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A61K 31/527 (2006.01) ***C07D 487/04 (2006.01)***
A61P 25/16 (2006.01) ***C07D 491/107 (2006.01)***
A61P 25/22 (2006.01) ***C07D 498/04 (2006.01)***
C07D 239/22 (2006.01)

Norwegian Industrial Property Office

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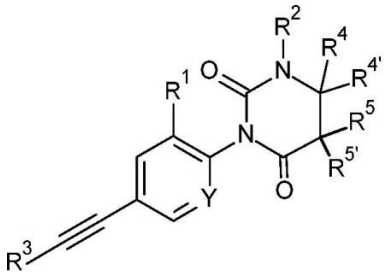
(73)	Proprietor	F. Hoffmann-La Roche AG, Grenzacherstrasse 124, 4070 Basel, Sveits
(72)	Inventor	VIEIRA, Eric, Lindenstrasse 9, CH-4402 Frenkendorf, Sveits JAESCHKE, Georg, Lerchenstrasse 76, CH-4059 Basel, Sveits GUBA, Wolfgang, Am Ruettacker 3, 79379 Muellheim, Tyskland RICCI, Antonio, Hauptstrasse 54, CH-4127 Birsfelden, Sveits RUEHER, Daniel, 14 Rue des Fleurs, F-68480 Raedersdorf, Frankrike BIEMANS, Barbara, Riehenstrasse 183, CH-4058 Basel, Sveits PLANCHER, Jean-Marc, 9 Rue des Vignes, F-68220 Hagenthal-le-Bas, Frankrike O`HARA, Fionn, Schlettstadterstrasse 27, CH-4055 Basel, Sveits
(74)	Agent or Attorney	PLOUGMANN VINGTOFT, Postboks 1003 Sentrum, 0104 OSLO, Norge

(54) Title **ETHYNYL DERIVATIVES**

(56) References Cited: WO-A1-2011/128279, WO-A1-2015/044075, WO-A1-2011/029104, US-A1- 2011 124 663

PATENTKRAV

1. Forbindelse med formel I



I

hvori

Y er N eller C−$R^{1'}$;

$R^{1'}$ er hydrogen eller F;

R^1 er hydrogen, halogen eller C_{1-7}−alkyl substituert med halogen;

R^2 er hydrogen eller C_{1-7}−alkyl;

eller R^2 danner sammen med R^4 en 6-leddet heterosyklisk ring inneholdende $-CH_2-CH_2-O-CH_2-$ eller $-CH_2-CH_2-NR-C(O)-$;

R er hydrogen, C_{1-7}−alkyl, fenyl eller benzyl;

R^3 er fenyl eller pyridinyl, hvori N-atomet i pyridinylgruppen kan være i forskjellige posisjoner;

$R^{4'}$ er hydrogen, C_{1-7}−alkyl eller C_{1-7}−alkoksyalkyl;

R^4 er hydrogen, C_{1-7}−alkyl, fenyl eventuelt substituert med halogen eller C_{1-7}−alkoksy, eller er sykloalkyl, eller er pyridinyl eventuelt substituert med halogen, C_{1-7}−alkyl, C_{1-7}−alkoksy eller =O, eller er pyrimidinyl eventuelt substituert med C_{1-7}−alkyl, C_{1-7}−alkoksy eller =O, eller er 1−C_{1-7}−alkylpyridinyl, eller er

pyrazinyl, eller er pyridazinyl eventuelt substituert med C_{1-7}−alkyl, C_{1-7}−alkoksy eller =O,

eller er

1-metylpyrrolo[2,3-b]pyridin-5-yl, eller er 6-imidazo[1,2-b]pyridazin-6-yl;

eller R^4 danner sammen med R^4 en 4-, 5- eller 6-leddet heterosyklisk ring inneholdende

