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Datasheet for the decision of 7 February 2017

Case Number: T 1208/12 - 3.3.04

Application Number: 97951782.8

Publication Number: 0891130

IPC: A01H5/10

Language of the proceedings: EN

Title of invention:
Oilseed Brassica containing an improved fertility restorer gene for ogura cytoplasmic male sterility

Patent Proprietor:
Pioneer Hi-Bred International, Inc.

Opponents:
01: KWS SAAT SE (opposition withdrawn)
02: Syngenta Participations AG (opposition withdrawn)
03: Deutsche Saatveredelung AG et al.

Headword:
Oilseed/PIONEER HI-BRED

Relevant legal provisions:
EPC Art. 53(b)
EPC R. 26(4), 27(b)
International Convention for the Protection of New Plant Varieties (UPOV 91 Convention)
European Union - Council Regulation (EC) No 2100/94 on Community plant Variety rights

Keyword:
Claim 1 of all requests - plant varieties excluded from patentability (yes)

Decisions cited:
G 0001/98, T 1054/96

Catchword:
-

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Case Number: T 1208/12 - 3.3.04

D E C I S I O N
of Technical Board of Appeal 3.3.04
of 7 February 2017

Appellant: (Patent Proprietor)	Pioneer Hi-Bred International, Inc. 800 Capital Square, 400 Locust Street Des Moines, Iowa 50309 (US)
Representative:	Stevens, Fiona Gill Jennings & Every LLP The Broadgate Tower 20 Primrose Street London EC2A 2ES (GB)
Respondent II: (Opponents 03)	Deutsche Saatveredelung AG et al. Weissenburger Strasse 5 59557 Lippstadt (DE) et al.
Representative:	Neuefeind, Regina Maiwald Patentanwälte GmbH Elisenhof Elisenstrasse 3 80335 München (DE)

Decision under appeal: **Decision of the Opposition Division of the European Patent Office posted on 22 March 2012 revoking European patent No. 0891130 pursuant to Article 101(3)(b) EPC**

Composition of the Board:

Chairwoman G. Alt
Members: B. Claes
M.-B. Tardo-Dino

Summary of Facts and Submissions

I. The patent proprietor (appellant) lodged an appeal against the decision of the opposition division to revoke European patent No. 0 891 130. The patent had been granted for European patent application No. 97 951 728.8, published as international application WO 1998/027806 with the title "*Oilseed Brassica containing an improved fertility restorer gene for ogura cytoplasmic male sterility*".

II. The patent was opposed by three opponents under Article 100(a) EPC (in conjunction with Articles 53(b), 54 and 56 EPC) and Article 100(b) and (c) EPC. Opponent 02 withdrew its opposition on 10 October 2011.

III. The decision under appeal concerned a main request and five auxiliary requests, all requests submitted with a letter dated 20 October 2011.

Claim 1 of the **main request** read:

"1. A hybrid seed comprising an inheritable and stable fertility restorer gene for ogura cytoplasmic male sterility, or hybrid plant thereof, produced by a cross between a plant obtained from seed deposited as *Brassica napus olifiera* 97SN-1650, 97SN-1651, 96FNW-1792-03 or 96FNW-1822-07 having the respective ATCC accession numbers 97838, 97839, 209001 or 209002 as a male parent and a second Brassica plant as a female parent, wherein the second *Brassica* plant has a glucosinolate level that is sufficiently low to ensure that the hybrid plant yields oilseeds having a total glucosinolate content of less than 30 µmol per gram dry weight."

Claim 1 of **auxiliary request 1** was identical to claim 1 of the main request but for the amendment of the feature "oilseeds having a total glucosinolate content of less than 30 µmol per gram dry weight" to "oilseeds having a total glucosinolate content *in the solid component before crushing and extraction of the oil component* of less than *25* µmol per gram".

Claim 1 of **auxiliary request 2** was identical to claim 1 of auxiliary request 1 but for the addition of the wording "*, wherein the glucosinolate content for the seeds obtained from 97SN-1650 and 97SN-1651 is determined on the air-dry-oil-free solid as measured by the gas liquid chromatography (TMS-based) method of the Canadian Grain Commission, and for the seeds obtained from 96FNW-1792-03 and 96FNW-1822-07 is measured by HPLC at 8.5% moisture*." at the end of the claim.

