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(54) Title: PROTEOME INTERACTION MAPPING

(57) Abstract: Methods for identifying an organism with pesticidal activity are provided. The methods comprise binding the proteins expressed by the organism to a substrate (test proteins), contacting the substrate with proteins or lipids expressed by a target pest (target substances), and detecting whether the target substances have bound to the test proteins. This method is useful in rapidly identifying organisms that express proteins with pesticidal activity.

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US2004/034754

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G01N33/68 G01N33/569				
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 G01N A01N				
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, EMBASE				
C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
A	MOHAMED S ET AL: "ANTIMYCOTIC SCREENING OF 58 MALAYSIAN PLANTS AGAINST PLANT PATHOGENS" PESTICIDE SCIENCE, ELSEVIER APPLIED SCIENCE PUBLISHER. BARKING, GB, vol. 47, no. 3, 1996, pages 259-264, XP009001842 ISSN: 0031-613X abstract page 260, right-hand column, paragraph 2 - paragraph 3 ----- -/--	1-19		
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input type="checkbox"/> Patent family members are listed in annex.				
° Special categories of cited documents :				
<table style="width:100%; border: none;"> <tr> <td style="width: 50%; border: none; vertical-align: top;"> <ul style="list-style-type: none"> *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 </td> <td style="width: 50%; border: none; vertical-align: top;"> <ul style="list-style-type: none"> *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. *Z* document member of the same patent family </td> </tr> </table>			<ul style="list-style-type: none"> *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 	<ul style="list-style-type: none"> *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. *Z* document member of the same patent family
<ul style="list-style-type: none"> *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 	<ul style="list-style-type: none"> *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. *Z* document member of the same patent family 			
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Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Weber, P			

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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	<p>DANIEL ANU ET AL: "Denaturation of either Manduca sexta aminopeptidase N or Bacillus thuringiensis Cry1A toxins exposes binding epitopes hidden under nondenaturing conditions"</p> <p>APPLIED AND ENVIRONMENTAL MICROBIOLOGY, vol. 68, no. 5, May 2002 (2002-05), pages 2106-2112, XP002337314 ISSN: 0099-2240 page 2107, right-hand column, last paragraph - page 2108, left-hand column, paragraph 1 page 2109, left-hand column, last paragraph - page 2110, left-hand column, paragraph 3 page 2110, right-hand column, paragraph 6 figures 3,4</p>	1-19
A	<p>STEFANELLI S ET AL: "INHIBITORS OF TYPE-I INTERLEUKIN-1 RECEPTOR FROM MICROBIAL METABOLITES"</p> <p>JOURNAL OF ANTIBIOTICS, JAPAN ANTIBIOTICS RESEARCH ASSOCIATION, TOKYO, JP, vol. 50, no. 6, June 1997 (1997-06), pages 484-489, XP008048860 ISSN: 0021-8820 abstract page 484, right-hand column, paragraph 1 - page 485, left-hand column, paragraph 2 figure 1a</p>	1-19
A	<p>CORBIN DAVID R ET AL: "The identification and development of proteins for control of insects in genetically modified crops"</p> <p>HORTSCIENCE, vol. 33, no. 4, July 1998 (1998-07), pages 614-617, XP008050103 ISSN: 0018-5345 page 614, right-hand column, line 5 - page 615, right-hand column, paragraph 1</p>	1-19
A	<p>WALSH JAMES C: "High throughput, mechanism-based screening techniques for discovering novel agrochemicals"</p> <p>JOURNAL OF BIOMOLECULAR SCREENING, vol. 3, no. 3, October 1998 (1998-10), pages 175-181, XP008050104 ISSN: 1087-0571 the whole document</p>	1-19