

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
2 July 2009 (02.07.2009)

PCT

(10) International Publication Number
WO 2009/082208 A3

(51) International Patent Classification:
C12N 15/82 (2006.01)

(21) International Application Number:
PCT/NL2008/050803

(22) International Filing Date:
16 December 2008 (16.12.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
07123967.7 21 December 2007 (21.12.2007) EP

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, 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, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, 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 (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))
- with sequence listing part of description (Rule 5.2(a))

(88) Date of publication of the international search report:
20 August 2009

(54) Title: TRICHOME SPECIFIC PROMOTERS

(57) Abstract: Trichome specific plant promoters are provided herein. Also provided are transgenic cells and organisms, especially plant cell and plants, comprising an trichome specific promoter and methods for expressing nucleic acid sequences in cells and organisms using trichome specific promoters.



WO 2009/082208 A3

INTERNATIONAL SEARCH REPORT

International application No

PCT/NL2008/050803

A. CLASSIFICATION OF SUBJECT MATTER
INV. C12N15/82

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)
C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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

EPO-Internal, Sequence Search, WPI Data, EMBL, BIOSIS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WANG E ET AL: "Isolation and characterization of the CYP71D16 trichome-specific promoter from Nicotiana tabacum L" JOURNAL OF EXPERIMENTAL BOTANY, OXFORD UNIVERSITY PRESS, GB, vol. 53, no. 376, September 2002 (2002-09), pages 1891-1897, XP002318244 ISSN: 0022-0957 see the whole document	1-10
Y	WO 2004/111183 A (EVOGENE LTD [IL]; RONEN GIL [IL]; RABINOVICH LARISA [IL]; MEISSNER RAF) 23 December 2004 (2004-12-23) see the whole document	1-10

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☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

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

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

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

* & * document member of the same patent family

Date of the actual completion of the international search

26 January 2009

Date of mailing of the international search report

03/07/2009

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INTERNATIONAL SEARCH REPORT

International application No

PCT/NL2008/050803

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 1 715 050 A (TOYOTA MOTOR CO LTD [JP]; OKAYAMA PREFECTURE [JP]) 25 October 2006 (2006-10-25) see the whole document	1-10
A	----- WANG E ET AL: "Elucidation of the functions of genes central to diterpene metabolism in tobacco trichomes using posttranscriptional gene silencing" PLANTA, SPRINGER VERLAG, DE, vol. 216, no. 4, February 2003 (2003-02), pages 686-691, XP002318258 ISSN: 0032-0935	
X	----- DATABASE EMBL [Online] 12 May 2007 (2007-05-12), "POTEI55TF Solanum tuberosum RHPOTKEY BAC ends Solanum tuberosum genomic clone RHPOTKEY041_J13, genomic survey sequence." XP002471321 retrieved from EBI accession no. EMBL:EI835693 Database accession no. EI835693 The sequence has 76.1% identity in an overlap of 289nt	5,6
X	----- DATABASE EMBL [Online] 1 June 2007 (2007-06-01), "POTN327TF Solanum tuberosum RHPOTKEY BAC ends Solanum tuberosum genomic clone RHPOTKEY118_F06, genomic survey sequence." XP002471322 retrieved from EBI accession no. EMBL:ER866105 Database accession no. ER866105 The sequence has 70.2% identity in an overlap of 379nt -----	5,6

INTERNATIONAL SEARCH REPORT

International application No.
PCT/NL2008/050803

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search reportcovers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-10 (all part)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-10 (all part)

Claims relating to the promoter having SEQ ID NO: 1

2. claims: 1-10 (all part)

Claims relating to the promoter having SEQ ID NO: 2

3. claims: 1-10 (all part)

Claims relating to the promoter having SEQ ID NO: 3

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/NL2008/050803

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 2004111183	A	23-12-2004	EP 1636333 A2	22-03-2006
EP 1715050	A	25-10-2006	NONE	