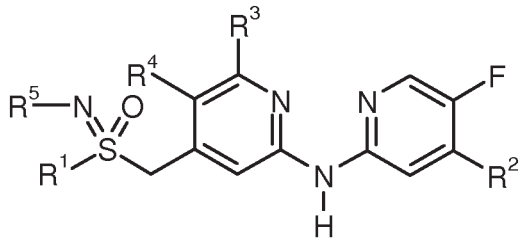
Patent claims

1. A compound of general formula (**I**)



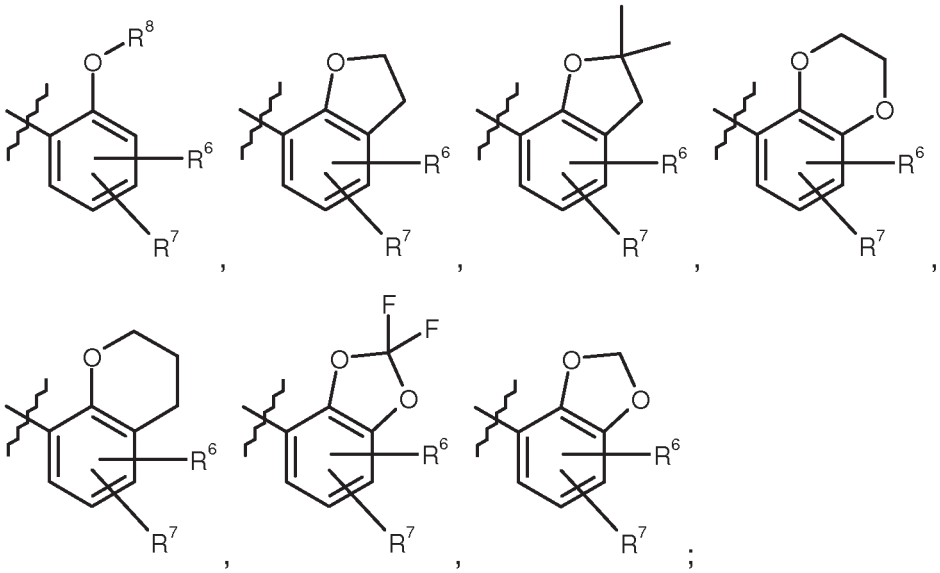
(I) ,

wherein

R^1 represents a group selected from C_1-C_6-alkyl-, C_3-C_7-cycloalkyl-, heterocyclyl-, phenyl, heteroaryl, phenyl-C_1-C_3-alkyl- or heteroaryl-C_1-C_3-alkyl-,

wherein said group is optionally substituted with one or two or three substituents, identically or differently, selected from the group of hydroxy, cyano, halogen, halo-C_1-C_3-alkyl-, C_1-C_6-alkoxy-, C_1-C_3-fluoroalkoxy-, $-NH_2$, alkylamino-, dialkylamino-, acetylamino-, *N*-methyl-*N*-acetylamino-, cyclic amines, $-OP(O)(OH)_2$, -C(O)OH, $-C(O)NH_2$;

R^2 represents a group selected from



R^3, R^4 represent, independently from each other, a group selected from a hydrogen atom, fluoro atom, chloro atom, bromo atom, cyano, C_1-C_3-alkyl-, C_1-C_3-alkoxy-, halo-C_1-C_3-alkyl-, C_1-C_3-fluoroalkoxy-;

R^5 represents a group selected from a hydrogen atom, cyano, $-C(O)R^9$, $-C(O)OR^9$, $-S(O)_2R^9$, $-C(O)NR^{10}R^{11}$, $-P(O)(OR^{12})_2$, $-CH_2OP(OR^{12})_2$, C_1-C_6-alkyl-, C_3-C_7-cycloalkyl-, heterocyclyl-, phenyl, heteroaryl,

wherein said C_1-C_6-alkyl, C_3-C_7-cycloalkyl-, heterocyclyl-, phenyl or heteroaryl group is optionally substituted with one, two or three substituents, identically or differently, selected from halogen, hydroxy, cyano, C_1-C_3-alkyl-, C_1-C_3-alkoxy-, $-NH_2$, alkylamino-, dialkylamino-, acetylamino-, *N*-methyl-*N*-acetylamino-, cyclic amines, halo-C_1-C_3-alkyl-, C_1-C_3-fluoroalkoxy-;

R^6, R^7 represent, independently from each other, a group selected from a hydrogen atom, fluoro atom, chloro atom, C_1-C_3-alkyl-, C_1-C_3-alkoxy-, halo-C_1-C_3-alkyl-, C_1-C_3-fluoroalkoxy-;

