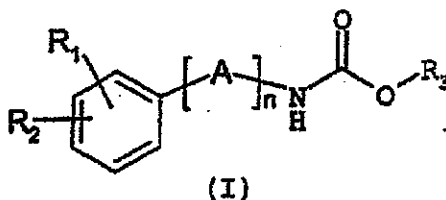


Arylalkylcarbamate derivatives, preparation method thereof and use of same in therapeutics

The invention relates to arylalkylcarbamate derivatives, to the preparation thereof and to the use thereof in therapeutics.

Such use may be for treatment of diseases and conditions for example pain, in particular acute or chronic pain of neurogenic type. Research has been carried out into compounds having the ability to prevent or to treat pathologies in which endogenous cannabinoids and/or any other substrates metabolized by the fatty acid amido hydrolase (FAAH) enzyme are involved. For example, an international application WO 03/065989 A2 (Bristol-Myers Squibb Company, 2003) discloses a compound of oxime carbamoyl derivatives which inhibit FAAH.

The compounds of the present invention correspond to general formula (I):



in which

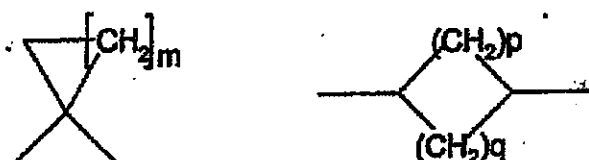
n represents an integer between 1 and 6;

A is chosen from one or more groups X, Y and/or Z;

X represents a C₁₋₂-alkylene group optionally substituted with one or more C₁₋₁₂-alkyl, C₃₋₇-cycloalkyl or C₃₋₇-cycloalkyl-C₁₋₆-alkylene groups;

Y represents a C₂-alkenylene group optionally substituted with one or more C₁₋₁₂-alkyl, C₃₋₇-cycloalkyl or C₃₋₇-cycloalkyl-C₁₋₆-alkylene groups; or a group -C≡C-;

Z represents a C₃₋₇-cycloalkyl group of formula:



m represents an integer ranging from 1 to 5;

p and q represent integers and are defined such that p+q is a number ranging from 1 to 5;

R₁ represents a hydrogen atom, a halogen atom, or a hydroxyl, cyano, nitro, C₁₋₃-alkyl, C₁₋₃-alkoxy, C₁₋₃-thioalkyl, C₁₋₃-fluoroalkyl, C₁₋₃-fluoroalkoxy or C₁₋₃-

fluorothioalkyl group;

R₂ represents

a hydrogen atom, a halogen atom,

or a cyano, nitro, hydroxyl, C₁₋₃-alkyl, C₁₋₃-alkoxy,

5 C₁₋₃-thioalkyl, C₁₋₃-fluoroalkyl, C₁₋₃-fluoroalkoxy or C₁₋₃-fluorothioalkyl group;

or a group chosen from a phenyl, naphthalenyl, biphenyl, phenylethylenyl, naphthylethylenyl,

pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl,

10 triazinyl, indanyl, indenyl, quinolinyl, isoquinolinyl,

quinazolinyl, quinoxalinyl, phthalazinyl, cinnolinyl,

thienyl, furyl, pyrrolyl, imidazolyl, pyrazolyl,

oxazolyl, thiazolyl, isoxazolyl, isothiazolyl,

thiadiazolyl, oxadiazolyl, triazolyl, benzothienyl,

15 benzofuryl, dibenzofuryl, benzimidazolyl, benzo-

triazolyl, indolyl, isoindolyl, indazolyl,

benzoxazolyl, benzisoxazolyl, benzothiazolyl, benziso-

thiazolyl, dihydroindolyl, pyrrolopyridinyl, furo-

pyridinyl, thienopyridinyl, imidazopyridinyl,

20 oxazolopyridinyl, thiazolopyridinyl, pyrazolopyridinyl,

isoxazolopyridinyl, isothiazolopyridinyl, tetrahydro-

quinolinyl, tetrahydroisoquinolinyl, phenyloxy,

phenylthio, phenylsulfonyl, benzoyl, phenylmethoxy,

phenylethoxy, phenylpropoxy, naphthalenyloxy,

25 naphthalenylmethoxy, naphthalenylethoxy, naphthalenyl-

propoxy, quinolinoxy and isoquinolinoxy, and optionally

substituted with one or more substituents chosen from a

halogen atom, and the following groups: hydroxyl,

cyano, nitro, C₁₋₄-alkyl, C₁₋₄-alkoxy, C₁₋₄-thioalkyl,

30 C₁₋₃-fluoroalkyl, C₁₋₃-fluoroalkoxy, C₁₋₃-fluorothioalkyl,

phenyloxy, benzyloxy, piperidyl, pyrrolidinyl,

morpholinyl, NH₂, NHR₆, NR₆R₇, NHCOR₆, COR₆, CO₂R₆, SO₂R₆,

-O-(C₁₋₃-alkylene)-O-, 4-piperazinyl optionally

substituted with a C₁₋₃-alkyl or with a benzyl;

35 R₃ represents

either a 2,2,2-trifluoroethyl group,

or a phenyl group optionally substituted with one or more halogen atoms or cyano, nitro, C₁₋₃-alkyl, C₁₋₃-alkoxy, trifluoromethyl or trifluoromethoxy groups,

and

R₆ and R₇ represent, independently of one another, a C₁₋₃-alkyl group or a phenyl.

- 5 In the context of the invention, the compounds of general formula (I) can therefore comprise several groups A which may be identical to or different from one another.
- 10 The following compounds are not part of the invention:
- 2,2,2-trifluoroethyl benzylcarbamate;
 - 2,2,2-trifluoroethyl 4-methoxybenzylcarbamate;
 - 4-nitrophenyl 2-[4-(phenylmethoxy)phenyl]ethyl-
 - carbamate;
 - 15 - 4-chloro-2-nitrophenyl 2-(4-(chlorophenyl)ethyl-
 - carbamate;
 - 4-nitrophenyl 2-(3,4-dimethoxyphenyl)ethylcarbamate;
 - phenyl 2-(3,4-dimethoxyphenyl)ethylcarbamate;
 - 4-cyanophenyl 2-(4-methylphenyl)ethylcarbamate;
 - 20 - 2,4,5-trichlorophenyl 2-(4-chlorophenyl)ethyl-
 - carbamate;
 - phenyl 4-chlorobenzylcarbamate;
 - phenyl 4-methoxybenzylcarbamate;
 - 4-fluorophenyl 2-(4-methoxyphenyl)ethylcarbamate;
 - 25 - phenyl 3-nitrobenzylcarbamate;
 - 4-cyanophenyl 4-methoxybenzylcarbamate;
 - phenyl 3-chlorobenzylcarbamate;
 - phenyl 3,4-dichlorobenzylcarbamate;
 - 4-nitrophenyl 2-(4-hydroxyphenyl)ethylcarbamate;
 - 30 - phenyl 2-[4-(2-ethyl-5,7-dimethyl-3H-imidazo-
 - [4,5-b]pyridin-3-yl)phenyl]ethylcarbamate;
 - phenyl 2-[4-(3-thienyl)phenyl]propylcarbamate;
 - phenyl 2-[4-(2-amino-4-thiazolyl)phenyl]ethyl-
 - carbamate;
 - 35 - 2,3,4,5,6-pentafluorophenyl 4-bromobenzylcarbamate.

Among the compounds of general formula (I), a first subgroup of compounds consists of the compounds for which:

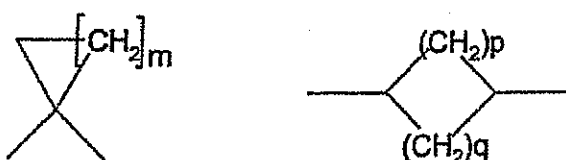
n represents an integer between 1 and 6;

A is chosen from one or more groups X, Y and/or Z;

X represents a C₁₋₂-alkylene group optionally substituted with one or more C₁₋₁₂-alkyl, C₃₋₇-cycloalkyl or C₃₋₇-cycloalkyl-C₁₋₆-alkylene groups;

Y represents a C₂-alkenylene group optionally substituted with one or more C₁₋₁₂-alkyl, C₃₋₇-cycloalkyl or C₃₋₇-cycloalkyl-C₁₋₆-alkylene groups; or a group -C≡C-;

Z represents a C₃₋₇-cycloalkyl group of formula:



m represents an integer ranging from 1 to 5;

p and q represent integers and are defined such that p+q is a number ranging from 1 to 5;

R₁ represents a hydrogen atom, a halogen atom, or a hydroxyl, cyano, nitro, C₁₋₃-alkyl, C₁₋₃-alkoxy, C₁₋₃-thioalkyl, C₁₋₃-fluoroalkyl, C₁₋₃-fluoroalkoxy or C₁₋₃-fluorothioalkyl group;

R₂ represents

a halogen atom, or a nitro, hydroxyl, C₁₋₃-alkyl or C₁₋₃-alkoxy group; and

R₃ represents

either a 2,2,2-trifluoroethyl group,

or a phenyl group optionally substituted with one or more halogen atoms, or cyano, nitro, C₁₋₃-alkyl, C₁₋₃-alkoxy, trifluoromethyl or trifluoromethoxy groups.

The following compounds are not part of the first subgroup of compounds above:

- 2,2,2-trifluoroethyl 4-methoxybenzylcarbamate;

- 4-chloro-2-nitrophenyl 2-(4-chlorophenyl)ethylcarbamate;

- 4-nitrophenyl 2-(3,4-dimethoxyphenyl)ethylcarbamate;

- phenyl 2-(3,4-dimethoxyphenyl)ethylcarbamate;

- 4-cyanophenyl 2-(4-methylphenyl)ethylcarbamate;
- 2,4,5-trichlorophenyl 2-(4-chlorophenyl)ethyl-
- carbamate;
- phenyl 4-chlorobenzylcarbamate;
- 5 - phenyl 4-methoxybenzylcarbamate;
- 4-fluorophenyl 2-(4-methoxyphenyl)ethylcarbamate;
- phenyl 3-nitrobenzylcarbamate;
- 4-cyanophenyl 4-methoxybenzylcarbamate;
- phenyl 3-chlorobenzylcarbamate;
- 10 - phenyl 3,4-dichlorobenzylcarbamate;
- 4-nitrophenyl 2-(4-hydroxyphenyl)ethylcarbamate;
- 2,3,4,5,6-pentafluorophenyl 4-bromobenzylcarbamate.

