BASF and chloridazon

or

an example of a commercial and sustainable industrial logic against health and the environment

At the beginning of the 1960s, BASF held a patent on the substance chloridazon (PCA), the exercise of which resulted in the manufacture of a beet herbicide marketed under the name of Pyramin FL.

In 1982, BASF registered a second patent whose inventive nature derived from a new process for the synthesis of chloridazon which considerably reduced the level of an impurity called iso-chloridazon (ISO-PCA).

Contrary to the most fundamental ethics and all the guiding principles to which it claims to adhere (code of good conduct, Responsible Care, sustainable agriculture, protection of health and the environment, etc.), BASF did not use the process claimed in its 1982 patent until 1997, for the sole purpose of protecting its commercial interests.

Thus, over a period of 15 years the failure to implement its own state-of-the-art method resulted in BASF deliberately polluting surface and underground water in Europe with several thousand tonnes of impurities in the form of ISO-PCA, the inactive, non-degradable isomer of chloridazon.

This strategy can be summarised thus:

1982 : Patent No. EP0026847; BASF still had a virtual monopoly on the commercialisation of chloridazon, and had no economic reason to exploit this patent. Only the Italian company OXON had, since 1977, been producing this substance, the basic patent for

which had lapsed into the public domain, but BASF came to an agreement with OXON and was already purchasing from it most of its output.

1995 : Under commercial pressure from rival products, most of which contained the ISO-PCA isomer, and with the intention of being the only company to defend the substance chloridazon under the provisions of a new Community Directive which entered into force in 1993, BASF requested the FAO to validate a supposedly “new” manufacturing process and to impose on all UNO members technical specifications which would bring the PCA/ISO-PCA ratio from 85/15 to 95/5.

1997 : The FAO published these specifications, and BASF submitted a claim in respect of them to the competent authorities responsible for product registration in all the Member States.

Since, under the terms of the Community Directive, FAO specifications are binding, marketing authorisations were withdrawn for rivals to its product Pyramin.

Since its 1982 patent was about to expire, BASF applied in each Member State for a Supplementary Protection Certificate in order to ensure exclusive rights for an additional 5 years.

There remained only the products whose marketing authorisations could not be withdrawn because they corresponded exactly to the new FAO specifications.

The 1982 patent was therefore used against these products by way of actions for infringement of patent.

In taking this action, BASF is guilty of having violated the fundamental rules which a chemical company has a duty to observe, and of having submitted even to the Court of Justice of the European Communities false statements in claiming to have exploited its patent since the time it was granted in 1982.

Likewise, the organisations and associations to which it belongs (Fedichem, Fytophar, UIPP etc.) are guilty of having failed to enforce compliance with the guiding principles on which

they base not only their message, but also their existence, since one of their most influential members is violating the most fundamental of those guiding principles, namely the integrity of health and the environment.

THE EFFECTS OF THE PCA ISOMER AND THE JUSTIFICATION FOR REDUCING ITS CONTENT

1-1 THE OXON PATENT

This patent was registered on 21 June 1979 at the Belgian Patent Office, and its subject was precisely the process for obtaining PCA free from ISO-PCA in technical chloridazon.

With regard to this document, it should be made clear once more that one of the essential objectives sought in phytopharmacology is to offer on the market the product which is the most efficacious and, taking into account the current state of the art and research in the area in question, the least toxic to human health and the environment.