Claim 1 of **auxiliary request 3** was identical to claim 1 of auxiliary request 2 but for the addition of the wording "*, wherein the glucosinolate content is determined on the air-dry-oil-free solid as measured by the gas liquid chromatography (TMS-based) method of the Canadian Grain Commission*." at the end of the claim.

Claim 1 of **auxiliary request 4** was identical to claim 1 of the main request but for the amendment of the feature "oilseeds having a total glucosinolate content of less than 30 µmol per gram dry weight" to "oilseeds having a total glucosinolate content *in the solid component before crushing and extraction of the oil component* of less than *20* µmol per gram".

Claim 1 of **auxiliary request 5** was identical to claim 1 of the main request with the term "96FNW-1792-03" deleted.

IV. The opposition division decided that claim 1 of the main request and of auxiliary requests 1 to 3 and 5 related to added subject-matter (Article 100(c) or 123(2) EPC). It was satisfied that claim 1 of auxiliary request 4 complied with the requirements of Articles 84 and 123(2) and (3) EPC. The opposition division decided however that claim 1 was directed to specific plant varieties as defined in Rule 26(4) EPC and was thus excluded from patentability pursuant to Article 53(b) EPC.

V. The following documents are referred to in the present decision:

D28: Feng *et al.* (2011), New Physiologist, pages 1 to 13.

D29: Rücker & Rudloff (1991), GCIRC 1991 Congress, *Rapeseed in a Changing World*, Proceedings Vol. 1, A-25, page 191 to 196.

VI. With the statement of grounds of appeal the appellant re-submitted the claim requests as considered by the opposition division in the decision under appeal and argued *inter alia* that the hybrid seeds and hybrid plants thereof as subject-matter of the claims were not excluded from patentability by virtue of Article 53(b) EPC. In addition it submitted a declaration by Dr K. Kraling dated 29 May 2012.

VII. Both opponent 01, as respondent I, and the joint opponents 03, as respondent II, replied to the appellant's appeal. Respondent I submitted document D29 and respondent II submitted a declaration by Dr R. Snowdon dated 17 November 2012.

VIII. With a letter dated 13 April 2015 one of the joint opponents 03 withdrew its opposition.

IX. In a communication pursuant to Article 15(1) RPBA annexed to the summons to oral proceedings, the board set out its preliminary non-binding opinion on the issues it considered pertinent to the case. It noted *inter alia* that the opposition division held that the subject-matter of claim 1 of auxiliary request 4 was limited to hybrids resulting from the recurrent use of two particular defined parent varieties. It thus fell under the definition of "plant variety" in Rule 26(4) EPC, and accordingly the subject-matter of this claim 1 was excluded from patentability by virtue of Article 53(b) EPC in the light of decision G 1/98 of the Enlarged Board of Appeal. The board noted that this finding of the opposition division also seemed to apply to claim 1 of the pending higher- and lower-ranking requests.

X. With a letter dated 6 January 2017 the appellant submitted further arguments in favour of the allowability of its appeal, a further auxiliary request and a further document.

XI. Respondent I withdrew its opposition with a letter dated 17 January 2017.

XII. The appellant and the respondents (opponents 03) were represented at the oral proceedings which took place as scheduled. The parties' final requests at the oral proceedings were:

The appellant requested that the decision under appeal be set aside and the patent maintained on the basis of

the set of claims of the main request or on the basis of the set of claims of one of auxiliary requests 1 to 5, all requests as filed with the statement of grounds of appeal, and that the case be remitted to the opposition division for further prosecution if one of the requests were found allowable.

The respondents (opponents 03) requested that the appeal be dismissed.

At the end of the oral proceedings the chairwoman announced the board's decision.

XIII. The arguments as submitted by the appellant which are relevant for the present decision may be summarised as follows:

All requests - claim 1 - plant varieties - Article 53(b) EPC

Article 53(b) EPC represented the border between plant variety protection and patent protection. It was intended to be a narrow exception excluding from patentability subject-matter which could be protected by plant variety rights.

It was impossible to obtain plant variety rights for the hybrids as defined in claim 1. They were thus patentable.

The male restorer plant defined in claim 1 was homozygous for the male sterility gene for ogura cytoplasmic male sterility and had a low glucosinolate level. The plant was obtained from seed from particular deposited *Brassica napus olifiera* lines having

respective ATCC accession numbers and belonging to one of the particular deposited varieties.