R^8 represents a group selected from

a) a C_1-C_6-alkyl group, which is optionally substituted with one or two or three substituents, identically or differently, selected from halogen, hydroxy, $-NH_2$, alkylamino-, dialkylamino-, acetylamino-, *N*-methyl-*N*-acetylamino-, cyclic amines, cyano, C_1-C_3-alkyl-, halo-C_1-C_3-alkyl-, C_1-C_3-fluoroalkoxy-, C_1-C_3-alkoxy-, C_2-C_3-alkenyl-, C_2-C_3-alkynyl-, C_3-C_7-cycloalkyl-, heterocyclyl-, phenyl, heteroaryl, wherein said C_3-C_7-cycloalkyl-, heterocyclyl-, phenyl or heteroaryl group is optionally substituted with one, two or three substituents, identically or differently, selected from halogen, hydroxy, C_1-C_3-alkyl-, C_1-C_3-alkoxy-, $-NH_2$, alkylamino-, dialkylamino-, acetylamino-, *N*-methyl-*N*-acetylamino-, cyclic amines, halo-C_1-C_3-alkyl-, C_1-C_3-fluoroalkoxy-;

b) a C_3-C_7-cycloalkyl- group, which is optionally substituted with one or two or three substituents, identically or differently, selected from the group of halogen, hydroxy, $-NH_2$, alkylamino-, dialkylamino-, acetylamino-, *N*-methyl-*N*-acetylamino-, cyclic amines, cyano, C_1-C_3-alkyl-, halo-C_1-C_3-alkyl-, C_1-C_3-fluoroalkoxy-, C_1-C_3-alkoxy-, C_2-C_3-alkenyl-, C_2-C_3-alkynyl-;

c) a heterocyclyl- group, which is optionally substituted with one or two or three substituents, identically or differently, selected from the group of halogen, hydroxy, $-NH_2$, alkylamino-, dialkylamino-, acetylamino-, *N*-methyl-*N*-acetylamino-, cyclic amines, cyano, C_1-C_3-alkyl-, halo-C_1-C_3-alkyl-, C_1-C_3-fluoroalkoxy-, C_1-C_3-alkoxy-, C_2-C_3-alkenyl-, C_2-C_3-alkynyl-;

d) a phenyl group, which is optionally substituted with one or two or three substituents, identically or differently, selected from the group of halogen, hydroxy, $-NH_2$, alkylamino-, dialkylamino-, acetylamino-, *N*-methyl-*N*-acetylamino-, cyclic amines, cyano, C_1-C_3-alkyl-, halo-C_1-C_3-alkyl-, C_1-C_3-fluoroalkoxy-, C_1-C_3-alkoxy-;

e) a heteroaryl group, which is optionally substituted with one or two or three substituents, identically or differently, selected from the group of halogen, hydroxy, -NH_2, alkylamino-, dialkylamino-, acetylamino-, *N*-methyl-*N*-acetylamino-, cyclic amines, cyano, C_1-C_3-alkyl-, halo-C_1-C_3-alkyl-, C_1-C_3-fluoroalkoxy-, C_1-C_3-alkoxy-;

f) a phenyl-C_1-C_3-alkyl- group, the phenyl group of which is optionally substituted with one or two or three substituents, identically or differently, selected from the group of halogen, hydroxy, -NH_2, alkylamino-, dialkylamino-, acetylamino-, *N*-methyl-*N*-acetylamino-, cyclic amines, cyano, C_1-C_3-alkyl-, halo-C_1-C_3-alkyl-, C_1-C_3-fluoroalkoxy-, C_1-C_3-alkoxy-;

g) a heteroaryl-C_1-C_3-alkyl- group, the heteroaryl group of which is optionally substituted with one or two or three substituents, identically or differently, selected from the group of halogen, hydroxy, -NH_2, alkylamino-, dialkylamino-, acetylamino-, *N*-methyl-*N*-acetylamino-, cyclic amines, cyano, C_1-C_3-alkyl-, halo-C_1-C_3-alkyl-, C_1-C_3-fluoroalkoxy-, C_1-C_3-alkoxy-;

h) a C_3-C_6-cycloalkyl-C_1-C_3-alkyl- group, the C_3-C_6-cycloalkyl group of which is optionally substituted with one or two or three substituents, identically or differently, selected from halogen, C_1-C_3-alkyl-, C_1-C_3-alkoxy-, halo-C_1-C_3-alkyl-, C_1-C_3-fluoroalkoxy-;

i) a heterocyclyl-C_1-C_3-alkyl- group, the heterocyclyl group of which is optionally substituted with one or two or three substituents, identically or differently, selected from halogen, C_1-C_3-alkyl-, C_1-C_3-alkoxy-, halo-C_1-C_3-alkyl-, C_1-C_3-fluoroalkoxy-;

R^9 represents a group selected from C_1-C_6-alkyl-, halo-C_1-C_3-alkyl-, C_3-C_7-cycloalkyl-, heterocyclyl-, phenyl, benzyl or heteroaryl,

wherein said group is optionally substituted with one, two or three substituents, identically or differently, selected from halogen, hydroxy, C_1-C_3-alkyl-, C_1-C_3-alkoxy-, -NH_2, alkylamino-, dialkylamino-, acetylamino-, *N*-methyl-*N*-acetylamino-, cyclic amines, halo-C_1-C_3-alkyl-, C_1-C_3-fluoroalkoxy-;

R^{10}, R^{11} represent, independently from each other, a group selected from hydrogen, C_1-C_6-alkyl-, C_3-C_7-cycloalkyl-, heterocyclyl-, phenyl, benzyl or heteroaryl,

wherein said C_1-C_6-alkyl-, C_3-C_7-cycloalkyl-, heterocyclyl-, phenyl, benzyl or heteroaryl group is optionally substituted with one, two or three substituents, identically or differently, selected from halogen, hydroxy, C_1-C_3-alkyl-, C_1-C_3-alkoxy-, -NH_2, alkylamino-, dialkylamino-, acetylamino-, *N*-methyl-*N*-acetylamino-, cyclic amines, halo-C_1-C_3-alkyl-, C_1-C_3-fluoroalkoxy-, or