The OXON patent states that:

- *ISO-PCA does not have a herbicidal action, so its presence is superfluous,* ***not to say harmful****, when applied to the soil at the same time as the primary isomer (PCA).*

- *The principal aim of the invention is* ***to obtain improved herbicidal compounds for agricultural use with properties superior to those of compounds currently in use and****, to this end, to obtain the isomer PCA, which acts as a selective herbicide, in a state practically free from the inactive ISO-PCA isomer.*

- *Herbicidal formulations containing pure PCA, as compared with those containing a mixture of the two isomers, have* ***a greater efficacy against weeds and a lower phytotoxicity to crops****, especially when used as post-emergence treatments.*

- *Since it is possible to make herbicidal compounds with pure PCA which have a higher content of the active ingredient while using the same quantity of the organic substance,* ***considerable benefits can be achieved from the ecological point of view****, since in this way it is possible to avoid spreading the land with ISO-PCA, an organic compound of no practical use,* ***thus reducing environmental pollution.***

- *Purified "Pyrazon" (PCA) is useful in making* ***improved herbicidal compounds; it is expedient to use an appropriate formulation conforming to state of the art methods;***

- *Unexpectedly, formulations containing "Pyrazon" with 97% PCA are* ***less phytotoxic*** *to beets and, likewise unexpectedly, have* ***a greater herbicidal efficacy*** *than similar formulations containing "Pyrazon" with 84% PCA when used at equivalent doses of the active ingredient.*

The ineluctable notion of the public interest would oblige any manufacturer to offer on the market the product which is the purest in PCA.

STUDIES CARRIED OUT ON THE PRESENCE OF ISO-PCA IN GROUNDWATER

In 1988/1989, a study carried out by Professor Heike WEIL and Dr. Klaus HABERER (ESWE Institute Wiesbaden) on the behaviour of a number of organic substances found in the surface water of the Rhine as they seep through the subsoil in a production and water protection area showed that:

"Because of the reduction in the total quantities of organic micro-pollutants in the Rhine, reduced amounts of pesticides can also be observed in the ground water.

The concentrations of most of the 34 substances measured in total decrease sharply during their journey through the subsoil, in some cases even reducing to values below the limit of detection.

Concentrations of Iso-chloridazon, on the other hand, are maintained as they pass through the subsoil".

"Although iso-chloridazon is not a pesticide, it is nevertheless found as an isomeric by-product of the manufacture of chloridazon in the waters of the Rhine downstream of the BASF factory.
No reduction in average iso-chloridazon contents obtained over the course of the research period was observed as the chemical passed through the subsoil.

The dispersion of average values was considerable, given that varying quantities, depending on the phase of production, were discharged into the Rhine".

In plain language, ISO-PCA is found in unaltered form, not broken down during its migration through the soil, in water for consumption.

BASF's STRATEGY

2-1 DIRECTIVE NO. 91/414/EEC

In 1991, Council Directive 91/414/EEC concerning the placing of plant protection products on the market was passed.

The aim of this directive was to harmonise licensing procedures between the Member States.

It entered into force on 25 July 1993.

Under this directive, each active ingredient is subject to thorough evaluation at Community level, and each product must undergo evaluation at national level. Community evaluation covers all aspects of human and animal health, together with the impact on the environment, not only of the active substance, but also of the impurities and other significant components, from a toxicological, eco-toxicological and environmental point of view.

In order for this evaluation to take place, it is imperative that manufacturers have the intention of defending their chemicals before the competent authorities of the Community.

In the case of existing substances which were already on the market prior to the entry into force of the Directive, the latter provides for a period of 10 years (2003) for their re-evaluation to be carried out after the manufacturer or manufacturers have indicated their intention of defending them.

Otherwise, substances which are not defended shall be banned.

It is obvious that if only one manufacturer is in a position to defend a substance with a view to its inclusion in the Directive's positive list, that manufacturer will be assured of a total monopoly on its distribution in the Community's markets, since it will be a long time before any competitors get access to the technical dossiers on which Community evaluation was based.

This was why, in 1995, BASF played out the first act in a scenario which was to result in its being the only defender of chloridazon before the Community authorities.

Notification of chloridazon was submitted by BASF pursuant to Article 10-1 of Commission Regulation 451/2000 of 28 February 2000. A decision on the acceptability of this notification will be made in about July 2001.

Moreover, as laid down in Directive 91/414/EEC, until such time as Community re-evaluation has been completed, it is up to the Member States to ensure that they

approve phytopharmaceutical products only if, considering all the normal conditions under which they might be used, it has been established that there is no unacceptable impact on the environment or on health.