The cross referred to in claim 1 for producing the hybrid seed could be performed with any female *Brassica* parent having a particular trait, i.e. capable of giving rise to hybrids with the desired low glucosinolate content defined in claim 1. This female parent plant was not limited to plants belonging to a particular variety. In practice, when working the invention, the skilled person would select a female parent that was stable for low glucosinolate content. However, the female parent was not necessarily stable in all its characteristics, and certainly did not need to be a registered plant variety, or even be capable of being registered. The female parent plants could e.g. have variations in herbicide or disease resistance profiles or different oil profiles. Thousands of different female plants could thus be used, and further new such suitable plants were constantly being discovered.

Claim 1 covered a very large number - thousands - of hybrid seeds and plants and did not define any specific hybrid variety. The hybrid seeds were furthermore not necessarily of the same species, as the dependent claims showed. The oilseeds, i.e. harvested from the plants grown from the hybrid seeds according to claim 1, were not used to produce successive generations of plants, as later generations were extremely variable and would not propagate unchanged. Therefore the claimed hybrid seeds and plants did not represent a plant variety.

The authors of document D29 estimated that there were eight loci involved in the difference between low

glucosinolate and high glucosinolate content in oilseed of *Brassica napus*.

Even if the cross referred to in claim 1 were undertaken with a female parent plant which belonged, like the male parent plant, to a plant variety having a low glucosinolate content, the resulting hybrid plants would neither fulfil the criteria of Rule 26(4) EPC, i.e. be a variety in its sense, nor necessarily meet the UPOV protection criteria because the hybrid plants would be stable for the low glucosinolate trait but would not necessarily be stable in respect of many other characteristics. In fact, out of every 500 or so hybrids generated in accordance with the invention (the female parent belonging to a plant variety or not), only a handful could be submitted for plant variety protection, and even fewer would be successful in achieving protection.

In its decision G 1/98 (see point 3.10) the Enlarged Board of Appeal stated that, whereas a claim was allowable if it "embraced" plant varieties, a claim was excluded from patentability if it specifically identified a limited number of specific plant varieties (e.g. up to about 20 varieties). Claim 1 of the patent in suit did not specifically identify any hybrid and was therefore not excluded from patentability by virtue of Article 53(b) EPC.

According to Rule 27(b) EPC, inventions concerning plants or animals were patentable if the technical feasibility of the invention was not confined to a particular plant or animal variety. This was the case for the claimed invention. Claim 1 was drafted to protect a trait, rather than specific varieties. The low glucosinolate level trait could be transferred from

one variety to numerous other varieties - even to those of different species. The claim was not directed to a complete genome, but merely to selected genes which encoded the transferable trait.

XIV. The arguments of the respondents which are relevant for the present decision may be summarised as follows:

All requests - claim 1 - plant varieties - Article 53(b) EPC

The required low glucosinolate level in the oilseeds set by claimed plants grown from claimed hybrid seeds did not result from the molecular properties of the male parent plant alone but from a combination of these properties of both the male and female parent plants in the cross. Therefore, the situation differed from the case underlying decision G 1/98 of the Enlarged Board of Appeal, i.e. that case was based on genetic engineering and plants resulting therefrom. It concerned a technical teaching, i.e. a trait resulting from the presence of a transgene which could be worked in an infinite number of varieties and not only in one particular variety. In the present situation however, the resulting claimed hybrid seed was itself each time a variety.

The hybrid seed of claim 1 could only be obtained by using selected female plants which belonged to a group of specifically defined plant varieties. This was corroborated by Dr Kraling's declaration (section V), which stated that "*a* [...] *number of Brassica varieties* [...] *could be chosen to breed with the deposited lines*". The outcome of such a crossing of two varieties could only be a plant variety.

The reduced glucosinolate level "trait" in the oilseeds aimed for in claim 1 was based on a very complex pathway for glucosinolate biosynthesis and regulation. The pathway included at least 105 metabolic quantitative trait loci (QTL) in *Brassica napus*, dispersed throughout the genome (see document D28). The low glucosinolate level of the claimed hybrid seed was thus established by a genome-wide genetic network, and only by combining the entire genomic networks of both the male and female parent plants could the criteria of the hybrid seed of claim 1 be fulfilled.

Article 5.1 of the EU Council Regulation (EC) No 2100/94 of 27 July 1994 on Community plant variety rights specified that "hybrids" were varieties which could form the object of Community plant variety rights.