R^{10} and R^{11}, together with the nitrogen atom they are attached to, form a cyclic amine;

R^{12} represents a group selected from hydrogen, C_1-C_4-alkyl or benzyl,

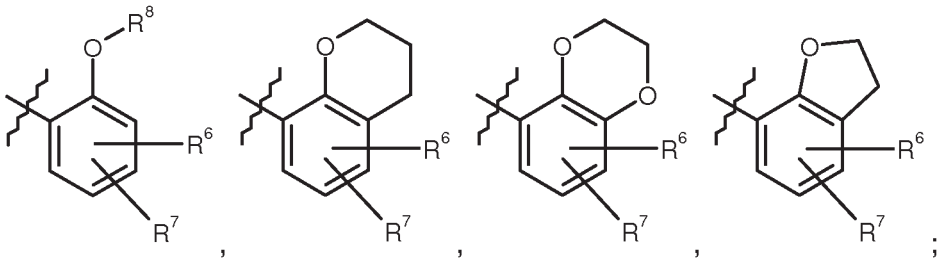
and the enantiomers, diastereomers, salts, solvates or salts of solvates thereof.

2. The compound of general formula (**I**) according to claim 1, wherein

R^1 represents a group selected from C_1-C_6-alkyl-, C_3-C_5-cycloalkyl-,

wherein said group is optionally substituted with one substituent selected from the group of hydroxy, C_1-C_3-alkoxy-, halo-C_1-C_2-alkyl-, C_1-C_2-fluoroalkoxy-, $-NH_2$, alkylamino-, dialkylamino-, cyclic amines, $-OP(O)(OH)_2$, -C(O)OH, $-C(O)NH_2$;

R^2 represents a group selected from



;

R^3 represents a hydrogen atom, a fluoro atom, a chloro atom, a bromo atom, or a C_1-C_3-alkyl, C_1-C_3-alkoxy or a halo-C_1-C_3-alkyl group;

R^4 represents a hydrogen atom, a fluoro atom, a chloro atom, or a bromo atom;

R^5 represents a group selected from a hydrogen atom, cyano, $-C(O)R^9$, $-C(O)OR^9$, $-S(O)_2R^9$, $-C(O)NR^{10}R^{11}$, $-P(O)(OR^{12})_2$, $-CH_2OP(OR^{12})_2$, C_1-C_6-alkyl-, C_3-C_7-cycloalkyl-, heterocyclyl-, phenyl, heteroaryl,

wherein said C_1-C_6-alkyl-, C_3-C_7-cycloalkyl-, heterocyclyl-, phenyl or heteroaryl group is optionally substituted with one, two or three substituents, identically or differently, selected from halogen, hydroxy, cyano, C_1-C_3-alkyl-, C_1-C_3-alkoxy-, $-NH_2$, alkylamino-, dialkylamino-, acetylamino-, *N*-methyl-*N*-acetylamino-, cyclic amines, halo-C_1-C_3-alkyl-, C_1-C_3-fluoroalkoxy-;

R^6, R^7 represent, independently from each other, a group selected from a hydrogen atom, fluoro atom, chloro atom, C_1-C_3-alkyl-, C_1-C_3-alkoxy-, halo-C_1-C_3-alkyl-, C_1-C_3-fluoroalkoxy-;

R^8 represents a group selected from

a) a C_1-C_6-alkyl group, which is optionally substituted with one or two or three substituents, identically or differently, selected from halogen, hydroxy, dialkylamino-, acetylamino-, *N*-methyl-*N*-acetylamino-, cyclic amines, cyano, C_1-C_3-alkyl-, halo-C_1-C_3-alkyl-, C_1-C_3-fluoroalkoxy-, C_1-C_3-alkoxy-, C_3-C_7-cycloalkyl-, heterocyclyl-, phenyl, heteroaryl, wherein said C_3-C_7-cycloalkyl-, heterocyclyl-, phenyl or heteroaryl group is optionally substituted with one, two or three substituents, identically or differently, selected from halogen, hydroxy, C_1-C_3-alkyl-, C_1-C_3-alkoxy-, dialkylamino-, acetylamino-, *N*-methyl-*N*-acetylamino-, cyclic amines, halo-C_1-C_3-alkyl-, C_1-C_3-fluoroalkoxy-;

b) a phenyl-C_1-C_3-alkyl- group, the phenyl group of which is optionally substituted with one or two or three substituents, identically or differently, selected from the group of halogen, hydroxy, dialkylamino-, acetylamino-, *N*-methyl-*N*-acetylamino-, cyclic amines, cyano, C_1-C_3-alkyl-, halo-C_1-C_3-alkyl-, C_1-C_3-fluoroalkoxy-, C_1-C_3-alkoxy-;

c) a heteroaryl-C_1-C_3-alkyl- group, the heteroaryl group of which is optionally substituted with one or two or three substituents, identically or differently, selected from the group of halogen, hydroxy, dialkylamino-, acetylamino-, *N*-methyl-*N*-acetylamino-, cyclic amines, cyano, C_1-C_3-alkyl-, halo-C_1-C_3-alkyl-, C_1-C_3-fluoroalkoxy-, C_1-C_3-alkoxy-;

d) a C_3-C_6-cycloalkyl-C_1-C_3-alkyl- group, the C_3-C_6-cycloalkyl group of which is optionally substituted with one or two or three substituents, identically or differently, selected from halogen, C_1-C_3-alkyl-, C_1-C_3-alkoxy-, halo-C_1-C_3-alkyl-, C_1-C_3-fluoroalkoxy-;

e) a heterocyclyl-C_1-C_3-alkyl- group, the heterocyclyl group of which is optionally substituted with one or two or three substituents, identically or differently, selected from halogen, C_1-C_3-alkyl-, C_1-C_3-alkoxy-, halo-C_1-C_3-alkyl-, C_1-C_3-fluoroalkoxy-;

