

Commissioner's Decision #1386

Décision du Commissaire #1386

TOPIC: B00; B22; K10

SUJET: B00; B22; K10

Application No.: 2,705,008

Demande n°.: 2,705,008

IN THE CANADIAN PATENT OFFICE

DECISION OF THE COMMISSIONER OF PATENTS

Patent application number 2,705,008 having been rejected under subsection 30(3) of the *Patent Rules*, has subsequently been reviewed in accordance with paragraph 30(6)(c) of the *Patent Rules*. The recommendation of the Board and the decision are as follows:

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INTRODUCTION

[1] Patent application number 2,705,008, entitled “New Cucumber Plants with a Compact Growing Habit”, is owned by Nunhems B.V., NL and stands rejected after the Applicant’s response to a Final Action for several reasons. The Applicant’s response did not overcome the rejection, and a review of the rejected application has therefore been conducted in accordance with paragraph 30(6)(c) of the *Patent Rules* by the Patent Appeal Board.

BACKGROUND

The technology

[2] The subject application relates to a cell of a novel cucumber plant that has so-called “compact characteristics”, or phenotypic traits, which give the plant certain characteristics, including: shorter internodes (the stem length between leaves), smaller leaves, smaller flowers and shorter cucumber fruits.

[3] The compact characteristics generally provide a more open plant structure better suited to specialized cultivation systems, while providing more fruits per plant.

File history

[4] The subject application was filed November 7, 2008. Examination culminated with the issuance of a Final Action on February 5, 2013 at which time certain claims were considered defective in several respects for lack of clarity under subsection 27(4) of the *Patent Act* through the use of the expressions “compact characteristics”, “descendants” and “results from self-pollination.”

[5] Other claims were considered overly broad and insufficiently disclosed, contrary to section 84 of the *Patent Rules* and subsection 27(3) of the *Patent Act*.

[6] The Applicant responded to the Final Action on July 25, 2013 by submitting a new set of claims and providing arguments in favour of their patentability. Because the new claim set was found to introduce additional defects, a Summary of Reasons

(SOR) was prepared and the rejected application was forwarded to the Patent Appeal Board for review.

- [7] The present panel of the Patent Appeal Board was then established and an initial review of the rejected application was conducted. After initial review, it was the Panel's preliminary view that certain of the clarity defects had been addressed through the Applicant's response. Other possible grounds for rejection were identified: a lack of clarity stemming from inconsistent wording in certain claims, and a concern that one claim might have been directed to non-patentable subject matter.
- [8] A letter inviting the Applicant to a hearing on the matter, and outlining the outstanding defects in the application, was sent to the Applicant on April 30, 2015. Written submissions in response to the Panel's letter were received on May 27, 2015. The submissions included proposed claims that the Applicant submitted would put the application in a condition for allowance. It was mutually agreed that a hearing on the matter was not required and that the written submissions were sufficient to resolve the matter.

ISSUES

- [9] There are 25 claims on file. Having considered the Final Action, the SOR, and having conducted an initial review, the Panel will address the following issues:
- 1) Do claims 1-3, 7-11, 13, 21 and 22 contravene subsection 27(4) of the Act because the expression "compact characteristics" causes a lack of clarity?
 - 2) Do claims 2, 8, 9, 13-15, 17-20, and 23-25 contravene subsection 27(4) of the Act because the expression "descendants" causes a lack of clarity?
 - 3) Do claims 9 and 15 contravene subsection 27(4) of the Act because the expression "results from self-pollination" causes a lack of clarity?
 - 4) Do claims 2, 3 and 7-14 contravene subsection 27(4) of the Act because their wording is inconsistent with a claim to which they refer?

- 5) Are claims 2, 4-6, and 16 overly broad and insufficiently disclosed, contrary to section 84 of the *Patent Rules* and subsection 27(3) of the Act?
- 6) Is claim 16 directed to non-patentable subject matter contrary to section 2 of the Act because it is directed to plant tissue culture?

