

Commissioner's Decision #1360
Décision du Commissaire #1360

TOPIC: O00
SUJET: O00

Application No: 2,269,368
Demande no: 2,269,368

IN THE CANADIAN PATENT OFFICE

DECISION OF THE COMMISSIONER OF PATENTS

Patent application number 2,269,368 having been rejected under subsection 30(3) of the *Patent Rules*, has consequently been reviewed in accordance with paragraph 30(6)(c) of the *Patent Rules* by a panel of the Patent Appeal Board and the Commissioner of Patents. The findings of the Board and the decision of the Commissioner are as follows:

Agent for the Applicant

MACPHERSON LESLIE & TYERMAN LLP

1500 - 1874 Scarth Street

REGINA, Saskatchewan

INTRODUCTION

- [1] This recommendation deals with a review by the Commissioner of Patents of patent application no. 2,269,368, entitled “NO-TILL STUBBLE ROW SEEDER GUIDANCE SYSTEM AND METHOD.” The Applicant is STRAW TRACK MANUFACTURING INC. and the inventor is Norbert Beaujot.
- [2] After submissions from the Applicant in response to the Examiner’s Final Action, which included amendments to the specification, this case was forwarded to the Patent Appeal Board, a panel of which was formed to perform the present review (“the panel”). A Summary of Reasons (“SOR”) from the Examiner indicated that the application was non-compliant with the *Patent Act* on the basis that the claims would have been obvious. The Examiner indicated in the SOR that he was satisfied that other previously identified defects were no longer present, based on the Applicant’s submissions and amendments noted above.
- [3] For the reasons that follow, the panel recommends that the application be refused for being obvious and therefore non-compliant with section 28.3 of the *Patent Act*.

BACKGROUND

- [4] The present application relates to agricultural seeding, in particular to a type of seeding known as “no-till solid-seeding”.
- [5] In solid-seeded crops the “rows” are typically spaced 6 to 12 inches apart, there being in essence no discernable rows due to the crop density. Such a seeding technique is typically used in association with cereals, pulses and oilseeds. In contrast, row crops such as corn

or cotton are typically arranged in rows spaced 24 to 36 inches apart. Such spacing allows for subsequent operations such as cultivation and spraying without disturbing the growing plants.

- [6] In a no-till solid-seeding operation there are fewer steps involved in working the soil in comparison with row crops. No-till crops are generally planted using a hoe furrow opener or disc furrow opener without any soil preparation. It is common practice in such a process to leave behind standing stubble from last year's crop after harvesting so as to catch as much snow as possible (for moisture retention) and so as to provide protection for new crops from wind and evaporation.
- [7] Because of the close spacing in a solid-seeded crop, the wheels of typical tractors used to tow a seeder are wider than the spacing between the standing crop stubble. For that reason, the tractor is typically driven without regard to the standing stubble, frequently knocking it down.
- [8] Since the length of the standing stubble may be longer than the spacing between the furrow openers typically used on the seeder, the displaced stubble is frequently dragged down the field as it lies across adjacent furrow openers. As the amount of such stubble increases the seeder becomes plugged.
- [9] According to the Applicant, there have been prior art attempts to alleviate this problem, such as increasing the spacing between hoe openers and increasing the length of the hoe openers themselves.
- [10] As the Applicant points out in the background portion of the specification (see page 5), with the plugging problem caused by crossing the standing stubble rows, this problem would be greatly reduced if the seeder was guided between these rows. The Applicant also points out that it is common practice to use guidance systems in association with row

crops in order to ensure that operations such as cultivating and spraying do not disturb the growing plants.

- [11] By the claims of the present application, the Applicant proposes a method of reducing the plugging problem in a no-till solid-seeding operation whereby a guidance system is used to keep the seeding implement furrow openers between the standing stubble rows, thereby avoiding knocking them down.