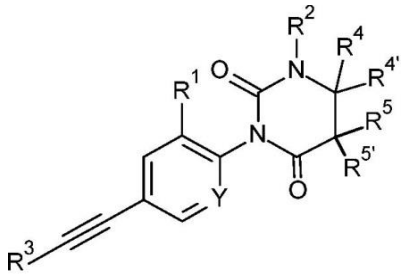
$-(CH_2)_5-$, $-CH_2-CH_2-O-CH_2-CH_2-$, $CH_2-CH_2-CH_2-$, $-CH_2-CH_2-CH_2-CH_2-$, $-CH_2-O-CH_2-CH_2-$ eller $CH_2-CH_2-CH_2-O-CH_2$;

R^5 og $R^{5'}$ er hydrogen eller $C_{1-7}-$alkyl;

eller R^4 danner sammen med R^5 en mettet 5-leddet ring inneholdende $-CH_2-CH_2-CH_2-$;

eller et farmasøytisk aksepterbart salt eller syreaddisjonssalt, en rasemisk blanding eller den tilsvarende enantiomeren og/eller optiske isomeren og/eller stereoisomeren av den.

2. Forbindelse med formel IA ifølge krav 1,



IA

hvori

Y er N eller $C-R^{1'}$;

$R^{1'}$ er hydrogen eller F;

R^1 er hydrogen, halogen eller $C_{1-7}-$alkyl substituert med halogen;

R^2 er hydrogen eller $C_{1-7}-$alkyl;

R^3 er fenyl eller pyridinyl, hvori N-atomet i pyridinylgruppen kan være i forskjellige posisjoner;

$R^{4'}$ er hydrogen, $C_{1-7}-$alkyl eller $C_{1-7}-$alkoksyalkyl;

R^4 er hydrogen, $C_{1-7}-$alkyl, fenyl eventuelt substituert med halogen eller $C_{1-7}-$alkoksy, eller er sykloalkyl, eller er pyridinyl eventuelt substituert med halogen, $C_{1-7}-$alkyl, $C_{1-7}-$alkoksy eller =O, eller er pyrimidinyl eventuelt substituert med $C_{1-7}-$alkyl, $C_{1-7}-$alkoksy eller =O, eller er $1-C_{1-7}-$alkylpyridinyl, eller er pyrazinyl, eller er

pyridazinyl eventuelt substituert med $C_{1-7}-$alkyl, $C_{1-7}-$alkoksy eller =O, eller er 1-metylpyrrolo[2,3-b]pyridin-5-yl, eller er 6-imidazo[1,2-b]pyridazin-6-yl;

R^5 og $R^{5'}$ er hydrogen eller C_{1-7}–alkyl;
eller et farmasøytisk aksepterbart salt eller syreaddisjonssalt, en rasemisk blanding, eller den tilsvarende enantiomeren og/eller optiske isomeren og/eller stereoisomeren av den.

3. Forbindelse med formel IA ifølge krav 2, hvori forbindelsene er
3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,6,6-trimetyl-heksahydropyrimidin-2,4-dion
3-[2-klor-4-(2-fenyletynyl)fenyl]-1,6,6-trimetyl-heksahydropyrimidin-2,4-dion
(5RS)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,5,6,6-tetrametyl-heksahydropyrimidin-2,4-dion
3-[2-klor-6-fluor-4-[2-(3-pyridyl)etynyl]fenyl]-1,6,6-trimetyl-heksahydropyrimidin-2,4-dion
3-[2-klor-6-fluor-4-[2-(3-pyridyl)etynyl]fenyl]-1-etyl-6,6-dimetyl-heksahydropyrimidin-2,4-dion
(6RS)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,6-dimetyl-6-fenyl-heksahydropyrimidin-2,4-dion
(6RS)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,6-dimetyl-6-fenyl-heksahydropyrimidin-2,4-dion
(6RS)-3-[2,6-difluor-4-[2-(3-pyridyl)etynyl]fenyl]-1-etyl-6-metyl-6-fenyl-heksahydropyrimidin-2,4-dion
(6RS)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-6-etyl-1,6-dimetyl-heksahydropyrimidin-2,4-dion
(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,6-dimetyl-6-fenyl-heksahydropyrimidin-2,4-dion
(6R)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,6-dimetyl-6-fenyl-heksahydropyrimidin-2,4-dion
3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-6,6-dietyl-heksahydropyrimidine-2,4-dion
3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-6,6-dietyl-1-metyl-heksahydropyrimidin-2,4-dion
(6RS)-1,6-dimetyl-6-fenyl-3-[5-(2-fenyletynyl)-2-pyridyl]heksahydropyrimidin-2,4-dion