LEGISLATIVE AND LEGAL PRINCIPLES

Purposive construction

[10] A purposive construction of the claims precedes all patentability considerations. It determines the meaning and scope of the claims from the perspective of the notional skilled person who possesses the common general knowledge in the pertinent art field: *Free World Trust v Électro Santé Inc*, 2000 SCC 66, at paras 44-55 66 (“*Free World Trust*”). During purposive construction, the elements of the claimed invention are identified as essential or non-essential: *Free World Trust* at para 31. According to the *Examination Practice Respecting Purposive Construction* (PN2013-02) the essential elements of a claim are identified considering the problem the inventors faced and relative to the proposed solution identified in the application.

Claim clarity: subsection 27(4) of the Act

[11] Subsection 27(4) of the Act requires that the specification “end with a claim or claims defining distinctly and in explicit terms the subject-matter of the invention for which an exclusive privilege or property is claimed.”

[12] In *Natural Colour Kinematograph v Bioschemes Ltd*, 32 R.P.C. 256 at 266 (“*Bioschemes*”; cited with approval by the Supreme Court in *Noranda Mines v Minerals Separation Corp*, [1950] SCR 36, 1949) Lord Loreburn said:

It is the duty of a patentee to state clearly and distinctly, either in direct words or by clear and distinct reference, the nature and limits of what he claims. If he uses language which, when fairly read, is avoidably obscure or ambiguous, the Patent is invalid, whether the defect be due to design, or to carelessness or to want of skill. Where the invention is difficult to

explain, due allowance will, of course, be made for any resulting difficulty in the language. But nothing can excuse the use of ambiguous language when simple language can easily be employed, and the only safe way is for the patentee to do his best to be clear and intelligible.

[13] In *Minerals Separation North American Corp v Noranda Mines Ltd*, [1947] Ex. CR. 306 at 352 (*Minerals Separation*; cited with approval by the Supreme Court in *Free World Trust, supra*, at para 14), the court indicated that the scope of the claims should be clear:

By his claims the inventor puts fences around the fields of his monopoly and warns the public against trespassing on his property. His fences must be clearly placed in order to give the necessary warning and he must not fence in any property that is not his own. The terms of a claim must be free from avoidable ambiguity or obscurity and must not be flexible; they must be clear and precise so that the public will be able to know not only where it must not trespass but also where it may safely go.

Over breadth of claims and insufficiency of disclosure: section 84 of the Rules and subsection 27(3) of the Act

[14] Section 84 of the Rules and subsection 27(3) of the Act are related since both are concerned with the relationship between the disclosure and the scope of the claims.

[15] Section 84 of the Rules states that “The claims shall be clear and concise and shall be fully supported by the description independently of any document referred to in the description.” The courts have provided little judicial interpretation of section 84 of the Rules, or any of its predecessor equivalents.

[16] The relevant portions of subsection 27(3) of the Act read as follows:

The specification of an invention must:

(a) correctly and fully describe the invention and its operation or use as contemplated by the inventor;

(b) set out clearly the various steps in a process, or the method of constructing, making, compounding or using a machine, manufacture or composition of matter, in such full, clear, concise and exact terms as to enable any person skilled in the art or science to which it pertains, or with which it is most closely connected, to make, construct, compound or use it;

...

[17] The courts have indicated that sufficiency of disclosure primarily relates to two questions that are relevant for the purpose of paragraphs 27(3)(a) and 27(3)(b) of the *Patent Act*: What is the invention? How does it work? (see *Consolboard v MacMillan Bloedel*, [1981] 1 S.C.R. 504 at 526, 56 C.P.R. (2d) 145, at p.157). With respect to each question the description must be correct and full in order that when the period of the monopoly has expired the public, having only the specification, will be able to make the same successful use of the invention as the inventor could at the time of his application, without having to display inventive ingenuity or undertake undue experimentation.

[18] Under subsection 38.1 of the Act, biological material, such as plant seed, that has been deposited in an International Deposit Authority is considered part of the specification and can be taken into consideration when determining whether subsection 27(3) of the Act has been complied with:

Where a specification refers to a deposit of biological material and the deposit is in accordance with the regulations, the deposit shall be considered part of the specification and, to the extent that subsection 27(3) cannot otherwise reasonably be complied with, the deposit shall be taken into consideration in determining whether the specification complies with that subsection.