PROCEDURAL HISTORY

- [12] The present application, filed on April 19, 1999 claims priority from a previously filed Canadian patent application filed on June 12, 1998, which has been used as the relevant claim date for the purposes of the assessment of obviousness.
- [13] As previously noted, all defects other than that of obviousness were dropped by the Examiner in the SOR, which was forwarded to the Applicant on December 10, 2012.
- [14] In a letter dated September 26, 2013, and following an initial review of the case, the panel offered the Applicant an opportunity to be heard in the form of written and/or oral submissions. In the same letter, the panel attempted to clarify the issues surrounding the obviousness of the claims by discussing some of the steps of the four-step analysis put forth in *Apotex Inc. v. Sanofi-Synthelabo Canada Inc.*, 2008 SCC 61 (*Sanofi*) in order to give the Applicant an opportunity to comment on any points raised.
- [15] In a communication to the panel dated November 5, 2013, the Applicant declined the opportunity to make submissions and requested a decision based on the existing written record.
- [16] This recommendation takes into account the written record to date including any

uncontested points made by the panel in the letter of September 26, 2013.

ISSUES

[17] The sole issue to be resolved in the present case is:

Would claims 1-15 have been obvious to the person skilled in the art at the claim date in view of the prior art cited by the Examiner?

WOULD CLAIMS 1-15 HAVE BEEN OBVIOUS?

Claim Construction

[18] In the present case although there were no disputes between the Examiner and the Applicant regarding claim construction, we feel it necessary before proceeding to briefly comment on the significance of certain features of the claims before considering their validity in view of the prior art.

[19] Purposive construction seeks to identify those features which the inventor considered to be essential and those which were considered to be non-essential (*Whirlpool Corp. v. Camco Inc.*, 2000 SCC 67). Purposive construction also requires that the claims be interpreted from the point of view of the person skilled in the art, who possesses the common general knowledge of the particular art (*Free World Trust v. Électro Santé Inc.*, 2000 SCC 66).

[20] Since as noted above, the claims must be considered from the point of view of the skilled person in view of their common general knowledge, it is first necessary to identify such a person and such knowledge.

The Skilled Person

[21] In the letter to the Applicant dated September 26, 2013, the panel agreed with the Applicant's point that the skilled person is best described as "a person skilled in the art of agricultural practices, in particular the seeding of solid seeded crops." The panel clarified that it viewed such a person, as part of their knowledge of agricultural practices, to also have been skilled in the seeding of row crops. This is in accordance with the Applicant's prior submissions contending that the skilled person would have knowledge of the differences between solid seeding and row seeding (see submissions dated November 22, 2007).

[22] Since none of the above has been contested by the Applicant, the panel uses this characterization of the skilled person for the purposes of the present analysis.

The Common General Knowledge

[23] In the letter to the Applicant of September 26, 2013 (as part of the *Sanofi* framework), the panel set out what it considered to have been the relevant common general knowledge of the skilled person, based on the prosecution and the background discussion in the application. As we advised the Applicant in this letter, since these points were not contested we consider them to have been part of the relevant common general knowledge. Therefore, for the purposes of this review, the common general knowledge includes:

- Knowledge of no-till solid seeding and row seeding operations and the differences between the two, as well as the equipment used in relation to each operation.
- Knowledge of the common parameters of solid-seeding such as forming rows spaced 6-12 inches apart and the common parameters of row seeding such as forming rows spaced 24-36 inches apart.
- Knowledge of the large shift in the art towards no-till seeding for crops such as cereals, pulses and oilseeds.