Every hybrid seed according to the claimed invention was the result of a cross of a particular stable male genotype of one variety and a particular stable female genotype of another variety. Thus, the resulting hybrid seed was each time a plant variety as defined in Rule 26(4) EPC.

Decision G 1/98 confirmed that a claim to a plurality of individual plant varieties was not patentable. There were no indications in decision G 1/98 that the exclusion of patentability pursuant to Article 53(b) EPC would not apply if a claim concerned a particular number of varieties. A claim which embraced 500 single plant varieties did not become patentable by virtue of the fact that the number of single varieties exceeded the speculatively assumed limit of 20. A claim embracing a multitude of varieties

was also excluded from patentability (see decision G 1/98, point 3.10).

Reasons for the Decision

1. The appeal is admissible.

The invention as claimed

2. The claimed invention (see section III) is a hybrid *Brassica* seed, and a plant grown therefrom, comprising a particular inheritable fertility restorer gene. The hybrid seed is further defined as resulting from a cross between a male parent plant and a female (male-sterile) parent plant.

3. The male parent plant is defined as being obtained from seed from either of four particular (and deposited) *Brassica napus olifiera* varieties. The female parent plant is defined as being a *Brassica* plant having a glucosinolate level which is functionally defined, i.e. such a level that is *sufficiently low to ensure* that the hybrid plant yields oilseeds which have a total glucosinolate content of less than a certain defined (low) value (this value depending on the request under consideration, see section III).

4. Thus, from the definition of the female parent plant it follows that the desired result of the invention as claimed is a hybrid plant grown from the claimed hybrid seed which yields oilseeds having a total glucosinolate content of less than the required particular (low) value.

Exclusion of plant varieties from patentability (Article 53(b) EPC and Rule 26(4) EPC)

5. Article 53(b) EPC provides that European patents shall not be granted in respect, *inter alia*, of plant varieties.

6. The notion of "plant variety" is defined in Rule 26(4) EPC as meaning "any plant grouping within a single botanical taxon of the lowest known rank, which grouping, irrespective of whether the conditions for the grant of a plant variety right are fully met, can be:
(a) defined by the expression of the characteristics that results from a given genotype or combination of genotypes,
(b) distinguished from any other plant grouping by the expression of at least one of the said characteristics, and
(c) considered as a unit with regard to its suitability for being propagated unchanged."

The decision under appeal

7. In the decision under appeal the opposition division held that, since it was known to the skilled person that the glucosinolate content of *Brassica* oilseeds was a complex genetic trait, that person knew that the desired result of claim 1 (see point 4 above) could only be achieved by picking such a female parent plant for the cross referred to which was genetically stable with respect to the low glucosinolate content level trait. The requirements of Article 83 EPC were therefore met only by the choice of a female parent belonging to a low glucosinolate plant grouping which was a variety as defined in Rule 26(4) EPC.

8. Accordingly, the claimed hybrid seed resulted from a cross of parent plants which each belonged to a particular variety, and therefore each such cross resulted in a variety in accordance with the definition of Rule 26(4) EPC.

9. The opposition division reasoned that the conditions in parts (a) and (b) of Rule 26(4) EPC were complied with since (i) the cross of two distinct plant varieties necessarily resulted in the expression of specific characteristics, i.e. a specific phenotype, as the result of the combination of the two genotypes of the two parents, and since (ii) the plant could be distinguished from the parents and other plant groupings.

10. The opposition division further noted that in its Article 9 the UPOV 1991 Convention defined the conditions for a variety to be "stable" as required for protection under the UPOV breeder's rights convention (see Article 5 UPOV 1991 Convention), i.e. "*A variety shall be deemed to be stable if the expression of the characteristics which are included in the examination for distinctness as well as any others used for the variety description, remain unchanged after repeated propagation or,* ***in the case of a particular cycle of propagation, at the end of each such cycle***." (emphasis added by the board). The opposition division was therefore satisfied that the claimed hybrid seed/plant was unchanged after a cycle of propagation, i.e. by each recurrent cross of two parent variety plants resulting in the hybrid seed and that hence the conditions of Rule 26(4)(c) EPC were met.

11. The opposition division concluded that the hybrid seed and plant as claimed were solely directed to specific hybrid plant varieties as defined in Rule 26(4) EPC and hence were not allowable within the meaning of Article 53(b) EPC.

