogen atom and a hydroxyl group, a C₁-C₆ alkoxy group, an oxo group and a halogen atom, a heteroaryl group which may have one or more substituents selected from a C₁-C₆ alkyl group which may have one or more substituents selected from a halogen atom and a hydroxyl group, a C₁-C₆ alkoxy group, an oxo group, a hydroxyl group and a halogen atom,

a three- to seven-membered cycloalkyl group which may have one or more substituents selected from a C₁-C₆ alkyl group which may have one or more substituents selected from a halogen atom and a hydroxyl group, a C₁-C₆ alkoxy group, an oxo group, a hydroxyl group and a halogen atom,

and

a three- to seven-membered heterocycloalkyl group which may have one or more substituents selected from a C₁-C₆ alkyl group which may have one or more substituents selected from a halogen atom and a hydroxyl group, a C₁-C₆ alkoxy group, an oxo group, a hydroxyl group and a halogen atom

Group 2: a C₁-C₆ alkyl group which may have one or more substituents selected from a halogen atom and a hydroxyl group, a C₁-C₆ alkoxy group, an oxo group, a hydroxyl group and a halogen atom

Group 3: a C₁-C₆ alkyl group which may have one or more substituents selected from Group 1, a C₁-C₆ acyl group,

a C₁-C₆ alkylthio group which may have one or more substituents selected from a halogen atom and a hydroxyl group,

-CONR^AR^B where R^A and R^B each independently represents a C₁-C₆ alkyl group which may have one or more substituents selected from a halogen atom, a C₁-C₆ alkoxy group and a hydroxyl group, or a hydrogen atom, or R^A and R^B together with the nitrogen atom to which they are bonded may form a three- to seven-membered heterocycloalkyl group which may have one or more substituents

selected from a halogen atom, a C₁-C₆ alkyl group, a C₁-C₆ alkoxy group and a hydroxyl group, -OR^C where R^C represents a C₁-C₆ alkyl group which may have one or more substituents selected from a C₁-C₆ alkoxy group, a halogen atom, a three- to seven-membered heterocycloalkyl group and a hydroxyl group, a three- to seven-membered heterocycloalkyl group which may have one or more substituents selected from a halogen atom, a C₁-C₆ alkyl group and a hydroxyl group, or a hydrogen atom, and a heterocycloalkyl group which may have one or more substituents selected from Group 2.