This is why the first act in its scenario would secure BASF the twofold advantage of having a monopoly on distribution in the short term even prior to Community registration.

For this first act, there was none better to play the leading role than the FAO.

2-2 NOTIFICATION SUBMITTED BY BASF TO THE FAO.

Under the terms of Directive 91/414/EEC, Member States are obliged to observe the technical specifications published by the FAO.

On the other hand, any national standards which are stricter than the FAO standard shall inevitably be regarded as a technical obstruction excluding from the market manufacturers who do not have access to such a method of manufacture, despite it being less harmful to health and to the environment than another method.

While the FAO itself may take the initiative in introducing a new standard, it may also be requested to do so by any interested party, particularly manufacturers.

A company like BASF would be fully aware of this, and therefore, while keeping quiet about the fact that its own state of the art method, jealously and culpably kept concealed in the multitude of patents taken out since 1982, ought to have been notified much earlier, it submitted to the FAO in 1995 a “new” specification for chloridazon.

In view of the undoubted benefits of this “new method”, the said specification was granted the status of provisional specification at the 26th Conference of the “Specifications Group” of the FAO held in PEKING in 1996.

The standard was definitively adopted and published in March 1997.

Now, and particularly with regard to those Member States which had failed immediately to apply the “new method” to licensed products, which henceforth would not comply with the FAO-UNO standard, BASF was able to close the first act of its scenario itself playing the role of United Nations Blue Beret charged with the mission of protecting the populace from the harmful agent ISO-PCA, and of overseeing the proper application of the new specification.

2-3 BASF’s DEALINGS WITH THE NATIONAL AUTHORITIES RESPONSIBLE FOR ISSUING REGISTRATIONS.

In Belgium, up until 1997, the level of purity of the technical active substance contained in the product PYRAMIN SC authorised under No. 6851/B was 80%.

Moreover, this composition remained registered at least until 9 November 1999.

The product PYRAMIN SC 520, in which the level of purity of the chloridazon was 94%, received approval for the first time on 10 October 1996 under No. 8884/B.

These facts are clear from statements made on 9 November 1999 by the highest authority responsible for licensing at the Ministry of the Middle Classes and Agriculture, Councillor-General Mr. HOUINS.

Consequently, the following conclusions are unavoidable:

- BASF had been making preparations in view of the forthcoming publication of FAO specifications, hence its application for a marketing authorisation in 1996.
- Incontestably, the company could not have put the product resulting from the claims of its 1982 patent onto the Belgian market before 10 October 1996 at the earliest, for want of an authorisation for this composition.

- If it is true, which remains to be proved, that BASF immediately supplied the whole of the Belgian market with the new product, the accumulation of ISO-PCA in the soil and in the water would not have ceased until 1997.

  In France, according to statements made by Mr. HOUINS' French counterpart on 24 November and 16 December 1999, the ISO-PCA isomer should no longer be found at levels above 60 g/kg (6%) at the maximum, according to the FAO specifications in 1997, and the level of purity of the chloridazon contained in the product PYRAMINE DF, as notified in the 10-yearly application for renewal of its marketing authorisation (1997), is 94% (by weight).

  Considering that Belgium and France represent the majority of the European beet acreage, it is highly likely that BASF's scenario against health and the environment was written for the international stage.

  To close this second act, BASF this time acted the policeman charged with ensuring that all marketing authorisations issued for products no longer conforming to the new FAO standard were withdrawn.

  Since its 1982 patent was about to lapse into the public domain, and since there would be a delay before chloridazon was registered in the Community list, BASF faced the risk of competition from manufacturers technically capable of producing products according to the new specifications.

  The third act of the scenario therefore consisted of obtaining a Supplementary Protection Certificate (SPC), which would enable it to avert this danger.