Among the compounds of the general formula (I), a
 15 second subgroup of compounds consists of the compounds
 for which:

n represents an integer between 1 and 6;

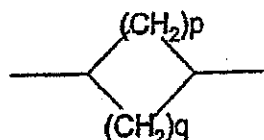
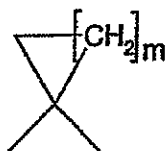
A is chosen from one or more groups X, Y and/or Z;

X represents a C₁₋₂-alkylene group optionally
 20 substituted with one or more C₁₋₁₂-alkyl, C₃₋₇-cycloalkyl
 or C₃₋₇-cycloalkyl-C₁₋₆-alkylene groups;

Y represents a C₂-alkenylene group optionally
 substituted with one or more C₁₋₁₂-alkyl, C₃₋₇-cycloalkyl
 or C₃₋₇-cycloalkyl-C₁₋₆-alkylene groups; or a group

25 -C≡C-;

Z represents a C₃₋₇-cycloalkyl group of formula:



30 m represents an integer ranging from 1 to 5;

p and q represent integers and are defined such that
 p+q is a number ranging from 1 to 5;

R₁ represents a hydrogen atom, a halogen atom, or a
 hydroxyl, cyano, nitro, C₁₋₃-alkyl, C₁₋₃-alkoxy, C₁₋₃-
 35 thioalkyl, C₁₋₃-fluoroalkyl, C₁₋₃-fluoroalkoxy or C₁₋₃-
 fluorothioalkyl group;

R₂ represents

a hydrogen atom, or a cyano, C₁₋₃-thioalkyl, C₁₋₃-fluoroalkyl, C₁₋₃-fluoroalkoxy or C₁₋₃-fluorothioalkyl group,

- 5 or a group chosen from a phenyl, naphthalenyl, biphenyl, phenylethylenyl, naphthylethylenyl, pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl, triazinyl, indanyl, indenyl, quinolinyl, isoquinolinyl, quinazolinyl, quinoxalinyl, phthalazinyl, cinnolinyl, 10 thienyl, furyl, pyrrolyl, imidazolyl, pyrazolyl, oxazolyl, thiazolyl, isoxazolyl, isothiazolyl, thiadiazolyl, oxadiazolyl, triazolyl, benzothienyl, benzofuryl, dibenzofuryl, benzimidazolyl, benzo- triazolyl, indolyl, isoindolyl, indazolyl, 15 benzoxazolyl, benzisoxazolyl, benzothiazolyl, benziso- thiazolyl, dihydroindolyl, pyrrolopyridinyl, furo- pyridinyl, thienopyridinyl, imidazopyridinyl, oxazolopyridinyl, thiazolopyridinyl, pyrazolopyridinyl, isoxazolopyridinyl, isothiazolopyridinyl, tetrahydro- 20 quinolinyl, tetrahydroisoquinolinyl, phenyloxy, phenylthio, phenylsulfonyl, benzoyl, phenylmethoxy, phenylethoxy, phenylpropoxy, naphthalenyloxy, naphthalenylmethoxy, naphthalenylethoxy, naphthalenyl- propoxy, quinolinoxy and isoquinolinoxy, and optionally 25 substituted with one or more substituents chosen from a halogen atom, and the following groups: hydroxyl, cyano, nitro, C₁₋₄-alkyl, C₁₋₄-alkoxy, C₁₋₄-thioalkyl, C₁₋₃-fluoroalkyl, C₁₋₃-fluoroalkoxy, C₁₋₃-fluorothioalkyl, phenyloxy, benzyloxy, piperidyl, pyrrolidinyl, 30 morpholinyl, NH₂, NHR₆, NR₆R₇, NHCOR₆, COR₆, CO₂R₆, SO₂R₆, -O-(C₁₋₃-alkylene)-O-, 4-piperazinyl optionally substituted with a C₁₋₃-alkyl or with a benzyl;

R₃ represents

either a 2,2,2-trifluoroethyl group,

- 35 or a phenyl group optionally substituted with one or more halogen atoms or cyano, nitro, C₁₋₃-alkyl, C₁₋₃-alkoxy, trifluoromethyl or trifluoromethoxy groups, and

R₆ and R₇ represent, independently of one another, a

C₁₋₃-alkyl group or a phenyl.

The following compounds are not part of the second subgroup of compounds above:

- 5 - 2,2,2-trifluoroethyl benzylcarbamate;
- 4-nitrophenyl 2-[4-(phenylmethoxy)phenyl]ethylcarbamate;
- phenyl 2-[4-(2-ethyl-5,7-dimethyl-3H-imidazo[4,5-b]-pyridin-3-yl)phenyl]ethylcarbamate;
- 10 - phenyl 2-[4-(3-thienyl)phenyl]propylcarbamate;
- phenyl 2-[4-(2-amino-4-thiazolyl)phenyl]ethylcarbamate.

Among the compounds of general formula (I), a first family of compounds consists of the compounds for which:

n represents an integer between 1 and 6;

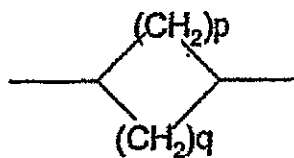
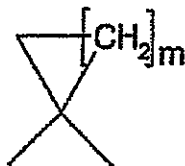
A is chosen from one or more groups X, Y and/or Z;

X represents a C₁₋₂-alkylene group optionally substituted with one or more C₁₋₁₂-alkyl, C₃₋₇-cycloalkyl or C₃₋₇-cycloalkyl-C₁₋₆-alkylene groups;

Y represents a C₂-alkenylene group optionally substituted with one or more C₁₋₁₂-alkyl, C₃₋₇-cycloalkyl or C₃₋₇-cycloalkyl-C₁₋₆-alkylene groups; or a group

25 -C≡C-;

Z represents a C₃₋₇-cycloalkyl group of formula:



30 m represents an integer ranging from 1 to 5;

p and q represent integers and are defined such that p+q is a number ranging from 1 to 5;

R₁ represents a hydrogen atom, a halogen atom, or a hydroxyl, cyano, nitro, C₁₋₃-alkyl, C₁₋₃-alkoxy, C₁₋₃-

35 thioalkyl, C₁₋₃-fluoroalkyl, C₁₋₃-fluoroalkoxy or C₁₋₃-

fluorothioalkyl group;

R₂ represents

a hydrogen atom, a halogen atom,
or a cyano, nitro, hydroxyl, C₁₋₃-alkyl, C₁₋₃-alkoxy,
5 C₁₋₃-thioalkyl, C₁₋₃-fluoroalkyl, C₁₋₃-fluoroalkoxy or
C₁₋₃-fluorothioalkyl group,
or a group chosen from a phenyl, naphthalenyl,
biphenyl, phenylethylenyl, naphthylethylenyl,
pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl,
10 triazinyl, indanyl, indenyl, quinolinyl, isoquinolinyl,
quinazolinyl, quinoxalinyl, phthalazinyl, cinnolinyl,
thienyl, furyl, pyrrolyl, imidazolyl, pyrazolyl,
oxazolyl, thiazolyl, isoxazolyl, isothiazolyl,
thiadiazolyl, oxadiazolyl, triazolyl, benzothienyl,
15 benzofuryl, dibenzofuryl, benzimidazolyl, benzo-
triazolyl, indolyl, isoindolyl, indazolyl,
benzoxazolyl, benzisoxazolyl, benzothiazolyl, benziso-
thiazolyl, dihydroindolyl, pyrrolopyridinyl, furo-
pyridinyl, thienopyridinyl, imidazopyridinyl,
20 oxazolopyridinyl, thiazolopyridinyl, pyrazolopyridinyl,
isoxazolopyridinyl, isothiazolopyridinyl, tetrahydro-
quinolinyl, tetrahydroisoquinolinyl, phenyloxy,
phenylthio, phenylsulfonyl, benzoyl, phenylmethoxy,
phenylethoxy, phenylpropoxy, naphthalenyloxy,
25 naphthalenylmethoxy, naphthalenylethoxy, naphthalenyl-
propoxy, quinolinoxy and isoquinolinoxy, and optionally
substituted with one or more substituents chosen from a
halogen atom, and the following groups: hydroxyl,
cyano, nitro, C₁₋₄-alkyl, C₁₋₄-alkoxy, C₁₋₄-thioalkyl,
30 C₁₋₃-fluoroalkyl, C₁₋₃-fluoroalkoxy, C₁₋₃-fluorothioalkyl,
phenyloxy, benzyloxy, piperidyl, pyrrolidinyl,
morpholinyl, NH₂, NHR₆, NR₆R₇, NHCOR₆, COR₆, CO₂R₆, SO₂R₆,
-O-(C₁₋₃-alkylene)-O-, 4-piperazinyl optionally
substituted with a C₁₋₃-alkyl or with a benzyl;

35 R₃ represents

either a 2,2,2-trifluoroethyl group,

or a phenyl group optionally substituted with one or
more halogen atoms or cyano, nitro, C₁₋₃-alkyl, C₁₋₃-
alkoxy, trifluoromethyl or trifluoromethoxy groups,

and

R₆ and R₇ represent, independently of one another, a C₁₋₃-alkyl group or a phenyl;

on the condition that

- 5 when R₃ represents a phenyl group,
if A represents a propylene, then R₂ does not represent a thienyl.

The following compounds are not part of the first
10 family of compounds defined above:

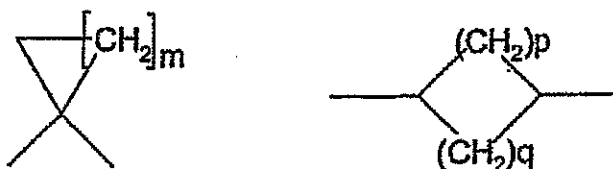
- 2,2,2-trifluoroethyl benzylcarbamate;
- 2,2,2-trifluoroethyl 4-methoxybenzylcarbamate;
- 4-nitrophenyl 2-[4-(phenylmethoxy)phenyl]ethyl-
- carbamate;
- 15 - 4-chloro-2-nitrophenyl 2-(4-(chlorophenyl)ethyl-
- carbamate;
- 4-nitrophenyl 2-(3,4-dimethoxyphenyl)ethylcarbamate;
- phenyl 2-(3,4-dimethoxyphenyl)ethylcarbamate;
- 4-cyanophenyl 2-(4-methylphenyl)ethylcarbamate;
- 20 - 2,4,5-trichlorophenyl 2-(4-chlorophenyl)ethyl-
- carbamate;
- phenyl 4-chlorobenzylcarbamate;
- phenyl 4-methoxybenzylcarbamate;
- 4-fluorophenyl 2-(4-methoxyphenyl)ethylcarbamate;
- 25 - phenyl 3-nitrobenzylcarbamate;
- 4-cyanophenyl 4-methoxybenzylcarbamate;
- phenyl 3-chlorobenzylcarbamate;
- phenyl 3,4-dichlorobenzylcarbamate;
- 4-nitrophenyl 2-(4-hydroxyphenyl)ethylcarbamate;
- 30 - phenyl 2-[4-(2-ethyl-5,7-dimethyl-3H-imidazo-
- [4,5-b]pyridin-3-yl)phenyl]ethylcarbamate;
- phenyl 2-[4-(2-amino-4-thiazolyl)phenyl]ethyl-
- carbamate;
- 2,3,4,5,6-pentafluorophenyl 4-bromobenzylcarbamate.

