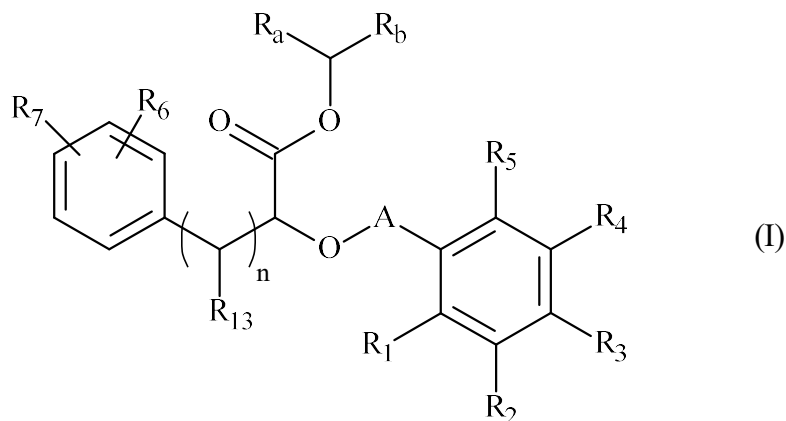
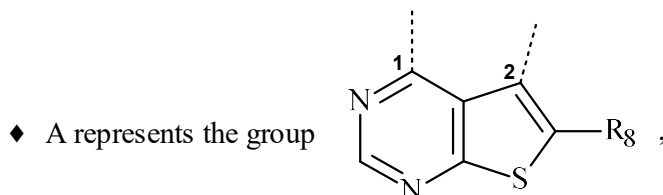


CLAIMS

1. Compounds of formula (I):



wherein:



in which **1** is linked to the oxygen atom and **2** is linked to the phenyl ring,

- ◆ R₁ represents a linear or branched (C₁-C₆)alkyl group, a linear or branched (C₂-C₆)alkenyl group, a linear or branched (C₂-C₆)alkynyl group, a linear or branched (C₁-C₆)alkoxy group, a -S-(C₁-C₆)alkyl group, a linear or branched (C₁-C₆)polyhaloalkyl, a hydroxy group, a hydroxy(C₁-C₆)alkyl group, a cyano group, -NR₁₁R₁₁', -Cy₆, or a halogen atom,
- ◆ R₂, R₃, R₄ and R₅ independently of one another represent a hydrogen atom, a halogen atom, a linear or branched (C₁-C₆)alkyl group, a linear or branched (C₂-C₆)alkenyl group, a linear or branched (C₂-C₆)alkynyl group, a linear or branched (C₁-C₆)polyhaloalkyl, a hydroxy group, a hydroxy(C₁-C₆)alkyl group, a linear or branched (C₁-C₆)alkoxy group, a -S-(C₁-C₆)alkyl group, a cyano group, a nitro group, -alkyl(C₀-C₆)-NR₉R₉', -O-alkyl(C₁-C₆)-NR₉R₉', -O-alkyl(C₁-C₆)-R₁₀, -C(O)-OR₉, -O-C(O)-R₉, -C(O)-NR₉R₉', -NR₉-C(O)-R₉', -NR₉-C(O)-OR₉,

- alkyl(C₁-C₆)-NR₉-C(O)-R₉', -SO₂-NR₉R₉', -SO₂-alkyl(C₁-C₆),
or the substituents of one of the pairs (R₂, R₃), (R₃, R₄), (R₄, R₅), when grafted onto
two adjacent carbon atoms, form together with the carbon atoms carrying them an
aromatic or non-aromatic ring composed of from 5 to 7 ring members, which may
contain from 1 to 3 heteroatoms selected from oxygen, sulphur and nitrogen, it
being understood that resulting ring may be substituted by a group selected from a
linear or branched (C₁-C₆)alkyl group, -NR₁₁R₁₁', -alkyl(C₀-C₆)-Cy₁, or an oxo,
- ♦ R₆ and R₇ independently of one another represent a hydrogen atom, a halogen
atom, a linear or branched (C₁-C₆)alkyl group, a linear or branched
(C₂-C₆)alkenyl group, a linear or branched (C₂-C₆)alkynyl group, a linear or
branched (C₁-C₆)polyhaloalkyl, a hydroxy group, a linear or branched
(C₁-C₆)alkoxy group, a -S-(C₁-C₆)alkyl group, a cyano group, a nitro group,
-alkyl(C₀-C₆)-NR₉R₉', -O-alkyl(C₁-C₆)-NR₉R₉', -O-Cy₁, -alkyl(C₀-C₆)-Cy₁,
-alkenyl(C₂-C₆)-Cy₁, -alkynyl(C₂-C₆)-Cy₁, -O-alkyl(C₁-C₆)-R₁₀, -C(O)-OR₉,
-O-C(O)-R₉, -C(O)-NR₉R₉', -NR₉-C(O)-R₉', -NR₉-C(O)-OR₉',
-alkyl(C₁-C₆)-NR₉-C(O)-R₉', -SO₂-NR₉R₉', -SO₂-alkyl(C₁-C₆),
or the substituents of the pair (R₆, R₇), when grafted onto two adjacent carbon
atoms, form together with the carbon atoms carrying them an aromatic or non-
aromatic ring composed of from 5 to 7 ring members, which may contain from 1 to
3 heteroatoms selected from oxygen, sulphur and nitrogen, it being understood that
resulting ring may be substituted by a group selected from a linear or branched
(C₁-C₆)alkyl group, -NR₁₁R₁₁', -alkyl(C₀-C₆)-Cy₁, or an oxo,
- ♦ R₈ represents a linear or branched (C₁-C₆)alkyl group, a linear or branched
(C₂-C₆)alkenyl group, a linear or branched (C₂-C₆)alkynyl group, -Cy₃,
-alkyl(C₁-C₆)-Cy₃, -alkenyl(C₂-C₆)-Cy₃, -alkynyl(C₂-C₆)-Cy₃, -Cy₃-Cy₄,
-alkynyl(C₂-C₆)-O-Cy₃, -Cy₃-alkyl(C₀-C₆)-O-alkyl(C₀-C₆)-Cy₄, a halogen atom, a
cyano group, -C(O)-R₁₂, or -C(O)-NR₁₂R₁₂',
- ♦ R₉ and R₉' independently of one another represent a hydrogen atom, a linear or
branched (C₁-C₆)alkyl group, -alkyl(C₀-C₆)-Cy₁,
or the substituents of the pair (R₉, R₉') form together with the nitrogen atom
carrying them an aromatic or non-aromatic ring composed of from 5 to 7 ring
members, which may contain in addition to the nitrogen atom from 1 to 3

