DECISION
of 12 January 2000

Case Number: T 0296/96 - 3.3.1

Application Number: 91203092.1

Publication Number: 0488474

IPC: C07D 213/86

Language of the proceedings: EN

Title of invention:
Herbicidal carboxamide derivatives

Applicant:
SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V.

Opponent:
-

Headword:
Carboxamides/SHELL

Relevant legal provisions:
EPC Art. 56, 87(1), 108, 113(1), 119, 122, 123(2)
EPC R. 67, 78(3)

Keyword:
"Admissibility of appeal (yes) - appeal deemed to have been filed"
"Main request: inventive step (no) - effect not made credible for whole scope"
"Auxiliary request 1 - amendment not directly and unambiguously derivable from application as filed"
"Auxiliary request 2: inventive step (yes) - claimed compounds not derivable from the prior art"
"Reimbursement of appeal fee (no) - no substantial procedural violation"

Decisions cited:
-
Catchword: 
-
Case Number: T 0296/96 - 3.3.1

DECISION
of the Technical Board of Appeal 3.3.1
of 12 January 2000

Appellant: SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V.
Carel van Bylandtlaan 30
NL-2596 HR Den Haag (NL)

Representative: Allam, Peter Clerk
LLOYD WISE, TREGEAR & Co.
Commonwealth House
1-19 New Oxford Street
London WC1A 1LW (GB)

Decision under appeal: Decision of the Examining Division of the European Patent Office posted 25 October 1995 refusing European patent application No. 91 203 092.1 pursuant to Article 97(1) EPC.

Composition of the Board:
Chairman: A. J. Nuss
Members: P. P. Bracke
W. Moser
Summary of Facts and Submissions

I. The appeal is against the decision of the Examining Division, dispatched on 25 October 1995, refusing the European patent application No. 91 203 092.1, published as EP-A-0 488 474, due to lack of inventive step of the claimed compounds over those described in documents

(A) EP-A-0 053 011;

(B) US-A-4 251 263;

(C) US-A-4 270 946; and

(D) EP-A-0 447 004.

II. On 21 December 1995, the Appellant (Applicant) filed a notice of appeal together with a fee voucher in respect of the fee for appeal referring to an amount of 1000 DM. During a consultation by telephone on 15 January 1996, the representative of the Appellant was informed by a Formalities Officer of the EPO that the fee for appeal was 2000 DM, and the Appellant was invited to pay the difference; the remainder was paid by means of a fee voucher annexed to a telefax dated 15 January 1996, by which the Appellant submitted that it was apparent from the notice of appeal that it had always been the intention of the Appellant to pay the full fee for appeal and that the wrong amount quoted on the fee voucher accompanying the notice of appeal was clearly the result of a clerical error. The EPO accepted the payment of the remainder without comment.

III. On 4 March 1996, a statement setting out the grounds of appeal was filed.
IV. At the oral proceedings before the Board of Appeal, which took place on 12 January 2000, the Appellant filed a set of 10 claims as a "main request", a set of 10 claims as "auxiliary request A1" and a set of 9 claims as "auxiliary request A2".

Claim 1 of the "main request" read:

"1. A compound of the general formula I

\[
\begin{align*}
X^\text{n} & \quad Y^\text{m} \\
& \quad Z \\
\end{align*}
\]

(I)

wherein

\begin{align*}
n & \text{is an integer from 1 to 5 and the or each } X \\
& \text{independently represents a hydrogen or halogen atom, a } C_{1-12} \text{ alkyl or } C_{1-12} \text{ alkoxy group optionally substituted by one or more of the same or different substituents selected from halogen atoms and cyano, hydroxy and } C_{1-12} \text{ alkoxy groups, or a cyano, nitro, } C_{2-12} \text{ alkenyloxy, } C_{2-12} \text{ alkynyloxy, } C_{1-12} \text{ alkylthio, } C_{1-12} \text{ haloalkylthio, } C_{2-12} \text{ alkenylthio or } C_{2-12} \text{ alkynylthio group;}
\\
m & \text{is 0 or an integer from 1 to 3 and the or each } Y \\
& \text{independently represents a halogen atom or a } C_{1-12} \text{ alkyl or } C_{1-12} \text{ haloalkyl group;}
\\
Z & \text{represents an oxygen atom or a sulphur atom;}
\\
\end{align*}