2-4 SUPPLEMENTARY PROTECTION CERTIFICATE

2-4-1 REGULATION NO. 1610/96 OF 23 JULY 1996

The Supplementary Protection Certificate for Plant Protection Products (SPCP) is a new title to industrial property created by Council Regulation (EC) No. 1610/96 of 23 July 1996.

This is a right to industrial property additional to a previously granted patent, but distinct from it, issued on a national basis according to a procedure harmonised at European level.

The SPCP, by extending the period of protection initially conferred by a patent, has the effect of re-establishing equality of treatment between the holders of “common” patents and the holders of patents relating to products the marketing of which is subject to a long and complex administrative authorisation procedure which proportionately reduces the period of commercial exploitation of the protected invention.

Financial considerations thus constitute the chief motivation for the adoption of Regulation No. 1610/96.

However, their importance should not be misjudged.

According to the opinion of the Economic and Social Committee on the draft regulation dated 27 April 1995 (Official Journal of the European Communities No. C155/15, 21 June 1995), the usefulness of the SPCP will be measured less in terms of the number of applications than in terms of its function in stimulating research in this domain.

The European market has in effect some 700 plant protection products in use, and 57% of this market involves active ingredients which have lapsed into the public domain, for which generic versions are available.

The SPCP would therefore benefit only around 37 of these at the time of its entry into force, according to the European authorities.

This function of stimulating phytopharmacological research through the SPCP is emphasised all the more since the European Parliament has had added to the original preamble of the draft regulation a paragraph pointing out that research on plant protection products "*contributes to the continuing improvement in the production and procurement of plentiful food of good quality at affordable prices*", which is a remarkable tribute, from an assembly which takes the protection of the environment very much to heart, to a category of products which are often disparaged.

Environmental preoccupations come to the fore, however, in No. 8 of the preamble to the regulation, which stresses the interdependence of economic growth and environmental quality.

Integrating environmental preoccupations into industrial property law is not without precedent, and is part of a general trend according to which the principle of environmental protection comes under public policy.

Regulation 1610/96 entered into force on 8 February 1997.

Taking cynicism beyond all limits imaginable in fiction, BASF was then able to raise the curtain on the third act of its scenario, which consisted of promoting, in the name of the environment and health, its manufacturing process which it had kept hidden for 15 years, and seeking an SPCP for its 1982 patent from all the competent national authorities.

In so doing, BASF was this time guilty of making false declarations to the said authorities, and of attempting fraudulently to hijack the regulation for its own profit.

Fortunately, certain Member States refused to become involuntary actors in such a deception.

Thus, for the first time since 1982, BASF was thwarted in its claims, and a refusal to grant it an SPCP led it to the Court of Justice of the European Communities (ECJ) in

Case No. C-258/99, on which case the Advocate General, Mr. Francis JACOBS, presented his opinion on 30 November 2000.

Reading this opinion, since it takes particular account of the statements of BASF, indubitably reveals the duplicity of company.

2-4-2 BASF's SPCP APPLICATIONS AND THE COMMUNITY PROCEEDINGS BEFORE THE ECJ

In BELGIUM, European Patent No. 0026847 was the subject of SPCP Application No. 097C0027 dated 16 May 1997.

The SPCP was issued on 1 February 2000, entered into force on 4 September 2000 and expired on 25 February 2001.

In France, BASF applied for an SPCP on 26 March 1997.

SPCP No. 97C0014 was issued on 4 September 2000 and expired on 27 February 2001.

In Germany, the SPCP was applied for on 20 February 1997 under No. 19775010.

The application was turned down by the German Patent Office on 16 October 1998, and is currently before the German Federal Patent Court.

In the NETHERLANDS, BASF applied for an SPCP on 3 March 1997.

The Industrial Property Office turned down the application on 26 September 1997.

BASF appealed against this decision on 7 November 1997 in a letter, the arguments of which were again rejected on 19 February 1998.

BASF finally challenged this rejection before the District Court in The Hague, which in turn applied to the CJEC for a preliminary ruling.

This was Case No. 258/99, in which the Advocate General produced his conclusions on 30 November 2000.