heteroatoms selected from oxygen, sulphur and nitrogen, it being understood that the nitrogen in question may be substituted by a group representing a hydrogen atom, or a linear or branched (C₁-C₆)alkyl group and it being understood that one or more of the carbon atoms of the possible substituents, may be deuterated,

- 5 ♦ R₁₀ represents -Cy₁, -Cy₁-alkyl(C₀-C₆)-Cy₂, -Cy₁-alkyl(C₀-C₆)-O-alkyl(C₀-C₆)-Cy₂,
-Cy₁-alkyl(C₀-C₆)-NR₉-alkyl(C₀-C₆)-Cy₂, -Cy₁-Cy₂-O-alkyl(C₀-C₆)-Cy₅,
-C(O)-NR₉R₉', -NR₉R₉', -OR₉, -NR₉-C(O)-R₉', -O-alkyl(C₁-C₆)-OR₉, -SO₂-R₉,
-C(O)-OR₉, or -NH-C(O)-NH-R₇,
- 10 ♦ R₁₁, R₁₁', R₁₂ and R₁₂' independently of one another represent a hydrogen atom or
an optionally substituted linear or branched (C₁-C₆)alkyl group,
- ♦ R₁₃ represents a hydrogen atom, a hydroxy group, or a hydroxy(C₁-C₆)alkyl group,
- ♦ R_a represents a hydrogen atom or a linear or branched (C₁-C₆)alkyl group,
- ♦ R_b represents a -O-C(O)-O-R_c group, a -O-C(O)-NR_cR_c' group, or a -O-P(O)(OR_c)₂
group,
- 15 ♦ R_c and R_c' independently of one another represent a hydrogen atom, a linear
or branched (C₁-C₈)alkyl group, a cycloalkyl group, a (C₁-C₆)alkoxy(C₁-C₆)alkyl
group, or a (C₁-C₆)alkoxycarbonyl(C₁-C₆)alkyl group,
or the substituents of the pair (R_c, R_c') form together with the nitrogen atom
carrying them a non-aromatic ring composed of from 5 to 7 ring members, which
20 may contain in addition to the nitrogen atom from 1 to 3 heteroatoms selected from
oxygen and nitrogen, it being understood that the nitrogen in question may be
substituted by a group representing a linear or branched (C₁-C₆)alkyl group,
- ♦ Cy₁, Cy₂, Cy₃, Cy₄, Cy₅ and Cy₆ independently of one another, represent a
cycloalkyl group, a heterocycloalkyl group, an aryl group or a heteroaryl group,
- 25 ♦ n is an integer equal to 0 or 1,

it being understood that:

- "aryl" means a phenyl, naphthyl, biphenyl, indanyl or indenyl group,
- "heteroaryl" means any mono- or bi-cyclic group composed of from 5 to 10 ring
members, having at least one aromatic moiety and containing from 1 to 3
30 heteroatoms selected from oxygen, sulphur and nitrogen,
- "cycloalkyl" means any mono- or bi-cyclic non-aromatic carbocyclic group

containing from 3 to 10 ring members,

- "heterocycloalkyl" means any mono- or bi-cyclic non-aromatic carbocyclic group containing from 3 to 10 ring members, and containing from 1 to 3 heteroatoms selected from oxygen, sulphur and nitrogen, which may include fused, bridged or spiro ring systems,

5

it being possible for the aryl, heteroaryl, cycloalkyl and heterocycloalkyl groups so defined and the alkyl, alkenyl, alkynyl, alkoxy groups, to be substituted by from 1 to 4 groups selected from optionally substituted linear or branched (C₁-C₆)alkyl, optionally substituted linear or branched (C₂-C₆)alkenyl group, optionally substituted linear or branched (C₂-C₆)alkynyl group, optionally substituted linear or branched (C₁-C₆)alkoxy, optionally substituted (C₁-C₆)alkyl-S-, hydroxy, oxo (or *N*-oxide where appropriate), nitro, cyano, -C(O)-OR', -O-C(O)-R', -C(O)-NR'R'', -NR'R'', -(C=NR')-OR'', linear or branched (C₁-C₆)polyhaloalkyl, trifluoromethoxy, or halogen, it being understood that R' and R'' independently of one another represent a hydrogen atom or an optionally substituted linear or branched (C₁-C₆)alkyl group, and it being understood that one or more of the carbon atoms of the preceding possible substituents, may be deuterated,