35

Among the compounds of general formula (I), a second family of compounds consists of the compounds for which:

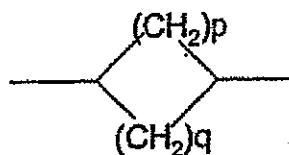
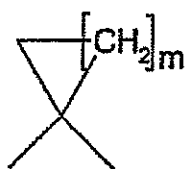
- when R₃ represents a 2,2,2-trifluoroethyl group, then

- n represents an integer between 1 and 6;
 A is chosen from one or more groups X, Y and/or Z;
 X represents a C₁₋₂-alkylene group optionally substituted with one or more C₁₋₁₂-alkyl, C₃₋₇-cycloalkyl
 5 or C₃₋₇-cycloalkyl-C₁₋₆-alkylene groups;
 Y represents a C₂-alkenylene group optionally substituted with one or more C₁₋₁₂-alkyl, C₃₋₇-cycloalkyl or C₃₋₇-cycloalkyl-C₁₋₆-alkylene groups; or a group -C≡C-;
 10 Z represents a C₃₋₇-cycloalkyl group of formula:



- m represents an integer ranging from 1 to 5;
 15 p and q represent integers and are defined such that p+q is a number ranging from 1 to 5;
 R₁ represents a hydrogen atom, a halogen atom, or a hydroxyl, cyano, nitro, C₁₋₃-alkyl, C₁₋₃-alkoxy, C₁₋₃-thioalkyl, C₁₋₃-fluoroalkyl, C₁₋₃-fluoroalkoxy or C₁₋₃-fluorothioalkyl group;
 20 R₂ represents
 a hydrogen atom, a halogen atom,
 or a cyano, nitro, hydroxyl, C₁₋₃-alkyl, C₁₋₃-alkoxy, C₁₋₃-thioalkyl, C₁₋₃-fluoroalkyl, C₁₋₃-fluoroalkoxy or
 25 C₁₋₃-fluorothioalkyl group,
 or a group chosen from a phenyl, naphthalenyl, biphenyl, phenylethylenyl, naphthylethylenyl, pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl, triazinyl, indanyl, indenyl, quinolinyl, isoquinolinyl,
 30 quinazolinyl, quinoxalinyl, phthalazinyl, cinnolinyl, thienyl, furyl, pyrrolyl, imidazolyl, pyrazolyl, oxazolyl, thiazolyl, isoxazolyl, isothiazolyl, thiadiazolyl, oxadiazolyl, triazolyl, benzothienyl, benzofuryl, dibenzofuryl, benzimidazolyl, benzo-
 35 triazolyl, indolyl, isoindolyl, indazolyl,

- benzoxazolyl, benzisoxazolyl, benzothiazolyl, benzisothiazolyl, dihydroindolyl, pyrrolopyridinyl, furopyridinyl, thienopyridinyl, imidazopyridinyl, oxazolopyridinyl, thiazolopyridinyl, pyrazolopyridinyl, isoxazolopyridinyl, isothiazolopyridinyl, tetrahydroquinolinyl, tetrahydroisoquinolinyl, phenyloxy, phenylthio, phenylsulfonyl, benzoyl, phenylmethoxy, phenylethoxy, phenylpropoxy, naphthalenyloxy, naphthalenylmethoxy, naphthalenylethoxy, naphthalenylpropoxy, quinolinoxy and isoquinolinoxy, and optionally substituted with one or more substituents chosen from a halogen atom, and the following groups: hydroxyl, cyano, nitro, C₁₋₄-alkyl, C₁₋₄-alkoxy, C₁₋₄-thioalkyl, C₁₋₃-fluoroalkyl, C₁₋₃-fluoroalkoxy, C₁₋₃-fluorothioalkyl, phenyloxy, benzyloxy, piperidyl, pyrrolidinyl, morpholinyl, NH₂, NHR₆, NR₆R₇, NHCOR₆, COR₆, CO₂R₆, SO₂R₆, -O-(C₁₋₃-alkylene)-O-, 4-piperazinyl optionally substituted with a C₁₋₃-alkyl or with a benzyl; and R₆ and R₇ represent, independently of one another, a C₁₋₃-alkyl group or a phenyl;
- when R₃ represents a phenyl group optionally substituted with one or more halogen atoms, or cyano, nitro, C₁₋₃-alkyl, C₁₋₃-alkoxy, trifluoromethyl or trifluoromethoxy groups, then
- n represents an integer between 1 and 6;
- A is chosen from one or more groups X, Y and/or Z;
- X represents a C₁₋₂-alkylene group optionally substituted with one or more C₁₋₁₂-alkyl, C₃₋₇-cycloalkyl or C₃₋₇-cycloalkyl-C₁₋₆-alkylene groups;
- Y represents a C₂-alkenylene group optionally substituted with one or more C₁₋₁₂-alkyl, C₃₋₇-cycloalkyl or C₃₋₇-cycloalkyl-C₁₋₆-alkylene groups; or a group -C≡C-;
- Z represents a C₃₋₇-cycloalkyl group of formula:



m represents an integer ranging from 1 to 5;

p and q represent integers and are defined such that

5 p+q is a number ranging from 1 to 5;

R₁ represents a hydrogen atom, a halogen atom, or a hydroxyl, cyano, nitro, C₁₋₃-alkyl, C₁₋₃-alkoxy, C₁₋₃-thioalkyl, C₁₋₃-fluoroalkyl, C₁₋₃-fluoroalkoxy or C₁₋₃-fluorothioalkyl group;

10 R₂ represents

a hydrogen atom, a halogen atom,

or a cyano, nitro, hydroxyl, C₁₋₃-alkyl, C₁₋₃-alkoxy, C₁₋₃-thioalkyl, C₁₋₃-fluoroalkyl, C₁₋₃-fluoroalkoxy or C₁₋₃-fluorothioalkyl group,

15 or a group chosen from a phenyl, naphthalenyl, biphenyl, phenylethylenyl, naphthylethylenyl, pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl, triazinyl, indanyl, indenyl, quinolinyl, isoquinolinyl, quinazolinyl, quinoxalinyl, phthalazinyl, cinnolinyl,

20 furyl, pyrrolyl, imidazolyl, pyrazolyl, oxazolyl, thiazolyl, isoxazolyl, isothiazolyl, thiadiazolyl, oxadiazolyl, triazolyl, benzothienyl, benzofuryl, dibenzofuryl, benzimidazolyl, benzotriazolyl, indolyl, isoindolyl, indazolyl, benzoxazolyl, benzisoxazolyl, benzothiazolyl, benzisothiazolyl, dihydroindolyl, pyrrolopyridinyl, furopyridinyl, thienopyridinyl, imidazopyridinyl, oxazolopyridinyl, thiazolopyridinyl, pyrazolopyridinyl, isoxazolopyridinyl, isothiazolopyridinyl, tetrahydroquinolinyl,

30 tetrahydroisoquinolinyl, phenyloxy, phenylthio, phenylsulfonyl, benzoyl, phenylmethoxy, phenylethoxy, phenylpropoxy, naphthalenyloxy, naphthalenylmethoxy, naphthalenylethoxy, naphthalenylpropoxy, quinolinoxy and isoquinolinoxy, and optionally substituted with one
35 or more substituents chosen from a halogen atom, and

the following groups: hydroxyl, cyano, nitro, C₁₋₄-alkyl, C₁₋₄-alkoxy, C₁₋₄-thioalkyl, C₁₋₃-fluoroalkyl, C₁₋₃-fluoroalkoxy, C₁₋₃-fluorothioalkyl, phenyloxy, benzyloxy, piperidyl, pyrrolidinyl, morpholinyl, NH₂,
5 NHR₆, NR₆R₇, NHCOR₆, COR₆, CO₂R₆, SO₂R₆, -O-(C₁₋₃-alkylene)-O-, 4-piperazinyl optionally substituted with a C₁₋₃-alkyl or with a benzyl; and
R₆ and R₇ represent, independently of one another, a C₁₋₃-alkyl group or a phenyl.

10

The following compounds are not part of the second family of compounds defined above:

- 2,2,2-trifluoroethyl benzylcarbamate;
- 2,2,2-trifluoroethyl 4-methoxybenzylcarbamate;
- 15 - 4-nitrophenyl 2-[4-(phenylmethoxy)phenyl]ethylcarbamate;
- 4-chloro-2-nitrophenyl 2-(4-(chlorophenyl)ethylcarbamate;
- 4-nitrophenyl 2-(3,4-dimethoxyphenyl)ethylcarbamate;
- 20 - phenyl 2-(3,4-dimethoxyphenyl)ethylcarbamate;
- 4-cyanophenyl 2-(4-methylphenyl)ethylcarbamate;
- 2,4,5-trichlorophenyl 2-(4-chlorophenyl)ethylcarbamate;
- phenyl 4-chlorobenzylcarbamate;
- 25 - phenyl 4-methoxybenzylcarbamate;
- 4-fluorophenyl 2-(4-methoxyphenyl)ethylcarbamate;
- phenyl 3-nitrobenzylcarbamate;
- 4-cyanophenyl 4-methoxybenzylcarbamate;
- phenyl 3-chlorobenzylcarbamate;
- 30 - phenyl 3,4-dichlorobenzylcarbamate;
- 4-nitrophenyl 2-(4-hydroxyphenyl)ethylcarbamate;
- phenyl 2-[4-(2-ethyl-5,7-dimethyl-3H-imidazo-[4,5-b]pyridin-3-yl)phenyl]ethylcarbamate;
- phenyl 2-[4-(2-amino-4-thiazolyl)phenyl]ethylcarbamate;
- 35 carbamate;
- 2,3,4,5,6-pentafluorophenyl 4-bromobenzylcarbamate.

Among the compounds of general formula (I), a third family of compounds consists of the compounds for

which:

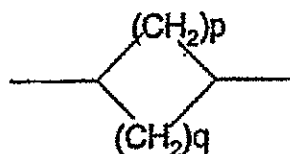
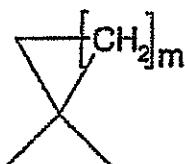
n represents an integer between 1 and 6;

A is chosen from one or more groups X, Y and/or Z;

X represents a C₁₋₂-alkylene group optionally
5 substituted with one or more C₁₋₁₂-alkyl, C₃₋₇-cycloalkyl
or C₃₋₇-cycloalkyl-C₁₋₆-alkylene groups;

Y represents a C₂-alkenylene group optionally
substituted with one or more C₁₋₁₂-alkyl, C₃₋₇-cycloalkyl
or C₃₋₇-cycloalkyl-C₁₋₆-alkylene groups; or a group
10 -C≡C-;

Z represents a C₃₋₇-cycloalkyl group of formula:



15 m represents an integer ranging from 1 to 5;

p and q represent integers and are defined such that
p+q is a number ranging from 1 to 5;

R₁ represents a hydrogen atom, a halogen atom, or a
hydroxyl, cyano, nitro, C₁₋₃-alkyl, C₁₋₃-alkoxy, C₁₋₃-
20 thioalkyl, C₁₋₃-fluoroalkyl, C₁₋₃-fluoroalkoxy or C₁₋₃-
fluorothioalkyl group;