Characteristics of the parent plants of the claimed hybrid seed

12. It has not been disputed by the appellant that the male restorer parent plant defined in claim 1, i.e. obtained from seed of four deposited *Brassica napus olifiera* lines, was a plant belonging to one of four deposited varieties. It was submitted that the plant was homozygous for the male sterility gene for ogura cytoplasmic male sterility and had a low glucosinolate level.

13. The appellant has however disputed the pivotal point in the reasoning adduced by the opposition division for holding that the claimed subject-matter is excluded from patentability by virtue of Article 53(b) EPC, namely that each and every female parent plant to be used in the cross as referred to in claim 1 necessarily belongs to a plant variety. The appellant submitted that the cross referred to could be performed with *any* female *Brassica* parent plant - not necessarily only belonging to a variety - as long as it was capable of giving rise to hybrid plants setting oilseeds with the desired low glucosinolate content. Although the skilled person would use for the cross a female parent plant which was stable for low glucosinolate content, such a plant did not necessarily have to belong to a variety, as such female parent plants could well have e.g. varying herbicide or disease resistance profiles or different oil profiles. The group of such different suitable female plants was thus not limited and further

new such suitable plants were constantly being discovered.

14. In the appeal proceedings, the parties have *inter alia* referred to documents D28 and D29 in the context of the required genetic properties of the female parent plant and in particular the required low glucosinolate trait. Document D29 discloses that the development of *Brassica* varieties having a stable low glucosinolate content was a tedious breeding undertaking involving extensive stabilisation of the trait (see page 191, lines 1 to 16) and teaches that at least eight different genetic loci or alleles, scattered throughout the *Brassica napus* genome, determine the variation between low and high seed glucosinolate content in *Brassica napus* (see page 194, lines 1 to 9). Document D28 also discloses that the required low glucosinolate level trait of oilseeds in *Brassica napus* is based on a highly complex pathway for glucosinolate biosynthesis and regulation and specifies the pathway as including at least 105 metabolic quantitative trait loci (QTL) dispersed throughout the genome.

15. The board considers that these teachings demonstrate that the required low glucosinolate level trait in the oilseeds of plants grown from the hybrid seeds as claimed appears to depend on an extensive genome-wide network of particular alleles, and only by combining these entire genomic networks of the male and female parent plants can the criteria as claimed be fulfilled. Accordingly, the board judges that a *sine qua non* for ensuring the required low glucosinolate level trait is that a female parent plant is used which is stable, and thus homozygous, in the particular alleles in the over 100 QTL involved in the highly complex pathway for glucosinolate biosynthesis and regulation. In fact,

only such plants would succeed in providing oilseeds set on the claimed hybrid progeny with the desired effect of the claimed invention.

16. In the board's judgement, a plant with such a genomic set-up cannot be considered other than as belonging to a variety as defined in Rule 26(4) EPC (see point 6), as it belongs to a plant grouping within a single botanical taxon of the lowest known rank which can be defined by the expression of the characteristics that results from a given genotype or combination of genotypes, can be distinguished from any other plant grouping by the expression of at least one of the said characteristics, and can be considered as a unit with regard to its suitability for being propagated unchanged.

17. The board accordingly judges that each and every female parent plant used in the cross as referred to in claim 1 necessarily belongs to a plant variety.

Characteristics of the claimed hybrid seed resulting from the cross of the parent plants

18. The desired low glucosinolate level in the oilseed yielded by the hybrid plant grown from the hybrid seed resulting from the cross defined in the claims does not solely result from the genomic properties of the male parent plant, which belongs to a variety having a low glucosinolate level, but necessarily results from the *combination* of the male genomic properties with the genomic properties of the female parent plant.

19. From the conclusions in points 12 and 17 the board judges that the opposition division was correct in holding that the claimed hybrid seed can result solely

from a cross of parent plants as defined in the claims which each belong to a particular variety as defined in Rule 26(4) EPC (see point 6 above).

20. The appellant has not contested the finding of the opposition division that the claimed hybrid seed complied with part (a) and (b) of the definition of plant variety pursuant to Rule 26(4) EPC (see point 6). The board concurs with the finding that a cross of two distinct plant varieties, i.e. a hybrid plant, expresses characteristics, i.e. a specific phenotype, as the result of the combined genotypes of the parents and can be distinguished from the parents and other plant groupings.

21. The appellant has however argued that the hybrid resulting from a cross between parent plants each belonging to distinct varieties is not necessarily a variety, as such a hybrid would not fulfill one of the requirements for being a variety in accordance with the provisions of Rule 26(4) EPC in that it could not be considered as a unit with regard to its suitability for being propagated unchanged.