10

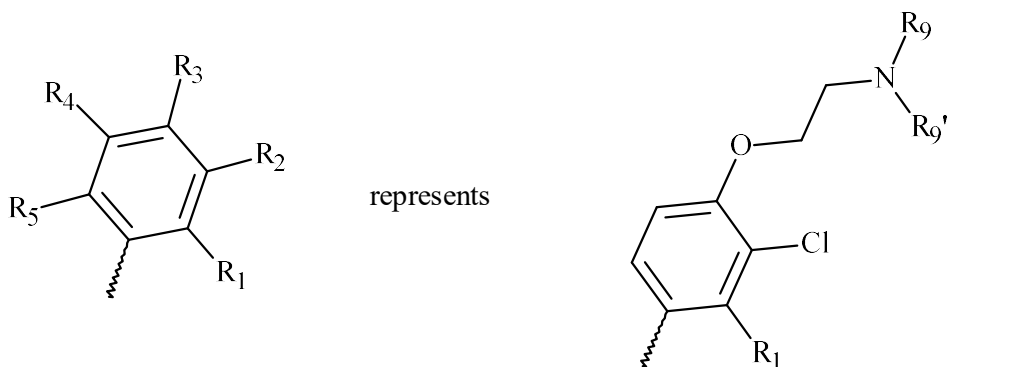
15

their enantiomers, diastereoisomers and atropisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

- 20 **2.** Compound of formula (I) according to claim 1, wherein at least one of the groups selected from R₂, R₃, R₄ and R₅ does not represent a hydrogen atom.
- 3.** Compound of formula (I) according to claim 1, wherein n is an integer equal to 1.
- 4.** Compound of formula (I) according to claim 1, wherein R₁ represents a linear or branched (C₁-C₆)alkyl group or a halogen atom.
- 25 **5.** Compound of formula (I) according to claim 1, wherein R₁₃ represents a hydrogen atom.

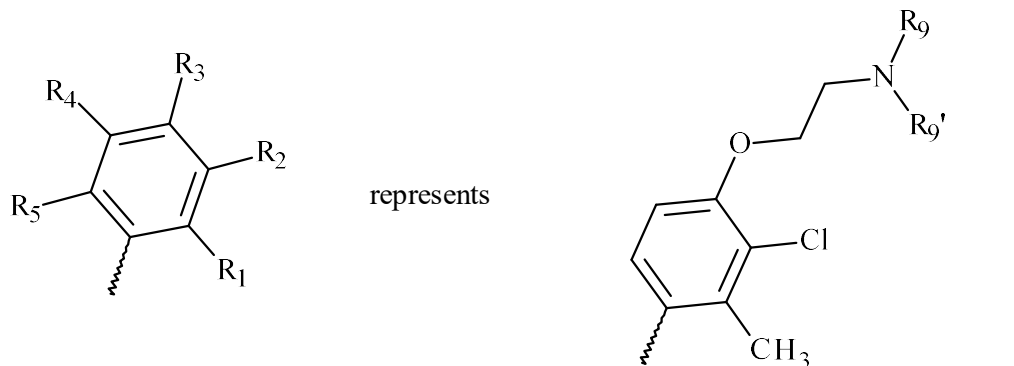
6. Compound of formula (I) according to claim 1, wherein R₄ and R₅ represent a hydrogen atom.

7. Compound of formula (I) according to claim 1, wherein



5 wherein R₁, R₉ and R₉' are as defined in claim 1.

8. Compound of formula (I) according to claim 1, wherein



wherein R₉ and R₉' are as defined in claim 1.

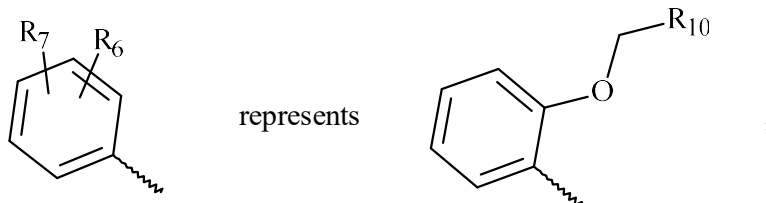
9. Compound of formula (I) according to claim 1, wherein the substituents of the pair (R₁, R₅) are identical and the substituents of the pair (R₂, R₄) are identical.

10

10. Compound of formula (I) according to claim 1, wherein R₆ represents an optionally substituted linear or branched (C₁-C₆)alkoxy group or a -O-alkyl(C₁-C₆)-R₁₀ group.

11. Compound of formula (I) according to claim 1, wherein R₇ represents a hydrogen atom.

12. Compound of formula (I) according to claim 1, wherein



5 wherein R₁₀ is as defined in claim 1.

13. Compound of formula (I) according to claim 1, wherein R₈ represents a linear or branched (C₁-C₆)alkyl group, a linear or branched (C₂-C₆)alkenyl group, a linear or branched (C₂-C₆)alkynyl group, an aryl group or a heteroaryl group.

10 14. Compound of formula (I) according to claim 1, wherein R₉ and R₉' independently of one another represent a linear or branched (C₁-C₆)alkyl group, or the substituents of the pair (R₉, R₉') form together with the nitrogen atom carrying them a non-aromatic ring composed of from 5 to 7 ring members, which may contain in addition to the nitrogen atom from 1 to 3 heteroatoms selected from oxygen, sulphur and nitrogen, it being understood that the nitrogen in question may be substituted by a group
15 representing a hydrogen atom, a linear or branched (C₁-C₆)alkyl group.

15 15. Compound of formula (I) according to claim 1, wherein R₁₀ represents -Cy₁, -Cy₁-alkyl(C₀-C₆)-O-alkyl(C₀-C₆)-Cy₂ or -Cy₁-alkyl(C₀-C₆)-Cy₂.

16. Compound of formula (I) according to claim 1, wherein Cy₁ represents a heteroaryl group.

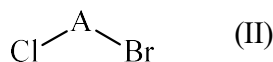
20 17. Compound of formula (I) according to claim 1, wherein Cy₂ represents a phenyl group, a pyridinyl group, a pyrazolyl group, a morpholinyl group, a furanyl group or a cyclopropyl group.