(6RS)-1,6-dimetyl-6-fenyl-3-[4-(2-fenyletynyl)fenyl]heksahydropyrimidin-2,4-dion

(6RS)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-6-isopropyl-1,6-dimetyl-heksahydropyrimidin-2,4-dion

(6RS)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,6-dimetyl-6-(2-pyridyl)heksahydropyrimidin-2,4-dion

(6RS)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,6-dimetyl-6-(4-pyridyl)heksahydropyrimidin-2,4-dion

(6RS)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,6-dimetyl-6-(3-pyridyl)heksahydropyrimidin-2,4-dion

(6RS)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-6-(metoksymetyl)-1,6-dimetyl-heksahydropyrimidin-2,4-dion

(6RS)-6-sykloheksyl-3-[2,6-difluor-4-[2-(3-pyridyl)etynyl]fenyl]-1,6-dimetyl-heksahydropyrimidin-2,4-dion

(6RS)-3-[3-klor-5-(2-fenyletynyl)-2-pyridyl]-1,6-dimetyl-6-fenyl-heksahydropyrimidin-2,4-dion

(6RS)-3-[2-klor-6-fluor-4-[2-(3-pyridyl)etynyl]fenyl]-1,6-dimetyl-6-(3-pyridyl)heksahydropyrimidin-2,4-dion

(6RS)-3-[2-klor-6-fluor-4-[2-(3-pyridyl)etynyl]fenyl]-1,6-dimetyl-6-fenyl-heksahydropyrimidin-2,4-dion

(6RS)-6-(3-klorfenyl)-3-[2,6-difluor-4-[2-(3-pyridyl)etynyl]fenyl]-1,6-dimetyl-heksahydropyrimidin-2,4-dion

(6RS)-6-(2-klorfenyl)-3-[2,6-difluor-4-[2-(3-pyridyl)etynyl]fenyl]-1,6-dimetyl-heksahydropyrimidin-2,4-dion

(6RS)-6-(4-klorfenyl)-3-[2,6-difluor-4-[2-(3-pyridyl)etynyl]fenyl]-1,6-dimetyl-heksahydropyrimidin-2,4-dion

(6RS)-3-[2,6-difluor-4-[2-(3-pyridyl)etynyl]fenyl]-6-(3-metoksyfenyl)-1,6-dimetyl-heksahydropyrimidin-2,4-dion

(6RS)-6-tert-butyl-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-6-metyl-heksahydropyrimidin-2,4-dion

(6RS)-6-tert-butyl-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,6-dimetyl-heksahydropyrimidin-2,4-dion

(6RS)-3-[3-fluor-5-(2-fenyletynyl)-2-pyridyl]-1,6-dimetyl-6-fenyl-heksahydropyrimidin-2,4-dion

(6RS)-1,6-dimetyl-6-fenyl-3-[5-(2-fenyletynyl)-3-(trifluormetyl)-2-pyridyl]heksahydropyrimidin-2,4-dion

(6RS)-3-[2-klor-4-(2-fenyletynyl)fenyl]-1,6-dimetyl-6-(3-pyridyl)heksahydropyrimidin-2,4-dion

(6RS)-3-[2,6-difluor-4-[2-(3-pyridyl)etynyl]fenyl]-6-etyl-1-metyl-6-fenyl-heksahydropyrimidin-2,4-dion

(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,6-dimetyl-6-(3-pyridyl)heksahydropyrimidin-2,4-dion

(6S)-3-[3-fluor-5-(2-fenyletynyl)-2-pyridyl]-1,6-dimetyl-6-(3-pyridyl)heksahydropyrimidin-2,4-dion