These conclusions state that:

Point 14. The applicant in the main proceedings, BASF AG, is the producer of a number of plant protection products. The present proceedings concern two herbicides in which the active substance is a chemical compound known as "chloridazon".

Point 15. Chloridazon is a compound which appears in different isomeric forms. That is, while all chloridazon consists of molecules with the same chemical formula, C10H8CIN3O, the physical structure of those molecules varies. There are two isomers in the chloridazon produced by the applicant: 4-amino-5-chloro-1-phenyl-pyridazon-6 ("isomer 1") and 5-amino-4-chloro-1-phenyl-pyridazon-6 ("isomer 2"). Those isomers have different chemical properties. While isomer 1 is an active substance, ***isomer 2 has little or no effect as a plant protection product. Isomer 2 may therefore be regarded as an impurity which occurs as an unavoidable result of the production of isomer 1.***

Point 16. The applicant has sold herbicides based on chloridazon in the Netherlands, and in other Member States, for several years, and it has been granted a number of different marketing authorisations for that purpose. Only two of those authorisations are relevant here.

First, the applicant obtained, on 27 February 1967, a marketing authorisation in the Netherlands for a product known as "Pyramin" (Authorisation 3594 N). According to the order for reference, Pyramin contains a maximum of 80% of the active isomer 1 and a minimum of 20% of the inactive isomer 2 of chloridazon. ***According to the applicant, Pyramin contains on average 65% of isomer 1 and 35% of isomer 2.*** *Second, on 19 January 1987, the applicant obtained a marketing authorisation in the Netherlands for the product "Pyramin DF" (Authorisation 9582 N). Pyramin DF contains, according to the order for reference, a minimum of 90% of the active isomer*

1 and a maximum of 10% of the inactive isomer 2. According to the applicant, Pyramin DF contains in practice more than 95% of isomer 1.

Owing to the higher concentration of the active substance in Pyramin DF, that product is more effective as a plant protection product than Pyramin.

Point 17. The higher concentration of the active substance in Pyramin DF was the result of a new process for the preparation of chloridazon which had been developed by the applicant. On 23 June 1982, the applicant was granted a European patent (EP 0 026 847) in respect of that process valid for 10 designated countries, including the Netherlands. The applicant had previously, on 28 December 1961, been granted a (German) product patent in respect of chloridazon. That product patent expired before the Regulation entered into force on 8 February 1997.

Point 46. BASF AG and the German Government claim that that interpretation of Article 1(8) is contrary to the purpose of the Regulation. Their argument may be summarised as follows:

Point 47. A producer will normally be required, under Directive 91/414 or under provisions of national law, ***to apply for a new marketing authorisation where the concentration of active substance in a plant protection product changes due to a new patented production process. The authorisation procedure limits the effective period of enjoyment of the process patent in the same way as it limits that period for product patents . . . . . .”***

Contrary to these observations of BASF and of the German Government, but entirely in agreement with those presented by the Commission and the Governments of the Netherlands and the United Kingdom, the Advocate General objects to the application of the SPCP in the case of BASF’s patent no. EP 0026847 of 1982, for the following reasons in particular:

Point 60 Ib. Where, by means of a new process, a plant protection product is obtained which contains a smaller proportion of unavoidable impurities than an existing plant protection product with the same active component, the two products are one and the same for the purposes of the Regulation.

The points referred to above are undoubtedly valuable in appreciating the industrial logic of BASF.

A- In an attempt to satisfy one of the essential conditions for obtaining an SPCP, namely that the product which is the subject of the basic patent must have been granted a marketing authorisation later than 1985, BASF laid claim to a marketing authorisation granted in the Netherlands on 19 January 1987 for the product Pyramin DF (Authorisation No. 9582 N).

Similarly, the company had claimed a Belgian marketing authorisation No. 7626/B issued on 12 November 1986 and a French marketing authorisation No. 8600073 issued on 28 February 1986 in order falsely to obtain an SPCP in Belgium and in France.

