(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 25 May 2001 (25.05.2001)

(10) International Publication Number WO 01/36649 A3

(51) International Patent Classification7: 15/29, 5/10, A01H 5/00

C12N 15/82.

(21) International Application Number: PCT/US00/31716

(22) International Filing Date:

20 November 2000 (20.11.2000)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/167,254

19 November 1999 (19.11.1999)

(63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application:

US

60/167,254 (CON)

Filed on

19 November 1999 (19.11.1999)

- (71) Applicant (for all designated States except US): BAT-TELLE MEMORIAL INSTITUTE [US/US]; Pacific Northwest National Laboratory, P.O. Box 999, Richland, WA 99352 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): SHI, Li-Fang [CN/US]; 1851 Jadwin Avenue #419, Richland, WA 99352 (US). GAO, Johnway [US/US]; 506 Snyder Road, Richland, WA 99352 (US). HOOKER, Brian, S. [US/US];

503 South Young Place, Kennewick, WA 99336 (US). DAI, Ziyu [CN/US]; 2835 Monarch Lane, #D, Richland, WA 99352 (US).

- (74) Agent: PEET, Richard, C.; Foley & Lardner, 3000 K. Street, N.W., Suite 500, Washington, DC 20007-5109 (US).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

(88) Date of publication of the international search report:

3 January 2002

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

(54) Title: ISOLATION AND CHARACTERIZATION OF THE GENOMIC DNA CLONES OF RIBOSOMAL PROTEIN GENE L25 IN TOBACCO



(57) Abstract: The promoter of the ribosomal protein gene L25 is operably linked to a structural gene. This chimeric gene is placed in an expression vector. The expression vector containing the chimeric gene is used to transform plants cells and plants. Seeds are obtained from the transformed plants. A product, such as a protein, encoded by the structural gene is isolated from the transformed plant cells and plants.



INTERNATIONAL SEARCH REPORT

i. .national Application No

a. classi IPC 7	FICATION OF SUBJECT MATTER C12N15/82 C12N15/29 C12N	N5/10	A01H5/00		
			, , , , , , , , , , , , , , , , , , ,		
According to	o International Patent Classification (IPC) or to both national o	classification an	d IPC		
B. FIELDS	SEARCHED				
_	commentation searched (classification system followed by clast ${\tt C12N-A01H}$	ssification symb	ools)		
	oren norm				
Documenta	tion searched other than minimum documentation to the exter	nt that such doc	uments are included in the fields searched		
Electronic d	ata base consulted during the international search (name of	data base and,	where practical, search terms used)		
EPO-In	ternal, BIOSIS, STRAND, WPI Data	ı, PAJ			
	, , ,	,			
C. DOCUMI	ENTS CONSIDERED TO BE RELEVANT				
Category °	Citation of document, with indication, where appropriate, of	f the relevant pa	ssages Relevant to claim No.		
Х	JEENINGA RIENK E ET AL: "Rat		1,4		
	ribosomal protein efficiently with its Saccharomyces cerevi				
	homologue for assembly into 6				
	subunits."				
	JOURNAL OF MOLECULAR BIOLOGY, vol. 263, no. 5, 1996, pages				
	XP002173790 XP002173790	040-050,			
	ISSN: 0022-2836				
	abstract, page 650, right col	umn, Fig	. 4A		
		-/			
	·				
X Furth	ner documents are listed in the continuation of box C.	Х	Patent family members are listed in annex.		
° Special ca	tegories of cited documents :	T' lator	r document published after the international filling date		
"A" document defining the general state of the art which is not			priority date and not in conflict with the application but		
	ment defining the general state of the art which is not sidered to be of particular relevance and the international lining date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention *X* document of particular relevance; the claimed invention				
filing d	ate ont which may throw doubts on priority claim(s) or	of the art which is not ance or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone			
which	is cited to establish the publication date of another n or other special reason (as specified)	"Y" doci	ument of particular relevance; the claimed invention not be considered to involve an inventive step when the		
	ent referring to an oral disclosure, use, exhibition or neans	do	cument is combined with one or more other such docu- ents, such combination being obvious to a person skilled		
"P" docume	other means *P* document published prior to the international filing date but later than the priority date claimed *A* document member of the same patent family				
Date of the a	actual completion of the international search	Dat	Date of mailing of the international search report		
2	2 August 2001 16/08/2001		16/08/2001		
			Authorized officer		
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2			nonzed officer		
NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl. Fax: (+31-70) 340-3016			Holtorf, S		

1

INTERNATIONAL SEARCH REPORT

i. rnational Application No
PCT/US 00/31716

	ation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to clai	m No.
A	GAO JIANWEI ET AL: "Developmental and environmental regulation of two ribosomal protein genes in tobacco." PLANT MOLECULAR BIOLOGY, vol. 25, no. 5, 1994, pages 761-770, XP002173791 ISSN: 0167-4412 cited in the application the whole document		
A	DATABASE EMBL SEQUENCE LIBRARY 'Online! 11 June 1993 (1993-06-11) GAO, J. , ET AL. : "Nucleotide and protein sequences of 60S ribosomal protein L17 from tobacco" XP002173792 accession no. L18908		
Α	DAI ZIYU ET AL: "Promoter elements controlling developmental and environmental regulation of a tobacco ribosomal protein gene L34." PLANT MOLECULAR BIOLOGY, vol. 32, no. 6, 1996, pages 1055-1065, XP002168629 ISSN: 0167-4412 the whole document		
A	WO 98 21348 A (BATTELLE MEMORIAL INSTITUTE) 22 May 1998 (1998-05-22)		

1

INTERNATIONAL SEARCH REPORT

Information on patent family members

.. smational Application No
PCT/US 00/31716

Patent document cited in search report		Publication date	Patent family member(s)	 Publication date
WO 9821348	A	22-05-1998	NONE	