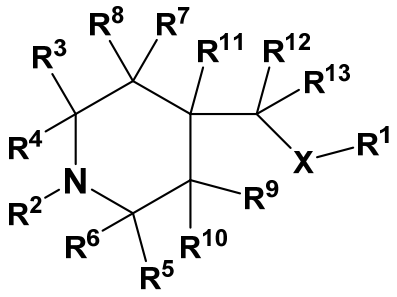
WHAT IS CLAIMED IS:

1. A compound of Formula I, or a pharmaceutically acceptable salt thereof, having a structure according to the following formula:



(I)

wherein

R^1 is substituted or unsubstituted alkyl, substituted or unsubstituted aryl or substituted or unsubstituted heteroaryl;

X is selected from $–N(R^{14})-C(=O)-$, or $–N(R^{14})-S(=O)_k-$, or $–CH_2-N(R^{14})-C(=O)-$, or $–CH_2-N(R^{14})-S(=O)_k-$, or $C(=O)-N(R^{14})$, and $–CH_2-C(=O)-N(R^{14})$, or $CH_2-N(R^{14})$;

k is selected from 1 and 2; and

R^{14} is H or substituted or unsubstituted C_1-C_6 alkyl;

R^2 is selected from substituted or unsubstituted alkyl and substituted or unsubstituted heteroalkyl;

R^3, R^4, R^5, R^6 are each independently hydrogen, substituted or unsubstituted $-C_{1-6}$ alkyl, substituted or unsubstituted $-C_{1-6}$ haloalkyl, a 3-, 4-, 5- or 6-membered substituted or unsubstitutedcycloalkyl or substituted or unsubstituted heterocycloalkyl group, wherein

R^3 and R^4 along with the carbon to which they are attached optionally form a 3- to 6-membered substituted or unsubstituted cycloalkyl or substituted or unsubstituted heterocycloalkyl group, said heterocycloalkyl group optionally containing 1 or 2 heteroatoms independently selected from O, N or S, and said substituted cycloalkyl or substituted heterocycloalkyl group is optionally substituted with 1, 2, or 3 substituents independently selected from F, $-C_{1-6}$ alkyl, and $-CF_3$

R^5 and R^6, together with the carbon to which they are attached, optionally form a 3-, 4-, 5- or 6- membered substituted or unsubstituted cycloalkyl or

substituted or unsubstituted heterocycloalkyl group, said heterocycloalkyl group optionally containing 1 or 2 heteroatoms independently selected from O, N or S, and said cycloalkyl or heterocycloalkyl group is optionally substituted with from 1, 2 or 3 substituents independently selected from F, -C_{1-6} alkyl, and -CF_3;

R^7, R^8, R^9, and $R^{10}$are each independently hydrogen, fluorine, substituted or unsubstituted-C_{1-6} alkyl, substituted or unsubstituted-C_{1-6} haloalkyl, a 3-, 4-, 5- or 6-membered substituted or unsubstituted cycloalkyl or substituted or unsubstituted heterocycloalkyl group, wherein

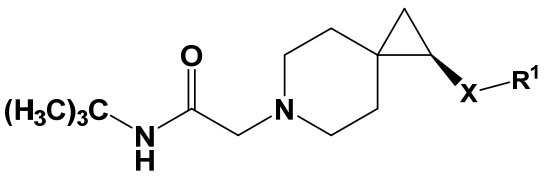
R^7 and R^8, together with the carbon to which they are attached, optionally form a 3-, 4-, 5-, or 6-membered substituted or unsubstituted cycloalkyl or substituted or unsubstituted heterocycloalkyl group, said heterocycloalkyl group optionally containing 1 or 2 heteroatoms independently selected from O, N or S, and said substituted cycloalkyl or substituted heterocycloalkyl group is optionally substituted with 1, 2 or 3 substituents independently selected from F, -C_{1-6} alkyl, or –CF_3;

