

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
1 February 2001 (01.02.2001)

PCT

(10) International Publication Number  
**WO 01/06855 A3**

- (51) International Patent Classification<sup>7</sup>: A01N 47/36, 33/00, 35/00, 37/00, 39/00, 51/00, 63/00, A01G 9/10
- (21) International Application Number: PCT/CA00/00809
- (22) International Filing Date: 10 July 2000 (10.07.2000)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
60/145,758 27 July 1999 (27.07.1999) US
- (71) Applicant (for all designated States except US): ECOVAL INC. [CA/CA]; 55 Oriole Parkway, Elmira, Ontario N3B 1B9 (CA).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): LOJEK, John, S. [CA/CA]; 55 Oriole Parkway, Elmira, Ontario N3B 1B9 (CA). LOJEK, Margaret, Anne [CA/CA]; 55 Oriole Parkway, Elmira, Ontario N3B 1B9 (CA).
- (74) Agent: GALLOWAY, Warren, J.; Sim & McBurney, 330 University Avenue, 6th Floor, Toronto, Ontario M5G 1R7 (CA).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— with international search report
- (88) Date of publication of the international search report:  
2 August 2001
- 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.



WO 01/06855 A3

(54) Title: PRE-EMERGENCE HERBICIDE FORMED FROM ANIMAL PROTEIN

(57) Abstract: A composition comprising a pre-emergence herbicide derived from an animal protein. The animal protein is preferably in the form of a meal, especially feather, blood, leather, fish and meat meal. The pre-emergence herbicide is formed by degradation of animal protein by a micro-organism.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/CA 00/00809

A. CLASSIFICATION OF SUBJECT MATTER  
 IPC 7 A01N47/36 A01N33/00 A01N35/00 A01N37/00 A01N39/00  
 A01N51/00 A01N63/00 A01G9/10

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 A01N A01G

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, EPO-Internal, WPI Data, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 96 22011 A (HOFFMANN MANFRED) 25 July 1996 (1996-07-25) * Page 2, lines 3, 29; page 3, lines 9-18, page 6, lines 7-9, page 9, claim 3 * ---	1-24
Y	GB 2 170 795 A (MONTJOIE RUDOLF ANTHONY DE) 13 August 1986 (1986-08-13) * the whole document * --- -/--	1-24

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

15 November 2000

Date of mailing of the international search report

08. 02. 01

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

Faizi-Gorn, R

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/CA 00/00809

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>DATABASE WPI  Week 9247, 1992  Derwent Publications Ltd., London, GB;  AN 1992-386264  XP002152942  "Organic Fertilizer with Controlled  Decomposition by Microorganisms Giving  Slow Release"  &amp; JP 04 285088 A (ASAHI KOGYO CO LTD),  9 October 1992 (1992-10-09)  * the abstract *</p>	1-24
Y	<p>---  DATABASE BIOSIS-PREV199497238974 [Online]  BIOSCIENCE INFORMATION SERVICE;  Canadian J. Plant Sci, Vol. 74 (1), pp.  167-168, 1994  GAGNON, B AND BERROUARD, S: "Effects of  Several Fertilizers on Growth of  Greenhouse Tomato Transplants"  XP002152940  * the abstract *</p>	1-24
A	<p>---  DATABASE BIOSIS-PREV199294100590 [Online]  BIOSCIENCES INFORMATION SERVICE,  PHILADELPHIA, PA, US;  Plant Disease, Vol. 76 (9), pp. 954-958,  1992  NELSON, E B AND CRAFT, C M: "Suppression  of Dollar Spot on Creeping Bentgrass and  Annual Bluegrass Turf with Compost Amended  Topdressings"  XP002152941  * the abstract *</p>	1-27
A	<p>---  DATABASE WPI  Week 32, 1997  Derwent Publications Ltd., London, GB;  AN 1997-347306  XP002152943  "Preparation of Mature Animal Organic  fertilizer"  &amp; JP 09 142972 A (GIJUTSU KENKYU KUMIKAI  KK), 3 June 1997 (1997-06-03)  * the abstract *</p> <p>-----</p>	1-27

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/CA 00/00809

## 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 - 24

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: 1-24

A pre-emergence herbicide composition based on an animal protein

Claims 26 and 27: A pre-emergence herbicide comprising a by-product of microbial decomposition of plant protein

2. Claim : Claim 25

A microorganism that effects decomposition of animal protein

3. Claim : Claims 26 and 27

A pre-emergence herbicide comprising a by-product of microbial decomposition of plant protein

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/CA 00/00809

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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GB 2170795 A	13-08-1986	NONE	
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JP 4285088 A	09-10-1992	NONE	
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JP 9142972 A	03-06-1997	NONE	
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