



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : C07C 259/06, 323/54, 323/58, C07D 213/64, 213/70, A01N 31/06, 33/08, 43/40	A3	(11) International Publication Number: WO 00/03975 (43) International Publication Date: 27 January 2000 (27.01.00)									
(21) International Application Number: PCT/EP99/05470 (22) International Filing Date: 16 July 1999 (16.07.99) (30) Priority Data: <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;">9815508.8</td> <td style="width: 30%;">16 July 1998 (16.07.98)</td> <td style="width: 40%; text-align: right;">GB</td> </tr> <tr> <td>9816783.6</td> <td>31 July 1998 (31.07.98)</td> <td style="text-align: right;">GB</td> </tr> <tr> <td>9826903.8</td> <td>7 December 1998 (07.12.98)</td> <td style="text-align: right;">GB</td> </tr> </table> (71) Applicant (for all designated States except US): RHONE-POULENC AGRICULTURE LTD. [GB/GB]; Fyfield Road, Ongar, Essex CM5 0HW (GB). (72) Inventors; and (75) Inventors/Applicants (for US only): RAY, Nicholas, Charles [GB/GB]; Rhône-Poulenc Agriculture Ltd., Research Station, Fyfield Road, Ongar, Essex CM5 0HW (GB). WHITE, Catherine, Jacqueline [FR/GB]; Rhône-Poulenc Agriculture Ltd., Research Station, Fyfield Road, Ongar, Essex CM5 0HW (GB). GINGELL, Michael [GB/GB]; Rhône-Poulenc Agriculture Ltd., Research Station, Fyfield Road, Ongar, Essex CM5 0HW (GB). PETTIT, Simon, Neil [GB/GB]; Rhône-Poulenc Agriculture Ltd., Research Station, Fyfield Road, Ongar, Essex CM5 0HW (GB). RAPHY, Gilles [FR/GB]; Rhône-Poulenc Agriculture Ltd., Research Station, Fyfield Road, Ongar, Essex CM5 0HW (GB).	9815508.8	16 July 1998 (16.07.98)	GB	9816783.6	31 July 1998 (31.07.98)	GB	9826903.8	7 December 1998 (07.12.98)	GB	(74) Agent: BRACHOTTE, Charles; Rhône-Poulenc Agro, DPI, Boîte postale 9163, F-69263 Lyon Cedex 09 (FR). (81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, 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, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, 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 <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 3 August 2000 (03.08.00)	
9815508.8	16 July 1998 (16.07.98)	GB									
9816783.6	31 July 1998 (31.07.98)	GB									
9826903.8	7 December 1998 (07.12.98)	GB									
(54) Title: ARYL VINYL ETHER DERIVATIVES AND THEIR USE AS HERBICIDES (I)											
(57) Abstract The invention relates to aryl vinyl ether derivatives of general formula (I), wherein the substituents are as defined in the description; compositions containing them, processes and intermediates for their preparation and a method of controlling weeds by means of such compositions.											

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INTERNATIONAL SEARCH REPORT

International Application No

PC., EP 99/05470

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07C259/06 C07C323/54 C07C323/58 C07D213/64 C07D213/70
 A01N31/06 A01N33/08 A01N43/40

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 C07C C07D 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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 464 381 A (BAYER AG) 8 January 1992 (1992-01-08) claim 1 ---	1-21
A	WO 98 03464 A (BRAYER JEAN LOUIS ; LAUGRAUD BRUNO & HM (FR); LAUGRAUD ROLANDE & HF) 29 January 1998 (1998-01-29) examples 55,75,96,98 ---	1-21
E	WO 98 43949 A (HIROSE TARO ; KIMURA NORIO (JP); SUMITOMO CHEMICAL CO (JP)) 8 October 1998 (1998-10-08) examples 225,226 ---	1-12
P,A	examples 222,262,263 ---	13-21
A	EP 0 383 117 A (BAYER AG) 22 August 1990 (1990-08-22) ---	1-21
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☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents :

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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

13 June 2000

Date of mailing of the international search report

16. 06. 00

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INTERNATIONAL SEARCH REPORT

International Application No

PC1/EP 99/05470

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,A	WO 99 19312 A (KRUEGER BERND WIELAND ;MAULER MACHNIK ASTRID (DE); STENZEL KLAUS () 22 April 1999 (1999-04-22) ---	1-21
A	CHEMICAL ABSTRACTS, vol. 64, no. 6, 14 March 1966 (1966-03-14) Columbus, Ohio, US; abstract no. 8172a, DORNOW ALFRED ;FISCHER KLAUS: "Syntheses of nitrogen-containing heterocycles. XXXIV. Several reaction of amidoximes" XP002129220 abstract	1-21
A	& CHEM. BER., vol. 99, no. 1, 1966, pages 68-71, -----	1-21

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP 99/05470

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:
see FURTHER INFORMATION sheet PCT/ISA/210
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.:

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

International Application No. PCT/EP 99/05470

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

The present claims relate to an extremely large number of possible compounds. In fact, the claims contain so many options, variables and provisos that a lack of clarity (and/or conciseness) within the meaning of Article 6 PCT arises to such an extent as to render a meaningful search of the claims impossible. Consequently, the search has been carried out for those parts of the application which do appear to be clear (and/or concise), namely the compounds of formulae (I-2)-(I-15) (see Tables 1-14).

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT

International Application No. PCT/EP 99/05470

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-21 (in part)

Compounds of formulae (I-2)-(I-11), compositions containing them, use thereof for controlling weeds, as well as a process for the preparation of said compounds.

1.1. Claims: 1-21(in part)
Formula (I-2).

1.2. Claims: 1-9, 13-21(all in part)
Formula (I-3).

1.3. Claims: 1-9, 13-21(all in part)
Formula (I-4).

1.4. Claims: 1-9, 13-21(all in part)
Formula (I-5).

1.5. Claims: 1-9, 13-21(all in part)
Formula (I-6).

1.6. Claims: 1-5, 7-10, 13-21(all in part)
Formula (I-7).

1.7. Claims: 1-5, 7-9, 13-21(all in part)
Formula (I-8).

1.8. Claims: 1-5, 7-9, 13-21(all in part)
Formula (I-9).

1.9. Claims: 1-5, 7-9, 13-21(all in part)
Formula (I-10).

1.10. Claims: 1-5, 7-9, 13-21(all in part)
Formula (I-11).

2. Claims: 1, 2, 4-10, 13-21(all in part)

Compounds of formula (I-12), compositions containing them, use thereof for controlling weeds, as well as a process for the preparation of said compounds.

INTERNATIONAL SEARCH REPORT

International Application No. PCT/EP 99/05470

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

3. Claims: 1-21(in part)

Compounds of formula (I-13), compositions containing them, use thereof for controlling weeds, as well as a process for the preparation of said compounds.

4. Claims: 1-3, 5-10, 13-21(all in part)

Compounds of formula (I-14), compositions containing them, use thereof for controlling weeds, as well as a process for the preparation of said compounds.

5. Claims: 1, 2, 4-10, 13-21(all in part)

Compounds of formula (I-15), compositions containing them, use thereof for controlling weeds, as well as a process for the preparation of said compounds.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 99/05470

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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