

## Title (en)

THE IDENTIFICATION AND USE OF EFFECTORS AND ALLOSTERIC MOLECULES FOR THE ALTERATION OF GENE EXPRESSION

## Title (de)

IDENTIFIZIERUNG UND VERWENDUNG VON EFFEKTOREN UND ALLOSTERISCHEN MOLEKÜLEN ZUR ÄNDERUNG DER GENEXPRESSION

## Title (fr)

IDENTIFICATION ET UTILISATION DE MOLECULES EFFECTRICES ET ALLOSTERIQUES POUR ALTERER L'EXPRESSION GENIQUE

## Publication

**EP 1290154 A2 20030312 (EN)**

## Application

**EP 01913217 A 20010301**

## Priority

- US 0106615 W 20010301
- US 18624800 P 20000301

## Abstract (en)

[origin: WO0164956A2] The present invention relates to the construction of an allosteric control module in which a catalytic RNA forms a part of or is linked to an effector-binding RNA domain or aptamer. These constructs place the activity of the catalytic RNA under the control of the effector and require the presence of an appropriate effector for activation or inactivation. The present invention provides means to identify useful effector molecules as well as their use to evolve cognate aptamers. The invention involves both the evolution of RNA sequences which bind the effector and a selection process in which the allosteric control modules are identified by their catalytic function in the presence and absence of the effector. The resulting regulatable catalytic RNAs may be used to alter the expression of a target RNA molecule in a controlled fashion.

## IPC 1-7

**C12N 15/10; C12N 15/11; C12N 15/63; C12N 15/86; C12N 5/10; C12N 9/00; C12Q 1/68; A61P 43/00**

## IPC 8 full level

**C12N 15/09** (2006.01); **A61K 31/4184** (2006.01); **A61K 31/4709** (2006.01); **A61K 31/496** (2006.01); **A61K 31/498** (2006.01); **A61K 38/21** (2006.01); **A61K 38/27** (2006.01); **A61K 38/43** (2006.01); **A61K 38/44** (2006.01); **A61K 38/55** (2006.01); **A61K 39/00** (2006.01); **A61K 39/04** (2006.01); **A61K 39/118** (2006.01); **A61K 39/13** (2006.01); **A61K 39/145** (2006.01); **A61K 39/165** (2006.01); **A61K 39/205** (2006.01); **A61K 39/21** (2006.01); **A61K 39/235** (2006.01); **A61K 39/245** (2006.01); **A61K 39/25** (2006.01); **A61K 48/00** (2006.01); **A61P 3/06** (2006.01); **A61P 3/10** (2006.01); **A61P 7/04** (2006.01); **A61P 7/06** (2006.01); **A61P 21/04** (2006.01); **A61P 31/00** (2006.01); **A61P 31/12** (2006.01); **A61P 37/00** (2006.01); **A61P 43/00** (2006.01); **C12N 1/15** (2006.01); **C12N 1/19** (2006.01); **C12N 1/21** (2006.01); **C12N 5/10** (2006.01); **C12N 9/00** (2006.01); **C12N 15/10** (2006.01); **C12N 15/115** (2010.01); **C12N 15/63** (2006.01); **C12N 15/86** (2006.01); **C12Q 1/02** (2006.01); **C12Q 1/68** (2006.01); **C12Q 1/6811** (2018.01)

## CPC (source: EP)

**A61P 3/06** (2017.12); **A61P 3/10** (2017.12); **A61P 7/04** (2017.12); **A61P 7/06** (2017.12); **A61P 21/04** (2017.12); **A61P 31/00** (2017.12); **A61P 31/12** (2017.12); **A61P 37/00** (2017.12); **A61P 43/00** (2017.12); **C12N 15/115** (2013.01); **C12Q 1/6811** (2013.01); **C12N 2310/121** (2013.01)

## Citation (search report)

See references of WO 0164956A2

## Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

## DOCDB simple family (publication)

**WO 0164956 A2 20010907; WO 0164956 A3 20021227**; AU 4190001 A 20010912; EP 1290154 A2 20030312; JP 2004504806 A 20040219; MX PA02008470 A 20021213

## DOCDB simple family (application)

**US 0106615 W 20010301**; AU 4190001 A 20010301; EP 01913217 A 20010301; JP 2001563643 A 20010301; MX PA02008470 A 20010301