[19] Subsection 38.1(2) of the Act clarifies that the deposit of a biological material does not create the presumption that the deposit is required for compliance.

Non-patentable subject matter: section 2 of the Act

[20] A higher life form is not patentable subject matter because it does not fall within the definition of “invention” under section 2 of the Act. The term “manufacture” found in section 2 has been interpreted in *Harvard College v Canada (Commissioner of Patents)*, 2002 SCC 76 at para 159 [*Harvard College*] to exclude higher life forms for the reason that such things “cannot easily be characterized as ‘something made by the hands of man’”. In that same decision the broader term “composition of matter” found in section 2 was also interpreted to exclude a higher life form because it can be derived from a “complex process, elements of which require no human intervention” (*Harvard College*, para 162).

[21] Subsection 17.02.01b of the *Manual of Patent Office Practice* generally excludes plant tissue from patentability. It echoes *Harvard College* and indicates that:

Organs and tissues (whether of plant or animal origin) are generally not considered to be manufactures or compositions of matter for the purposes of section 2 of the *Patent Act*. Organs and tissues are in general created by complex processes, elements of which require no technical intervention, and do not consist of ingredients or substances that have been combined or mixed together.

Proposed claims

[22] An Applicant cannot, as a matter of right, amend their application after the time limit to respond to a Final Action has expired. In circumstances where the Commissioner determines that the application does not comply with the Act or Rules, the Commissioner can then inform an applicant that specific amendments are “necessary” for compliance. Subsection 30 (6.3) of the Rules provides:

If, after review of a rejected application, the Commissioner determines that the application does not comply with the Act or these Rules, but that specific amendments are necessary, the Commissioner shall notify the applicant that the specific amendments have to be made within three months after the date of the notice. If the applicant complies with that notice, the Commissioner shall notify the applicant that the application has been found allowable and shall requisition the payment of the applicable final fee set out in paragraph 6(a) or (b) of Schedule II within the six-month period after the date of the notice of allowance.

ANALYSIS

Claim construction

[23] In our letter of April 30, 2015 the Panel outlined its understanding of the person of skill in the art, that person's common general knowledge, the problem the inventors faced, the solution proposed by the inventors, and the essential elements of the claims.

[24] The Applicant provided no submissions on any of these points in its letter of May 27, 2015. They will therefore be adopted for the purposes of this review, as outlined below.

The person skilled in the art

[25] In our letter of April 30, 2015 we characterized the skilled person as one skilled in the art of plant breeding, including marker assisted breeding, as well as one skilled in the art of plant cell and tissue culture.

The relevant common general knowledge (CGK) of the skilled person

[26] Based on what is described in the description under the heading "Comparison with the prior art", the Panel identified the relevant common general knowledge (CGK) of the skilled person as follows:

- Conventional methods of plant breeding, including methods of crossing

genetically different plants to yield hybrid plants with desired phenotypic traits;

- Plant breeding has produced common cucumber varieties producing fruits of varying types, such as long cucumbers, short cucumbers, gherkins, etc.;
- Cultivation of the cucumber is labour intensive, requiring tending of plants to remove superfluous leaves;
- Cucumber plants may be grown in less labour intensive technique known as “high-wire” in which fruits are harvested from the stem;
- Cucumber fruit may be harvested with the aid of robotic pickers; and,
- Marker assisted breeding techniques in which a molecular marker (DNA/RNA variation) is used for indirect selection of progeny carrying a genetic determinant for a phenotypic trait of interest.

The problem to be solved

[27] Under the heading “Comparison with the prior art”, the description indicates that cucumbers are not very suitable for the “high-wire” cultivation technique because they grow too long and have long internodes (p. 4, first para).

The solution

[28] The description indicates that the solution proposed relates to new mutant cucumber plants which exhibit a compact growth habit, as represented by seed deposited under NCIMB¹ number 41266. The solution proposed also relates to cells of plants comprising the compact characteristic.