R₂ represents

a hydrogen atom, a halogen atom,

or a cyano, nitro, hydroxyl, C₁₋₃-alkyl, C₁₋₃-alkoxy,

25 C₁₋₃-thioalkyl, C₁₋₃-fluoroalkyl, C₁₋₃-fluoroalkoxy or
C₁₋₃-fluorothioalkyl group,

or a group chosen from a phenyl, naphthalenyl,
biphenyl, phenylethylenyl, naphthylethylenyl,

pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl,

30 triazinyl, indanyl, indenyl, quinolinyl, isoquinolinyl,

quinazolinyl, quinoxalinyl, phthalazinyl, cinnolinyl,

thienyl, furyl, pyrrolyl, imidazolyl, pyrazolyl,

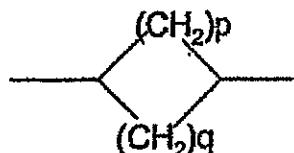
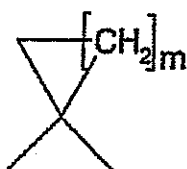
oxazolyl, thiazolyl, isoxazolyl, isothiazolyl,

thiadiazolyl, oxadiazolyl, triazolyl, benzothienyl,

35 benzofuryl, dibenzofuryl, benzimidazolyl, benzo-

- triazolyl, indolyl, isoindolyl, indazolyl,
benzoxazolyl, benzisoxazolyl, benzothiazolyl, benziso-
thiazolyl, dihydroindolyl, pyrrolopyridinyl, furo-
pyridinyl, thienopyridinyl, imidazopyridinyl,
5 oxazolopyridinyl, thiazolopyridinyl, pyrazolopyridinyl,
isoxazolopyridinyl, isothiazolopyridinyl, tetrahydro-
quinolinyl, tetrahydroisoquinolinyl, phenyloxy,
phenylthio, phenylsulfonyl, benzoyl, phenylmethoxy,
phenylethoxy, phenylpropoxy, naphthalenyloxy,
10 naphthalenylmethoxy, naphthalenylethoxy, naphthalenyl-
propoxy, quinolinoxy and isoquinolinoxy, and optionally
substituted with one or more substituents chosen from a
halogen atom, and the following groups: hydroxyl,
cyano, nitro, C₁₋₄-alkyl, C₁₋₄-alkoxy, C₁₋₄-thioalkyl,
15 C₁₋₃-fluoroalkyl, C₁₋₃-fluoroalkoxy, C₁₋₃-fluorothioalkyl,
phenyloxy, benzyloxy, piperidyl, pyrrolidinyl,
morpholinyl, NH₂, NHR₆, NR₆R₇, NHCOR₆, COR₆, CO₂R₆, SO₂R₆,
-O-(C₁₋₃-alkylene)-O-, 4-piperazinyl optionally
substituted with a C₁₋₃-alkyl or with a benzyl;
20 R₃ represents
either a 2,2,2-trifluoroethyl group,
or a phenyl group optionally substituted with one or
more halogen atoms, or cyano, nitro, C₁₋₃-alkyl, C₁₋₃-
alkoxy, trifluoromethyl or trifluoromethoxy groups,
25 and
R₆ and R₇ represent, independently of one another, a
C₁₋₃-alkyl group or a phenyl;
on the condition that
- when R₃ represents a 2,2,2-trifluoroethyl group,
30 if A represents a methylene and if R₁ represents a
hydrogen, then R₂ is neither a hydrogen nor a methoxy;
if A represents a methylene and if R₂ represents a
hydrogen, then R₁ is neither a hydrogen nor a methoxy;
- when R₃ represents a phenyl group,
35 if A represents a methylene, then neither R₁ nor R₂
represents a chlorine atom, a methoxy group or a nitro
group;
if A represents an ethylene, then
neither R₁ nor R₂ represents a methoxy;

- R_2 represents neither a 2-ethyl-5,7-dimethyl-3H-imidazo[4,5-b]pyridin-3-yl nor a 2-amino-4-thiazolyl;
if A represents a propylene, then R_2 does not represent a 3-thienyl;
- 5 - when R_3 represents a phenyl group substituted with one to five chlorine or fluorine atoms or nitro or cyano groups,
if A represents a methylene, then neither R_1 nor R_2 represents a methoxy or a bromine atom;
- 10 if A represents an ethylene, then
neither R_1 nor R_2 represents a chlorine atom, or a hydroxyl, methyl or methoxy group;
 R_2 does not represent a phenylmethoxy.
- 15 Among the compounds of general formula (I), a fourth family of compounds consists of the compounds for which:
- when R_3 represents a 2,2,2-trifluoroethyl group, then n represents an integer between 1 and 6;
- 20 A is chosen from one or more groups X, Y and/or Z;
X represents a C_{1-2} -alkylene group optionally substituted with one or more C_{1-12} -alkyl, C_{3-7} -cycloalkyl or C_{3-7} -cycloalkyl- C_{1-6} -alkylene groups;
Y represents a C_2 -alkenylene group optionally substituted with one or more C_{1-12} -alkyl, C_{3-7} -cycloalkyl or C_{3-7} -cycloalkyl- C_{1-6} -alkylene groups; or a group
25 -C≡C-;
Z represents a C_{3-7} -cycloalkyl group of formula:



30

- m represents an integer ranging from 1 to 5;
p and q represent integers and are defined such that p+q is a number ranging from 1 to 5;
- 35 R_1 represents a hydrogen atom, a halogen atom, or a

hydroxyl, cyano, nitro, C₁₋₃-alkyl, C₁₋₃-alkoxy, C₁₋₃-thioalkyl, C₁₋₃-fluoroalkyl, C₁₋₃-fluoroalkoxy or C₁₋₃-fluorothioalkyl group;

R₂ represents

- 5 a halogen atom
or a cyano, nitro, hydroxyl, C₁₋₃-alkyl, C₂₋₃-alkoxy, C₁₋₃-thioalkyl, C₁₋₃-fluoroalkyl, C₁₋₃-fluoroalkoxy or C₁₋₃-fluorothioalkyl group,
or a group chosen from a phenyl, naphthalenyl,
10 biphenyl, phenylethylenyl, naphthylethylenyl, pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl, triazinyl, indanyl, indenyl, quinolinyl, isoquinolinyl, quinazolinyl, quinoxalinyl, phthalazinyl, cinnolinyl, thienyl, furyl, pyrrolyl, imidazolyl, pyrazolyl,
15 oxazolyl, thiazolyl, isoxazolyl, isothiazolyl, thiadiazolyl, oxadiazolyl, triazolyl, benzothienyl, benzofuryl, dibenzofuryl, benzimidazolyl, benzotriazolyl, indolyl, isoindolyl, indazolyl, benzoxazolyl, benzisoxazolyl, benzothiazolyl, benziso-
20 thiazolyl, dihydroindolyl, pyrrolopyridinyl, furo-pyridinyl, thienopyridinyl, imidazopyridinyl, oxazolopyridinyl, thiazolopyridinyl, pyrazolopyridinyl, isoxazolopyridinyl, isothiazolopyridinyl, tetrahydro-quinolinyl, tetrahydroisoquinolinyl, phenyloxy,
25 phenylthio, phenylsulfonyl, benzoyl, phenylmethoxy, phenylethoxy, phenylpropoxy, naphthalenyloxy, naphthalenylmethoxy, naphthalenylethoxy, naphthalenylpropoxy, quinolinoxy and isoquinolinoxy, and optionally substituted with one or more substituents chosen from a
30 halogen atom, and the following groups: hydroxyl, cyano, nitro, C₁₋₄-alkyl, C₁₋₄-alkoxy, C₁₋₄-thioalkyl, C₁₋₃-fluoroalkyl, C₁₋₃-fluoroalkoxy, C₁₋₃-fluorothioalkyl, phenyloxy, benzyloxy, piperidyl, pyrrolidinyl, morpholinyl, NH₂, NHR₆, NR₆R₇, NHCOR₆, COR₆, CO₂R₆, SO₂R₆,
35 -O-(C₁₋₃-alkylene)-O-, 4-piperazinyl optionally substituted with a C₁₋₃-alkyl or with a benzyl;

and

R₆ and R₇ represent, independently of one another, a C₁₋₃-alkyl group or a phenyl;

- when R_3 represents a phenyl group optionally substituted with one or more halogen atoms, or cyano, nitro, C_{1-3} -alkyl, C_{1-3} -alkoxy, trifluoromethyl or trifluoromethoxy groups, then

5 n represents an integer between 1 and 6;

A is chosen from one or more groups X, Y and/or Z;

X represents a C_{1-2} -alkylene group optionally substituted with one or more C_{1-12} -alkyl, C_{3-7} -cycloalkyl or C_{3-7} -cycloalkyl- C_{1-6} -alkylene groups;

10 Y represents a C_2 -alkenylene group optionally substituted with one or more C_{1-12} -alkyl, C_{3-7} -cycloalkyl or C_{3-7} -cycloalkyl- C_{1-6} -alkylene groups; or a group $-C\equiv C-$;

Z represents a C_{3-7} -cycloalkyl group of formula:

15



m represents an integer ranging from 1 to 5;

p and q represent integers and are defined such that

20 $p+q$ is a number ranging from 1 to 5;

R_1 represents a hydrogen atom, an iodine atom, or a cyano, C_{2-3} -alkyl, C_{2-3} -alkoxy, C_{1-3} -thioalkyl, C_{1-3} -fluoroalkyl, C_{1-3} -fluoroalkoxy or C_{1-3} -fluorothioalkyl group;

25 R_2 represents

a hydrogen atom, an iodine atom,

or a cyano, C_{2-3} -alkyl, C_{2-3} -alkoxy, C_{1-3} -thioalkyl, C_{1-3} -fluoroalkyl, C_{1-3} -fluoroalkoxy or C_{1-3} -fluorothioalkyl group,

30 or a group chosen from a phenyl, naphthalenyl, biphenyl, phenylethylenyl, naphthylethylenyl, pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl, triazinyl, indanyl, indenyl, quinolinyl, isoquinolinyl, quinazolinyl, quinoxalinyl, phthalazinyl, cinnolinyl, 35 furyl, pyrrolyl, imidazolyl, pyrazolyl, oxazolyl,

isoxazolyl, isothiazolyl, thiadiazolyl, oxadiazolyl,
triazolyl, benzothienyl, benzofuryl, dibenzofuryl,
benzimidazolyl, benzotriazolyl, indolyl, isoindolyl,
indazolyl, benzoxazolyl, benzisoxazolyl,
5 benzothiazolyl, benzisothiazolyl, dihydroindolyl,
pyrrolopyridinyl, furopyridinyl, thienopyridinyl,
oxazolopyridinyl, thiazolopyridinyl, pyrazolopyridinyl,
isoxazolopyridinyl, isothiazolopyridinyl, tetrahydro-
quinolinyl, tetrahydroisoquinolinyl, phenyloxy,
10 phenylthio, phenylsulfonyl, benzoyl, phenylethoxy,
phenylpropoxy, naphthalenyloxy, naphthalenylmethoxy,
naphthalenylethoxy, naphthalenylpropoxy, quinolinoxy
and isoquinolinoxy, and optionally substituted with one
or more substituents chosen from a halogen atom, and
15 the following groups: hydroxyl, cyano, nitro, C₁₋₄-
alkyl, C₁₋₄-alkoxy, C₁₋₄-thioalkyl, C₁₋₃-fluoroalkyl, C₁₋₃-
fluoroalkoxy, C₁₋₃-fluorothioalkyl, phenyloxy,
benzyloxy, piperidyl, pyrrolidinyl, morpholinyl, NH₂,
NHR₆, NR₆R₇, NHCOR₆, COR₆, CO₂R₆, SO₂R₆, -O-(C₁₋₃-
20 alkylene)-O-, 4-piperazinyl optionally substituted with
a C₁₋₃-alkyl or with a benzyl;
and
R₆ and R₇ represent, independently of one another, a
C₁₋₃-alkyl group or a phenyl.