18. Compound of formula (I) according to claim 1, wherein R₁₀ represents -Cy₁-Cy₂ in which Cy₁ represents a pyrimidinyl group and Cy₂ represents a phenyl group, a pyridinyl group, a pyrazolyl group, a morpholinyl group, a furanyl group, or a cyclopropyl group.
- 5 19. Compound of formula (I) according to claim 1, wherein R_a represents a hydrogen atom or a methyl group.
20. Compound of formula (I) according to claim 1, wherein R_b represents a -O-C(O)-O-(C₁-C₈)alkyl group; a -O-C(O)-O-cycloalkyl group; a -O-C(O)-NR_cR_c' group, in which R_c and R_c' independently of one another represent a hydrogen atom, a
10 linear or branched (C₁-C₈)alkyl group, a (C₁-C₆)alkoxy(C₁-C₆)alkyl group, a (C₁-C₆)alkoxycarbonyl(C₁-C₆)alkyl group, or the substituents of the pair (R_c, R_c') form together with the nitrogen atom carrying them a non-aromatic ring composed of from 5 to 7 ring members, which may contain in addition to the nitrogen atom from 1 to 3 heteroatoms selected from oxygen and nitrogen; or a -O-P(O)(OH)₂ group.
- 15 21. Compounds according to claim 1, which are:
- 1-[(methoxycarbonyl)oxy]ethyl (2*R*)-2-{[(5*S_a*)-5-{3-chloro-2-methyl-4-[2-(4-methylpiperazin-1-yl)ethoxy]phenyl}-6-(4-fluorophenyl)thieno[2,3-*d*]pyrimidin-4-yl]oxy}-3-(2-{[2-(2-methoxyphenyl)pyrimidin-4-yl]methoxy}phenyl)propanoate;
 - 1-[(ethoxycarbonyl)oxy]ethyl (2*R*)-2-{[(5*S_a*)-5-{3-chloro-2-methyl-4-[2-(4-methylpiperazin-1-yl)ethoxy]phenyl}-6-(4-fluorophenyl)thieno[2,3-*d*]pyrimidin-4-yl]oxy}-3-(2-{[2-(2-methoxyphenyl)pyrimidin-4-yl]methoxy}phenyl)propanoate;
 - 1-[(propan-2-yloxy)carbonyl]oxyethyl (2*R*)-2-{[(5*S_a*)-5-{3-chloro-2-methyl-4-[2-(4-methylpiperazin-1-yl)ethoxy]phenyl}-6-(4-fluorophenyl)thieno[2,3-*d*]pyrimidin-4-yl]oxy}-3-(2-{[2-(2-methoxyphenyl)pyrimidin-4-yl]methoxy}phenyl)propanoate;
 - 1-[(*tert*-butoxycarbonyl)oxy]ethyl (2*R*)-2-{[(5*S_a*)-5-{3-chloro-2-methyl-4-[2-(4-methylpiperazin-1-yl)ethoxy]phenyl}-6-(4-fluorophenyl)thieno[2,3-*d*]pyrimidin-4-yl]oxy}-3-(2-{[2-(2-methoxyphenyl)pyrimidin-4-yl]methoxy}phenyl)propanoate;
- 25

- 1-{[(cyclopentyloxy)carbonyl]oxy}ethyl (2*R*)-2-{[(5*S_a*)-5-{3-chloro-2-methyl-4-[2-(4-methylpiperazin-1-yl)ethoxy]phenyl}-6-(4-fluorophenyl)thieno[2,3-*d*]pyrimidin-4-yl]oxy}-3-(2-{[2-(2-methoxyphenyl)pyrimidin-4-yl]methoxy}phenyl)propanoate;
- 5 - 1-{[(octyloxy)carbonyl]oxy}ethyl (2*R*)-2-{[(5*S_a*)-5-{3-chloro-2-methyl-4-[2-(4-methylpiperazin-1-yl)ethoxy]phenyl}-6-(4-fluorophenyl)thieno[2,3-*d*]pyrimidin-4-yl]oxy}-3-(2-{[2-(2-methoxyphenyl)pyrimidin-4-yl]methoxy}phenyl)propanoate;
- 1-[(dimethylcarbamoyl)oxy]ethyl (2*R*)-2-{[(5*S_a*)-5-{3-chloro-2-methyl-4-[2-(4-methylpiperazin-1-yl)ethoxy]phenyl}-6-(4-fluorophenyl)thieno[2,3-*d*]pyrimidin-4-yl]oxy}-3-(2-{[2-(2-methoxyphenyl)pyrimidin-4-yl]methoxy}phenyl)propanoate;
- 10 - 1-[(diethylcarbamoyl)oxy]ethyl (2*R*)-2-{[(5*S_a*)-5-{3-chloro-2-methyl-4-[2-(4-methylpiperazin-1-yl)ethoxy]phenyl}-6-(4-fluorophenyl)thieno[2,3-*d*]pyrimidin-4-yl]oxy}-3-(2-{[2-(2-methoxyphenyl)pyrimidin-4-yl]methoxy}phenyl)propanoate;
- 1-[(2*R*)-2-{[(5*S_a*)-5-{3-chloro-2-methyl-4-[2-(4-methylpiperazin-1-yl)ethoxy]phenyl}-6-(4-fluorophenyl)thieno[2,3-*d*]pyrimidin-4-yl]oxy}-3-(2-{[2-(2-methoxyphenyl)pyrimidin-4-yl]methoxy}phenyl)propanoyl]oxy}ethyl morpholine-4-carboxylate;
- 15 - 1-[(2-methoxyethyl)carbamoyl]oxy}ethyl (2*R*)-2-{[(5*S_a*)-5-{3-chloro-2-methyl-4-[2-(4-methylpiperazin-1-yl)ethoxy]phenyl}-6-(4-fluorophenyl)thieno[2,3-*d*]pyrimidin-4-yl]oxy}-3-(2-{[2-(2-methoxyphenyl)pyrimidin-4-yl]methoxy}phenyl)propanoate;
- 20 - 1-[(bis(2-methoxyethyl)carbamoyl]oxy}ethyl (2*R*)-2-{[(5*S_a*)-5-{3-chloro-2-methyl-4-[2-(4-methylpiperazin-1-yl)ethoxy]phenyl}-6-(4-fluorophenyl)thieno[2,3-*d*]pyrimidin-4-yl]oxy}-3-(2-{[2-(2-methoxyphenyl)pyrimidin-4-yl]methoxy}phenyl)propanoate;
- 25 - 1-[(2-methoxy-2-oxoethyl)(methyl)carbamoyl]oxy}ethyl (2*R*)-2-{[(5*S_a*)-5-{3-chloro-2-methyl-4-[2-(4-methylpiperazin-1-yl)ethoxy]phenyl}-6-(4-fluorophenyl)thieno[2,3-*d*]pyrimidin-4-yl]oxy}-3-(2-{[2-(2-methoxyphenyl)pyrimidin-4-yl]methoxy}phenyl)propanoate;
- 30 - (phosphonooxy)methyl (2*R*)-2-{[(5*S_a*)-5-{3-chloro-2-methyl-4-[2-(4-methylpiperazin-1-yl)ethoxy]phenyl}-6-(4-fluorophenyl)thieno[2,3-*d*]pyrimidin-4-yl]oxy}-3-(2-{[2-(2-methoxyphenyl)pyrimidin-4-yl]methoxy}phenyl)propanoate;