[29] In other respects the proposed solution relates to molecular markers associated with the compact characteristic that may be used as tracking tools when conducting marker assisted breeding with the new cucumber plant.

1 : “NCIMB” stands for the “National Collection of Industrial, Marine and Food Bacteria”. It is recognized as an International Deposit Authority for biological materials that are the subject of patent applications.

[30] Cultivation of the plants of the invention is less labour-intensive while providing more fruits per plant and the plants are especially suitable for high-wire cultivation (p. 1). Since the new plants have smaller leaves than conventional varieties, their fruits are more visible and more easily harvested by robotic pickers (p. 4).

The essential elements of the claims

[31] The claims on file generally relate to cells of the novel cucumber plants, as well as uses thereof. Other claims relate to specialized cultivation and harvesting methods involving the cucumber plants as well as molecular markers associated with the compact characteristic. Claim 1 reads:

A cell of a cucumber plant, said cucumber plant having compact characteristics, representative seed of said cucumber plant having been deposited under NCIMB Accession number 41266.

[32] Bearing in mind the proposed solution, the skilled person would consider the following elements of claim 1 to be essential:

- a cell that can make up a cucumber plant;
- the plant having compact characteristics; and
- wherein representative seed of the cucumber plant (rather than the plant itself) has been deposited under NCIMB Accession number 41266.

[33] Each of these elements is essential because they contribute to the solution proposed in that the inventors have disclosed a cell of a novel cucumber plant that has desirable compact characteristics which avoid the problems associated with conventional ones. Seeds have been deposited in the NCIMB which serve to define the invention because representative plants themselves cannot be deposited in the deposit authority. As regards the cell in claim 1, the description indicates that it relates to “*in vitro* techniques [that] are used to maintain and/or multiply plants to avoid the need for multiplication via seeds and/or multiply identical hybrids via *in vitro* techniques . . . using e.g. cell or tissue culture techniques” (p. 19).

- [34] Claims 2-20 and 23-25 all directly or indirectly refer to claim 1, and set out additional features that cooperate with the elements of claim 1, indicating that the essential elements of claim 1 are carried into these claims as well.
- [35] Claims 21-22 relate to the use of molecular markers that may be used to track the gene(s) responsible for the compact characteristic during plant breeding. Their essential elements consist of the molecular markers referred to therein (i.e., as pairs of DNA sequence markers) as well as the use of the markers for determining whether material derived from a cucumber plant is likely to contain the gene(s) responsible for conferring the compact characteristics and which are found in the cell of claim 1.

Issue 1: Do claims 1-3, 7-11, 13, 21 and 22 contravene subsection 27(4) of the Act because the expression “compact characteristics” causes a lack of clarity?

- [36] The SOR indicates that claims 2, 4-6 and 16 are not compliant with subsection 27(4) of the Act because the use of the expression “compact characteristics” causes a lack of clarity. The expression is also found in claims 1, 3, 7-11, 13, 21 and 22. Our initial review letter therefore identified additional claims which include the expression.

- [37] Claim 2 is directed to a cell of a plant which is a descendant of a seed deposited under NCIMB accession number 41266:

A cell of a cucumber plant, wherein said plant has compact characteristics and is a descendant of the plant as defined in claim 1, and wherein the descendant results from a cross between the plant as defined in claim 1 and another cucumber plant.

- [38] It is true, strictly speaking, that the plant referred to in claim 2 is not the very same plant referred to by biological deposit number in claim 1 – it is a descendant of that plant. It is also true that defining a plant, which is made up of cells, is not the same as directly defining characteristics of the cell itself. However, to obtain patent protection, an applicant is permitted to “state clearly and distinctly, either in direct words *or by clear and distinct reference*, the nature and limits of what he claims” (*Bioschemes, supra*).