25

Among the compounds of general formula (I), a fifth
family of compounds consists of the compounds for
which:

n represents an integer between 1 and 6;

30 A is chosen from one or more groups X, Y and/or Z;

X represents a C₁₋₂-alkylene group optionally
substituted with one or more C₁₋₁₂-alkyl, C₃₋₇-cycloalkyl
or C₃₋₇-cycloalkyl-1-6-alkylene groups;

Y represents a C₂-alkenylene group optionally
35 substituted with one or more C₁₋₁₂-alkyl, C₃₋₇-cycloalkyl
or C₃₋₇-cycloalkyl-C₁₋₆-alkylene groups; or a group -C≡C-
;

Z represents a C₃₋₇-cycloalkyl group of formula:



m represents an integer ranging from 1 to 5;

p and q represent integers and are defined such that

5 p+q is a number ranging from 1 to 5;

R₁ represents a hydrogen atom, a halogen atom, or a hydroxyl, cyano, nitro, C₁₋₃-alkyl, C₁₋₃-alkoxy, C₁₋₃-thioalkyl, C₁₋₃-fluoroalkyl, C₁₋₃-fluoroalkoxy or C₁₋₃-fluorothioalkyl group;

10 R₂ represents

a hydrogen atom, or a phenyl or phenyloxy group, this group being optionally substituted with one or more substituents chosen from a halogen atom, and the following groups: hydroxyl, cyano, nitro, C₁₋₄-alkyl,

15 C₁₋₄-alkoxy, C₁₋₄-thioalkyl, C₁₋₃-fluoroalkyl, C₁₋₃-fluoroalkoxy, C₁₋₃-fluorothioalkyl, phenyloxy, benzyloxy, piperidyl, pyrrolidinyl, morpholinyl, NH₂, NHR₆, NR₆R₇, NHCOR₆, COR₆, CO₂R₆, SO₂R₆, -O-(C₁₋₃-alkylene)-O-, 4-piperazinyl optionally substituted with a C₁₋₃-alkyl or

20 with a benzyl;

R₃ represents

either a 2,2,2-trifluoroethyl group,

or a phenyl group optionally substituted with one or more halogen atoms, or cyano, nitro, C₁₋₃-alkyl, C₁₋₃-alkoxy, trifluoromethyl or trifluoromethoxy groups,

25 and

R₆ and R₇ represent, independently of one another, a C₁₋₃-alkyl group or a phenyl;

2,2,2-trifluoroethyl benzylcarbamate being excluded.

30

Among the compounds of general formula (I), a sixth family of compounds consists of the compounds for which:

n represents an integer between 1 and 6;

35 A is a group X;

- the groups A being identical to or different from one another when n is an integer between 2 and 6;
- X represents a C₁₋₂-alkylene group optionally substituted with one or more C₁₋₁₂-alkyl, C₃₋₇-cycloalkyl
- 5 or C₃₋₇-cycloalkyl-C₁₋₆-alkylene groups;
- R₁ represents a hydrogen atom, a halogen atom, or a hydroxyl, cyano, nitro, C₁₋₃-alkyl, C₁₋₃-alkoxy, C₁₋₃-thioalkyl, C₁₋₃-fluoroalkyl, C₁₋₃-fluoroalkoxy or C₁₋₃-fluorothioalkyl group;
- 10 R₂ represents
a hydrogen atom, a halogen atom,
or a cyano, nitro, hydroxyl, C₁₋₃-alkyl, C₁₋₃-alkoxy,
C₁₋₃-thioalkyl, C₁₋₃-fluoroalkyl, C₁₋₃-fluoroalkoxy, C₁₋₃-
fluorothioalkyl group,
- 15 or a group chosen from a phenyl, naphthalenyl,
biphenyl, phenylethylenyl, naphthylethylenyl,
pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl,
triazinyl, indanyl, indenyl, quinolinyl, isoquinolinyl,
quinazolinyl, quinoxalinyl, phthalazinyl, cinnolinyl,
- 20 thienyl, furyl, pyrrolyl, imidazolyl, pyrazolyl,
oxazolyl, thiazolyl, isoxazolyl, isothiazolyl,
thiadiazolyl, oxadiazolyl, triazolyl, benzothienyl,
benzofuryl, dibenzofuryl, benzimidazolyl, benzo-
triazolyl, indolyl, isoindolyl, indazolyl,
- 25 benzoxazolyl, benzisoxazolyl, benzothiazolyl, benziso-
thiazolyl, dihydroindolyl, pyrrolopyridinyl, furo-
pyridinyl, thienopyridinyl, imidazopyridinyl,
oxazolopyridinyl, thiazolopyridinyl, pyrazolopyridinyl,
isoxazolopyridinyl, isothiazolopyridinyl, tetrahydro-
- 30 quinolinyl, tetrahydroisoquinolinyl, phenyloxy,
phenylthio, phenylsulfonyl, benzoyl, phenylmethoxy,
phenylethoxy, phenylpropoxy, naphthalenyloxy,
naphthalenylmethoxy, naphthalenylethoxy, naphthalenyl-
propoxy, quinolinoxy and isoquinolinoxy, and optionally
- 35 substituted with one or more substituents chosen from a
halogen atom, and the following groups: hydroxyl,
cyano, nitro, C₁₋₄-alkyl, C₁₋₄-alkoxy, C₁₋₄-thioalkyl,
C₁₋₃-fluoroalkyl, C₁₋₃-fluoroalkoxy, C₁₋₃-fluorothioalkyl,
phenyloxy, benzyloxy, piperidyl, pyrrolidinyl,

morpholinyl, NH_2 , NHR_6 , NR_6R_7 , NHCOR_6 , COR_6 , CO_2R_6 , SO_2R_6 ,
-O-(C_{1-3} -alkylene)-O-, 4-piperazinyl optionally
substituted with a C_{1-3} -alkyl or with a benzyl;
 R_3 represents

- 5 either a 2,2,2-trifluoroethyl group,
or a phenyl group optionally substituted with one or
more halogen atoms, or cyano, nitro, C_{1-3} -alkyl, C_{1-3} -
alkoxy, trifluoromethyl or trifluoromethoxy groups,
and
10 R_6 and R_7 represent, independently of one another, a
 C_{1-3} -alkyl group or a phenyl;
on the condition that:
- when R_3 represents a 2,2,2-trifluoroethyl group and
the group $-\text{[A]}_n-$ represents a $-\text{CH}_2-$ group,
15 then R_1 is other than a hydrogen atom or than a methoxy
group;
- when R_3 represents an optionally substituted phenyl
group and the group $-\text{[A]}_n-$ represents a $-\text{CH}_2-$, $-\text{CH}_2\text{CH}_2-$,
 $-\text{CH}(\text{CH}_3)-$ or $-\text{CH}(\text{CH}_3)-\text{CH}_2-$ group;
20 then R_1 is other than a hydrogen or chlorine atom or
than a methyl or methoxy group, and R_2 is other than a
hydrogen atom.

The compounds of general formula (I) can comprise one
25 or more asymmetrical carbons. They can exist in the
form of enantiomers or of diastereoisomers. These
enantiomers and diastereoisomers, and also mixtures
thereof, including racemic mixtures, are part of the
invention.

30

The compounds of formula (I) can exist in the form of
bases or of addition salts with acids. Such addition
salts are part of the invention.

35 These salts are advantageously prepared with
pharmaceutically acceptable acids, but the salts of
other acids useful, for example, for the purification
or the isolation of the compounds of formula (I) are
also part of the invention. The compounds of general

formula (I) can be in the form of hydrates or of solvates, i.e. in the form of associations or of combinations with one or more molecules of water or with a solvent. Such hydrates and solvates are also
5 part of the invention.

In the context of the invention:

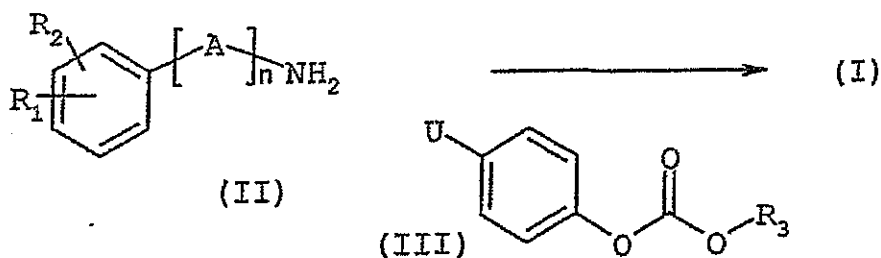
- the expression " C_{t-z} " where t and z can have the values from 1 to 12" is intended to mean a carbon-based chain that can have from t to z carbon atoms; for example, " C_{1-3} " is intended to mean a carbon-based chain which can have from 1 to 3 carbon atoms;
10
- the term "alkyl" is intended to mean a linear or branched, saturated aliphatic group; for example, a C_{1-3} -alkyl group represents a linear or branched carbon-based chain of 1 to 3 carbon atoms, more particularly a methyl, ethyl, propyl or 1-methyl-ethyl;
15
- the term "alkylene" is intended to mean a linear or branched, saturated divalent alkyl group; for example, a C_{1-3} -alkylene group represents a linear or branched divalent carbon-based chain of 1 to 3 carbon atoms, more particularly a methylene, ethylene, 1-methylethylene or propylene;
20 25
- the term "cycloalkyl" is intended to mean a cyclic alkyl group; for example, a C_{3-5} -cycloalkyl group represents a cyclic carbon-based group of 3 to 5 carbon atoms, more particularly a cyclopropyl, cyclobutyl or cyclopentyl;
30
- the term "alkenylene" is intended to mean a divalent unsaturated aliphatic group, more particularly an ethylene;
- the term "alkoxy" is intended to mean an -O-alkyl group comprising a linear or branched, saturated aliphatic chain;
35
- the term "thioalkyl" is intended to mean an -S-alkyl group comprising a linear or branched, saturated aliphatic chain;

- the term "fluoroalkyl" is intended to mean an alkyl group in which one or more hydrogen atoms have been substituted with a fluorine atom;
- the term "fluoroalkoxy" is intended to mean an alkoxy group in which one or more hydrogen atoms have been substituted with a fluorine atom;
- the term "fluorothioalkyl" is intended to mean a thioalkyl group in which one or more hydrogen atoms have been substituted with a fluorine atom;
- the term "halogen atom" is intended to mean a fluorine, a chlorine, a bromine or an iodine.

The compounds of the invention can be prepared according to various methods, illustrated by the schemes which follow.

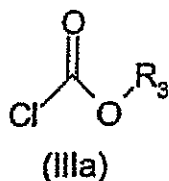
Thus, a first method (scheme 1) for preparing the compounds of general formula (I) consists in reacting an amine of general formula (II), in which R_1 , R_2 , n and A are as defined above, with a carbonate of general formula (III), in which U represents a hydrogen atom or a nitro group and R_3 is as defined above, in a solvent such as toluene or dichloroethane, at a temperature of between 0 and 80°C.