(6RS)-6-(6-klor-3-pyridyl)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,6-dimetyl-heksahydropyrimidin-2,4-dion

(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1-etyl-6-metyl-6-(3-pyridyl)heksahydropyrimidin-2,4-dion

(6S)-3-[2,6-difluor-4-[2-(3-pyridyl)etynyl]fenyl]-1,6-dimetyl-6-(3-pyridyl)heksahydropyrimidin-2,4-dion

(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,6-dimetyl-6-(6-metyl-3-pyridyl)heksahydropyrimidin-2,4-dion

(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,6-dimetyl-6-pyrimidin-4-yl-heksahydropyrimidin-2,4-dion

(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,6-dimetyl-6-pyrimidin-5-yl-heksahydropyrimidin-2,4-dion

(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,6-dimetyl-6-pyrazin-2-yl-heksahydropyrimidin-2,4-dion

(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,6-dimetyl-6-pyridazin-3-yl-heksahydropyrimidin-2,4-dion

(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-6-(5-fluor-3-pyridyl)-1,6-dimetyl-heksahydropyrimidin-2,4-dion

(6S)-6-(2-klor-4-pyridyl)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,6-dimetyl-heksahydropyrimidin-2,4-dion

(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,6-dimetyl-6-pyridazin-4-yl-heksahydropyrimidin-2,4-dion

(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,6-dimetyl-6-(2-metyl-4-pyridyl)heksahydropyrimidin-2,4-dion

(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-6-(6-metoksy-3-pyridyl)-1,6-dimetyl-heksahydropyrimidin-2,4-dion

(6S)-6-(2-klor-4-pyridyl)-3-[2,6-difluor-4-[2-(3-pyridyl)etynyl]fenyl]-1,6-dimetyl-heksahydropyrimidin-2,4-dion

(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,6-dimetyl-6-(-6-okso-1H-pyridin-3-yl)heksahydropyrimidin-2,4-dion

(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,6-dimetyl-6-(1-metyl-6-okso-3-pyridyl)heksahydropyrimidin-2,4-dion

(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-6-(1-etyl-6-okso-3-pyridyl)-1,6-dimetyl-heksahydropyrimidin-2,4-dion

(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-6-(1-isopropyl-6-okso-3-pyridyl)-1,6-dimetyl-heksahydropyrimidin-2,4-dion

(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-6-(6-isopropoksy-3-pyridyl)-1,6-dimetyl-heksahydropyrimidin-2,4-dion

(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1-isopropyl-6-metyl-6-(3-pyridyl)heksahydropyrimidin-2,4-dion

(6S)-3-[2-klor-6-fluor-4-(2-fenyletynyl)fenyl]-1,6-dimetyl-6-(3-pyridyl)heksahydropyrimidin-2,4-dion

(6RS)-3-[2,6-difluor-4-[2-(3-pyridyl)etynyl]fenyl]-1-metyl-6-fenyl-6-(trifluormetyl)heksahydropyrimidin-2,4-dion

(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-6-(2-metoksy-4-pyridyl)-1,6-dimetyl-heksahydropyrimidin-2,4-dion

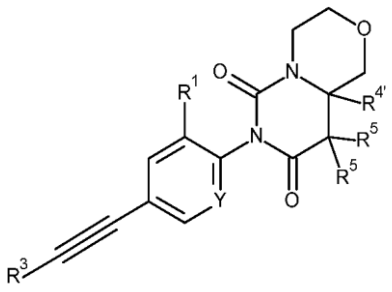
(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,6-dimetyl-6-(2-okso-1H-pyridin-4-yl)heksahydropyrimidin-2,4-dion

(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,6-dimetyl-6-(1-metyl-2-okso-4-pyridyl)heksahydropyrimidin-2,4-dion