- [39] In this case, the skilled person would understand that the scope of the invention is limited to a cell which has the same characteristics as the referenced plant. The capability to produce the unique phenotypic traits, or “compact characteristics”, is genetically preserved in the cell and would become evident to the skilled person upon inspection of a plant made up of such cells.
- [40] We are mindful that “where the invention is difficult to explain, due allowance will, of course, be made for any resulting difficulty in the language” (*Bioschemes, supra*). It is our view therefore that the skilled person would understand the limits of the claims through an appropriate reference to a biological deposit and through the unique phenotypic traits of the plant (the “compact characteristics”) made up of the claimed cells, subject to the proviso that the unique phenotypic traits are explicitly set out in the claims. As regards to such a proviso, we do not see that it has been satisfied by the claims on file.
- [41] In our letter of April 30, 2015 we explained that it was our preliminary view that the limits of the expression “compact characteristics” would not be readily understood by the skilled person. As such, there is no explicit limitation in the claims on the unique phenotypic traits associated with a plant having so-called “compact characteristics”. Although a detailed definition of the expression appears in the description on page 29, third paragraph, that language does not appear “distinctly and in explicit terms” in the claims. We raised this concern in respect of all claims in which the expression appears, i.e., claims 1-3, 7-11, 13, 21 and 22.
- [42] In the letter of May 27, 2015 the Applicant commented on ambiguity surrounding the use of the expression “compact characteristics” only to explain that “a clear and unambiguous point of reference for the compact characteristics is provided”, and asked that proposed claims be considered.
- [43] Since the claims are not “free from avoidable ambiguity” (*Minerals Separation, supra*) because they include the expression “compact characteristics”, and “nothing can excuse the use of ambiguous language when simple language can easily be employed” (*Bioschemes, supra*), it is our view that the claims are unclear to the

skilled person and therefore not compliant with subsection 27(4) of the Act. There is simple language found on page 29, third paragraph that can be used to avoid ambiguity and clarify the scope of the claims in respect of the expression “compact characteristics.”

Issue 2: Do claims 2, 8, 9, 13-15, 17-20, and 23-25 contravene subsection 27(4) of the Act because the expression “descendants” causes a lack of clarity?

[44] In the SOR claims 2, 8, 9, 13-15, 17-20, and 23-25 are indicated to be non-compliant with subsection 27(4) of the Act because the use of the expression “descendants” causes a lack of clarity. It states that “neither the plant that the cell of claim 2 is from, nor the plants of claims 8, 9, 13 to 15, 17 to 20 and 23 to 25 are clearly defined, because the descendant is not defined. Said plants are defined solely as having one ancestor which is the plant deposited under NCIMB accession number 41266 and by the unclear limitation of ‘compact characteristics’. The other parent or parents are undefined.”

[45] Apart from a concern with respect to the use of the expression “compact characteristics”, which has been addressed above, in our opinion the skilled person would find the scope of the claims to be clear.

[46] The meaning of the expression “descendants”, taken on its own, would be readily understood by the skilled person to have an ordinary meaning, e.g., a plant that is genetically related to a predecessor plant. This does not, however, render the claim defective on the basis that one parent may not be a “descendant” of the deposited seed.

[47] Moreover, claim 2 for instance clearly indicates that the descendant “results from a cross between the plant as defined in claim 1 (by reference to a biological deposit) and another cucumber plant.”

[48] We therefore conclude that the use of the expression “descendants” does not cause a lack of clarity.

Issue 3: Do claims 9 and 15 contravene subsection 27(4) of the Act because the expression “results from self-pollination” causes a lack of clarity?

[49] For reasons similar to those provided above in respect of the use of the expression “descendants”, we also find that the use of the expression “results from self-pollination” also does not render the claims defective due to lack of clarity.

[50] Claim 9 is representative of claims 9 and 15. It reads:

Use of a descendant of a cucumber plant as defined in claim 1 to breed a cucumber plant having compact characteristics, wherein the descendant has compact characteristics and results from self-pollination.

[51] The skilled person, being familiar with conventional methods of plant breeding, knows that “self-pollination” refers to the process of self-fertilization that can occur in some plants, including cucumbers, and involves crossing of a plant with itself such that pollen is transferred from a plant’s male organs to its female organs.