and
R\textsuperscript{1} and R\textsuperscript{2} each, independently, represents a hydrogen atom, a C\textsubscript{1-12} alkyl group optionally substituted by one or more of the same or different substituents selected from halogen atoms or hydroxy, cyano, C\textsubscript{1-12} alkoxy, C\textsubscript{1-12} alkylthio, C\textsubscript{1-12} alkoxy carbonyl, or mono- or di-C\textsubscript{1-12} alkylamino groups, a C\textsubscript{2-12} alkenyl, C\textsubscript{2-12} alkynyl, C\textsubscript{3-8} cycloalkyl, or halosubstituted C\textsubscript{3-6} cycloalkyl-C\textsubscript{1-4} alkyl group, or a hydroxy, C\textsubscript{1-12} alkoxy, C\textsubscript{2-12} alkenyloxy, C\textsubscript{2-12} alkynyloxy, C\textsubscript{1-12} alkoxy carbonyl, amino, mono- or di-C\textsubscript{1-12} alkylamino, C\textsubscript{1-12} alkoxy carbonylamino group, a phenylamino group optionally substituted by a halogen atom or a di-C\textsubscript{1-12} alkyl carbamoyl group;

or

R\textsuperscript{1} and R\textsuperscript{2} together represent a C\textsubscript{3-6} alkyne chain which is optionally interrupted by an oxygen or sulphur atom or by a group -NR- in which R represents a hydrogen atom or a C\textsubscript{1-12} alkyl group.

Claim 1 of "auxiliary request A1" read:

"1. A compound of the general formula I

\begin{equation}
\text{(I)}
\end{equation}

wherein

n is an integer from 1 to 5 and the or each X independently represents a halogen atom, a C\textsubscript{1-12} alkyl or C\textsubscript{1-12} alkoxy group optionally substituted
by one or more of the same or different substituents selected from halogen atoms and cyano, hydroxy and C\textsubscript{1-12} alkoxy groups, or a cyano, nitro, C\textsubscript{2-12} alkenyloxy, C\textsubscript{2-12} alkynylthio, C\textsubscript{1-12} alkylthio, C\textsubscript{1-12} haloalkylthio, C\textsubscript{2-12} alkenylthio or C\textsubscript{2-12} alkynylthio group;

m is 0 or an integer from 1 to 3 and the or each Y independently represents a halogen atom or a C\textsubscript{1-12} alkyl or C\textsubscript{1-12} haloalkyl group;

Z represents an oxygen atom or a sulphur atom;

and

R\textsuperscript{1} and R\textsuperscript{2} each, independently, represents a hydrogen atom, a C\textsubscript{1-12} alkyl group optionally substituted by one or more of the same or different substituents selected from halogen atoms or hydroxy, cyano, C\textsubscript{1-12} alkoxy, C\textsubscript{1-12} alkylthio, C\textsubscript{1-12} alkoxy carbonyl, or mono- or di-C\textsubscript{1-12} alkylamino groups, a C\textsubscript{2-12} alkenyl, C\textsubscript{2-12} alkynyl, C\textsubscript{3-6} cycloalkyl, hydroxy, C\textsubscript{1-12} alkoxy, C\textsubscript{2-12} alkenyloxy, C\textsubscript{2-12} alkynylthio, C\textsubscript{1-12} alkoxy carbonyl, amino, mono- or di-C\textsubscript{1-12} alkylamino, C\textsubscript{1-12} alkoxy carbonylamino group, a phenylamino group optionally substituted by a halogen atom or a di-C\textsubscript{1-12} alkylcarbamoyl group;

or

R\textsuperscript{1} and R\textsuperscript{2} together represent a C\textsubscript{3-6} alkylene chain which is optionally interrupted by an oxygen atom or by a group -NR- in which R represents a hydrogen atom or a C\textsubscript{1-12} alkyl group.
The set of claims according to "auxiliary request A2" contained five independent claims reading:

"1. A compound of the general formula I

\[
\text{\text{\begin{tikzpicture}
\node[shape=circle,draw,inner sep=0pt,minimum size=0.9cm] (X) at (0,0) {X};
\node[shape=circle,draw,inner sep=0pt,minimum size=0.9cm] (Y) at (1.5,0) {Y};
\node[shape=circle,draw,inner sep=0pt,minimum size=0.9cm] (Z) at (0,-1.5) {Z};
\node[shape=circle,draw,inner sep=0pt,minimum size=0.9cm] (R1) at (1.5,-1.5) {R1};
\node[shape=circle,draw,inner sep=0pt,minimum size=0.9cm] (R2) at (0,-3) {R2};
\draw (X) -- (Y);
\draw (Y) -- (Z);
\draw (Z) -- (R1);
\draw (R1) -- (R2);
\end{tikzpicture}}}
\]

wherein

\(n\) is an integer from 1 to 5 and the or each \(X\) independently represents a halogen atom, a \(C_{1-12}\) alkyl or \(C_{1-12}\) alkoxy group optionally substituted by one or more of the same or different substituents selected from halogen atoms and cyano, hydroxy and \(C_{1-12}\) alkoxy groups, or a cyano, nitro, \(C_{2-12}\) alkenyloxy, \(C_{2-12}\) alkynyloxy, \(C_{1-12}\) alkylthio, \(C_{1-12}\) haloalkylthio, \(C_{2-12}\) alkenylthio or \(C_{2-12}\) alkynylthio group;

\(m\) is 0 or an integer from 1 to 3 and the or each \(Y\) independently represents a halogen atom or a \(C_{1-12}\) alkyl or \(C_{1-12}\) haloalkyl group;

\(Z\) represents an oxygen atom or a sulphur atom;

and

\(R^1\) and \(R^2\) each, independently, represents a hydrogen atom, a \(C_{1-12}\) alkyl group optionally substituted by one or more of the same or different substituents selected from halogen atoms or hydroxy, cyano, \(C_{1-12}\) alkoxy, \(C_{1-12}\) alkylthio, \(C_{1-12}\) alkoxy carbonyl, or
mono- or di-C<sub>1-12</sub> alkylamino groups, a C<sub>2-12</sub> alkenyl, C<sub>2-12</sub> alkynyl, C<sub>3-6</sub> cycloalkyl, hydroxy, C<sub>1-12</sub> alkoxy, C<sub>2-12</sub> alkenyloxy, C<sub>2-12</sub> alkynyloxy, C<sub>1-12</sub> alkoxy carbonyl, amino, mono- or di-C<sub>1-12</sub> alkylamino, C<sub>1-12</sub> alkoxy carbonylamino group, a phenylamino group optionally substituted by a halogen atom or a di-C<sub>1-12</sub> alkylcarbamoyl group;

or

R<sup>1</sup> and R<sup>2</sup> together represent a group -(CH<sub>2</sub>)<sub>4</sub>-, -(CH<sub>2</sub>)<sub>3</sub>O(CH<sub>2</sub>)<sub>2</sub>- or -(CH<sub>2</sub>)<sub>2</sub>NR(CH<sub>2</sub>)<sub>2</sub>- in which R is a C<sub>1-2</sub> alkyl group."

"6. A process for the preparation of a compound of general formula I as claimed in claim 1, which comprises preparing a compound of general formula I in which Z represents an oxygen atom, by

a) reacting a compound of the general formula II

\[
\begin{array}{c}
\text{X}_n \\
\text{O} \\
\text{Y}_m \\
\text{C} \text{O} \text{L}
\end{array}
\]

(II)

In which X<sub>n</sub> and Y<sub>m</sub> are as defined in claim 1, and L represents a leaving group, with an amine of the general formula NHR<sup>1</sup>R<sup>2</sup>, in which R<sup>1</sup> and R<sup>2</sup> are as defined in claim 1; or

b) reacting a compound of the general formula III
In which $Y_m$, $R^1$ and $R^2$ are as defined in claim 1, and Hal represents a halogen atom with a compound of the general formula IV

$$\text{Hal} - Y_m$$

$$\text{CONR}^1 R^2$$

in which $X_n$ is as defined in claim 1 and M represents an alkali metal atom; and

optionally converting the product into a compound of general formula I in which $Z$ represents a sulphur atom."

"7. A herbicidal composition which comprises a compound as claimed in any one of claims 1 to 5, together with a carrier."