R^9 represents a group selected from C_1-C_6-alkyl-, halo-C_1-C_3-alkyl-, C_3-C_7-cycloalkyl-, heterocyclyl-, phenyl, benzyl or heteroaryl,

wherein said group is optionally substituted with one, two or three substituents, identically or differently, selected from halogen, hydroxy, C_1-C_3-alkyl-, C_1-C_3-alkoxy-, $-NH_2$, alkylamino-, dialkylamino-, acetylamino-, *N*-methyl-*N*-acetylamino-, cyclic amines, halo-C_1-C_3-alkyl-, C_1-C_3-fluoroalkoxy-;

R^{10}, R^{11} represent, independently from each other, a group selected from hydrogen, C_1-C_6-alkyl-, C_3-C_7-cycloalkyl-, heterocyclyl-, benzyl, phenyl or heteroaryl,

wherein said C_1-C_6-alkyl, C_3-C_7-cycloalkyl-, heterocyclyl-, benzyl, phenyl or heteroaryl group is optionally substituted with one, two or three substituents, identically or differently, selected from halogen, hydroxy, C_1-C_3-alkyl-, C_1-C_3-alkoxy-, $-NH_2$, alkylamino-, dialkylamino-, acetylamino-, *N*-methyl-*N*-acetylamino-, cyclic amines , halo-C_1-C_3-alkyl-, C_1-C_3-fluoroalkoxy-, or

R^{10} and R^{11}, together with the nitrogen atom they are attached to, form a cyclic amine;

R^{12} represents a group selected from hydrogen or C_1-C_4-alkyl,

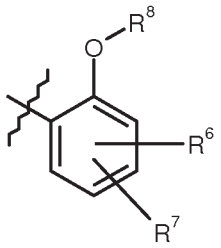
and the enantiomers, diastereomers, salts, solvates or salts of solvates thereof.

3. The compound of general formula (**I**) according to claim 1, wherein

R^1 represents a C_1-C_6-alkyl- or C_3-C_5-cycloalkyl group,

wherein said group is optionally substituted with one substituent selected from the group of hydroxy, C_1-C_3-alkoxy-, $-NH_2$, alkylamino-, dialkylamino-, cyclic amines, $-OP(O)(OH)_2$;

R^2 represents a group selected from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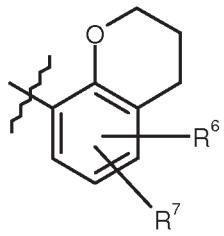

;

R^3 represents a hydrogen atom, a fluoro atom or a chloro atom, or a C_1-C_3-alkyl, C_1-C_3-alkoxy or a fluoro-C_1-C_3-alkyl group;

R^4 represents a hydrogen atom, a fluoro atom or a bromo atom;

R^5 represents a group selected from a hydrogen atom, cyano, $-C(O)R^9$, $-C(O)OR^9$, $-C(O)NR^{10}R^{11}$, $-P(O)(OR^{12})_2$, $-CH_2OP(OR^{12})_2$ or C_1-C_3-alkyl-,

wherein said C_1-C_3-alkyl group is optionally substituted with one substituent, selected from $-NH_2$, alkylamino-, dialkylamino-, or cyclic amines;

R^6, R^7 represent, independently from each other, a group selected from a hydrogen atom, a fluoro atom or a chloro atom;

R^8 represents a group selected from

a) a C_1-C_3-alkyl group, which is optionally substituted with one or two or three substituents, identically or differently, selected from halogen, halo-C_1-C_3-alkyl-;

b) a phenyl-C_1-C_3-alkyl- group, the phenyl group of which is optionally substituted with one or two or three substituents, identically or differently, selected from the group of halogen, cyano, C_1-C_3-alkyl-, halo-C_1-C_3-alkyl-, C_1-C_3-fluoroalkoxy-, C_1-C_3-alkoxy-;

c) a heteroaryl-C_1-C_3-alkyl- group, the heteroaryl group of which is optionally substituted with one or two substituents, identically or differently, selected from the group of halogen, cyano, C_1-C_3-alkyl-, halo-C_1-C_3-alkyl-, C_1-C_3-fluoroalkoxy-, C_1-C_3-alkoxy-;

R^9 represents a group selected from C_1-C_3-alkyl-, halo-C_1-C_3-alkyl-, or a benzyl group, the phenyl group of which is optionally substituted with one or two substituents, identically or differently,

selected from the group of halogen, C_1-C_3-alkyl-, C_1-C_3-alkoxy-, -NH_2, alkylamino-, dialkylamino-;

R^{10}, R^{11} represent, independently from each other, a group selected from hydrogen, C_1-C_3-alkyl-, benzyl, or

R^{10} and R^{11}, together with the nitrogen atom they are attached to, form a cyclic amine;

R^{12} represents a group selected from hydrogen or C_1-C_2-alkyl,

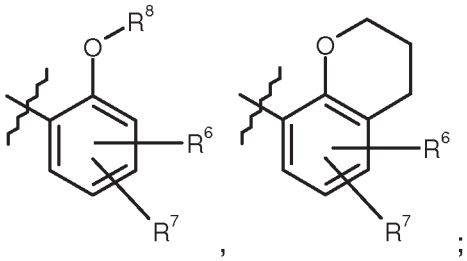
and the enantiomers, diastereomers, salts, solvates or salts of solvates thereof.

