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(54) Title: DIAGNOSTIC ASSAY FOR BOAR TAINT

(57) Abstract: The present invention discloses a link between the level of cytochrome P450 isoform P4502E1 and the level of skatole. A polynucleotide encoding the sequence for P4502E1 and a polynucleotide encoding the sequence for P4502E1 and a polynucleotide encoding the sequence for P4502E1 for one pig with high skatole is provided. An assay to identify pigs with a genetic predisposition is also provided.

INTERNATIONAL SEARCH REPORT

Internatio ublication No

PCT/GB 01/04245

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12Q1/68

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)

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)

BIOSIS, MEDLINE, EMBASE, EPO-Internal, EMBL, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DATABASE EMBL 'Online! 14 February 1997 (1997-02-14) HAMASIMA N.: " Sus scrofa mRNA for Cytochrome P-450-j, complete cds." Database accession no. ab000885 XP002226446 cited in the application Almost identical to SEQ ID N°1 and 3. No polymorphism with SEQ ID N°1 and 3 at positions 648 and 1435. abstract</p> <p style="text-align: center;">---</p>	1
X	<p>CA 2 234 349 A (UNIVERSITY OF GUELPH) 10 August 1999 (1999-08-10) page 20, line 1 - line 16; examples 1,2</p> <p style="text-align: center;">---</p> <p style="text-align: center;">-/--</p>	2-16

 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

8 January 2003

Date of mailing of the international search report

29/01/2003

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INTERNATIONAL SEARCH REPORT

Internati
plication No
PCT/GB 01/04245

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>SQUIRES E JAMES ET AL: "Relationship between cytochrome P450IIE1 in liver and levels of skatole and its metabolites in intact male pigs." JOURNAL OF ANIMAL SCIENCE, vol. 75, no. 9, 1997, pages 2506-2511, XP009002879 ISSN: 0021-8812 cited in the application page 2510, left-hand column, line 16 - line 30</p> <p style="text-align: center;">----</p>	2-16
A	<p>BABOL J ET AL: "HEPATIC METABOLISM OF SKATOLE IN PIGS BY CYTOCHROME P4502E1" JOURNAL OF ANIMAL SCIENCE, NEW YORK, NY, US, vol. 76, no. 3, 1997, pages 822-828, XP000982482 ISSN: 0021-8812 cited in the application the whole document</p> <p style="text-align: center;">-----</p>	

INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB 01/04245

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:

Although claim(s) 2 to 6 and 8 to 15 are directed to a diagnostic method practised on the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
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:

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.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

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Application No

PCT/GB 01/04245

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
CA 2234349	A	NONE	