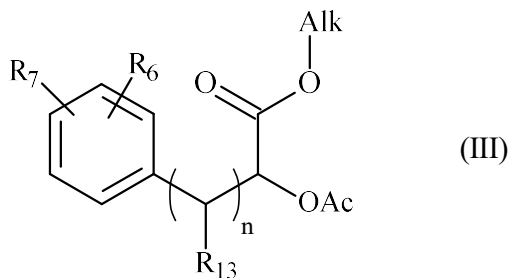
- 1-[(ethoxycarbonyl)oxy]ethyl (2*R*)-2-{[5-{2,6-dimethyl-4-[2-(4-methylpiperazin-1-yl)ethoxy]phenyl}-6-(4-fluorophenyl)thieno[2,3-*d*]pyrimidin-4-yl]oxy}-3-(2-{[2-(2-methoxyphenyl)pyrimidin-4-yl]methoxy}phenyl)propanoate;
- 1-[(ethoxycarbonyl)oxy]ethyl (2*R*)-2-{[5-{3,5-dichloro-2,6-dimethyl-4-[2-(4-methylpiperazin-1-yl)ethoxy]phenyl}-6-(4-fluorophenyl)thieno[2,3-*d*]pyrimidin-4-yl]oxy}-3-(2-{[2-(2-methoxyphenyl)pyrimidin-4-yl]methoxy}phenyl)propanoate;
- 1-[(dimethylcarbamoyl)oxy]ethyl (2*R*)-2-{[5-{2,6-dimethyl-4-[2-(4-methylpiperazin-1-yl)ethoxy]phenyl}-6-(4-fluorophenyl)thieno[2,3-*d*]pyrimidin-4-yl]oxy}-3-(2-{[2-(2-methoxyphenyl)pyrimidin-4-yl]methoxy}phenyl)propanoate;
- 1-[(dimethylcarbamoyl)oxy]ethyl (2*R*)-2-{[5-{3,5-dichloro-2,6-dimethyl-4-[2-(4-methylpiperazin-1-yl)ethoxy]phenyl}-6-(4-fluorophenyl)thieno[2,3-*d*]pyrimidin-4-yl]oxy}-3-(2-{[2-(2-methoxyphenyl)pyrimidin-4-yl]methoxy}phenyl)propanoate.

22. Process for the preparation of a compound of formula (I) according to claim 1, characterised in that there is used as starting material the compound of formula (II):



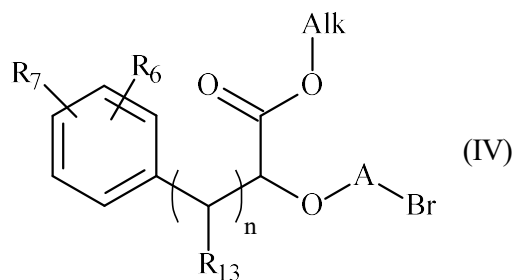
wherein A is as defined for formula (I) in which **1** is linked to the chlorine atom and **2** is linked to the bromine atom,

which compound of formula (II) is subjected to coupling with a compound of formula (III):



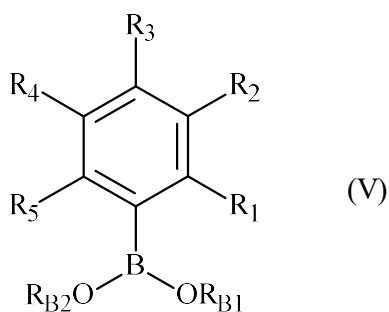
wherein R_6 , R_7 , R_{13} and n are as defined for formula (I), and Alk represents an optionally substituted linear or branched (C₁-C₆)alkyl group,

to yield the compound of formula (IV):



