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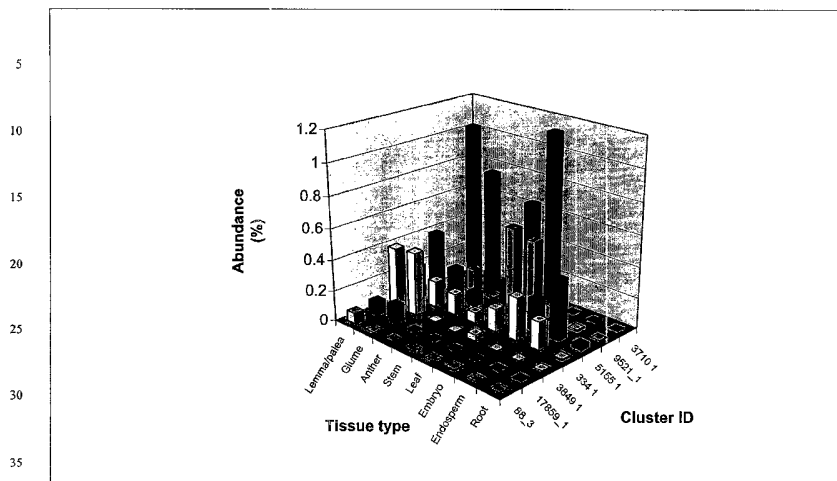
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— with international search report

[Continued on next page]

(54) Title: RICE REGULATORY SEQUENCES FOR GENE EXPRESSION IN DEFINED WHEAT TISSUE



Wheat EST cluster % abundance in a range of cDNA libraries measured by BLAST

(57) Abstract: The abundance of the 96 most abundant EST cluster sequences in a wheat lemma/palea cDNA library was investigated in a range of cDNA libraries made from various wheat tissues. 30 cDNA sequences showing highly enhanced abundance in lemma, palea and glume tissues over leaf, stem, embryo, endosperm and root tissue were selected for further analysis. These wheat EST cluster sequences were used to identify rice cDNA homologs. The abundance of the rice cDNA homologs was compared in rice leaf and panicle (includes lemma and palea) cDNA libraries. Rice cDNAs showing preferential expression in the panicle were then used to identify homologous rice genomic DNA clones, the putative promoter sequences have been identified and cloned.



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— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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.

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 02/09533

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 C12N15/82 C12N15/29 C07K14/415 A01H5/00

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)
 IPC 7 C12N A01H C07K

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, WPI Data, PAJ, BIOSIS, Sequence Search

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DATABASE EM HTG EBI Hinxton, GB; AC/ID NO: AP004068 17 August 2001 (2001-08-17), SASAKI T ET AL.: "Oryza sativa nipponbare (GA3) genomic DNA, chromosome 2, BAC" XP002188680 see nucleotides 128521 to 130200 abstract -----	1-4,8-11
X	EP 0 913 469 A (JAPAN TOBACCO INC) 6 May 1999 (1999-05-06) the whole document -----	1-6,8-17
X	WO 98 22593 A (PIONEER HI BRED INT ;UNIV IOWA RES FOUND (US)) 28 May 1998 (1998-05-28) the whole document -----	1,12
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Further documents are listed in the continuation of box C.

Patent family members are listed in 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

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26.09.2003

Name and mailing address of the ISA

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INTERNATIONAL SEARCH REPORT

International Application No
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 99 09190 A (LOCKHART BENHAM ;OLSZEWSKI NEIL (US); SOMERS DAVID A (US); TZAFRIR) 25 February 1999 (1999-02-25) the whole document -----	1-17

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP 02/09533

Box I Observations where certain claims were found unsearchable (Continuation of item 1 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 II Observations where unity of invention is lacking (Continuation of item 2 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 all searchable claims.

2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers 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.:

1-17 (all partially)

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- 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: 1-17 partially

Monocotyledonous regulatory sequence SEQ ID NO: 1 capable of regulating transcription of an operably linked nucleic acid sequence in lemma, palea and/or glume monocotyledonous tissue. A DNA construct, a plant cell, a plant tissue, a transgenic plant, use of said sequence, a method of regulating transcription of a DNA sequence, a method of producing a transgenic plant using said sequence.

2. claims: 1-17 partially

same as invention but comprising SEQ ID NO: 2.

3. claims: 1-17 partially

same as invention 1 but comprising SEQ ID NO: 3.

4. claim: 18 complete

A method of isolating 5' regulatory sequences that confer enhanced expression of operably linked nucleic acid sequences in cereals.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 02/09533

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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