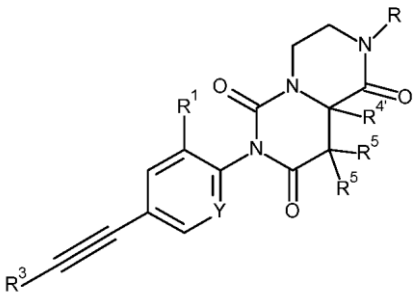
(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,6-dimetyl-6-(2-metylpyrimidin-4-yl)heksahydropyrimidin-2,4-dion

(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1-etyl-6-metyl-6-(2-metyl-4-pyridyl)heksahydropyrimidin-2,4-dion
(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,6-dimetyl-6-(4-pyridyl)heksahydropyrimidin-2,4-dion
(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-6-(2-metoksypyrimidin-5-yl)-1,6-dimetyl-heksahydropyrimidin-2,4-dion
(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,6-dimetyl-6-(2-okso-1H-pyrimidin-5-yl)heksahydropyrimidin-2,4-dion
(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-6-(6-metoksypyridazin-3-yl)-1,6-dimetyl-heksahydropyrimidin-2,4-dion
(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,6-dimetyl-6-(6-okso-1H-pyridazin-3-yl)heksahydropyrimidin-2,4-dion
(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,6-dimetyl-6-(1-metyl-6-okso-pyridazin-3-yl)heksahydropyrimidin-2,4-dion
(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,6-dimetyl-6-(1-metylpyrrolo[2,3-b]pyridin-5-yl)heksahydropyrimidin-2,4-dion eller
(6S)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-6-imidazo[1,2-b]pyridazin-6-yl-1,6-dimetyl-heksahydropyrimidin-2,4-dion.

4. Forbindelse med formel IB-1 eller IB-2 ifølge krav 1



IB-1 eller



IB-2

hvori

Y er N eller C−$R^{1'}$;

$R^{1'}$ er hydrogen eller F;

R^1 er hydrogen, halogen eller C_{1-7}−alkyl substituert med halogen;

R er hydrogen, C_{1-7}−alkyl, fenyl eller benzyl;

R^3 er fenyl eller pyridinyl, hvori N-atomet i pyridinylgruppen kan være i forskjellige posisjoner;

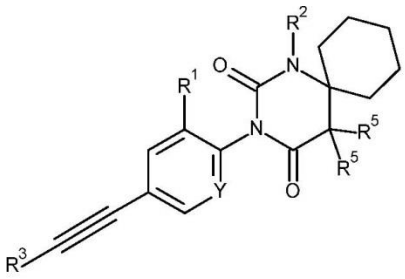
$R^{4'}$ er hydrogen, C_{1-7}−alkyl eller C_{1-7}−alkoksyalkyl;

R^5 og $R^{5'}$ er hydrogen eller C_{1-7}−alkyl;

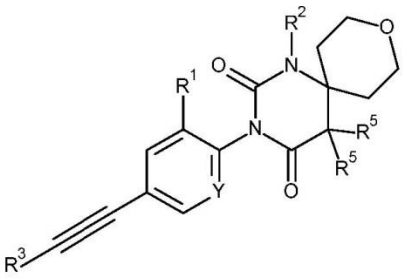
eller et farmasøytisk aksepterbart salt eller syreaddisjonssalt, en rasemisk blanding eller den tilsvarende enantiomeren og/eller optiske isomeren og/eller stereoisomeren av den.