"8. A method of combating undesired plant growth at a locus, which comprises treating the locus with a compound as claimed in any one of claims 1 to 5, or with a composition as claimed in claim 7."

"9. The use of a compound as claimed in any one of claims 1 to 5, or a composition as claimed in claim 7,
As far as the main request is concerned, the Appellant accepted document (D) as the closest state of the art. He submitted that a number of the claimed compounds showed a greater selectivity for herbicidal activity against barnyard grass in comparison to rice than compounds according to document (D) and that the claimed compounds generally showed higher activity against barnyard grass, as shown in the Appendix B to the statement setting out the grounds of appeal.

As far as the auxiliary requests are concerned, the Appellant submitted that document (B) represented the closest state of the art and that it had been satisfactory shown, with the data provided in the application in suit and with the data shown in Appendix A to the statement setting out the grounds of appeal, that the claimed compounds exhibited herbicidal activity. Since it could not be derived from documents (A), (B) and (C) that the compounds now claimed had herbicidal activity, the Appellant concluded that the compounds according to the auxiliary requests were inventive.

Additionally, the Appellant submitted that the Examining Division had committed a substantial procedural violation, since it issued the contested decision after only one communication, although the Appellant had provided a bona fide response.

VI. The Appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the following documents filed during oral proceedings:

1154.D
(a) Claims 1 to 10 filed as main request; or

(b) Claims 1 to 10 filed as auxiliary request A1; or

(c) Claims 1 to 9 filed as auxiliary request A2.

The Appellant further requested the reimbursement of the appeal fee.

Reasons for the Decision

1. Admissibility

In the present case, the time limit for filing a notice of appeal and for paying the appeal fee expired on Thursday, 4 January 1996 (Article 119 EPC, Rule 78(3) EPC). Hence, only 50% of the appeal fee was paid before the expiry of the time limit under Article 108 EPC, first sentence. However, since the Formalities Officer invited the Appellant to pay the remainder of the appeal fee and accepted its subsequent payment without comment, the appellant could assume in all good faith that the appeal was deemed to have been filed (Article 108 EPC, second sentence) and that, as a consequence, it was not necessary to file an application for restitutio in integrum (Article 122 EPC). The Appellant should thus have been invited by the EPO to file an application for restitutio in integrum before the expiry of the one-year time limit under Article 122(2) EPC, third sentence, on 4 January 1997. Since there was no such invitation, the Appellant, who was misled by the action of the Formalities Officer, must, in accordance with the principle of the protection of legitimate expectations,
be treated as having paid the appeal fee in time. The appeal is thus deemed to have been filed; furthermore, it is also admissible.

2. **Main request**

2.1 The set of claims meets the requirements of Article 123(2) EPC. More particularly, Claim 1 is supported by Claim 1 of the application as filed and by

- page 3, lines 23 to 27, of the application as filed, mentioning that when any of the substituents X, Y, \( R^1 \) and \( R^2 \) represents or contains an alkyl, alkenyl or alkynyl substituent group, the latter suitably has up to 12 carbon atoms, and

- page 3, lines 31 and 32, of the application as filed, saying an aryl group suitably is phenyl.

2.2 Inventive step

It was not disputed that *inter alia* the claimed compounds wherein X is hydrogen were not mentioned in the priority document, that thus the priority of 28 November 1990 cannot be validly claimed and, consequently, that document (D), published on 18 September 1991, is comprised in the state of the art according to Article 54(2) EPC. Therefore, in assessing inventive step, this document is to be taken in consideration.

2.2.1 It was also not disputed that document (D) represents the closest state of the art.

Document (D) describes 2-phenoxy-6-pyridinecarboxamides...
differing from the claimed compounds in that the amide function is substituted with a phenyl- or a benzyl radical instead of a radical $R^1$ and/or $R^2$ as defined in Claim 1. It is taught that those carboxamides have high herbicidal activity with a wide spectrum of activity against grasses and, especially, broadleaved weeds when applied pre- and post-emergence and that they show selectivity to small grain cereals, for example maize, barley and rice, and to broad-leaved crops, for example soya and sunflower, thus being useful in combatting weeds growing in such crops (page 2, last paragraph, and page 6, lines 12 to 17).