All these marketing authorisations are for the product Pyramin DF, which is in a formulation consisting of granules for dispersal in water, and not for Pyramin FL which is a liquid formulation, and which still today represents 90% of the Belgian market.

To put it plainly, it was not only Belgium which had been deprived until 1997 of Pyramin FL purified of ISO-PCA, but the whole of the common market.

With regard to the co-existence of these two products, Pyramin DF and Pyramin FL, there are two possible hypotheses:

- In 1986/1987, BASF used its process patented in 1982 for Pyramin DF only.

  Since the two products, DF and FL, differ only in their formulation, and since both apparently use essentially the same process for the synthesis of chloridazon, BASF must have manufactured the active substance by two processes, thus depriving itself of profitable use of its new non-ISO-PCA production unit, and deliberately, against all logic, maintaining its old, polluting unit.

Such an industrial logic would no doubt not be overly excessive, in opposing health and environmental interests out of a powerful will to harm, and out of pure gratuitous spite.

If BASF was happy with a particular production logic and was attempting to maintain the most favourable conditions for it, its contempt for the public interest would certainly not lead it to commit the gratuitous act which this hypothesis would inevitably require.

- BASF did not use its process patented in 1982 for either Pyramin DF or Pyramin FL until 1997.

On the other hand, the DF formulation is technically not able to support the same level of ISO-PCA impurity as the FL formulation, and OXON knows how to extract the unwanted agent in satisfactory amounts using its own patented process.

It must be remembered that, to the knowledge of the whole industry, BASF purchases the majority of OXON's output.

Thus, Pyramin DF would not have derived from BASF's patent, but from OXON's, which had nothing to do with the disputes before the ECJ.

The following facts support this hypothesis:

- Apart from BASF, Sipcam-Phyteurop is the only company to hold a marketing authorisation for chloridazon in the DF formulation in France, under the name Better DF and the number 9000197.

  Sipcam-Phyteurop and OXON are one and the same company.

- The statements made by the French Ministry of Agriculture on 24 November and 16 December 1999 related solely to Pyramin DF, and prove that the 94% chloridazon purity level had not been notified until the 10-yearly renewal of the marketing authorisation according to the FAO specifications in 1997.

BASF had therefore in no way claimed its own patented process when it applied for a marketing authorisation for Pyramin DF in 1986.

B- In order the better to promote the interests of its patent, BASF did not hesitate to admit that the 80% purity level of the chloridazon contained in Pyramin FL, for which it had been granted a marketing authorisation in the Netherlands, was in actual fact only 65%.

In the case of Belgium, for example, 15% more of the ISO-PCA isomer, over a period of 15 years, had resulted in contamination of the water with more than 120 extra tonnes of harmful products.

C- While concealing from the ECJ the fact that it had never used its patented process, BASF tried to lead it to believe that, under Directive 91/414 or under provisions of national law, the procedure for the authorisation of a product in which the concentration of active substance is changed limits the effective period of enjoyment of the process patent in the same way as it limits that period for product patents.

In reality, nothing could be further from the truth, since if the concentration of the active substance increases as a result of the elimination of a polluting substance, it is obvious that, in the public interest, the national competent authorities would immediately grant authorisation for the product thus purified as soon as they had been notified of it by the applicant for the new marketing authorisation.

Finally, in a judgement dated 10 May 2001, the CJEC rejected BASF's arguments and declared its application for an SPCP to be inadmissible.

THE BASF STRATEGY APPLIED TO PRODUCTS COMPLYING WITH THE NEW FAO STANDARD

3-1 WHY BASF NEEDED THESE PRODUCTS TO BE ELIMINATED

With the aim of becoming the only company to defend chloridazon for registration in the Community list, BASF evaluated its strategy in terms of its 1982 patent, the notification of the FAO in 1995 of its "new" process, and the reality of the provisions of Directive 91/414/EEC in the face of three companies capable of producing the substance for which it intended to acquire a new monopoly.