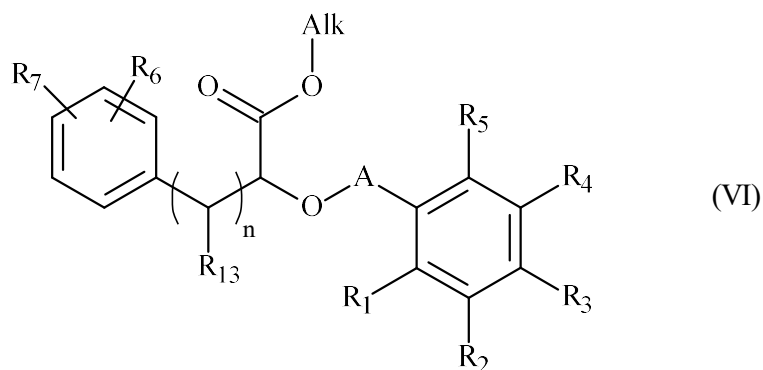
wherein R_6 , R_7 , R_{13} , A and n are as defined for formula (I), and Alk is as defined before,

5 compound of formula (IV) which is further subjected to coupling with compound of formula (V):



wherein R_1 , R_2 , R_3 , R_4 and R_5 are as defined for formula (I), and R_{B1} and R_{B2} represent a hydrogen atom, a linear or branched (C_1 - C_6) alkyl group, or R_{B1} and R_{B2} form with the oxygen carrying them an optionally methylated ring,

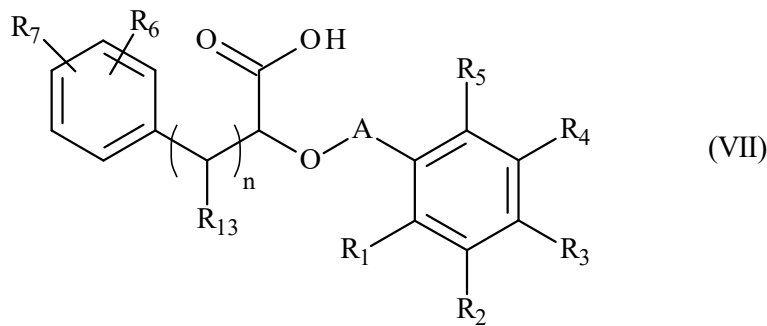
10 to yield the compound of formula (VI):



wherein R_1 , R_2 , R_3 , R_4 , R_5 , R_6 , R_7 , R_{13} , A and n are as defined for formula (I) and Alk

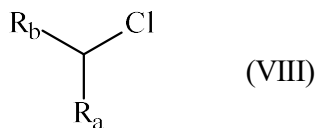
is as defined before,

the Alk-O-C(O)- ester function of which compound of formula (VI) is hydrolysed to yield the carboxylic acid of formula (VII):



5 wherein R₁, R₂, R₃, R₄, R₅, R₆, R₇, R₁₃, A and n are as defined for formula (I),

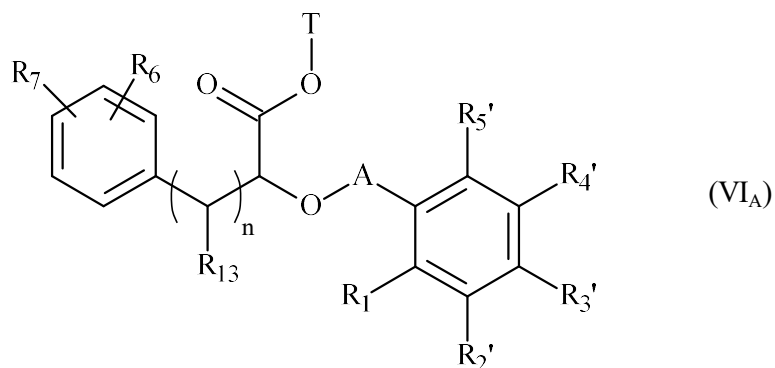
which is subjected to coupling with a compound of formula (VIII):



wherein R_a and R_b are as defined for formula (I),

10 to yield the compound of formula (I), which may be purified according to a conventional separation technique, which is converted, if desired, into its addition salts with a pharmaceutically acceptable acid or base and which is optionally separated into its isomers according to a conventional separation technique,
it being understood that at any moment considered appropriate during the course of the process described above, some groups (hydroxy, amino...) of the starting reagents or
15 of the synthesis intermediates can be protected, subsequently deprotected and functionalized, as required by the synthesis.

23. Compound of formula (VI_A), a particular case of compound of formula (VI) according to claim 22:



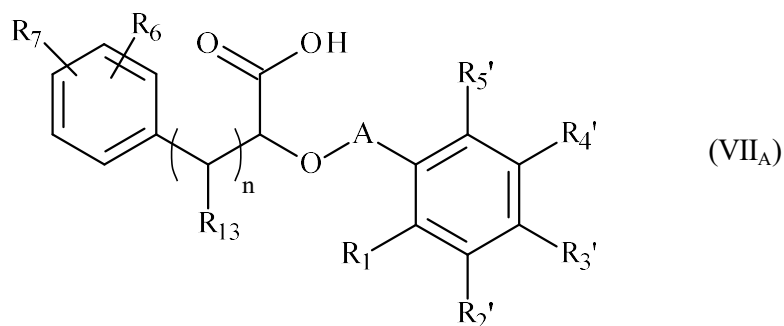
wherein:

- ◆ R₂', R₃', R₄' and R₅' independently of one another represent a halogen atom, a linear or branched (C₁-C₆)alkyl group, a linear or branched (C₂-C₆)alkenyl group, a linear or branched (C₂-C₆)alkynyl group, a linear or branched (C₁-C₆)polyhaloalkyl, a hydroxy group, a hydroxy(C₁-C₆)alkyl group, a linear or branched (C₁-C₆)alkoxy group, a -S-(C₁-C₆)alkyl group, a cyano group, a nitro group, -alkyl(C₀-C₆)-NR₉R₉', -O-alkyl(C₁-C₆)-NR₉R₉', -O-alkyl(C₁-C₆)-R₁₀, -C(O)-OR₉, -O-C(O)-R₉, -C(O)-NR₉R₉', -NR₉-C(O)-R₉', -NR₉-C(O)-OR₉', -alkyl(C₁-C₆)-NR₉-C(O)-R₉', -SO₂-NR₉R₉', -SO₂-alkyl(C₁-C₆),
- ◆ T represents a (C₁-C₆)alkyl group, a (C₁-C₆)carbonyloxy(C₁-C₆)alkyl group or a di(C₁-C₆)alkylaminocarbonyl(C₁-C₆)alkyl group,
- ◆ R₁, R₆, R₇, R₁₃, A and n are as defined for formula (I),

its enantiomers, diastereoisomers and atropisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

24. Compound of formula (VI_A) according to claim 23, wherein the substituents of the pair (R₁, R₅') are identical and the substituents of the pair (R₂', R₄') are identical.