2.2.2 According to the Appellant, starting from the disclosure of document (D), the problem underlying the invention must be seen in providing further 2-phenoxy-6-pyridinecarboxamides, which exhibit advantageous herbicidal activity, such as a different spectrum of activity and/or increased activity (see the last sentence on page 3 of the telefax dated 5 January 2000).

2.2.3 The first point to be considered in assessing inventive step is therefore whether it has convincingly been shown that the claimed 2-phenoxy-6-pyridinecarboxamides exhibit such a different spectrum of activity and/or increased activity.

In an attempt to show that the above-mentioned activity is effectively obtained with the claimed compounds, the Appellant referred to the data contained in Appendix B to the statement setting out the grounds of appeal, showing that the compound of Example 49 of the application in suit in comparison with its closest structural analogue from document (D) (hereinafter

1154.D
designated: reference compound) exhibited higher activity against barnyard grass without exhibiting phytotoxicity against rice, which suggested the potential usefulness of the compound of Example 49 as a selective herbicide as it killed weeds whilst leaving the crop plant rice unscathed.

Moreover, the Appellant argued that such higher herbicidal activity against barnyard in comparison with rice was also illustrated by the data set out in Table 3 of the application in suit, showing that part of the claimed compounds had a greater selectivity for herbicidal activity against barnyard grass in comparison to rice than the reference compound. Although the Appellant also admitted in the paragraph bridging pages 4 and 5 of the telefax dated 5 January 2000 that a non-negligible part of the compounds in Table 3 of the application in suit did not show such higher selectivity, it argued that all of the substituent groups exemplified in these compounds, which did not show such higher selectivity, were structurally more distant from the disclosure of document (D) and thus less likely to be synthesised by the person skilled in the art seeking further active compounds.

However, the only decisive question is whether it has been shown that virtually all claimed compounds exhibit a different spectrum of activity and/or increased activity. Since the Appellant itself admitted that a non-negligible number of the claimed compounds does not show such effect, the Board concludes that it has not been satisfactory shown that the problem underlying the invention, as defined in point 2.2.2 above, is effectively solved for the whole range of the
subject-matter covered by Claim 1.

The argument of the Appellant that the substituents in the compounds not exhibiting such an effect were further from the disclosure of document (D) is irrelevant in assessing whether an effect has been effectively shown.

2.2.4 Consequently, in view of the teaching of document (D), the problem underlying the invention can only be seen as the provision of further compounds having herbicidal activity, as taught on page 5, lines 19 to 26, of the application in suit.

2.2.5 Therefore, it remains to be decided whether a skilled person would have expected the claimed compounds to have herbicidal activity.

The Appellant argued that it was known that N-phenyl and N-benzyl phenoxy-pyridine-carboxamides had higher herbicidal activity than their N-alkyl analogues, as mentioned on page 2, lines 5 to 9, of the application in suit. Therefore, a skilled person, starting from the disclosure of document (D) and looking for compounds having higher herbicidal activity would not have considered replacing the phenyl or benzyl group on the amide function in the compounds of document (D) by the substituents R¹ and R² as defined in Claim 1.

However, as the problem underlying the invention must be seen in providing further compounds having herbicidal activity (see point 2.2.4 above), the question does not arise whether a skilled person would have expected a higher herbicidal activity but whether he would have expected a herbicidal activity at all.

1154.D
Since 2-phenoxy-3-pyridine-carboxamides bearing on the amide function an alkyl, alkenyl or alkynyl group are known from document (B) to have herbicidal activity (see column 1, lines 5 to 52), and 2-phenoxy-3-pyridine-carboxamides bearing on the amide function a phenyl or benzyl group are known from document (C) also to have herbicidal activity (see column 1, lines 5 to 44), a skilled person had no reason even to consider that the replacement of a phenyl or a benzyl group on the amide function of a phenoxy-pyridine-carboxamide having a specific substitution pattern on the pyridine ring by an alkyl, an alkenyl or an alkynyl group would impair the herbicidal activity in a substantial way.

Therefore, in view of the teaching of document (D), in combination with the disclosures of documents (B) and (C), the Board comes to the conclusion that it was obvious for a skilled person looking for further compounds having herbicidal activity to try to replace the phenyl or the benzyl group in the compounds known from document (D) by an alkyl, alkenyl or alkynyl group.

