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(54) Title: SCAR TEST FOR THE AUTHENTICATION OF CHINESE MEDICINAL MATERIALS

(57) Abstract: Methods are provided for the authentication of traditional ingredients in Chinese medical materials. Arbitrarily primed polymerase chain reaction techniques are employed to identify genomic regions that are polymorphic between ginseng species of the genus Panax and between snake species of the family Serpentes. The sequence of these polymorphic regions is used to design specific primers that will amplify a unique region from the species of interest. These sequence characterized amplified regions (SCAR) may be used to rapidly amplify a diagnostic nucleic acid from herbal and medicinal materials. The present invention therefore provides rapid and sensitive methods for identifying ingredients in traditional Chinese medicines, and distinguishing them from common adulterants or ersatz ingredients.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US01/32602

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C12Q 1/68; C12P 19/34, CO7H 21/04
 US CL : 435/6, 91.1, 91.2; 536/23.1, 24.32, 24.33

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. : 435/6, 91.1, 91.2; 536/23.1, 24.32, 24.33

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)

WEST 2.0, MEDLINE, CAPLUS, GENBANK, GENESEQ, EMBL, EST, PUBLISHED PATENTS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,747,538 A (MEYBECK et al) 05 May 1998 (05.05.1998) see entire patent.	1
A, P	US 6,309,840 B1 (WANG et al) 30 October 2001 (30.10.2001), see entire patent.	1-33
X	US 5,876,977 A (WANG et al) 02 March 1999 (02.03.1999), see entire patent.	1-5, 10
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Y		11-17

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:

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"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

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"&" document member of the same patent family

Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

PCT/US01/32602

Continuation of Item 4 of the first sheet:

The title is too long >

The new title is: SCAR TEST FOR THE AUTHENTICATION OF CHINESE MEDICINAL MATERIALS