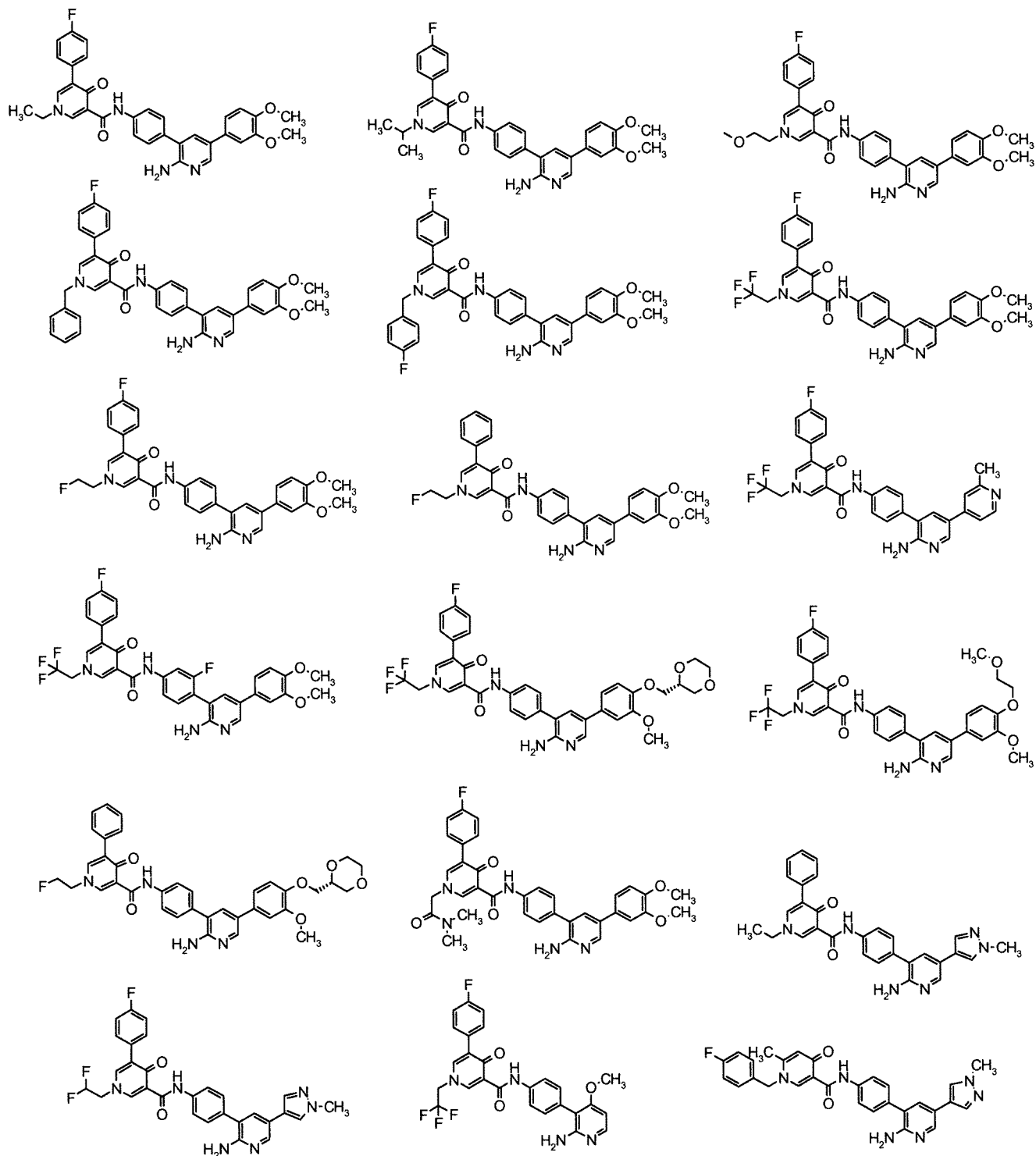
2. A compound or salt thereof according to claim 1, wherein A is a phenylene group.

3. A compound or salt thereof according to claim 1 or 2, wherein W is C-R⁴.

4. A compound or salt thereof according to any one of claims 1 to 3, wherein n is 0.

5. A compound or salt thereof according to any one of claims 1 to 4, wherein R⁵ is a hydrogen atom.

6. A compound or salt thereof according to any one of claims 1 to 5 selected from the following group



7. A compound according to any one of claims 1 to 5 which is N-{4-[2-Amino-5-(3,4-dimethoxyphenyl)pyridin-3-yl]phenyl}-5-(4-fluorophenyl)-4-oxo-1-(2,2,2-trifluoroethyl)-1,4-dihydropyridine-3-carboxamide or a salt thereof.
8. A compound according to any one of claims 1 to 5 which is N-{4-[2-Amino-5-(3,4-dimethoxyphenyl)pyridin-3-yl]phenyl}-5-(4-fluorophenyl)-4-oxo-1-(2,2,2-trifluoroethyl)-1,4-dihydropyridine-3-carboxamide hydrochloride.
9. A crystal of a compound according to any one of claims 1 to 5 which is N-{4-[2-amino-5-(3,4-dimethoxyphenyl)pyridin-3-yl]phenyl}-5-(4-fluorophenyl)-4-oxo-1-(2,2,2-trifluoroethyl)-1,4-dihydropyridine-3-carboxamide hydrochloride.
10. A crystal according to claim 9, which has an X-ray diffraction pattern shown in any one of Figures 1 to 16 in a powder X-ray diffraction diagram obtained by irradiation with copper K α radiation (wavelength $\lambda = 1.54 \text{ \AA}$).
11. A crystal according to claim 9, which has characteristic peaks at diffraction angles 2θ of

7.44, 10.00, 13.48, 14.86, 16.10, 19.30, 20.30, 22.62, 23.02, 23.70, 24.54, 25.92 and 28.46 in a powder X-ray diffraction diagram obtained by irradiation with copper K α radiation (wavelength λ = 1.54 Å).