2.2.6 Consequently, Claim 1, at least for the compounds having as \( R^1 \) and/or \( R^2 \) an alkyl, alkenyl or alkynyl group, does not involve an inventive step according to Article 56 EPC.

3. Auxiliary request A1

3.1 Article 123(2) EPC

According to Claim 1, \( R^1 \) and \( R^2 \) may represent a \( \text{C}_{3-6} \) alkylene chain interrupted by a group \(-\text{NR}-\) in which \( R \) represents a \( \text{C}_{1-12} \) alkyl group, whereas in Claim 1 as
filed and in the passage on page 3, lines 19 to 22, of the application as filed R is defined as representing a hydrogen atom or an alkyl group, without any specification of the number of carbon atoms.

In support of its submission that the definition of R in Claim 1 was nevertheless disclosed by the application as filed, the Appellant referred to the teaching in lines 23 to 27 of page 3 of the application as filed, saying that "When any of ... R¹ and R² represents or contains an alkyl, alkenyl or alkynyl substituent group, this ... suitably has up to 12 ... carbon atoms ".

This teaching, however, refers to those compounds wherein any of the substituents R¹ and R² contain an alkyl, alkenyl or alkynyl group and does not refer to compounds wherein R¹ and R² together represent a C₃₋₆ alkyene interrupted by -NR-.

The content of a document must not be considered to be a reservoir from which features pertaining to separate embodiments could be combined in order to artificially create a particular embodiment. When assessing whether a feature has been disclosed in a document, the relevant question is whether a skilled person would seriously contemplate combining the different features cited in that document. This is not the case in the application as filed, from which it may not be directly and unambiguously derived that the definition given on page 3, lines 23 to 27, for alkyl, alkenyl and alkynyl would also be valid for the R-substituent in the -NR- group interrupting the alkyene chain when R¹ and R² together represent an alkyene chain.
Claim 1 thus contains subject-matter extending beyond the content of the application as filed, contrary to the requirement of Article 123(2) EPC.

4. **Auxiliary request A2**

4.1 **Article 123(2) EPC**

Claim 1 is supported by Claim 1 of the application as filed and by

- page 3, lines 23 to 27, of the application as filed, mentioning that when any of the substituents X, Y, R\textsubscript{1} and R\textsubscript{2} represents or contains an alkyl, alkenyl or alkynyl substituent group, the latter suitably has up to 12 carbon atoms;

- page 3, lines 31 and 32, of the application as filed, saying an aryl group suitably is phenyl; and

- page 5, lines 26 to 30, disclosing that R\textsubscript{1} and R\textsubscript{2} together may represent a group -(CH\textsubscript{2})\textsubscript{4}-, -(CH\textsubscript{2})\textsubscript{2}O(CH\textsubscript{2})\textsubscript{2}- or -(CH\textsubscript{2})\textsubscript{2}NR(CH\textsubscript{2})\textsubscript{2}- in which R is a C\textsubscript{1-2} alkyl group.

The features of Claims 2 to 5 are supported by Claims 2 to 4, 5 and 6 of the application as filed.

The process of Claim 6 corresponds with the process described in Claim 7 as originally filed and Claims 7 to 9 correspond with Claims 8 to 10 as originally filed.

Consequently, the subject-matter of all Claims 1 to 9
meets the requirement of Article 123(2) EPC.

4.2 State of the art

All the claimed subject-matter was disclosed in the priority document and, consequently, the present claims concern the same invention as the priority document and the priority of 28 November 1990 is validly claimed. Since the date of priority, according to Article 87(1) EPC, counts as the date of filing for the purpose of Article 54(2) EPC, document (D), published on 18 September 1991, does not belong to the state of the art to be considered.

4.3 Novelty

Since the compounds defined in Claim 1 differ from the compounds known from the prior art at least by the substitution of the phenoxy and the carboxamide groups on the pyridine ring, the Board comes to the conclusion that Claim 1 and, consequently, also Claims 2 to 9 are novel over the cited prior art. Since the novelty of the claimed process has never been contested, it is not necessary to give detailed reasons for this finding.

4.4 Inventive step

4.4.1 The Board considers document (B), which is discussed on page 2, lines 3 to 5 and 13 to 17, of the application in suit, to represent the closest state of the art, which was not contested.