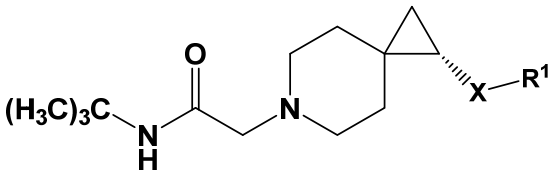
R^9 and R^{10}, together with the carbon to which they are attached, optionally form a 3-, 4-, 5- or 6-membered substituted or unsubstituted cycloalkyl or substituted or unsubstituted heterocycloalkyl group, said heterocycloalkyl group containing from 1 or 2 heteroatoms independently selected from O, N or S, and the substituted cycloalkyl or subsituted heterocycloalkyl group is optionally substituted with 1, 2, or 3 substituents independently selected from F, -C_{1-6} alkyl, or –CF_3;

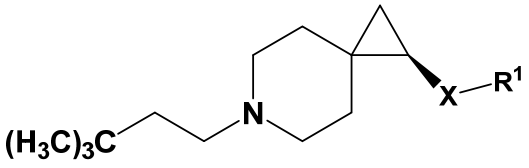
R^{11}, R^{12} and R^{13} are each independently hydrogen, fluorine, substituted or unsubstituted-C_{1-6} alkyl, substituted or unsubstituted-C_{1-6} haloalkyl, a 3-, 4-, 5- or 6-membered substituted or unsubstituted cycloalkyl or substituted or unsubstituted heterocycloalkyl group, wherein

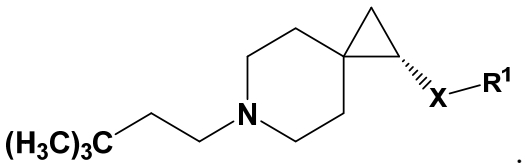
R^{11} and either R^{12} or R^{13}, together with the carbons to which they are attached, optionally form a 3-, 4-, 5-, 6- or 7-membered substituted or unsubstituted cycloalkyl or substituted or unsubstituted heterocycloalkyl group; and

wherein the compound is



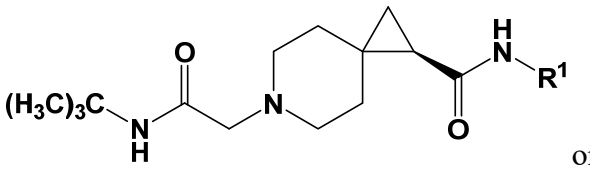
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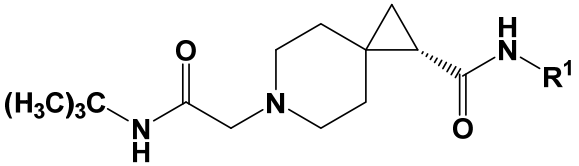
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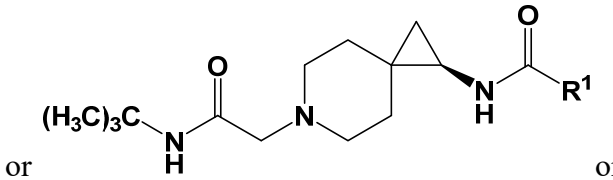
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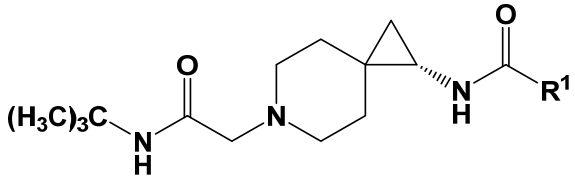
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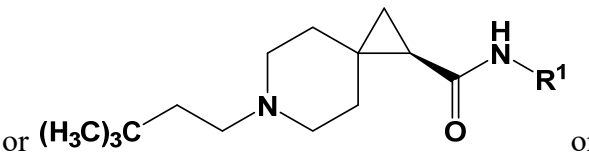
2. The compound according to claim 1 which is:

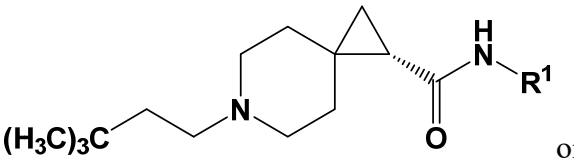


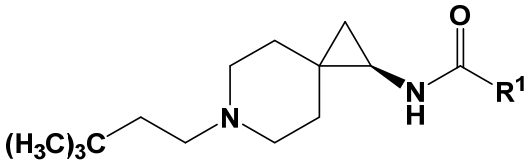
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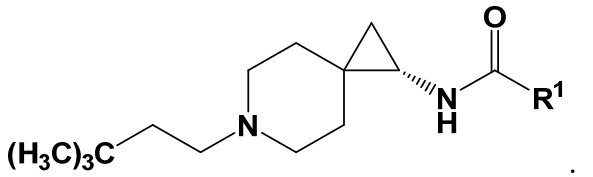