5. Forbindelse med formel IB-1 eller IB-2 ifølge krav 4, hvori forbindelsene er
(9aRS)-7-[2,6-difluor-4-(2-fenyletynyl)fenyl]-3,4,9,9a-tetrahydro-1H-pyrimido[6,1-c][1,4]oksazin-6,8-dion
(9aRS)-7-[2,6-difluor-4-(2-fenyletynyl)fenyl]-9a-metyl-2,3,4,9-tetrahydropyrazino[1,2-c]pyrimidin-1,6,8-trion
(9aRS)-7-[2,6-difluor-4-(2-fenyletynyl)fenyl]-2,9a-dimetyl-4,9-dihydro-3H-pyrazino[1,2-c]pyrimidin-1,6,8-trion
(9aRS)-7-[2,6-difluor-4-(2-fenyletynyl)fenyl]-2-isopropyl-9a-metyl-4,9-dihydro-3H-pyrazino[1,2-c]pyrimidin-1,6,8-trion
(9aRS)-2-benzyl-7-[2,6-difluor-4-(2-fenyletynyl)fenyl]-9a-metyl-4,9-dihydro-3H-pyrazino[1,2-c]pyrimidin-1,6,8-trion
(9aRS)-7-[2,6-difluor-4-(2-fenyletynyl)fenyl]-9a-metyl-2-fenyl-4,9-dihydro-3H-pyrazino[1,2-c]pyrimidin-1,6,8-trion eller
(9aRS)-7-[2-klor-6-fluor-4-(2-fenyletynyl)fenyl]-9a-metyl-2,3,4,9-tetrahydropyrazino[1,2-c]pyrimidin-1,6,8-trion

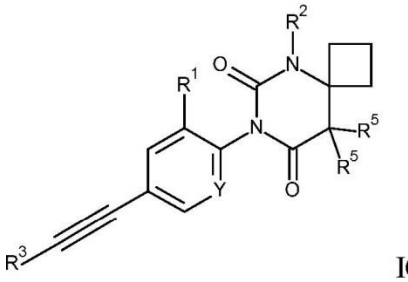
6. Forbindelse med formel IC-1, IC-2, IC-3, IC-4, IC-5 og IC-6 ifølge krav 1



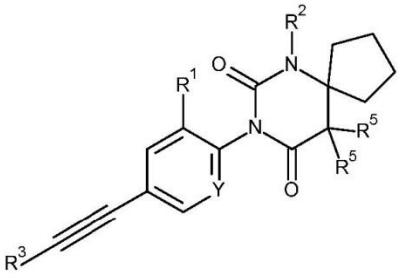
IC-1,



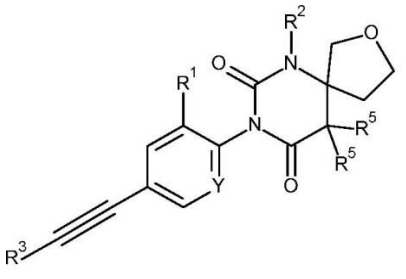
IC-2



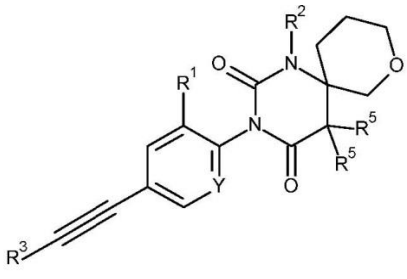
IC-3,



IC-4



IC-5,



IC-6

hvori

Y er N eller C−$R^{1'}$;

$R^{1'}$ er hydrogen eller F;

R^1 er hydrogen, halogen eller C_{1-7}−alkyl substituert med halogen;

R^2 er hydrogen eller C_{1-7}−alkyl;

R^3 er fenyl eller pyridinyl, hvori N-atomet i pyridinylgruppen kan være i forskjellige posisjoner;

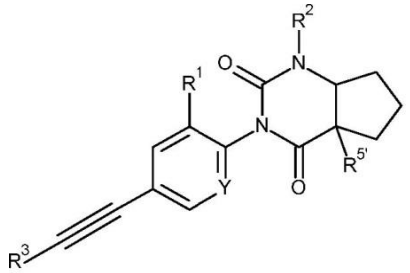
R^5 og $R^{5'}$ er hydrogen eller C_{1-7}−alkyl;

eller et farmasøytisk aksepterbart salt eller syreaddisjonssalt, en rasemisk blanding eller den tilsvarende enantiomeren og/eller optiske isomeren og/eller stereoisomeren av den.