25. Compound of formula (VII_A), a particular case of compound of formula (VII) according to claim 22:

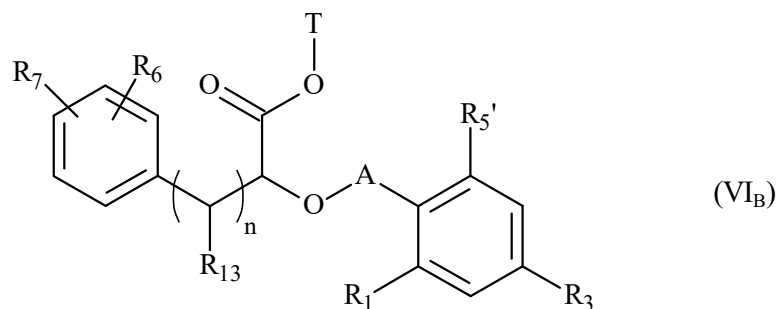


wherein:

- ◆ R₂', R₃', R₄' and R₅' independently of one another represent a halogen atom, a linear or branched (C₁-C₆)alkyl group, a linear or branched (C₂-C₆)alkenyl group, a linear or branched (C₂-C₆)alkynyl group, a linear or branched (C₁-C₆)polyhaloalkyl, a hydroxy group, a hydroxy(C₁-C₆)alkyl group, a linear or branched (C₁-C₆)alkoxy group, a -S-(C₁-C₆)alkyl group, a cyano group, a nitro group, -alkyl(C₀-C₆)-NR₉R₉', -O-alkyl(C₁-C₆)-NR₉R₉', -O-alkyl(C₁-C₆)-R₁₀, -C(O)-OR₉, -O-C(O)-R₉, -C(O)-NR₉R₉', -NR₉-C(O)-R₉', -NR₉-C(O)-OR₉', -alkyl(C₁-C₆)-NR₉-C(O)-R₉', -SO₂-NR₉R₉', -SO₂-alkyl(C₁-C₆),
- ◆ R₁, R₆, R₇, R₁₃, A and n are as defined for formula (I),

its enantiomers, diastereoisomers and atropisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

26. Compound of formula (VII_A) according to claim 25 wherein the substituents of the pair (R₁, R₅') are identical and the substituents of the pair (R₂', R₄') are identical.
27. Compound of formula (VII_A) according to claim 26, which is (2*R*)-2-{[5-{3,5-dichloro-2,6-dimethyl-4-[2-(4-methylpiperazin-1-yl)ethoxy]phenyl}-6-(4-fluorophenyl)thieno[2,3-*d*]pyrimidin-4-yl]oxy}-3-(2-{[2-(2-methoxyphenyl)pyrimidin-4-yl]methoxy}phenyl)propanoic acid.
28. Compound of formula (VI_B), a particular case of compound of formula (VI) according to claim 22:



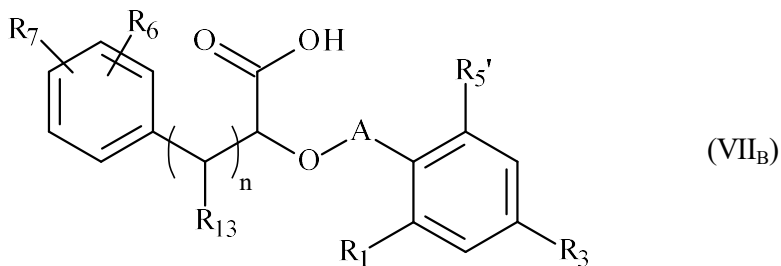
wherein:

- ◆ R₅' represents a halogen atom, a linear or branched (C₁-C₆)alkyl group, a linear or branched (C₂-C₆)alkenyl group, a linear or branched (C₂-C₆)alkynyl group, a linear or branched (C₁-C₆)polyhaloalkyl, a hydroxy group, a hydroxy(C₁-C₆)alkyl group, a linear or branched (C₁-C₆)alkoxy group, a -S-(C₁-C₆)alkyl group, a cyano group, a nitro group, -alkyl(C₀-C₆)-NR₉R₉', -O-alkyl(C₁-C₆)-NR₉R₉', -O-alkyl(C₁-C₆)-R₁₀, -C(O)-OR₉, -O-C(O)-R₉, -C(O)-NR₉R₉', -NR₉-C(O)-R₉', -NR₉-C(O)-OR₉', -alkyl(C₁-C₆)-NR₉-C(O)-R₉', -SO₂-NR₉R₉', -SO₂-alkyl(C₁-C₆),
- ◆ T represents a (C₁-C₆)alkyl group, a (C₁-C₆)carbonyloxy(C₁-C₆)alkyl group or a di(C₁-C₆)alkylaminocarbonyl(C₁-C₆)alkyl group,
- ◆ R₁, R₃, R₆, R₇, R₁₃, A and n are as defined for formula (I),

and wherein the substituents of the pair (R₁, R₅') are identical,

its enantiomers, diastereoisomers and atropisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