22. The board notes that, in the technical field of plant breeding, the means by which a variety can be *propagated unchanged* as required by Rule 26(4)(c) EPC vary considerably. Some varieties are propagated unchanged from the plants of the variety itself, such as e.g. by cloning, by selfing, etc. Other varieties, however, such as "hybrid" varieties, are propagated unchanged by recurrent cycles of propagation involving plants other than those of the hybrid variety itself, namely parent plants belonging to particular varieties. If the cycle of propagation involves two defined parent plants, then it results each time in a so-called

"simple hybrid". That is the case underlying the present invention.

23. The board notes that such simple hybrid varieties are protectable under breeder's rights as established for plant varieties under the UPOV 91 Convention and under Council Regulation (EC) No 2100/94.

24. The board can therefore not concur with the appellant and considers that the recurrent use of particular parent plants in the cross defined in the claim leads each and every time to a resultant hybrid seed and the plant grown therefrom which comply each separately with part (c) of, and consequently with the definition of plant variety given in, Rule 26(4) EPC.

25. The board therefore concludes that the hybrid seed and the plant grown therefrom as subject-matter of the claim **each and every** time belong to a particular plant grouping which complies with the definition of plant variety pursuant to Rule 26(4) EPC. The board notes furthermore in this context that it is immaterial for this finding that the hybrid seed covered by claim 1 does not necessarily belong to the same species.

Plant varieties - Article 53(b) EPC

26. The appellant has submitted that, in relation to the provision in Article 53(b) EPC that European patents are not to be granted in respect of plant varieties, the Enlarged Board of Appeal had held in its decision G 1/98 (OJ EPO 2000, 111) that a claim might "embrace" plant varieties, but that a claim which specifically identified a limited number of specific plant varieties was excluded from patentability.

27. The appellant therefore argued that, even if both parent plants of the cross as described in the claims were to belong to specific plant varieties, and even if the claim therefore covered a very large number (thousands) of hybrid plants, it did not identify any specific hybrid variety. Accordingly, it submitted that the claimed hybrid seed and the plant derived therefrom were therefore not excluded from patentability.

28. In point 3 of the reasons for its decision G 1/98, *supra*, the Enlarged Board of Appeal deals with question 2 referred to it and summarises its considerations in point 3.10, holding that: "[...] *according to Article 53(b) EPC, a patent is 'in respect of plant varieties' and shall not be granted if the claimed subject-matter is directed to plant varieties. In the absence of the identification of a specific plant variety in a product claim, the subject-matter of the claimed invention is not directed to a plant variety or varieties within the meaning of Article 53(b) EPC.* [...] *Article 53(b) EPC defines the borderline between patent protection and plant variety protection. The extent of the exclusion for patents is the obverse of the availability of plant variety rights. The latter are only granted for specific plant varieties and not for technical teachings which can be implemented in an indefinite number of plant varieties.* [...] *It is not sufficient for the exclusion of Article 53(b) EPC to apply that one or more plant varieties are embraced or may be embraced by the claims.*" The Enlarged Board accordingly answered question 2 by stating that: "*A claim wherein specific plant varieties are not individually claimed is not excluded from patentability even though it may embrace plant varieties*" (see decision G 1/98, *supra*, Headnote I).

29. The board agrees with the appellant that the Enlarged Board in decision G 1/98 did indeed deal in depth with the relevant legal notion in Article 53(b) EPC for the present case and that this decision needs to be taken into account when deciding whether or not the subject-matter claimed here is excluded from patentability.

30. For analysing the ruling in decision G 1/98, the board considers it however relevant to emphasise a guiding initial principle established by the Enlarged Board of Appeal in point 3.1 of the reasons for the decision, namely that: "*Clearly, it is not the wording but the substance of a claim which is decisive in assessing the subject-matter to which the claim is directed. However,* ***it does not follow that the subject-matter of a claim may be equated with the scope of a claim. In assessing the subject-matter of a claim, the underlying invention has to be identified.*** *In this respect, it is relevant how generic or specific the claimed invention is*" *(emphasis added by the board)*.

31. The board notes that the case underlying the referring decision T 1054/96 (OJ EPO 1998, 511) related to an invention which technically differed substantially from the invention underlying the present case. It related namely to an invention which provided transgenic plants and seeds thereof comprising in their genome particular foreign recombinant DNA sequences.