[52] The particular type of descendant of claim 9 is therefore understood by the skilled person to be one that arises from the crossing of the plant disclosed in claim 1 with itself. Claims 9 and 15 are limited to such self-derived descendants and therefore they comply with subsection 27(4) of the Act.

Issue 4: Do claims 2, 3 and 7-14 contravene subsection 27(4) of the Act because their wording is inconsistent with a claim to which they refer?

[53] In our letter of April 30, 2015 we indicated that claims 2, 3 and 7-14 refer to a “plant as defined in claim 1.” However, claim 1 defines a plant cell, not a plant as such. Therefore clarification was considered necessary for compliance with subsection 27(4) of the Act.

[54] In the letter of May 27, 2015 the Applicant did not explain why the claims on file were clear and instead proposed amending the claims to address the issue. As such,

we maintain that the claims are unclear and not compliant with subsection 27(4) of the Act.

Issue 5: Are claims 2, 4-6, and 16 overly broad and insufficiently disclosed, contrary to section 84 of the Patent Rules and subsection 27(3) of the Act?

[55] The Final Action, the SOR, and our letter of April 30, 2015 indicated a concern that claims 2, 4-6, and 16 are overly broad and insufficiently disclosed, contrary to section 84 of the Rules and subsection 27(3) of the Act.

[56] In our letter of April 30, 2015 we similarly indicated that the claims are not consistent with the teachings of the description because the expression “compact characteristics” is unclear and therefore cannot serve to limit the claims.

[57] We acknowledge the Applicant’s assertion made in the letter of May 27, 2015 that the “skilled person can use the deposited seed to produce descendant cucumber plants having compact characteristics”. We also acknowledge that under subsection 38.1 of the Act a biological deposit can be taken into consideration when assessing compliance with subsection 27(3) of the Act. However, in our view a “correct and full description” of the invention under subsection 27(3)(a) of the Act, as claimed, must include an explicit limitation on the scope of the claims, which is not satisfied by the general expression “compact characteristics”.

[58] On that basis, claims 2, 4-6, and 16 are therefore too broad and not compliant with section 84 of the Rules and subsection 27(3)(a) of the Act.

[59] Compliance with subsection 27(3)(b) is a consideration separate from subsection 27(3)(a). In that regard, where there is an explicit limitation on the scope of the claims such that the compact characteristics are limited to those disclosed, there is no concern under subsection 27(3)(b) of the Act that the skilled person would not be able to practise the invention across its scope and generate cells of descendant plants (whether they result from self-fertilization or crossing with another cucumber plant) that possess the compact characteristics, as claimed in claim 2 for example.

Remembering that the Applicant’s proposed monopoly is restricted to descendant

plants that actually have the unique combination of phenotypic traits that together define “compact characteristics” the skilled person would understand that the Applicant makes no claim to subject-matter that lacks the characteristics and is unrelated to the deposited seed.

- [60] In this case, the description of predictable and reliable phenotypic and molecular selection methods provide the skilled person with an enabling disclosure of the production of cells that make up descendant plants in which the compact characteristics are genetically preserved.
- [61] In the present case, cells of descendant plants having compact characteristics that are derived from the deposited seed mentioned in claim 1 have a simple genetic basis: they result from the expression of a single gene that obeys the predictable laws of classical Mendelian genetics (p. 7). This is unlike, for example, the situation in which the trait is polygenic and inherited in a complex, unpredictable manner.
- [62] The skilled person is taught that the compact characteristics are “due to the expression of a single genetic locus, with monogenic intermediate heredity, i.e. the characteristics are more pronounced in the homozygous plant than in the heterozygous plant where they give an 'intermediate' phenotype” (p. 1).
- [63] Thus the gene may be found in either homozygous or heterozygous states in plant cells; the former reflecting the presence of two copies, and the latter reflecting the presence of a single copy (p. 39). The description and drawings indicates that there are “clearly recognizable phenotypical differences” between the heterozygous, homozygous and normal states (p. 31; Figures 2a, 2b and 2c). No matter how the states are compared, the differences are highly statistically significant (p. 41-42; Table 1), meaning that the skilled person can readily identify descendants with compact characteristics on the basis of phenotypic selection.
- [64] The deposited seeds are homozygous for the gene and are useful for making commercially interesting hybrid descendant plants that can be heterozygous for the compact characteristic gene (p. 20). Although the compact characteristics could be less easily detected in such plants on the basis of phenotype due to intermediate

expression of only one copy of the gene, the characteristics are still readily observable and the claims are limited to instances where the characteristics are observable.