12. A crystal according to claim 9, which has characteristic peaks at diffraction angles 2θ of 4.32, 9.10, 15.52, 18.32, 18.54, 19.22, 20.54, 20.70, 23.54, 24.14, 25.34 and 27.02 in a powder X-ray diffraction diagram obtained by irradiation with copper K α radiation (wavelength λ = 1.54 Å).

13. A crystal according to claim 9, which has characteristic peaks at diffraction angles 2θ of 13.86, 15.04, 19.76, 20.58, 22.26, 22.58, 23.82, 24.10, 24.36 and 24.88 in a powder X-ray diffraction diagram obtained by irradiation with copper K α radiation (wavelength λ = 1.54 Å).

14. A crystal according to claim 9, which has characteristic peaks at diffraction angles 2θ of 5.34, 7.22, 8.20, 11.68, 14.54, 15.74, 17.54, 23.24, 23.72, 25.12 and 26.16 in a powder X-ray diffraction

diagram obtained by irradiation with copper $K\alpha$ radiation (wavelength $\lambda = 1.54 \text{ \AA}$).

15. A crystal according to claim 9, which has characteristic peaks at diffraction angles 2θ of 11.02, 11.86, 15.56, 18.20, 22.12, 24.70, 25.80, 26.04, 26.26 and 28.62 in a powder X-ray diffraction diagram obtained by irradiation with copper $K\alpha$ radiation (wavelength $\lambda = 1.54 \text{ \AA}$).

16. A crystal according to claim 9, which has characteristic peaks at diffraction angles 2θ of 3.58, 4.56, 6.60, 6.72, 7.20, 9.62, 10.28, 13.06 and 24.52 in a powder X-ray diffraction diagram obtained by irradiation with copper $K\alpha$ radiation (wavelength $\lambda = 1.54 \text{ \AA}$).

17. A crystal according to claim 9, which has characteristic peaks at diffraction angles 2θ of 7.78, 8.14, 8.88, 12.54, 15.68, 16.36, 18.76, 19.34, 20.08, 22.36, 24.66, 25.74, 26.70 and 28.02 in a powder X-ray diffraction diagram obtained by irradiation with copper $K\alpha$ radiation (wavelength $\lambda = 1.54 \text{ \AA}$).

18. A crystal according to claim 9, which has characteristic peaks at diffraction angles 2θ of 5.78, 8.90, 13.66, 14.42, 16.84, 17.56, 19.26, 20.74, 22.42, 24.66, 25.12, 25.60 and 26.96 in a powder X-ray diffraction diagram obtained by irradiation with copper $K\alpha$ radiation (wavelength $\lambda = 1.54 \text{ \AA}$).

19. A crystal according to claim 9, which has characteristic peaks at diffraction angles 2θ of 11.12, 14.82, 18.86, 20.32, 20.66, 21.64, 22.36, 22.68, 23.00, 24.10, 25.26 and 27.00 in a powder X-ray diffraction diagram obtained by irradiation with copper $K\alpha$ radiation (wavelength $\lambda = 1.54 \text{ \AA}$).

20. A crystal according to claim 9, which has characteristic peaks at diffraction angles 2θ of 7.80, 12.18, 12.78, 16.20, 16.82, 19.20, 19.66, 20.20, 21.20, 24.52, 25.68 and 26.78 in a powder X-ray diffraction diagram obtained by irradiation with copper $K\alpha$ radiation (wavelength $\lambda = 1.54 \text{ \AA}$).

