

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
11 May 2006 (11.05.2006)

PCT

(10) International Publication Number  
**WO 2006/049777 A3**

(51) International Patent Classification:

*C12N 9/02* (2006.01)      *A01N 1/00* (2006.01)  
*C12N 15/00* (2006.01)      *G01N 33/53* (2006.01)

(21) International Application Number:

PCT/US2005/035325

(22) International Filing Date:

30 September 2005 (30.09.2005)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/614,874      30 September 2004 (30.09.2004)      US

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(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY,  
MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO,  
NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,  
SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,  
VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT,  
RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA,  
GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the  
claims and to be republished in the event of receipt of  
amendments

(88) Date of publication of the international search report:  
10 August 2006

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: NUCLEIC ACID SEQUENCES ENCODING LUCIFERASE FOR EXPRESSION IN FILAMENTOUS FUNGI

(57) Abstract: The present invention relates to genetic reporters. Specifically, the present invention is directed to a modified gene encoding a luciferase for high level expression in an organism with a bias for cytosine (C) or guanine (G) in the third position of the codon.



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**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/US05/35325

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC: C12N 9/02( 2006.01);C12N 15/00( 2006.01);A01N 1/00( 2006.01);G01N 33/53( 2006.01)

USPC: 435/189;435/320.1;435/254.4;435/8;435/7.31

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 435/189; 435/320.1; 435/254.4; 435/8; 435/7.31

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
EAST, SCIRUS, Google Scholar, PubMed.

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FOURRIER et al., Simple, powerful promoter and enhancer analysis with MightyLight System. inNovations, March 2003, Vol. 16, pages 13-16, entire document.	1-6
A	BUDISA et al., Toward the experimental codon reassignment in vivo: protein building with an expanded amino acid repertoire. FASEB, January 1999, Vol.13, pages41-51, entire document.	1, 2, 3 and 5
A	CAMPBELL et al., Codon usage in higher plants, green algae, and Cyanobacteria. Plant Physiol., 1990, Vol.92, pages 1-11, entire document.	1-6
Y	FRANKLIN et al., Development of a GFP reporter gene for Chlamydomonas reinhardtii chloroplast. The Plant Journal. 2002, Vol. 30, No. 6, pages 733-744. entire document.	1-6
A	SATYA et al., A pattern matching algorithm for codon optimization and CpG motif-engineering in DNA expression vectors	1-5
Y	US 5,795,737 A (SEED et al) 18 August 1998 (18.08.1998), entire document.	1-6

Further documents are listed in the continuation of Box C.

See patent family annex.

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"A"	document defining the general state of the art which is not considered to be of particular relevance	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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Date of the actual completion of the international search  
05 May 2006 (05.05.2006)

Date of mailing of the international search report

14 JUN 2006

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**INTERNATIONAL SEARCH REPORT**International application No.  
PCT/US05/35325**C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,837,458 A (MINSHULL et al) 17 November 1998 (17.11.1988), entire document.	1-6
Y	US 5,811,238 A (STEMMER et al) 22 September 1998 (22.09.1998), entire document.	1-6