Scheme 1



According to a second method, the compounds of general formula (I) for which R_3 represents more particularly an optionally substituted phenyl can be prepared by reacting an amine of general formula (II), as defined

above, with an aryl chloroformate of general formula (IIIa)



- 5 where R_3 represents a phenyl group optionally substituted with one or more halogen atoms, or cyano, nitro, C_{1-3} -alkyl, C_{1-3} -alkoxy, trifluoromethyl or trifluoromethoxy groups,
- 10 in a solvent such as dichloromethane or dichloroethane in the presence of a base such as triethylamine or diisopropylethylamine, at a temperature of between 0°C and the reflux temperature of the solvent.
- 15 The carbonates of general formula (III) can be prepared according to any method described in the literature, for example by reaction of an alcohol of general formula HOR_3 with phenyl chloroformate or para-nitrophenyl chloroformate, in the presence of a base
- 20 such as triethylamine or diisopropylethylamine.

The compounds of general formulae (II) and (IIIa) are commercially available or described in the literature, or else can be prepared according to methods which are

25 described therein or which are known to those skilled in the art.

When R_2 represents a group of aryl or heteroaryl type in a compound of formula (I) or (II), the introduction

30 of R_2 onto the phenyl ring can be carried out by reacting a derivative of a compound of general formula (I) or (II) in which the phenyl ring bears a chlorine, bromine or iodine atom or a triflate group, in the position where it is desired to introduce R_2 , with an

35 aryl- or heteroaryl boronic acid derivative in

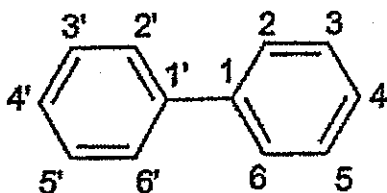
accordance with the Suzuki reaction conditions (*Chem. Rev.* (1995), 95, 2457-2483; *Angew. Chem. Int., Ed.* (1999), 38, 3387-3388), or with an aryl- or heteroaryl trialkyltin derivative in accordance with the Stille reaction conditions (*Angew. Chem. Int. Ed. Engl.* (1986), 25, 508-524).

The following examples illustrate the preparation of some compounds of the invention. They are not limiting and merely illustrate the invention. The NMR spectra and/or the LC-MS (Liquid Chromatography coupled to Mass Spectroscopy) confirm the structures and the purities of the compounds obtained.

Mp (°C) represents the melting point in degrees Celsius.

The numbers indicated between parentheses in the titles of the examples correspond to those of the 1st column of the table hereinafter.

The IUPAC nomenclature (International Union of Pure and Applied Chemistry) was used to name the compounds in the following examples. For example, for the biphenyl group, the following numbering was observed:



Example 1 (Compound No. 1)

2,2,2-Trifluoroethyl 1,1'-biphenyl-4-ylmethylcarbamate

0.119 ml (1.64 mmol) of 2,2,2-trifluoroethanol and 0.306 ml (1.49 mmol) of *N,N*-diisopropylethylamine are added, dropwise and at ambient temperature, to a solution of 0.3 g (1.49 mmol) of *para*-nitrophenyl chloroformate in 15 ml of methylene chloride. The

mixture is stirred at ambient temperature for 2 h, and then 0.275 g (1.5 mmol) of 4-phenylbenzylamine is added. *N,N*-Diisopropylethylamine is subsequently added, dropwise and at ambient temperature, until the precipitate which has formed disappears. The transparent solution thus obtained is stirred at ambient temperature for 1 h. The reaction medium is diluted with a further 10 ml of methylene chloride and washing is carried out with a saturated aqueous ammonium chloride solution and with a saturated aqueous sodium chloride solution. The phases are separated and the organic phase is dried over sodium sulfate. The product is filtered, the filtrate is concentrated under reduced pressure and the residue is purified by silica gel chromatography with methylene chloride. 0.215 g of white solid is obtained.

LC-MS: 310

Mp(°C): 123-125°C

¹H NMR (DMSO-d₆) δ(ppm): 8.25 (t, 1H); 7.75-7.30 (m, 9H); 4.65 (q, 2H); 4.25 (d, 2H).

Example 2 (Compound No. 19)

2,2,2-Trifluoroethyl 2-(1,1'-biphenyl-4-yl)ethyl-carbamate

25

The procedure is carried out in a manner similar to Example 1, replacing the 4-phenylbenzylamine with 2-(4-biphenyl)ethylamine.

0.311 g of white solid is obtained.

30 LC-MS: 324

Mp(°C): 79-81°C

¹H NMR (DMSO-d₆) δ(ppm): 7.80-7.20 (m, 10H); 4.65 (q, 2H); 3.30 (m, 2H); 2.75 (t, 2H).

Example 3 (Compound No. 10)

2,2,2-Trifluoroethyl 4-phenyloxybenzylcarbamate

The procedure is carried out in a manner similar to
5 Example 1, replacing the 4-phenylbenzylamine with
4-phenyloxybenzylamine.

0.252 g of white solid is obtained.

LC-MS: 326

Mp(°C): 145-148°C

10 ¹H NMR (DMSO-d₆) δ(ppm): 8.15 (t, 1H); 7.40-6.90 (m, 9H);
4.65 (q, 2H); 4.20 (d, 2H).

Example 4 (Compound No. 3)

4-Fluorophenyl 1,1'-biphenyl-4-ylmethylcarbamate

15

0.069 ml (0.522 mmol) of 4-fluorophenyl chloroformate
and 0.149 ml (0.82 mmol) of *N,N*-diisopropylethylamine
are added, dropwise and at ambient temperature, to a
solution of 0.107 g (0.58 mmol) of 4-phenylbenzylamine
20 in 4 ml of methylene chloride. The mixture is stirred
at ambient temperature for 1 h. The reaction medium is
diluted with a further 2 ml of methylene chloride and
washed with a saturated aqueous ammonium chloride
solution and with a saturated aqueous sodium chloride
25 solution. The phases are separated and the organic
phase is filtered through a hydrophobic sintered glass
funnel. The filtrate is concentrated under reduced
pressure and the solid residue is washed with 5 ml of
diisopropyl ether.

30 0.136 g of white solid is obtained.

LC-MS: 322

Mp(°C): 155-157°C

¹H NMR (DMSO-d₆) δ(ppm): 8.30 (t, 1H); 7.70-7.10 (m,
13H); 4.30 (d, 2H).

35

Example 5 (Compound No. 26)

4-Methylphenyl 2-(1,1'-biphenyl-4-yl)ethylcarbamate

The procedure is carried out in a manner similar to
5 Example 4, replacing the 4-phenylbenzylamine with 2-(4-biphenyl)ethylamine and the 4-fluorophenyl chloroformate with 4-methylphenyl chloroformate.

0.126 g of white solid is obtained.

LC-MS: 332

10 Mp(°C): 172-174°C

¹H NMR(DMSO-d₆) δ(ppm): 7.75 (t, 1H); 7.70-7.30 (m, 9H);
7.10 (d, 2H); 6.90 (d, 2H); 3.30 (m, 2H); 2.80 (t, 2H);
2.25 (s, 3H).

15 Example 6 (Compound No. 16)

4-Methoxyphenyl 4-phenyloxybenzylcarbamate

The procedure is carried out in a manner similar to
Example 4, replacing the 4-phenylbenzylamine with
20 4-phenyloxybenzylamine and the 4-fluorophenyl chloroformate with 4-methoxyphenyl chloroformate.

0.137 g of white solid is obtained.

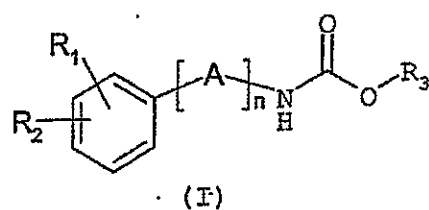
LC-MS: 350

Mp(°C): 89-91°C

25 ¹H NMR(DMSO-d₆) δ(ppm): 8.20 (t, 1H); 7.45-7.25 (m, 4H);
7.20-6.80 (m, 9H); 4.25 (d, 2H); 3.75 (s, 3H).

The following table illustrates the chemical structures
and the physical properties of some compounds according
30 to the invention. In this table, "n.d." signifies that
the melting point could not be determined (product in
the form of a gum, for example).

Table



No.	[A] _n	R ₁	R ₂	R ₃	Mp (°C)
1.	CH ₂	H	4-phenyl	CH ₂ CF ₃	123-125
2.	CH ₂	H	4-phenyl	phenyl	158-162
3.	CH ₂	H	4-phenyl	4-F-phenyl	155-157
4.	CH ₂	H	4-phenyl	2-Cl-phenyl	128-130
5.	CH ₂	H	4-phenyl	4-Cl-phenyl	161-164
6.	CH ₂	H	4-phenyl	2-CH ₃ O-phenyl	186-188
7.	CH ₂	H	4-phenyl	4-CH ₃ O-phenyl	153-156
8.	CH ₂	H	4-phenyl	4-CH ₃ -phenyl	153-155
9.	CH ₂	H	4-phenyl	3-CF ₃ -phenyl	n.d.
10.	CH ₂	H	4-phenyloxy	CH ₂ CF ₃	145-148
11.	CH ₂	H	4-phenyloxy	phenyl	99-101
12.	CH ₂	H	4-phenyloxy	4-F-phenyl	82-84
13.	CH ₂	H	4-phenyloxy	2-Cl-phenyl	106-109
14.	CH ₂	H	4-phenyloxy	4-Cl-phenyl	90-93
15.	CH ₂	H	4-phenyloxy	2-CH ₃ O-phenyl	84-86
16.	CH ₂	H	4-phenyloxy	4-CH ₃ O-phenyl	89-91
17.	CH ₂	H	4-phenyloxy	4-CH ₃ -phenyl	105-107
18.	CH ₂	H	4-phenyloxy	3-CF ₃ -phenyl	n.d.
19.	CH ₂ CH ₂	H	4-phenyl	CH ₂ CF ₃	79-81
20.	CH ₂ CH ₂	H	4-phenyl	phenyl	150-152
21.	CH ₂ CH ₂	H	4-phenyl	4-F-phenyl	160-163
22.	CH ₂ CH ₂	H	4-phenyl	2-Cl-phenyl	131-133
23.	CH ₂ CH ₂	H	4-phenyl	4-Cl-phenyl	167-169
24.	CH ₂ CH ₂	H	4-phenyl	2-CH ₃ O-phenyl	116-119
25.	CH ₂ CH ₂	H	4-phenyl	4-CH ₃ O-phenyl	158-160
26.	CH ₂ CH ₂	H	4-phenyl	4-CH ₃ -phenyl	172-174
27.	CH ₂ CH ₂	H	4-phenyl	3-CF ₃ -phenyl	132-135
28.	CH ₂ CH ₂ CH ₂	H	H	phenyl	62-65
29.	CH ₂ CH ₂ CH ₂	H	H	4-F-phenyl	61-63
30.	CH ₂ CH ₂ CH ₂	H	H	4-Cl-phenyl	53-56

No.	[A] _n	R ₁	R ₂	R ₃	Mp (°C)
31.	CH ₂ CH ₂ CH ₂	H	H	4-CH ₃ -phenyl	79-81
32.	CH ₂ CH ₂ CH ₂ CH ₂	H	H	phenyl	76-78
33.	CH ₂ CH ₂ CH ₂ CH ₂	H	H	4-F-phenyl	91-93
34.	CH ₂ CH ₂ CH ₂ CH ₂	H	H	4-Cl-phenyl	95-97
35.	CH ₂ CH ₂ CH ₂ CH ₂	H	H	4-CH ₃ -phenyl	91-93

The compounds of the invention were subjected to pharmacological assays to determine their inhibitory effect on the FAAH enzyme (fatty acid amido hydrolase).