4. The compound of general formula (**I**) according to claim 1, wherein

R^1 represents a C_1-C_6-alkyl group,

wherein said group is optionally substituted with one substituent, selected from the group of hydroxy, C_1-C_3-alkoxy, -NH_2, alkylamino-, dialkylamino-, or cyclic amines;

R^2 represents a group selected from



;

R^3 represents a hydrogen atom, a fluoro atom or a chloro atom, or a methyl, methoxy, difluoromethyl or trifluoromethyl group;

R^4 represents a hydrogen atom or a bromo atom;

R^5 represents a group selected from a hydrogen atom, cyano, -C(O)R^9, -C(O)OR^9, -C(O)N$R^{10}R^{11}$;

R^6, R^7 represent, independently from each other, a group selected from a hydrogen atom, fluoro atom or chloro atom;

R^8 represents a C_1-C_3-alkyl group;

R^9 represents a C_1-C_3-alkyl group, a benzyl group, or trifluoromethyl;

R^{10}, R^{11} represent, independently from each other, a group selected from hydrogen, C_1-C_2-alkyl-;

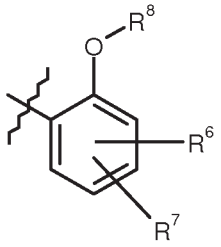
and the enantiomers, diastereomers, salts, solvates or salts of solvates thereof.

5. The compound of general formula (**I**) according to claim 1, wherein

R^1 represents a C_1-C_3-alkyl group,

wherein said group is optionally substituted with one substituent, selected from the group of hydroxy, -NH_2;

R^2 represents a group



;

R^3 represents a hydrogen atom, a fluoro atom or a chloro atom, or a methyl, methoxy, difluoromethyl or trifluoromethyl group;

R^4 represents a hydrogen atom or a bromo atom;

R^5 represents a group selected from a hydrogen atom, cyano, $-C(O)R^9$, $-C(O)OR^9$, $-C(O)NR^{10}R^{11}$;

R^6 represents a fluoro atom;

R^7 represents hydrogen;

R^8 represents a methyl or ethyl group;

R^9 represents a methyl, ethyl or trifluoromethyl group;

R^{10}, R^{11} represent, independently from each other, a group selected from hydrogen, C_1-C_2-alkyl-;

and the enantiomers, diastereomers, salts, solvates or salts of solvates thereof.

6. The compound of general formula (**I**) according to claim 1, wherein

R^1 represents a methyl, ethyl, 2-hydroxyethyl or 2-aminoethyl group;

R^2 represents a 4-fluoro-2-methoxyphenyl or 4-fluoro-2-ethoxyphenyl group;

R^3 represents a hydrogen atom, a fluoro atom or a chloro atom, or a methyl, methoxy, difluoromethyl or trifluoromethyl group;

R^4 represents a hydrogen atom or a bromo atom;

R^5 represents a hydrogen atom, or a group selected from cyano, $-C(O)CH_3$, $-C(O)CF_3$, $-C(O)OC_2H$, $-C(O)N(H)C_2H_5$;

and the enantiomers, diastereomers, salts, solvates or salts of solvates thereof.

7. The compound according to claim 1, which is

- (*rac*)-5-Fluoro-4-(4-fluoro-2-methoxyphenyl)-*N*-{4-[(*S*-methylsulfonimidoyl)methyl]pyridin-2-yl}pyridin-2-amine;
- (+)-5-Fluoro-4-(4-fluoro-2-methoxyphenyl)-*N*-{4-[(*S*-methylsulfonimidoyl)methyl]pyridin-2-yl}pyridin-2-amine;
- (-)-5-Fluoro-4-(4-fluoro-2-methoxyphenyl)-*N*-{4-[(*S*-methylsulfonimidoyl)methyl]pyridin-2-yl}pyridin-2-amine;
- (*rac*)-5-Fluoro-4-(4-fluoro-2-methoxyphenyl)-*N*-{6-methyl-4-[(*S*-methylsulfonimidoyl)methyl]pyridin-2-yl}pyridin-2-amine;