KAUSTIK in the former USSR was producing a poor quality substance which had no chance of carrying on, since the criteria laid down in the European Directive stated that only substances of a purity similar to the purest industrially achievable could be expected to be included in Annex 1.

Furthermore, the increasing influence of Germany in the East, and the control which BASF had gained over Russian gas no doubt played in its favour.

KAUSTIK abandoned production of chloridazon.

OXON in Italy held a patent similar to that of BASF, but the two companies had formed a partnership some time previously, and seemed to be maintaining it in the sense that OXON had not notified the Community authorities of any interest in the substance.

There remained only **ISTROCHEM** in Bratislava, the jewel in the industrial crown of the young Slovakia, which had ambitions in the lucrative and solvent EU market. Chloridazon and MCPA were the only two plant protection products manufactured by ISTROCHEM, and the two were interdependent in their manufacture.

After negotiations, or rather an attempt to take control, had failed, BASF instituted proceedings against ISTROCHEM for infringement of its 1982 patent.

ISTROCHEM's distributor, for its part, intended to remain in the plant protection market after the announcement of the barrage of existing substances vying for registration in the Community list.

Chloridazon was the first substance for which it began eco-toxicological studies.

To this end, it was granted financial support at national and Community level.

Furthermore, the studies on metabolites were entrusted to the French laboratory ADME BIOANALYSES in MOUGINS, which was later discovered to have connections with BASF.

This turned out to be most unfortunate, since in a letter dated 30 October 1996, ADME stated that it was "obliged" to pass information about this study to BASF, and that it "regretted" that the initial batch of samples had suffered a breakdown in the cold-chain!

At all events, BASF could not fail to be aware of its intention to defend chloridazon at Community level, and this small Belgian distributor threatened to interfere badly with its aim of being the sole player.

Thus commenced the infernal spiral which would lead the inconvenient distributor and the ISTROCHEM company down a legal route mapped out by BASF and waymarked with its false declarations.

3-2 BASF's SCENARIO BROUGHT TO LIGHT

- On 9 November 1999 the Councillor-General, Mr. HOUINS, who was responsible for marketing authorisations at the Belgian Ministry of Agriculture, attested that the level of purity of the technical active substance contained in the product PYRAMIN FL was at that time 80%, that the level of purity of the chloridazon contained in PYRAMIN SC 520, approved for the first time on 10 October 1996, was higher, at 94%, that the case would be put before the next sitting of the Approvals Committee for them to judge whether the co-existence of these two

levels of purity was acceptable, and that the process used (by BASF) was difficult to defend from an ethical point of view.

- On 14 February 2000, the FAO confirmed that it had been informed of new technical specifications by BASF in 1995, and described the procedure leading to their publication in 1997.

- On 4 September and 11 October 2000, BASF was called upon to give its reasons for retaining an ISO-PCA content for 15 years despite the fact that its own state of the art method would have enabled it to eliminate that content almost entirely.

- On 7 February 2001, FEDICHEM produced a reply from BASF dated 11 January in which the company claimed that delays in the granting of a new marketing authorisation and the industrial investments necessary for the implementation of its 1982 patent meant that it had been unable to switch from the old to the new form of PYRAMIN, with a higher level of chloridazon purity, until 1996.

This admission by BASF was incontestable proof of its duplicity, both in the proceedings in which it had claimed to be exploiting its patent in order to justify commercial prejudice and to obtain the seizure of products which it claimed were infringing the patent, and before the CJEC, where it had stated that it had been exploiting its patent since 1986 with the production of PYRAMIN DF.

Its explanations addressed to FEDICHEM were, moreover, undeniably fallacious.

With regard to changing the manufacturing process, the scale of the financial or human resources necessary for the elimination of a polluting substance is in fact irrelevant, especially since, in the actual wording of the patent in question, the protected process enables chloridazon to be obtained in a purer form and "*by means considerably more simple and economical*" than with previous processes.