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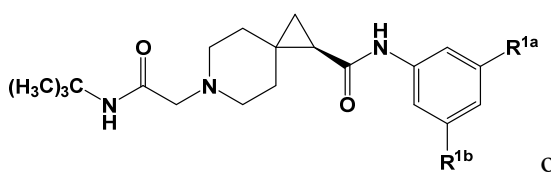
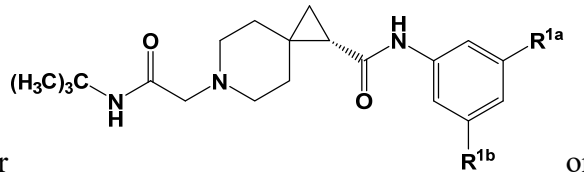
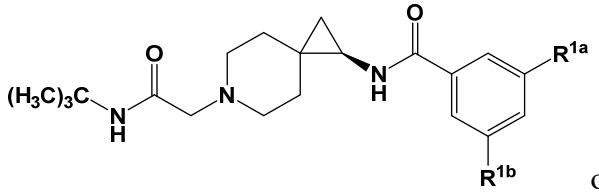
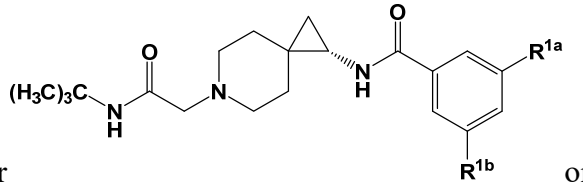
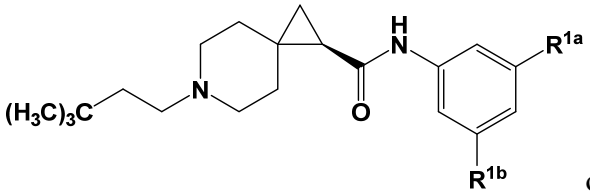
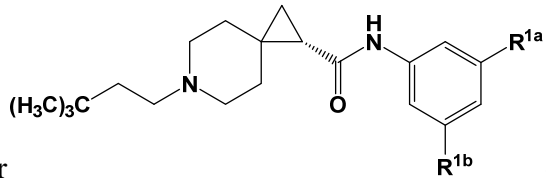
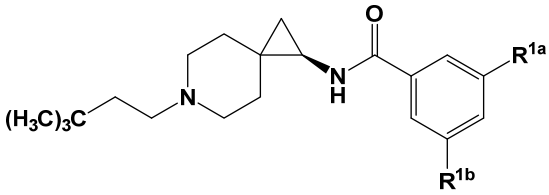
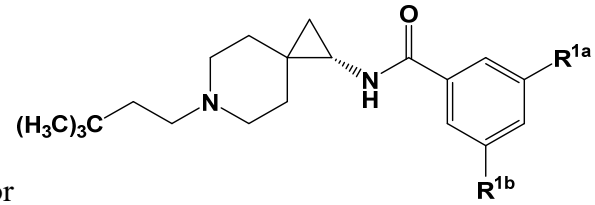
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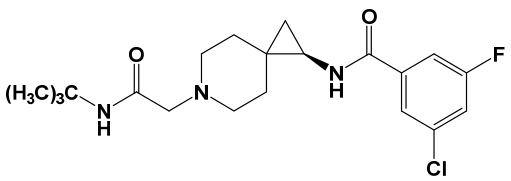
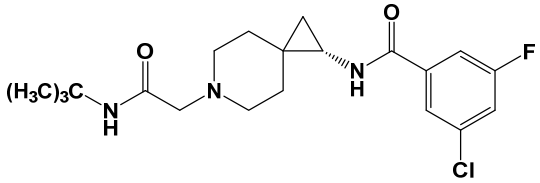
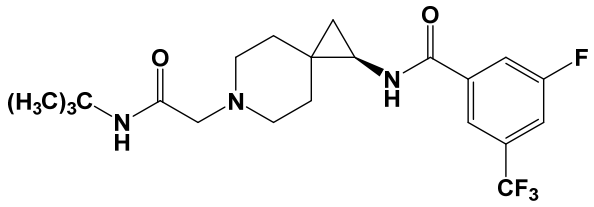
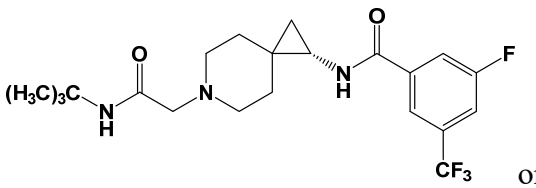
3. The compound according to a preceding claim, or a pharmaceutically acceptable salt thereof, wherein R^1 is phenyl substituted with one to three substituents, each of which is a member selected from the group consisting of F, Cl, and CF_3.