- (*rac*)-5-Bromo-*N*-[5-fluoro-4-(4-fluoro-2-methoxyphenyl)pyridin-2-yl]-6-methyl-4-[(*S*-methylsulfonimidoyl)methyl]pyridin-2-amine;
- (*rac*)-5-Fluoro-4-(4-fluoro-2-methoxyphenyl)-*N*-{6-methoxy-4-[(*S*-methylsulfonimidoyl)methyl]pyridin-2-yl}pyridin-2-amine;
- (*rac*)-*N*-{6-Chloro-4-[(*S*-methylsulfonimidoyl)methyl]pyridin-2-yl}-5-fluoro-4-(4-fluoro-2-methoxyphenyl)pyridin-2-amine;
- (*rac*)-2-{*S*-[(2-{[5-Fluoro-4-(4-fluoro-2-methoxyphenyl)pyridin-2-yl]amino}pyridin-4-yl)methyl]sulfonimidoyl}ethanol;
- (*rac*)-*N*-(4-{[*S*-(2-Aminoethyl)sulfonimidoyl]methyl}pyridin-2-yl)-5-fluoro-4-(4-fluoro-2-methoxyphenyl)pyridin-2-amine;
- {[(2-{[5-Fluoro-4-(4-fluoro-2-methoxyphenyl)pyridin-2-yl]amino}pyridin-4-yl)methyl](methyl)oxido-λ^6-sulfanylidene}cyanamide;
- (*rac*)-Ethyl {[(2-{[5-fluoro-4-(4-fluoro-2-methoxyphenyl)pyridin-2-yl]amino}pyridin-4-yl)methyl](methyl)oxido-λ^6-sulfanylidene}carbamate;
- (*rac*)-1-Ethyl-3-{[(2-{[5-fluoro-4-(4-fluoro-2-methoxyphenyl)pyridin-2-yl]amino}pyridin-4-yl)methyl](methyl)oxido-λ^6-sulfanylidene}urea;
- (*rac*)-*N*-{[(2-{[5-Fluoro-4-(4-fluoro-2-methoxyphenyl)pyridin-2-yl]amino}pyridin-4-yl)methyl](methyl)oxido-λ^6-sulfanylidene}acetamide;
- 5-Fluoro-4-(4-fluoro-2-methoxyphenyl)-*N*-{4-[(*S*-methylsulfonimidoyl)methyl]pyridin-2-yl}pyridin-2-amine hydrochloride; enantiomer 2;
- (*rac*)-Ethyl {[(2-{[5-fluoro-4-(4-fluoro-2-methoxyphenyl)pyridin-2-yl]amino}-6-methoxypyridin-4-yl)methyl](methyl)oxido-λ^6-sulfanylidene}carbamate;
- 5-Fluoro-4-(4-fluoro-2-methoxyphenyl)-*N*-{4-[(*S*-methylsulfonimidoyl)methyl]pyridin-2-yl}pyridin-2-amine hydrochloride; enantiomer 1;
- (*rac*)-5-Fluoro-4-(4-fluoro-2-methoxyphenyl)-*N*-{6-fluoro-4-[(*S*-methylsulfonimidoyl)methyl]pyridin-2-yl}pyridin-2-amine;
- (*rac*)-2,2,2-Trifluoro-*N*-{[(2-fluoro-6-{[5-fluoro-4-(4-fluoro-2-methoxyphenyl)pyridin-2-yl]amino}pyridin-4-yl)methyl](methyl)oxido-λ^6-sulfanylidene}acetamide;
- (+)-5-Fluoro-4-(4-fluoro-2-methoxyphenyl)-*N*-{6-fluoro-4-[(*S*-methylsulfonimidoyl)methyl]pyridin-2-yl}pyridin-2-amine;
- (-)-5-Fluoro-4-(4-fluoro-2-methoxyphenyl)-*N*-{6-fluoro-4-[(*S*-methylsulfonimidoyl)methyl]pyridin-2-yl}pyridin-2-amine;
- (*rac*)-5-Fluoro-4-(4-fluoro-2-methoxyphenyl)-*N*-{4-[(*S*-methylsulfonimidoyl)methyl]-6-(trifluoromethyl)pyridin-2-yl}pyridin-2-amine;
- (+)-5-Fluoro-4-(4-fluoro-2-methoxyphenyl)-*N*-{4-[(*S*-methylsulfonimidoyl)methyl]-6-(trifluoromethyl)pyridin-2-yl}pyridin-2-amine;

- (-)-5-Fluoro-4-(4-fluoro-2-methoxyphenyl)-*N*-{4-[(*S*-methylsulfonimidoyl)methyl]-6-(trifluoromethyl)pyridin-2-yl}pyridin-2-amine;
- (+)-2,2,2-Trifluoro-*N*-[{[2-{[5-fluoro-4-(4-fluoro-2-methoxyphenyl)pyridin-2-yl]amino}-6-(trifluoromethyl)-pyridin-4-yl]methyl}(methyl)oxido-λ^6-sulfanylidene]acetamide;
- (-)-2,2,2-Trifluoro-*N*-[{[2-{[5-fluoro-4-(4-fluoro-2-methoxyphenyl)pyridin-2-yl]amino}-6-(trifluoromethyl)-pyridin-4-yl]methyl}(methyl)oxido-λ^6-sulfanylidene]acetamide;
- (*rac*)-4-(2-Ethoxy-4-fluorophenyl)-5-fluoro-*N*-{6-fluoro-4-[(*S*-methylsulfonimidoyl)methyl]pyridin-2-yl}pyridin-2-amine;
- (*rac*)-*N*-{[(2-{[4-(2-Ethoxy-4-fluoro-phenyl)-5-fluoropyridin-2-yl]amino}-6-fluoropyridin-4-yl)methyl]-(methyl)oxido-λ^6-sulfanylidene}-2,2,2-trifluoroacetamide;
- (+)-4-(2-Ethoxy-4-fluorophenyl)-5-fluoro-*N*-{6-fluoro-4-[(*S*-methylsulfonimidoyl)methyl]pyridin-2-yl}pyridin-2-amine;
- (-)-4-(2-Ethoxy-4-fluorophenyl)-5-fluoro-*N*-{6-fluoro-4-[(*S*-methylsulfonimidoyl)methyl]pyridin-2-yl}pyridin-2-amine;
- (*rac*)-*N*-{4-[(*S*-Ethylsulfonimidoyl)-methyl]pyridin-2-yl}-5-fluoro-4-(4-fluoro-2-methoxyphenyl)pyridin-2-amine;
- (*rac*)-*N*-{6-(Difluoromethyl)-4-[(*S*-methylsulfonimidoyl)methyl]pyridin-2-yl}-5-fluoro-4-(4-fluoro-2-methoxyphenyl)pyridin-2-amine;
- (+)-5-Fluoro-4-(4-fluoro-2-methoxyphenyl)-*N*-{6-methyl-4-[(*S*-methylsulfonimidoyl)methyl]pyridin-2-yl}pyridin-2-amine;
- (-)-5-Fluoro-4-(4-fluoro-2-methoxyphenyl)-*N*-{6-methyl-4-[(*S*-methylsulfonimidoyl)methyl]pyridin-2-yl}pyridin-2-amine,

