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Declaration under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(U))

Published:

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7 June 2007

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:** ANTIPORTER GENE FROM PORTERESIA COARCTATA FOR CONFERRING STRESS TOLERANCE

(57) **Abstract:** The present invention relates to isolation and characterization of a cDNA corresponding to Na⁺/H⁺ antiporter gene from *Porteresia coarctata*, the deduced protein of the said gene and its promoter region capable of conferring tolerance to abiotic stress in plants. The present invention also relates to cloning the complete cDNA sequence corresponding to Na⁺/H⁺ antiporter gene from *Porteresia coarctata*. The invention further provides a method for producing abiotic stress tolerant transgenic plants. Further, the invention relates to salt tolerant transformed plants of rice over-expressing the Na⁺/H⁺ antiporter gene from *Porteresia coarctata*.



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INTERNATIONAL SEARCH REPORT

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A CLASSIFICATION OF SUBJECT MATTER IPC ⁸ : C12N 15/29 (2006 01) 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 ⁸ . 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 practicable, search terms used) EPODOC, WPI, PAJ, FullText engl, german, french, Medline, Embase		
C DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
X	Fukuda et al., "Molecular cloning and expression of the Na ⁺ /H ⁺ exchanger gene in <i>Oryza sativa</i> ", <i>Biochim Biophys Acta</i> 1999 Jul 7;1446(1-2)-149-55 <i>entire document</i>	1, 2
X	--	
X	WO 2002/01 6423 A2 (BASF PLANT SCIENCE GMBH) 28 February 2002 (28 02 2002) <i>entire document</i>	1-6, 8-26
X	--	
X	US 2005/0321 12 A 1 (FUKUDA ET AL) 10 February 2005 (10 02 2005) <i>entire document</i>	1-6, 8, 9, 12-17, 19-23, 25, 26
X	--	
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C <input checked="" type="checkbox"/> 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 application or patent 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 "Sc" document member of the same patent family		
Date of the actual completion of the international search 25 January 2007 (25.01.2007)		Date of mailing of the international search report 13 March 2007 (13.03.2007)
Name and mailing address of the ISA/ AT Austrian Patent Office Dresdner Straße 87, A-1200 Vienna Facsimile No +43 / 1 / 534 24 / 535		Authorized officer ETZ H. Telephone No +43 / 1 / 534 24 / 2 15

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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.
T	US 2006/117416 A 1 (PURDUE RESEARCH FOUNDATION) 1 June 2006 (01.06.2006) <i>entire document</i> -----	1-6, 8-26

INTERNATIONAL SEARCH REPORT

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Continuation 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:

Claims Nos.: 7 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:

Claim 7 only gives the names of some recombinant vectors, but neither here nor in the corresponding figure the respective sequence is shown. A technical information as demanded by Rule 6.3(a) of the PCT is thus not given, the claim cannot be searched.

Continuation 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:

I) Claims 1-26, II) Claims 27-40

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. 1-26

INTERNATIONAL SEARCH REPORT

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Information on patent family members

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
wo A 2002016423		none	
US A 2005032112		US AI 2005032112	2005-02-10
		US AI 2002083487	2002-06-27
		wo AI 0037644	2000-06-29
		EP AI 1143 002	2001-10-10
		CN A 1342203	2002-03-27
		CA AI 23 69590	2000-06-29
US A 2006117416		AR AI 051959	2007-02-21
		US AI 2006117416	2006-06-01
		wo A2 2006053246	2006-05-18