7. Forbindelse med formel IC-1, IC-2, IC-3, IC-4, IC-5 og IC-6 ifølge krav 6, hvori forbindelsene er

3-[2-klor-4-(2-fenyletynyl)fenyl]-1-metyl-1,3-diazaspiro[5,5]undekan-2,4-dion
3-[2-klor-4-(2-fenyletynyl)fenyl]-1-metyl-9-oksa-1,3-diazaspiro[5.5]undekan-2,4-dion
7-[2-klor-4-(2-fenyletynyl)fenyl]-5-metyl-5,7-diazaspiro[3.5]nonan-6,8-dion
8-[2,6-difluor-4-(2-fenyletynyl)fenyl]-6-metyl-6,8-diazaspiro[4.5]dekan-7,9-dion
(5RS)-8-[2,6-difluor-4-(2-fenyletynyl)fenyl]-6-metyl-2-oksa-6,8-diazaspiro[4.5]dekan-7,9-dion eller
(6RS)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1-metyl-8-oksa-1,3-diazaspiro[5.5]undekan-2,4-dion

8. Forbindelse med formel ID ifølge krav 1



ID

hvori

Y er N eller C−$R^{1'}$;

$R^{1'}$ er hydrogen eller F;

R^1 er hydrogen, halogen eller C_{1-7}−alkyl substituert med halogen;

R^2 er hydrogen eller C_{1-7}−alkyl;

R^3 er fenyl eller pyridinyl, hvori N-atomet i pyridinylgruppen kan være i forskjellige posisjoner;

$R^{5'}$ er hydrogen eller C_{1-7}−alkyl;

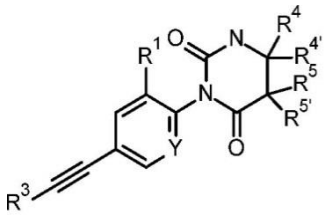
eller et farmasøytisk aksepterbart salt eller syreaddisjonssalt, en rasemisk blanding eller den tilsvarende enantiomeren og/eller optiske isomeren og/eller stereoisomeren av den.

9. Forbindelse med formel ID ifølge krav 8, hvori forbindelsene er
(4aRS,7aSR)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1-metyl-5,6,7,7a-tetrahydro-4aH-syklopenta[d]pyrimidin-2,4-dion eller

(4aRS,7aRS)-3-[2,6-difluor-4-(2-fenyletynyl)fenyl]-1,7a-dimetyl-4a,5,6,7-tetrahydrosyklopenta[d]pyrimidin-2,4-dion.

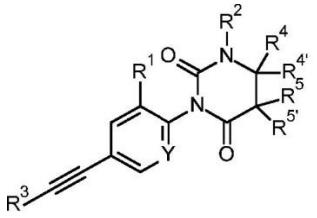
10. Framgangsmåte for å framstille en forbindelse med formel I som definert i hvilket som helst av krav 1 - 9, der framgangsmåten omfatter

a) alkylere en forbindelse med formel



6

med R^2-I i nærvær av NaH eller CS_2CO_3 i DMF til en forbindelse med formel



I

hvori substituentene beskrives i krav 1, eller
hvis det ønskes, å omdanne de framstilte forbindelsene til farmasøytisk aksepterbare syreaddisjonssalter.

11. Forbindelse med formel I ifølge hvilket som helst av krav 1 - 9 til anvendelse som terapeutiske virkestoffer.

12. Forbindelse med formel I ifølge hvilket som helst av krav 1 - 9 til anvendelse ved behandling av Parkinsons sykdom, angst, oppkast, obsessiv-kompulsiv lidelse, autisme, nevroproteksjon, kreft, depresjon og diabetes type 2.

13. Farmasøytisk sammensetning som omfatter en forbindelse med formel ifølge hvilket som helst av krav 1–9 og farmasøytisk aksepterbare hjelpestoffer.

14. Anvendelsen av en forbindelse med formel I ifølge hvilket som helst av

krav 1–9 til fremstilling av et medikament til behandling av Parkinsons sykdom, angst, oppkast, obsessiv-kompulsiv lidelse, autisme, nevroproteksjon, kreft, depresjon og diabetes type 2.