and the enantiomers, diastereomers, salts, solvates or salts of solvates thereof.

8. A compound of general formula (**I**) according to any one of claims 1 to 7 or an enantiomer, diastereomer, salt, solvate, or salt of the solvate thereof, for the treatment and/or prophylaxis of hyper-proliferative disorders, virally induced infectious diseases and/or of cardiovascular diseases.

9. A compound of general formula (**I**) according to any one of claims 1 to 7 or an enantiomer, diastereomer, salt, solvate, or salt of the solvate thereof, for the treatment and/or prophylaxis of lung carcinomas, prostate carcinomas, cervical carcinomas, colorectal carcinomas, melanomas, ovarian carcinomas or leukemias.

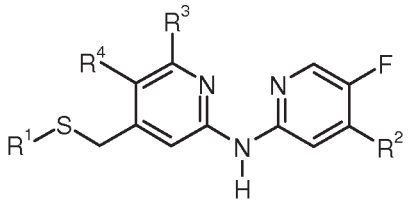
10. A pharmaceutical combination comprising a compound of general formula (**I**) according to any one of claims 1 to 7 or an enantiomer, diastereomer, salt, solvate, or salt of the solvate thereof, in combination with at least one or more further active ingredients.

11. A pharmaceutical composition comprising a compound of general formula (**I**) according to any one of claims 1 to 7 or an enantiomer, diastereomer, salt, solvate, or salt of the solvate thereof, in combination with an inert, nontoxic, pharmaceutically suitable adjuvant.

12. The pharmaceutical combination according to claim 10 for the treatment and/or prophylaxis of hyper-proliferative disorders, virally induced infectious diseases and/or of cardiovascular diseases.

13. The pharmaceutical composition according to claim 11 for the treatment and/or prophylaxis of hyper-proliferative disorders, virally induced infectious diseases and/or of cardiovascular diseases.

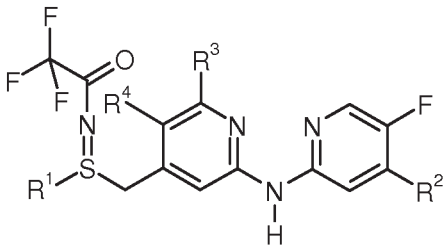
14. A compound of general formula (**5**)



5

wherein R^1, R^2, R^3 and R^4 are as defined according to any one of claims 1 to 6 for the compounds of general formula (**I**),
or a salt, solvate, or salt of solvate thereof.

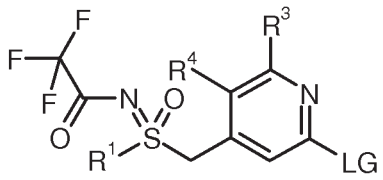
15. A compound of general formula (**6**)



6

wherein R^1, R^2, R^3 and R^4 are as defined according to any one of claims 1 to 6 for the compounds of general formula (**I**),
or an enantiomer, diastereomer, salt, solvate, or salt of solvate thereof.

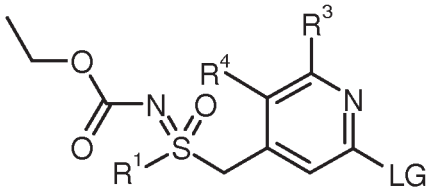
16. A compound of general formula (**14**)



14

wherein R^1, R^3 and R^4 are as defined according to any one of claims 1 to 6 for the compounds of general formula (**I**), and wherein LG stands for a leaving group,
or an enantiomer, diastereomer, salt, solvate, or salt of solvate thereof.

17. A compound of general formula (**16**)

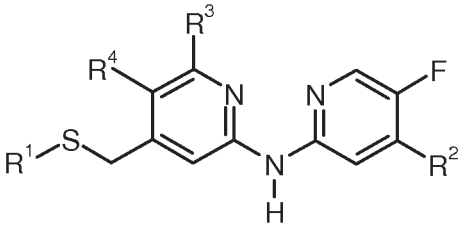


16

wherein R^1, R^3 and R^4 are as defined according to any one of claims 1 to 6 for the compounds of general formula (**I**), and wherein LG stands for a leaving group,

or an enantiomer, diastereomer, salt, solvate, or salt of solvate thereof.