32. In view of the initial guiding principle referred to by the Enlarged Board of Appeal, the board considers that the Enlarged Board also analysed question 2 - namely whether a claim which related to plants but wherein specific varieties were not individually claimed *ipso facto* avoided the prohibition on patenting in Article 53(b) EPC, even though it embraced plant

varieties (see question 2 in decision T 1054/96, *supra*, Headnote II), in point 3.10 of the reasons (see point 28 above) - in the context of transgenic plants.

33. This view of the board is corroborated by certain more detailed considerations of the Enlarged Board of Appeal earlier in point 3 of the reasons for the decision. In point 3.1, following the passage referred to in point 30, above, the Enlarged Board held in relation to the claimed invention underlying the referring decision and to definitions of the concept of "plant variety" that "*... **a plant defined by single recombinant DNA sequences is not an individual plant grouping to which an entire constitution can be attributed** ... It is not a concrete living being or grouping of concrete living beings but **an abstract and open definition embracing an indefinite number of individual entities defined by a part of its genotype or by a property bestowed on it by that part.** As described in more detail in the referring decision, the claimed transgenic plants in the application in suit are defined by certain characteristics allowing the plants to inhibit the growth of plant pathogens (Reasons, point 11, Annex I, point 8). The taxonomic category within the traditional classification of the plant kingdom to which the claimed plants belong is not specified, let alone the further characteristics necessary to assess the homogeneity and stability of varieties within a given species. **Hence, it would appear that the claimed invention neither expressly nor implicitly defines a single variety**, whether according to the definition of "plant variety" in Article 1(vi) of the UPOV Convention 1991, or according to any of the other definitions of "plant variety" mentioned above. **This also means that it does not define a multiplicity of varieties which necessarily consists of several individual varieties.***

In the absence of the identification of specific varieties in the product claims, the subject-matter of the claimed invention is neither limited nor even directed to a variety or varieties." (emphasis added by the board).

34. Accordingly, the board considers that the highlighted passages referred to in point 33 demonstrate that the general conclusions and answers were provided by the Enlarged Board in decision G 1/98, *supra*, in the context of the particular technical situation underlying the invention in the referring decision leading to the subject-matter claimed, i.e. claims for plants defined by the genomic presence of a particular transgenic sequence.

35. As can be seen from point 25 above, however, the technical situation underlying the present case is different and has resulted in a different formulation of the claims, i.e. claims for a hybrid seed and a plant grown therefrom resulting from a particular cross and thus ***not*** for a seed or plant merely defined by the presence of a single recombinant DNA sequence. The definition of the claimed subject-matter thus does ***not*** fit the concept of "*an abstract and open definition embracing an indefinite number of individual entities defined by a part of its genotype or by a property bestowed on it by that part*" as the Enlarged Board referred to in relation to claims defining a plant by a single recombinant DNA sequence (see point 33), but rather defines a seed or a plant which necessarily belongs to a particular plant grouping which complies with the definition of plant variety pursuant to Rule 26(4) EPC, i.e. it relates exclusively to individual plant groupings to which an entire constitution can be attributed. The board considers

therefore that in the present situation it cannot be concluded, as was the case with the plants defined by the genomic presence of a recombinant DNA sequence, that the claim "*neither expressly nor implicitly defines a single variety*" (see point 33) as the subject-matter of the claim, but that it rather defines "*a multiplicity of varieties which necessarily consists of several individual varieties*" (see point 33).

36. In view of the above finding the board furthermore cannot agree with the appellant that the technical feasibility of the claimed invention was not confined to a particular plant or animal variety and that therefore patentability for the claimed invention was provided by Rule 27(b) EPC. Indeed, the claim as drafted is solely for hybrid seed and plants which always belong to one of "*a multiplicity of varieties which necessarily consists of several individual varieties*" (see point 33), rather than a particular trait which can be transferred from one variety or plant to numerous other varieties or plants.

37. In summary, the board holds that the conclusions and considerations of the Enlarged Board in decision G 1/98, *supra*, have to be appreciated in the context of the technical situation of the invention that it had in mind when answering the questions referred to it. In case of the present invention the board concludes that the subject-matter of the claim is limited to and even directed to a variety or varieties.

38. Accordingly, it is decided that the subject-matter of claim 1 of each pending request is not patentable by virtue of Article 53(b) EPC.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairwoman:

P. Cremona G. Alt

Decision electronically authenticated