4.4.2 Document (B) describes 2-phenoxy-3-pyridinecarboxamides exhibiting herbicidal properties, being herbicidally active against various species of weeds, showing
various activities as pre-emergence and/or post-emergence herbicides and some of them showing particular activity against certain weed species (cf. column 1, lines 8 to 30, and lines 43 to 52).

4.4.3 Starting from the disclosure of document (B), the problem underlying the invention must be seen in the provision of further compounds exhibiting herbicidal properties. This was agreed upon by the Appellant at the oral proceedings before the Board of Appeal.

4.4.4 From the data in Table 3 of the application in suit, illustrating the pre-emergence and post-emergence herbicidal activities of compounds 2 to 61 and 63 and from the data contained in Appendix A to the statement setting out the grounds of appeal, illustrating pre-emergence and post-emergence herbicidal activities of compounds 2 and 39 of the application in suit and of two compounds embraced within the disclosure of document (B), it incontestably follows that the claimed compounds have herbicidal properties.

The Board therefore accepts that a credible case has been put forward that the problem underlying the invention, as defined in point 4.4.3, is effectively solved by the claimed compounds.

4.4.5 It remains to be decided, whether, in the light of the teachings of the cited documents, a skilled person seeking to solve the above-mentioned problem, would have arrived at the claimed compounds in an obvious way.

4.4.6 Document (B) only describes pyridinecarboxamides having a phenoxy group in the 2-position and a carboxamide...
group in the 3-position without mentioning the possibility of having any other substitution pattern on the pyridine ring. Therefore, document (B), taken alone, would not suggest to a skilled person looking for further compounds having herbicidal activity that he should change the substitution pattern on the pyridine ring.

4.4.7 Documents (A) and (C) also describe 2-phenoxy-3-pyridinecarboxamides exhibiting herbicidal properties (see document (A), page 1, line 5 to page 2, line 22, and document (C), column 1, lines 6 to 31, and 45 to 57). Since, however, both documents are also silent about the possibility that phenoxy-pyridinecarboxamides not having the phenoxy and the carboxamide groups in the 2- respectively 3-position of the pyridine ring could have herbicidal properties, a skilled person could not get any hint from those documents to change the substitution pattern of the pyridine ring, let alone to expect that the claimed 2-phenoxy-6-carboxamides would exhibit herbicidal activity.

Therefore, the Board comes to the conclusion that the subject-matter of Claim 1 is not obvious in the light of the teachings of the cited prior art and thus involves an inventive step.

4.4.8 Dependent Claims 2 to 5, which represent preferred embodiments of Claim 1, and Claims 6 to 9 derive their patentability from the same inventive concept.

5. **Reimbursement of the appeal fee**

According to Rule 67 EPC the reimbursement of an appeal fee shall be ordered if such reimbursement is equitable
by reason of a substantial procedural violation.

In his communication dated 10 May 1995, the Examining Division has given detailed reasons why it was of the opinion that the claimed compounds were novel over the cited prior art documents but that the claims as originally filed did not meet the requirement of inventive step. With his letter dated 4 September 1995, the Appellant filed an amended Claim 1 which essentially differed from Claim 1 as originally filed in that the numbers of carbon atoms of the alkyl-, alkoxy-, alkenyl-, alkynyl- and cycloalkyl radicals were defined, and he contested the relevance of the Examining Division’s objections concerning inventive step.

As in the Examining Division’s opinion the Applicant had not given convincing arguments for accepting an inventive step, the Examining Division has refused the application on the basis of the objections mentioned in the only communication, instead of repeating the objections of the first communication in a second one. Since, however, the main arguments for refusing the application were a mere repetition of those mentioned in the only communication, the contested decision was based on grounds on which the Applicant had an opportunity to present his comments and, consequently, Article 113(1) EPC was not contravened.

Therefore, by refusing the application after only one communication, there has not been a substantial procedural violation within the meaning of Rule 67 EPC.
Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the Examining Division with the order to grant a patent with the following claims:

   - Claims 1 to 9 filed as auxiliary request A2 during oral proceedings;

   and a description to be adapted.

3. The request for reimbursement of the appeal fee is refused.

The Registrar: The Chairman:

N. Maslin A. Nuss