18. A method for the preparation of a compound of formula (**6**), in which R^1, R^2, R^3, and R^4 are as defined for the compound of the formula (**I**) according to any one of claims 1 to 6, in which method a compound of formula (**5**), in which R^1, R^2, R^3, and R^4 are as defined for the compound of the formula (**I**) according to any one of claims 1 to 6,



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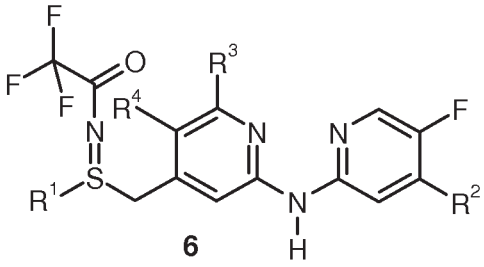
is reacted with trifluoroacetamide and 1,3-dibromo-5,5-dimethylhydantoin in the presence of an alkali salt of *tert*-butanol in a cyclic ether as a solvent, to give a compound of the formula (**6**),



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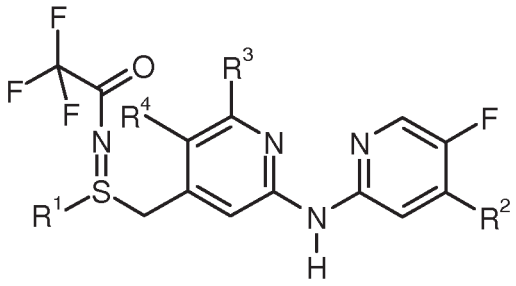
and in which method the resulting compound is optionally, if appropriate, converted with the corresponding (i) solvents and/or (ii) bases or acids to the solvates, salts and/or solvates of the salts thereof.

19. A method for the preparation of a compound of formula (**I**), according to any one of the claims 1 to 7, in which method a compound of formula (**6**), in which R^1, R^2, R^3, and R^4 are as defined for the compound of the formula (**I**) according to any one of claims 1 to 6,



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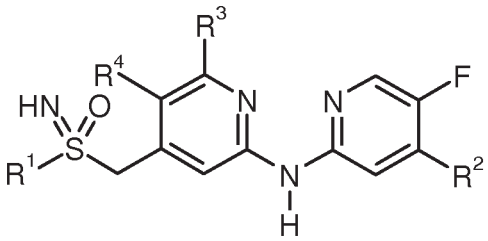
is oxidised with an alkali salt of permanganic acid in an aliphatic ketone of the formula C_1-C_2-C(O)-C_1-C_2-alkyl as a solvent,

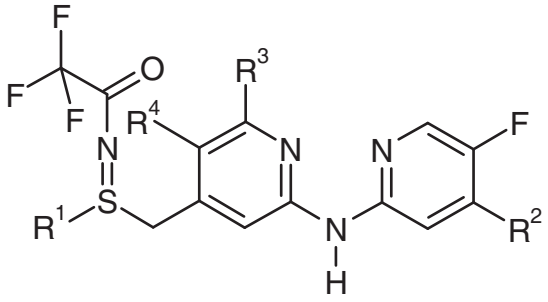
followed, if the trifluoroacetyl group present in the compound of formula (**6**) has not been cleaved off during abovementioned oxidation process, by the removal of said trifluoroacetyl group by treatment of the resulting intermediate with a suitable base in an alcoholic solvent, to give a compound of the formula (**I**), in which R^5 is hydrogen,



(I); R^5 = H

and in which method the resulting compound is optionally, if appropriate, converted with the corresponding (i) solvents and/or (ii) bases or acids to the solvates, salts and/or solvates of the salts thereof.

20. A method for the preparation of a compound of formula (**I**), according to any one of the claims 1 to 7, in which method a compound of formula (**6**), in which R^1, R^2, R^3, and R^4 are as defined for the compound of the formula (**I**) according to any one of claims 1 to 6,



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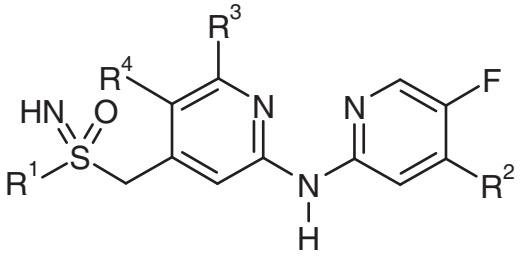
is oxidised with a peroxomonosulfate based oxidant in a solvent selected from an aliphatic alcohol of the formula C_1-C_3-alkyl-OH, water, and *N*,*N*-dimethylformamide, or a mixture thereof, to give a compound of the formula (**I**), in which R^5 is hydrogen,



(I); R^5 = H

and in which method the resulting compound is optionally, if appropriate, converted with the corresponding (i) solvents and/or (ii) bases or acids to the solvates, salts and/or solvates of the salts thereof.

21. Use of a compound of the formula (**I**) according to any one of claims 1 to 7, or an enantiomer, diastereomer, salt, solvate, or salt of the solvate thereof, in the manufacture of a medicament for the treatment and/or prophylaxis of a disorder relating to or mediated by CDK9 activity, wherein the disorder is a hyper-proliferative disorder, a virally induced infectious disease, or a cardiovascular disease.

22. Use according to claim 21, wherein the disorder is lung carcinoma, prostate carcinoma, cervical carcinoma, colorectal carcinoma, melanoma, ovarian carcinoma or leukemia.