mGluR1 and mGluR5 belong to group I, mGluR2 and mGluR3 belong to group II and mGluR4, mGluR6, mGluR7 and mGluR8 belong to group III.

Negative allosteric modulators of metabotropic glutamate receptors, belonging to the first group, can be used for the treatment or prevention of acute and/or chronic neurological disorders such as Parkinson's disease, Fragile-X syndrome, autistic disorders, cognitive disorders and memory deficits, as well as chronic and acute pain and gastroesophageal reflux disease (GERD).

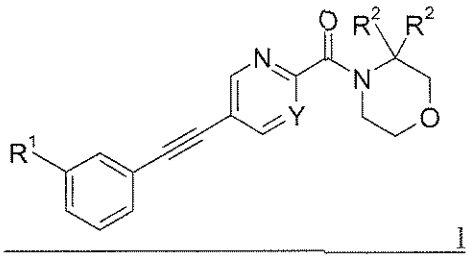
Other treatable indications in this connection are restricted brain function caused by bypass operations or transplants, poor blood supply to the brain, spinal cord injuries, head injuries, hypoxia caused by pregnancy, cardiac arrest and hypoglycaemia. Further treatable indications are ischemia, Huntington's chorea, amyotrophic lateral sclerosis (ALS), dementia caused by AIDS, eye injuries, retinopathy, idiopathic parkinsonism or parkinsonism caused by medicaments as well as conditions which lead to glutamate-deficiency functions, such as e.g. muscle spasms, convulsions, migraine, urinary incontinence, nicotine addiction, opiate addiction, anxiety, vomiting, dyskinesia and depressions.

Disorders mediated full or in part by mGluR5 are for example acute, traumatic and chronic degenerative processes of the nervous system, such as Alzheimer's disease, senile dementia, Parkinson's disease, Huntington's chorea, amyotrophic lateral sclerosis and multiple sclerosis, psychiatric diseases such as schizophrenia and anxiety, depression, pain and drug dependency *(Expert Opin. Ther. Patents (2002), 12, (12)).*

Selective mGluR5 antagonists are especially useful for the treatment of disorders where reduction of mGluR5 receptor activation is desired, such as anxiety and pain, depression, Fragile-X syndrom, autism spectrum disorders, Parkinson's disease, and gastroesophageal reflux disease (GERD).

Objects of the ~~present invention~~embodiments disclosed herein are compounds of formula I and their pharmaceutically acceptable salts, the above-mentioned compounds as pharmaceutically active substances and their production. Further objects of the embodiments disclosed herein ~~invention~~ are medicaments based on a compound in accordance with the ~~invention~~ disclosure and their manufacture as well as the use of the compounds in the control or prevention of mGluR5 receptor (NAM) mediated disorders, which are anxiety and pain, depression, Fragile-X syndrom, autism spectrum disorders, Parkinson's disease, and gastroesophageal reflux disease (GERD, and, respectively, for the production of corresponding medicaments.

In one aspect, there is provided a compound of formula I



I

wherein

Y is N or CH;

R^1 is fluoro or chloro;

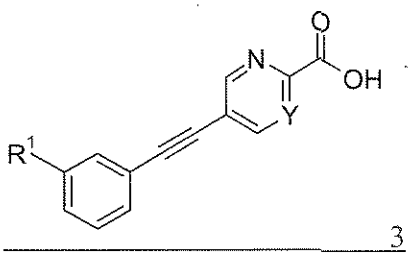
R^2 is hydrogen or methyl;

or a pharmaceutically acceptable acid addition salt, a racemic mixture, or its corresponding enantiomer and/or optical isomer and/or stereoisomer thereof.

In another aspect, there is provided a compound as defined herein for use as therapeutically active substance.

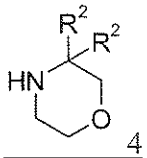
In another aspect, there is provided a process for preparation of a compound of formula I as defined herein, comprising the variant

reacting a compound of formula



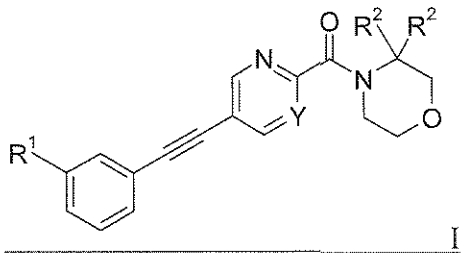
3

with a compound of formula



4

to form a compound of formula I



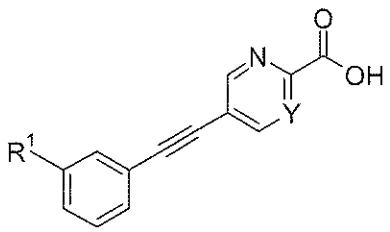
I

wherein the substituents are as defined herein.

In another aspect, there is provided a pharmaceutical composition comprising a compound as defined herein and a therapeutically active carrier.

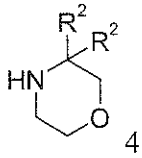
In another aspect, there is provided use of a compound as defined herein for the manufacture of a medicament for the treatment of anxiety and pain, depression, Fragile-X syndrom, autism spectrum disorders, Parkinson's disease, and gastroesophageal reflux disease (GERD).

In another aspect, there is provided a compound as defined herein for the treatment of anxiety and pain, depression, Fragile-X syndrom, autism spectrum disorders, Parkinson's disease, and gastroesophageal reflux disease (GERD).



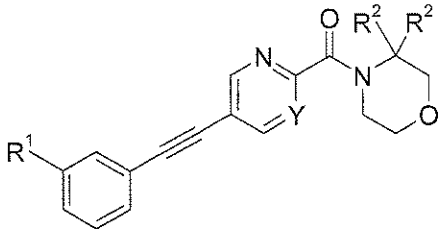
3

with a compound of formula



4

to form a compound of formula I



I

wherein the substituents are described in claim1.

8. A pharmaceutical composition comprising a compound in accordance with any one of claims 1 –5 and a therapeutically active carrier.

~~9. The use of a compound according to any one of claims 1 –5 for the treatment of anxiety and pain, depression, Fragile-X syndrom, autism spectrum disorders, Parkinson's disease, and gastroesophageal reflux disease (GERD).~~

~~10.~~9. The use of a compound as claimed in any one of claims 1-5 for the manufacture of a medicament for the treatment of anxiety and pain, depression, Fragile-X syndrom, autism spectrum disorders, Parkinson's disease, and gastroesophageal reflux disease (GERD).

~~11.~~10. A compound according to any one of claims 1 –5 for the treatment of anxiety and pain, depression, Fragile-X syndrom, autism spectrum disorders, Parkinson's disease, and gastroesophageal reflux disease (GERD).

~~12. A method for the treatment of anxiety and pain, depression, Fragile-X syndrom, autism spectrum disorders, Parkinson's disease, and gastroesophageal reflux disease (GERD),~~

~~which method comprises administering an effective amount of a compound as defined in any one of claims 1—5.~~