5

The inhibitory activity was demonstrated in a radioenzymatic assay based on measuring the product of hydrolysis (ethanolamine [1-³H]) of anandamide [ethanolamine 1-³H] by FAAH (*Life Sciences* (1995), 56, 1999-2005) and (*Journal of Pharmacology and Experimented Therapeutics* (1997), 283, 729-734). Thus, mouse brains (minus the cerebellum) are removed and conserved at -80°C. Membrane homogenates are prepared extemporaneously by homogenization of the tissues with a Polytron in a 10mM Tris-HCl buffer (pH 8.0) containing 150 mM NaCl and 1 mM EDTA. The enzymatic reaction is subsequently carried out in 70 µl of buffer containing fatty acid-free bovine serum albumin (1 mg/ml). The compounds tested, at various concentrations, anandamide [ethanolamine 1-³H] (specific activity of 15-20 Ci/mmol) diluted to 10 µM with cold anandamide, and the membrane preparation (400 µg of frozen tissue per assay) are added successively. After 15 minutes at 25°C, the enzymatic reaction is stopped by adding 140 µl of chloroform/methanol (2:1). The mixture is stirred for 10 minutes and then centrifuged for 15 minutes at 3500 g. An aliquot (30 µl) of the aqueous phase containing the ethanolamine [1-³H] is counted by liquid scintillation.

Under these conditions, the most active compounds of the invention exhibit IC₅₀ values (concentration that

inhibits 50% of the control enzymatic activity of FAAH) between 0.001 and 1 μ M.

5 It therefore appears that the compounds according to the invention have an inhibitory activity on the FAAH enzyme.

The FAAH enzyme (*Chemistry and Physics of Lipids*, (2000), 108, 107-121) catalyses the hydrolysis of
10 endogenous derivatives of amides and of esters of various fatty acids such as N-arachidonoyl ethanolamine (anandamide), N-palmitoylethanolamine, N-oleylethanolamine, oleamide or 2-arachidonoylglycerol. These derivatives exert various pharmacological activities by
15 interacting, inter alia, with cannabinoid and vanilloid receptors.

The compounds of the invention block this degradation pathway and increase the tissue content of these
20 endogenous substances. They can be used in this respect in the prevention and treatment of pathologies in which endogenous cannabinoids and/or any other substrates metabolized by the FAAH enzyme are involved.

25 Mention may, for example, be made of the following diseases and conditions:

pain, in particular acute or chronic pain of neurogenic type: migraine, neuropathic pain including the forms associated with the herpesvirus and with diabetes;

30 acute or chronic pain associated with inflammatory diseases: arthritis, rheumatoid arthritis, osteoarthritis, spondylitis, gout, vasculitis, Crohn's disease, irritable bowel syndrome;

acute or chronic peripheral pain:

35 dizziness, vomiting, nausea, in particular those subsequent to chemotherapy;

eating disorders, in particular anorexia and cachexia of various natures;

neurological and psychiatric pathologies: shaking,

dyskinesia, dystonia, spasticity, obsessive compulsive disorders, Tourette's syndrome, all forms of depression and anxiety of any nature and origin, mood disorders, psychoses;

- 5 acute and chronic neurodegenerative diseases: Parkinson's disease, Alzheimer's disease, senile dementia, Huntington's chorea, lesions related to cerebral ischemia and to cranial and medullary traumas; epilepsy;
- 10 sleeping disorders, including sleep apnoea; cardiovascular diseases, in particular hypertension, cardiac arrhythmias, arteriosclerosis, heart attack, cardiac ischemias; renal ischemia;
- 15 cancers: benign skin tumors, papillomas and brain tumors, prostate tumors, brain tumors (glioblastomas, medulloepitheliomas, medulloblastomas, neuroblastomas, tumors of embryonic origin, astrocytomas, astroblastomas, ependyomas, oligodendrogliomas, plexus
- 20 tumors, neuroepitheliomas, epiphyseal tumors, ependymoblastomas, malignant meningiomas, sarcomatoses, malignant melanomas, schwannomas); immune system disorders, in particular autoimmune diseases: psoriasis, lupus erythematosus, connective
- 25 tissue diseases or connectivitis, Sjögren's syndrome, ankylosing spondylarthritis, undifferentiated spondylarthritis, Behcet's disease, hemolytic auto-immune anemia, multiple sclerosis, amyotrophic lateral sclerosis, amyloses, transplant rejection, diseases
- 30 affecting the plasmocyte line; allergic diseases: immediate or delayed hypersensitivity, allergic rhinitis or conjunctivitis, contact dermatitis; parasitic, viral or bacterial infectious diseases:
- 35 AIDS, meningitis; inflammatory diseases, in particular articular diseases: arthritis, rheumatoid arthritis, osteo arthritis, spondylitis, gout, vasculitis, Crohn's disease, irritable bowel syndrome;

- osteoporosis;
ocular conditions: ocular hypertension, glaucoma;
pulmonary conditions: respiratory tract diseases,
bronchospasms, coughs, asthma, chronic bronchitis,
5 chronic respiratory tract obstruction, emphysema;
gastrointestinal diseases: irritable bowel syndrome,
intestinal inflammatory disorders, ulcers, diarrhea;
urinary incontinence and bladder inflammation.
- 10 The use of the compounds according to the invention for
preparing a medicinal product for use in the treatment
of the pathologies mentioned above is an integral part
of the invention.
- 15 The use of the following compounds for preparing a
medicinal product for use in the treatment of the
pathologies mentioned above is also an integral part of
the invention:
- 2,2,2-trifluoroethyl benzylcarbamate;
 - 20 - 2,2,2-trifluoroethyl 4-methoxybenzylcarbamate;
 - 4-nitrophenyl 2-[4-phenylmethoxy)phenyl]ethyl-
carbamate,
 - 4-chloro-2-nitrophenyl 2-(4-chlorophenyl)ethyl-
carbamate;
 - 25 - 4-nitrophenyl 2-(3,4-dimethoxyphenyl)ethylcarbamate;
 - phenyl 2-(3,4-dimethoxyphenyl)ethylcarbamate;
 - 4-cyanophenyl 2-(4-methylphenyl)ethylcarbamate;
 - 2,4,5-trichlorophenyl 2-(4-chlorophenyl)ethyl-
carbamate;
 - 30 - phenyl 4-chlorobenzylcarbamate;
 - phenyl 4-methoxybenzylcarbamate;
 - 4-fluorophenyl 2-(4-methoxyphenyl)ethylcarbamate;
 - phenyl 3-nitrobenzylcarbamate;
 - 4-cyanophenyl 4-methoxybenzylcarbamate;
 - 35 - phenyl 3-chlorobenzylcarbamate;
 - phenyl 3,4-dichlorobenzylcarbamate;
 - 4-nitrophenyl 2-(4-hydroxyphenyl)ethylcarbamate;
 - phenyl 2-[4-(2-ethyl-5,7-diimethyl-3H-imidazo-
[4,5-b]pyridin-3-yl)phenyl]ethylcarbamate;

- phenyl 2-[4-(2-amino-4-thiazolyl)phenyl]ethyl-carbamate;
- 2,3,4,5,6-pentafluorophenyl 4-bromobenzylcarbamate.

5 A subject of the invention is also medicinal products which comprise a compound of formula (I), or a salt, or else a hydrate or a solvate, that is pharmaceutically acceptable, of the compound of formula (I). These medicinal products find their use in therapeutics, in
10 particular in the treatment of the pathologies mentioned above.

A subject of the invention is also medicinal products which comprise a compound chosen from the list of
15 compounds below, or a salt, or else a hydrate or a solvate, that is pharmaceutically acceptable, of this compound:

- 2,2,2-trifluoroethyl benzylcarbamate;
- 2,2,2-trifluoroethyl 4-methoxybenzylcarbamate;
- 20 - 4-nitrophenyl 2-[4-phenylmethoxy)phenyl]ethyl-carbamate,
- 4-chloro-2-nitrophenyl 2-(4-chlorophenyl)ethyl-carbamate;
- 4-nitrophenyl 2-(3,4-dimethoxyphenyl)ethylcarbamate;
- 25 - phenyl 2-(3,4-dimethoxyphenyl)ethylcarbamate;
- 4-cyanophenyl 2-(4-methylphenyl)ethylcarbamate;
- 2,4,5-trichlorophenyl 2-(4-chlorophenyl)ethyl-carbamate;
- phenyl 4-chlorobenzylcarbamate;
- 30 - phenyl 4-methoxybenzylcarbamate;
- 4-fluorophenyl 2-(4-methoxyphenyl)ethylcarbamate;
- phenyl 3-nitrobenzylcarbamate;
- 4-cyanophenyl 4-methoxybenzylcarbamate;
- phenyl 3-chlorobenzylcarbamate;
- 35 - phenyl 3,4-dichlorobenzylcarbamate;
- 4-nitrophenyl 2-(4-hydroxyphenyl)ethylcarbamate;
- phenyl 2-[4-(2-ethyl-5,7-diimethyl-3H-imidazo-[4,5-b]pyridin-3-yl)phenyl]ethylcarbamate;
- phenyl 2-[4-(2-amino-4-thiazolyl)phenyl]ethyl-

carbamate;

- 2,3,4,5,6-pentafluorophenyl 4-bromobenzylcarbamate.

5 These medicinal products find their use in therapeutics, in particular in the treatment of the pathologies mentioned above.

10 According to another of its aspects, the present invention relates to pharmaceutical compositions containing, as active ingredient, at least one compound according to the invention. These pharmaceutical compositions contain an effective dose of a compound according to the invention, or a salt, or a hydrate, or a solvate, that is pharmaceutically acceptable, of said
15 compound, and, optionally, one or more excipients that are pharmaceutically acceptable.

20 According to another of its aspects, the present invention relates to pharmaceutical compositions containing, as active ingredient, at least one compound chosen from the list of compounds below. These pharmaceutical compositions contain an effective dose of a compound chosen from the list of compounds below, or a salt, or a hydrate, or a solvate, that is
25 pharmaceutically acceptable, of said compound, and, optionally, one or more excipients that are pharmaceutically acceptable:

- 2,2,2-trifluoroethyl benzylcarbamate;
- 2,2,2-trifluoroethyl 4-methoxybenzylcarbamate;
- 30 - 4-nitrophenyl 2-[4-phenylmethoxy)phenyl]ethylcarbamate,
- 4-chloro-2-nitrophenyl 2-(4-chlorophenyl)ethylcarbamate;
- 4-nitrophenyl 2-(3,4-dimethoxyphenyl)ethylcarbamate;
- 35 - phenyl 2-(3,4-dimethoxyphenyl)ethylcarbamate;
- 4-cyanophenyl 2-(4-methylphenyl)ethylcarbamate;
- 2,4,5-trichlorophenyl 2-(4-chlorophenyl)ethylcarbamate;
- phenyl 4-chlorobenzylcarbamate;

- phenyl 4-methoxybenzylcarbamate;
- 4-fluorophenyl 2-(4-methoxyphenyl)ethylcarbamate;
- phenyl 3-nitrobenzylcarbamate;
- 4-cyanophenyl 4-methoxybenzylcarbamate;
- 5 - phenyl 3-chlorobenzylcarbamate;
- phenyl 3,4-dichlorobenzylcarbamate;
- 4-nitrophenyl 2-(4-hydroxyphenyl)ethylcarbamate;
- phenyl 2-[4-(2-ethyl-5,7-dimethyl-3H-imidazo-
- [4,5-b]pyridin-3-yl)phenyl]ethylcarbamate;
- 10 - phenyl 2-[4-(2-amino-4-thiazolyl)phenyl]ethyl-
- carbamate;
- 2,3,4,5,6-pentafluorophenyl 4-bromobenzylcarbamate.