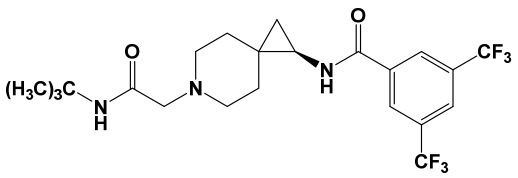
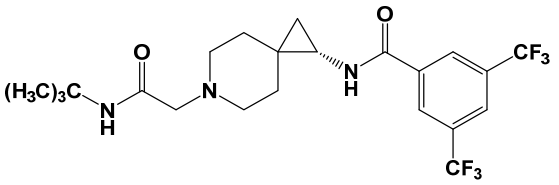
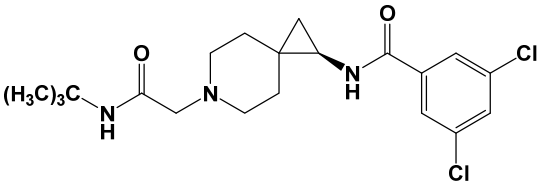
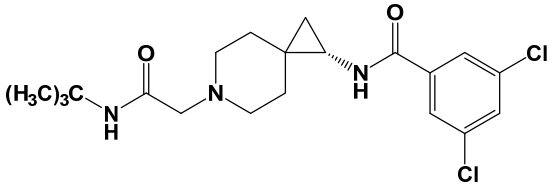
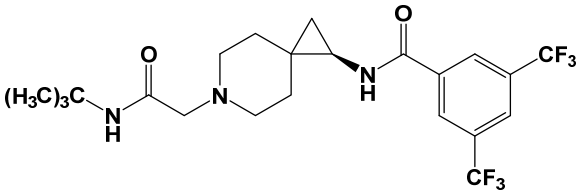
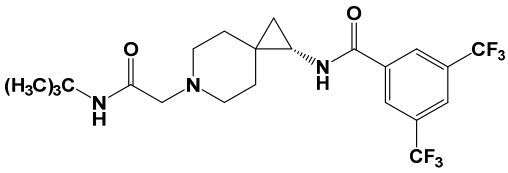
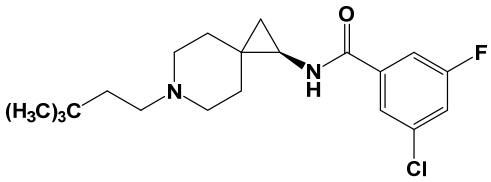
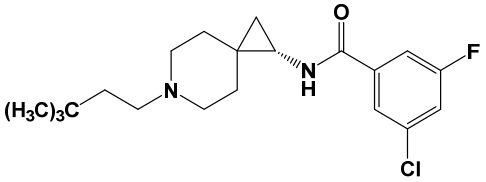
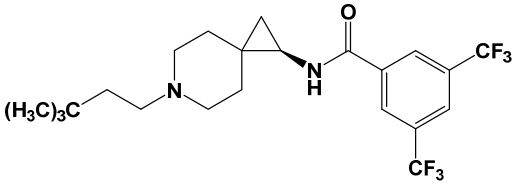
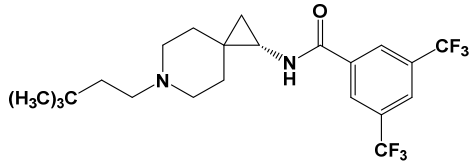
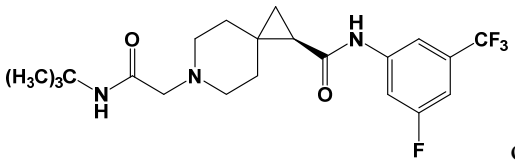
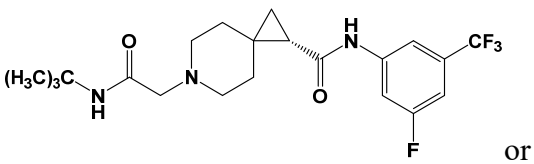
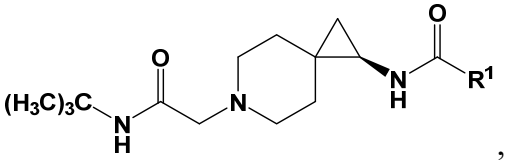
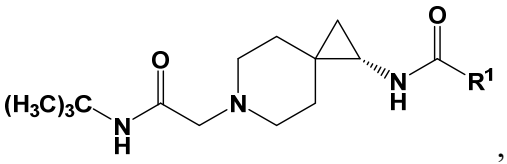
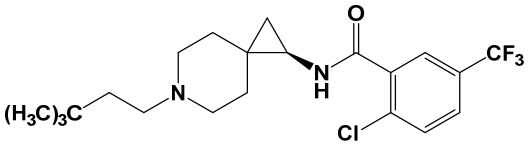
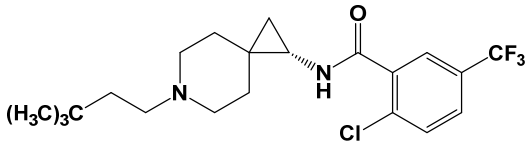
4. The compound according to a preceding claim, or a pharmaceutically acceptable salt thereof, which is:


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or

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or


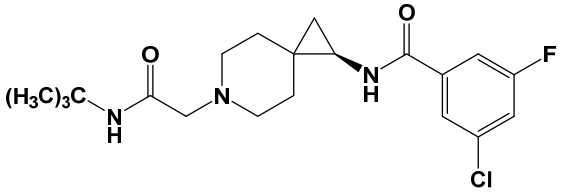
wherein R^{1a} and R^{1b} are members each independently selected from the group consisting of F, Cl, and CF_3.

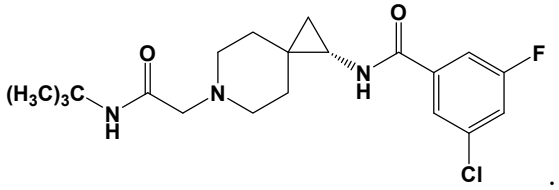
5. The compound according to claim **1**, or a pharmaceutically acceptable salt thereof, which is:


or

or

or

or


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or

or

or

or

or

, wherein R^1 is unsubstituted adamant-1-yl, or

, wherein R^1 is unsubstituted adamant-1-yl, or

or

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6. A compound, or a pharmaceutically acceptable salt thereof, which is



or


.

7. A pharmaceutical formulation comprising a therapeutically effective amount of a compound according to a preceding claim, or a pharmaceutically acceptable salt thereof.

8. A pharmaceutical formulation comprising a therapeutically effective amount of a compound according to claim **1-6**, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.

9. The pharmaceutical formulation according to claim **7** or **8**, said formulation in a unit dosage format.

10. A compound according to claim **1-6**, or a pharmaceutically acceptable salt thereof, for use in the treatment of pain responsive to selective inhibition of the T Channel known as the $Ca_{v3.2}$ channel.

11. A compound according to claim **1-6**, or a pharmaceutically acceptable salt thereof, which is a selective T-type channel inhibitory compound useful for relief of neuropathic and/or inflammatory pain, and epilepsy.

12. A compound according to claim **1-6**, or a pharmaceutically acceptable salt thereof, for use in the treatment of pain, epilepsy, or essential tremor.

13. Use of a compound according to claim **1-6**, or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for the treatment of pain responsive to selective inhibition of the T Channel known as the $Ca_{v3.2}$ channel, pain, epilepsy, or essential tremor.