21. A crystal according to claim 9, which has characteristic peaks at diffraction angles 2θ of 2.80, 6.86, 7.88, 11.60, 13.68, 14.86, 17.40, 22.40,

23.78 and 25.74 in a powder X-ray diffraction diagram obtained by irradiation with copper K α radiation (wavelength $\lambda = 1.54 \text{ \AA}$).

22. A crystal according to claim 9, which has characteristic peaks at diffraction angles 2θ of 5.32, 7.98, 10.68, 11.70, 14.84, 16.02, 19.78, 21.76, 23.08, 25.30 and 25.68 in a powder X-ray diffraction diagram obtained by irradiation with copper K α radiation (wavelength $\lambda = 1.54 \text{ \AA}$).

23. A crystal according to claim 9, which has characteristic peaks at diffraction angles 2θ of 8.10, 10.60, 12.06, 14.16, 14.58, 15.60, 18.16, 20.72, 20.94, 22.86, 23.90, 24.32 and 27.14 in a powder X-ray diffraction diagram obtained by irradiation with copper K α radiation (wavelength $\lambda = 1.54 \text{ \AA}$).

24. A crystal according to claim 9, which has characteristic peaks at diffraction angles 2θ of 3.60, 6.22, 9.56, 10.42, 14.04, 14.66, 15.30, 16.40, 19.52, 22.12 and 26.42 in a powder X-ray diffraction diagram obtained by irradiation with copper K α radiation (wavelength $\lambda = 1.54 \text{ \AA}$).

25. A crystal according to claim 9, which has characteristic peaks at diffraction angles 2θ of 5.46, 7.98, 9.54, 11.00, 14.00, 15.36, 16.56, 22.00, 23.54, 24.00 and 26.56 in a powder X-ray diffraction diagram obtained by irradiation with copper $K\alpha$ radiation (wavelength $\lambda = 1.54 \text{ \AA}$).

26. A crystal according to claim 9, which has characteristic peaks at diffraction angles 2θ of 5.64, 6.92, 8.06, 11.32, 14.40, 16.18, 17.04, 21.84, 22.50, 23.82 and 24.28 in a powder X-ray diffraction diagram obtained by irradiation with copper $K\alpha$ radiation (wavelength $\lambda = 1.54 \text{ \AA}$).

27. An Axl inhibitor comprising a compound or salt thereof according to any one of claims 1 to 6, or a crystal thereof.

28. A medicine comprising a compound or salt thereof according to any one of claims 1 to 6, or a crystal thereof as an active ingredient.

29. A compound or salt thereof according to any one of claims 1 to 6, or a crystal thereof, for use in medicine.

30. A pharmaceutical composition comprising a compound or salt thereof according to any one of claims 1 to 6, or a crystal thereof, and a pharmaceutically acceptable carrier.

31. A medicine according to claim 28, a compound or salt thereof according to any one of claims 1 to 6, or a crystal thereof, or a pharmaceutical composition according to claim 30 for use in treating a disease caused by Axl kinase hyperfunction, a disease associated with Axl kinase hyperfunction and/or a disease accompanied by Axl kinase hyperfunction.

32. A medicine according to claim 28, a compound or salt thereof according to any one of claims 1 to 6, or a crystal thereof, or a pharmaceutical composition according to claim 30, for use in treating hyperproliferative disease, treating cancer, preventing cancer metastasis, or overcoming drug resistance.

33. A medicine, a compound or salt thereof, or a crystal thereof, or a pharmaceutical composition for use according to claim 32, wherein the cancer is selected from breast cancer, colon cancer, prostate

cancer, lung cancer, gastric cancer, ovarian cancer, endometrial cancer, renal cancer, hepatocellular carcinoma, thyroid cancer, uterine cancer, esophageal cancer, squamous cell carcinoma, leukemia, osteosarcoma, melanoma, glioblastoma, neuroblastoma and pancreatic cancer.