Said excipients are chosen, according to the pharma-
15 ceutical form and the method of administration desired,
from the usual excipients that are known to those
skilled in the art.

In the pharmaceutical compositions of the present
20 invention for oral, sublingual, subcutaneous, intra-
muscular, intravenous, topical, local, intrathecal,
intranasal, transdermal, pulmonary, ocular or rectal
administration, the active ingredient of formula (I)
above or one of the compounds below:

- 25 - 2,2,2-trifluoroethyl benzylcarbamate;
- 2,2,2-trifluoroethyl 4-methoxybenzylcarbamate;
- 4-nitrophenyl 2-[4-phenylmethoxy)phenyl]ethyl-
- carbamate,
- 4-chloro-2-nitrophenyl 2-(4-chlorophenyl)ethyl-
- 30 carbamate;
- 4-nitrophenyl 2-(3,4-dimethoxyphenyl)ethylcarbamate;
- phenyl 2-(3,4-dimethoxyphenyl)ethylcarbamate;
- 4-cyanophenyl 2-(4-methylphenyl)ethylcarbamate;
- 2,4,5-trichlorophenyl 2-(4-chlorophenyl)ethyl-
- 35 carbamate;
- phenyl 4-chlorobenzylcarbamate;
- phenyl 4-methoxybenzylcarbamate;
- 4-fluorophenyl 2-(4-methoxyphenyl)ethylcarbamate;
- phenyl 3-nitrobenzylcarbamate;

- 4-cyanophenyl 4-methoxybenzylcarbamate;
- phenyl 3-chlorobenzylcarbamate;
- phenyl 3,4-dichlorobenzylcarbamate;
- 4-nitrophenyl 2-(4-hydroxyphenyl)ethylcarbamate;
- 5 - phenyl 2-[4-(2-ethyl-5,7-dimethyl-3H-imidazo-
[4,5-b]pyridin-3-yl)phenyl]ethylcarbamate;
- phenyl 2-[4-(2-amino-4-thiazolyl)phenyl]ethyl-
carbamate;
- 2,3,4,5,6-pentafluorophenyl 4-bromobenzylcarbamate;
- 10 or its possible salt, solvate or hydrate, can be
administered in unit administration form as a mixture
with conventional pharmaceutical excipients, to animals
and to human beings for the prophylaxis or the
treatment of the disorders or of the diseases above.

15

Suitable unit administration forms comprise oral
administration forms such as tablets, soft or hard
gelatin capsules, powders, granules, chewing gums and
oral solutions or suspensions, sublingual, buccal,
20 intratracheal, intraocular and intranasal admini-
stration forms, forms for administration by inhalation,
subcutaneous, intramuscular or intravenous
administration forms, and rectal or vaginal admini-
stration forms. For topical application, the compounds
25 according to the invention can be used in creams,
ointments or lotions.

By way of example, a unit administration form of a
compound according to the invention in tablet form can
30 comprise the following components:

	Compound according to the invention	50.0 mg
	Mannitol	223.75 mg
	Sodium croscarmellose	6.0 mg
	Corn starch	15.0 mg
35	Hydroxypropylmethylcellulose	2.25 mg
	Magnesium stearate	3.0 mg

Said unit forms contain doses so as to allow a daily
administration of 0.01 to 20 mg of active ingredient

per kg of bodyweight, according to the pharmaceutical form.

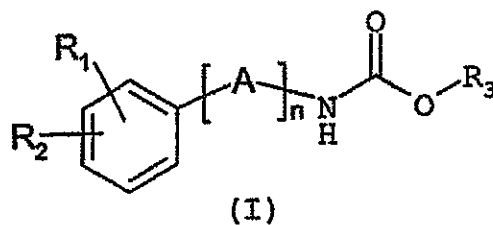
5 There may be specific cases where higher or lower doses are appropriate, such doses are also part of the invention. According to the usual practice, the dosage suitable for each patient is determined by the physician according to the method of administration, and the weight and response to said patient.

10

According to another of its aspects, the invention also relates to a method of treatment of the pathologies indicated above, which comprises the administration of an effective dose of a compound according to the
15 invention, of one of its salts that are pharmaceutically acceptable, or of a solvate or a hydrate of said compound.

CLAIMS

- 5 1. A compound corresponding to formula (I):



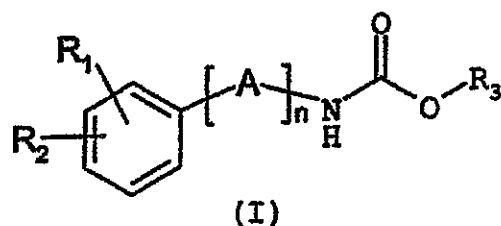
in which

$[A]_n$	R_1	R_2	R_3
CH ₂	H	4-phenyl	phenyl
CH ₂	H	4-phenyl	4-F-phenyl
CH ₂	H	4-phenyl	2-Cl-phenyl
CH ₂	H	4-phenyl	4-Cl-phenyl
CH ₂	H	4-phenyl	2-CH ₃ O-phenyl
CH ₂	H	4-phenyl	4-CH ₃ O-phenyl
CH ₂	H	4-phenyl	4-CH ₃ -phenyl
CH ₂	H	4-phenyl	3-CF ₃ -phenyl
CH ₂	H	4-phenyloxy	phenyl
CH ₂	H	4-phenyloxy	4-F-phenyl
CH ₂	H	4-phenyloxy	2-Cl-phenyl
CH ₂	H	4-phenyloxy	4-Cl-phenyl
CH ₂	H	4-phenyloxy	2-CH ₃ O-phenyl
CH ₂	H	4-phenyloxy	4-CH ₃ O-phenyl
CH ₂	H	4-phenyloxy	4-CH ₃ -phenyl
CH ₂	H	4-phenyloxy	3-CF ₃ -phenyl
CH ₂ CH ₂	H	4-phenyl	phenyl
CH ₂ CH ₂	H	4-phenyl	4-F-phenyl
CH ₂ CH ₂	H	4-phenyl	2-Cl-phenyl
CH ₂ CH ₂	H	4-phenyl	4-Cl-phenyl
CH ₂ CH ₂	H	4-phenyl	2-CH ₃ O-phenyl
CH ₂ CH ₂	H	4-phenyl	4-CH ₃ O-phenyl
CH ₂ CH ₂	H	4-phenyl	4-CH ₃ -phenyl

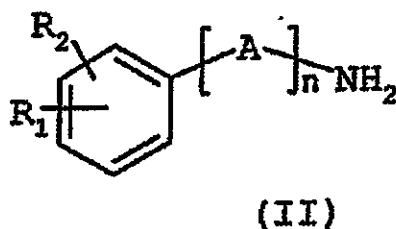
$[A]_n$	R_1	R_2	R_3
CH_2CH_2	H	4-phenyl	3-CF ₃ -phenyl
$CH_2CH_2CH_2$	H	H	phenyl
$CH_2CH_2CH_2$	H	H	4-F-phenyl
$CH_2CH_2CH_2$	H	H	4-Cl-phenyl
$CH_2CH_2CH_2$	H	H	4-CH ₃ -phenyl
$CH_2CH_2CH_2CH_2$	H	H	phenyl
$CH_2CH_2CH_2CH_2$	H	H	4-F-phenyl
$CH_2CH_2CH_2CH_2$	H	H	4-Cl-phenyl
$CH_2CH_2CH_2CH_2$	H	H	4-CH ₃ -phenyl

in the form of a base, of an addition salt with an acid, of a hydrate or of a solvate.

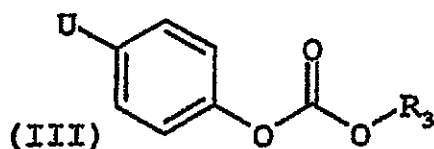
2. A process for preparing a compound of general formula (I)



- in which R_1 , R_2 , R_3 , A and n are as defined according to claim 1,
comprising the step consisting in
reacting an amine of general formula (II)



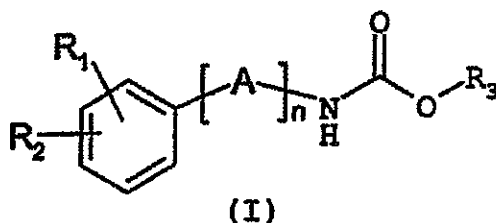
- in which R_1 , R_2 , n and A are as defined in general formula (I), with a carbonate of general formula (III)



in which U represents a hydrogen atom or a nitro group and R₃ is as defined in general formula (I).

5

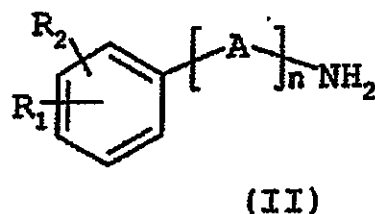
3. A process for preparing a compound of general formula (I).



10

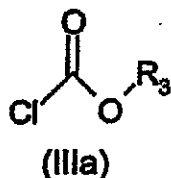
in which

R₁, R₂, A and n are as defined according to claim 1, and R₃ represents a phenyl group optionally substituted with one or more halogen atoms, or cyano, nitro, C₁₋₃-alkyl, C₁₋₃-alkoxy, trifluoromethyl or trifluoromethoxy groups, comprising the step consisting in
15 reacting an amine of general formula (II)



20

in which R₁, R₂, n and A are as defined in general formula (I), with an aryl chloroformate of general formula (IIIa)



in which R₃ represents a phenyl group optionally substituted with one or more halogen atoms, or cyano, nitro, C₁₋₃-alkyl, C₁₋₃-alkoxy, trifluoromethyl or trifluoromethoxy groups.

4. A pharmaceutical composition containing at least one compound of formula (I) as claimed in claim 1, in the form of a base, of a salt, of a hydrate or of a solvate, that is pharmaceutically acceptable, and, optionally, one or more excipients that are pharmaceutically acceptable.

5. A compound of formula (I) as claimed in claim 1, in the form of a base, of a salt, of a hydrate or of a solvate, that is pharmaceutically acceptable, for its use as a medicinal product.

6. The use of a compound of formula (I) as claimed in claim 1, in the form of a base, of a salt, of a hydrate or of a solvate, that is pharmaceutically acceptable, for preparing a medicinal product for use in the prevention or treatment of acute or chronic pain, dizziness, vomiting, nausea, eating disorders, neurological and psychiatric pathologies, acute or chronic neurodegenerative diseases, epilepsy, sleep disorders, cardiovascular diseases, renal ischemia, cancers, immune system disorders, allergic diseases, parasitic, viral or bacterial infectious diseases, inflammatory diseases, osteoporosis, ocular conditions, pulmonary conditions, gastrointestinal diseases or urinary incontinence.