[65] The skilled person is also provided with molecular markers that are tightly coupled to the gene and which can be used to follow the gene in descendant plants, even before they mature or overtly display compact characteristics (p. 34).

[66] Finally, the description indicates the expected results; the Applicant was actually successful in producing descendant plants in a straight forward manner: “all such derived plants in different genetic backgrounds had useful characteristics and displayed the favourable compact characteristics” (p. 40-41).

[67] Therefore, claims 2, 4-6, and 16 are compliant with subsection 27(3)(b) of the Act.

Issue 6: Is claim 16 directed to non-patentable subject matter contrary to section 2 of the Act because it is directed to plant tissue culture?

[68] In our letter of April 30, 2015 we indicated that claim 16 appeared to be directed to a plant tissue culture that is considered a higher life form, contrary to section 2 of the Act. Claim 16 reads:

An *in-vitro* tissue culture comprising the cell according to any one of claims 1 to 6.

[69] The Applicant’s letter of May 27, 2015 did not explain why the claim is compliant with section 2 of the Act. Instead, the Applicant proposed deleting the claim in order to obviate the issue. As such, we maintain that claim 16 is directed to a non-patentable higher life form, contrary to section 2 of the Act.

Conclusions regarding claims on file

[70] In view of the foregoing, we find that:

- (i) claims 1-3, 7-11, 13, 21 and 22 contravene subsection 27(4) of the Act because the expression “compact characteristics” causes a lack of clarity;

- (ii) claims 2, 8, 9, 13-15, 17-20, and 23-25 do not contravene subsection 27(4) of the Act because the expression “descendants” does not cause a lack of clarity;
- (iii) claims 9 and 15 do not contravene subsection 27(4) of the Act because the expression “results from self-pollination” does not cause a lack of clarity;
- (iv) claims 2, 3 and 7-14 contravene subsection 27(4) of the Act because their wording is inconsistent with a claim to which they refer;
- (v) claims 2, 4-6, and 16 are overly broad and insufficiently disclosed, contrary to section 84 of the Patent Rules and subsection 27(3)(a) of the Act; and that
- (vi) claim 16 is directed to non-patentable subject matter contrary to section 2 of the Act because it is directed to plant tissue culture.

Proposed claims

[71] It is our view that the application does not comply with the Act and Rules.

[72] In a letter dated May 27, 2015, the Applicant proposed claims that it submitted would address the defects identified above. Specifically, the amendments would: reproduce the definition of “compact characteristics” found on page 29, third paragraph of the description into the claims; address any inconsistent claim language; limit the claims to the invention disclosed (again through the inclusion of the definition of “compact characteristics”), and delete the claim to non-patentable subject matter.

RECOMMENDATION

[73] In our view the proposed claims overcome the defects in the application and are “necessary” under subsection 30 (6.3) of the *Patent Rules* for compliance with the Act and Rules.

Ed MacLaurin
Member

Paul Sabharwal
Member

Andrew Strong
Member

Decision

[74] I concur with the findings and the recommendation of the Board. In accordance with subsection 30 (6.3) of the *Patent Rules*, the amendments proposed by the Applicant on May 27, 2015 are necessary for compliance with the Act and Rules. The Applicant may cancel claims 1-25 on file and replace them with proposed claims 1-24 submitted by the Applicant on May 27, 2015.

[75] If those amendments, and only those amendments, are not made within three months from the date of this decision I intend to refuse the application.

Agnès Lajoie

Assistant Commissioner of Patents

Dated at Gatineau, Quebec,

this 5th day of August, 2015