29. Compound of formula (VII_B), a particular case of compound of formula (VII) according to claim 22:



wherein:

- ◆ R₅' represents a halogen atom, a linear or branched (C₁-C₆)alkyl group, a linear or branched (C₂-C₆)alkenyl group, a linear or branched (C₂-C₆)alkynyl group, a linear or branched (C₁-C₆)polyhaloalkyl, a hydroxy group, a hydroxy(C₁-C₆)alkyl group, a linear or branched (C₁-C₆)alkoxy group, a -S-(C₁-C₆)alkyl group, a cyano group, a nitro group, -alkyl(C₀-C₆)-NR₉R₉', -O-alkyl(C₁-C₆)-NR₉R₉', -O-alkyl(C₁-C₆)-R₁₀, -C(O)-OR₉, -O-C(O)-R₉, -C(O)-NR₉R₉', -NR₉-C(O)-R₉', -NR₉-C(O)-OR₉', -alkyl(C₁-C₆)-NR₉-C(O)-R₉', -SO₂-NR₉R₉', -SO₂-alkyl(C₁-C₆),
- ◆ R₁, R₃, R₆, R₇, R₁₃, A and n are as defined for formula (I),

and wherein the substituents of the pair (R₁, R₅') are identical,

its enantiomers, diastereoisomers and atropisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

30. Compound of formula (VII_B) according to claim 29, which is (2*R*)-2-{[5-{2,6-dimethyl-4-[2-(4-methylpiperazin-1-yl)ethoxy]phenyl}-6-(4-fluorophenyl)thieno[2,3-*d*]pyrimidin-4-yl]oxy}-3-(2-{[2-(2-methoxyphenyl)pyrimidin-4-yl]methoxy}phenyl)propanoic acid.

31. Pharmaceutical composition comprising a compound of formulae (I), (VI_A), (VI_B), (VII_A) or (VII_B), according to any one of claims 1 to 21 or claims 23 to 30, or an addition salt thereof with a pharmaceutically acceptable acid or base in combination with one or more pharmaceutically acceptable excipients.

32. Pharmaceutical composition according to claim 31 for use as pro-apoptotic agents.

33. Pharmaceutical composition according to claim 32 for use in the treatment of cancers and of auto-immune and immune system diseases.

34. Pharmaceutical composition according to claim 33 for use in the treatment of cancers of the bladder, brain, breast and uterus, chronic lymphoid leukaemias, cancer of the

colon, oesophagus and liver, lymphoblastic leukaemias, acute myeloid leukaemias, lymphomas, melanomas, malignant haemopathies, myelomas, ovarian cancer, non-small-cell lung cancer, prostate cancer, pancreatic cancer and small-cell lung cancer.

- 5 **35.** Use of a pharmaceutical composition according to claim 31 in the manufacture of medicaments for use as pro-apoptotic agents.
- 36.** Use of a pharmaceutical composition according to claim 31 in the manufacture of medicaments for use in the treatment of cancers and of auto-immune and immune system diseases.
- 10 **37.** Use of a pharmaceutical composition according to claim 31 in the manufacture of medicaments for use in the treatment of cancers of the bladder, brain, breast and uterus, chronic lymphoid leukaemias, cancer of the colon, oesophagus and liver, lymphoblastic leukaemias, acute myeloid leukaemias, lymphomas, melanomas, malignant haemopathies, myelomas, ovarian cancer, non-small-cell lung cancer, prostate cancer, pancreatic cancer and small-cell lung cancer.
- 15 **38.** Compound of formulae (I), (VI_A), (VI_B), (VII_A) or (VII_B), according to any one of claims 1 to 21 or claims 23 to 30, or an addition salt thereof with a pharmaceutically acceptable acid or base, for use as pro-apoptotic agents.
- 20 **39.** Compound of formulae (I), (VI_A), (VI_B), (VII_A) or (VII_B), according to any one of claims 1 to 21 or claims 23 to 30, or an addition salt thereof with a pharmaceutically acceptable acid or base, for use in the treatment of cancers of the bladder, brain, breast and uterus, chronic lymphoid leukaemias, cancer of the colon, oesophagus and liver, lymphoblastic leukaemias, acute myeloid leukaemias, lymphomas, melanomas, malignant haemopathies, myelomas, ovarian cancer, non-small-cell lung cancer, prostate cancer, pancreatic cancer and small-cell lung cancer.
- 25 **40.** Use of a compound of formulae (I), (VI_A), (VI_B), (VII_A) or (VII_B), according to any one of claims 1 to 21 or claims 23 to 30, or an addition salt thereof with a

pharmaceutically acceptable acid or base, in the manufacture of medicaments for use in the treatment of cancers of the bladder, brain, breast and uterus, chronic lymphoid leukaemias, cancer of the colon, oesophagus and liver, lymphoblastic leukaemias, acute myeloid leukaemias, lymphomas, melanomas, malignant haemopathies, myelomas, ovarian cancer, non-small-cell lung cancer, prostate cancer, pancreatic cancer and small-cell lung cancer.

41. Combination of a compound of formulae (I), (VI_A), (VI_B), (VII_A) or (VII_B), according to any one of claims 1 to 21 or claims 23 to 30, with an anti-cancer agent selected from genotoxic agents, mitotic poisons, anti-metabolites, proteasome inhibitors, kinase inhibitors and antibodies.

42. Pharmaceutical composition comprising a combination according to claim 41 in combination with one or more pharmaceutically acceptable excipients.

43. Combination according to claim 41 for use in the treatment of cancers.

44. Use of a combination according to claim 41 in the manufacture of medicaments for use in the treatment of cancers.

45. Compound of formulae (I), (VI_A), (VI_B), (VII_A) or (VII_B), according to any one of claims 1 to 21 or claims 23 to 30, for use in the treatment of cancers requiring radiotherapy.