It must be remembered that over a period of 15 years, BASF's breach of the guiding principles of Responsible Care resulted, not only in sizeable industrial discharges of pollutants into the waters of the Rhine, but also in the pollution of the water in beet-

growing areas with several thousand tonnes of non-degradable ISO-PCA contained in the product used by farmers.

As for the administrative delays, it should also be borne in mind that the 1982 patent concerned 10 Member States of the EEC in which BASF had already been granted marketing authorisations for its product Pyramin, containing ISO-PCA, in the 1960s.

It was therefore not a case of a new product in the sense put forward by the manufacturer.

While it is true that if there is a change in the purity of an active substance, a new authorisation must be sought, it will obviously be granted immediately by the competent authorities if the change relates to an increase in purity, if its consequence is the elimination of a highly polluting agent, and . . . if a new file consisting essentially of the technical claims of a process patent is in fact submitted.

The legislation in force, particularly in Belgium, could therefore not have been the cause of the least delay in implementing a state of the art plant protection process if it had been submitted by BASF to the authorities responsible for applying the legislation.

- On 16 February 2001, Mr. HOUINS, Councillor-General at the Ministry of Agriculture, replied very precisely to this effect, and stated that the Belgian authorities responsible for the approval of pesticides for agricultural use were not called into question by BASF in its letter dated 11 January 2001.

- In February 2001, the French magazine QUE CHOISIR, published by the Federal Union of Consumers, published an article entitled "*BASF's unexploited patent*" which was based on an examination of AUDACE's files and its own investigation.

BASF did not demand a right of reply.

- Other actions are currently still in the process of being brought, or are still awaiting a response from the professional authorities or organisations which have been alerted.

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- For a very long time now, and at the very least since the RIO Conference in 1992, the integration of environmental preoccupations into industrial property law has been part of a general trend according to which the principle of environmental protection comes under public policy.

  Thus, businesses which are not respectful of the environment are held civilly responsible throughout the life-cycle of the products they place on the market.

  Producing a pollutant when its own state of the art technology would enable it to eliminate that pollutant makes BASF responsible a fortiori.

  Very recently the extremely mediatory case in Pretoria in South Africa, and the withdrawal of the 39 plaintiff pharmaceutical industries, has demonstrated that respect for human rights takes precedence over respect for industrial property rights.

  The environment and health form an integral part of human rights.

  Thus, industry has had to accept that in the face of catastrophes involving pollution or disease, legal arguments in favour of the necessity of defending its financial interests by means of patents are carrying less and less weight in the face of public opinion and Justice.

- In a judgement of the CJEC dated 21 January 1999 (Case No. C-207/97), Belgium was condemned for failing to adopt pollution reduction programmes which included quality targets for water in respect of 99 substances.

  The CJEC declared that Belgium had failed to fulfil the obligations incumbent upon it under Article 7 of Council Directive 76/464/EEC of 4 May 1976 on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community.

  In view of this judgement, it would be anachronistic at the very least for BASF to find legal justifications for its failure to implement its state of the art process, since this failure led precisely to a pollution of the water.

  At a time when agro-chemistry is in search of a new legitimisation, and is itself posing the question as to whether its products are socially acceptable, this dossier certainly does not honour the radical change of attitude announced on June 28th by its association, the UIPP, before the French National Assembly.

As for establishing a 'Sustainability Council' within BASF with the task of watching over it to ensure that its activities 'contribute to economic, ecological, and social development without compromising the development prospects of future generations' and which will integrate 'the idea of sustainability more strongly' in the daily affairs of the group, notably by taking part in an 'eco-efficiency' analysis of its investment decisions, … and as for the very high opinion the firm has of itself when it maintains that it is 'one of the very first global enterprises to take such an initiative', … doubtless one would have to await its report, due out this summer, on its 'social responsibility' (Les Échos June 27th) and see the space it dedicates therein to the chloridazon dossier to assess whether its talent for communication is indeed nothing more than constant and fallacious propaganda.