- Knowledge of the common practice of driving a towing tractor in a solid-seeding operation without regard to the standing stubble rows since the wheels of the tractor and possibly the seeding implement are wider than the row spacing.
- Knowledge that an object of no-till seeding is to leave plant residue or stubble from the last crop standing as high as possible in some environments in order to catch snow and minimize the amount of non-grain material passing through the harvester. This practice also reduces soil erosion and increases water retention.
- Knowledge that hoe furrow openers are generally preferred over disc openers and why.
- Knowledge that in solid seeding operations it is a common problem that crop stubble tends to wrap around individual hoe openers because the seeder crosses the previous year's stubble rows, and gets dragged down the field, plugging the seeder.
- Knowledge that as a result of the above, both hoe and disc furrow openers function better when they pass through less crop residue.
- Knowledge of the commonly known solutions to the plugging problem in no-till solid seeding operations such as: increasing the spacing between hoe openers; increasing the number of rows of hoe openers to increase spacing; increasing the length of the hoe openers to increase the distance between a seeder frame and the ground; and the common practice of leaving the stubble in a solid-seeding operation no higher than the spacing between openers to prevent plugging.
- Knowledge that guidance systems are common in a row crop environment to keep implements aligned with furrows or plant rows (since the spacing must be kept constant for later cultivating, spraying and harvesting).
- Knowledge that such guidance systems use sensors to sense the growing crops to accurately keep the implement between the rows.
- Knowledge that traditionally there has been no need for such precision in solid seeding operations since the crops are not cultivated and sprayers and combines are generally driven without regard to the crop rows.

Claim Language Considerations

- [24] The application contains three independent claims, all directed to a “method of reducing plugging of a seeder with crop residue from a previous year crop” in association with a “no-till seeding application in a solid seeded crop.”

[25] Claim 1 is representative of the independent claims and is presented below:

1. In a no-till seeding application in a solid seeded crop, a method of reducing plugging of a seeder with crop residue from a previous year crop comprising the following steps:

sensing a location of standing stubble rows of the previous year crop where the standing stubble rows are spaced a maximum of 12 inches apart; and

guiding furrow openers of the seeder between said standing stubble rows.

[26] Although the features of the independent claims are similar and contain common features such as the sensing of the crop stubble rows and the guiding of the furrow openers between such rows, the manner in which the crop seeding operation and crop stubble is described varies.

[27] For example, claim 1 describes the crop stubble rows as being “spaced a maximum of 12 inches apart.” Claim 6 adds to this a description of the seeding operation as “driving the towing vehicle without regard to a location of the standing stubble rows such that the towing vehicle crosses the standing stubble rows during movement along the field.”

[28] Claim 11, while specifying a similar operation of the towing vehicle as in claim 6, specifies the spacing of the standing stubble rows as being “less than a width of at least one wheel of the towing vehicle.”

[29] As noted above in the discussion of the common general knowledge, the features which on their face distinguish the independent claims from each other all relate to a typical no-till solid-seeding operation. A maximum spacing of 12 inches, driving a towing vehicle without regard to the crop stubble location and the towing vehicle wheels typically being wider than the rows (which, as disclosed by the Applicant in the Background portion of the

application, is the reason why the towing vehicle is not driven so as to follow the row) are all inherent characteristics of no-till solid-seeding.

[30] Therefore since the independent claims all refer to a no-till solid seeded crop, we do not see the presence of these inherent characteristics of a no-till solid-seeding operation as changing the scope of the claims. For example, in comparing the claims with the prior art, such characteristics need not be referred to explicitly in a prior art reference so long as the reference referred to “no-till solid seeding”. In this sense such differences may be considered “non-essential” as they are already encapsulated by the words “no-till seeding application in a solid seeded crop.”

[31] With respect to the dependent claims, we see no issues with their language which require clarification.

[32] With this understanding of the claims in mind we turn to the issue of obviousness.

Obviousness: Legal Principles

[33] Section 28.3 of the *Patent Act* sets out the conditions under which a claim may be found to be obvious:

28.3 The subject-matter defined by
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- (a) information disclosed more than one year before the filing date by the applicant, or by a person who obtained knowledge, directly or indirectly, from the applicant in such a manner that the information became available to the public in Canada or elsewhere; and
 (b) information disclosed before the claim date by a person not mentioned in paragraph (a) in such a manner that the information became available to the public in Canada or elsewhere.

[34] In *Sanofi* the Supreme Court put forward a useful four-step approach to performing the obviousness assessment, which we utilize in our own analysis below:

- (1) (a) Identify the notional "person skilled in the art";
 (b) Identify the relevant common general knowledge of that person;
- (2) Identify the inventive concept of the claim in question or if that cannot readily be done, construe it;
- (3) Identify what, if any, differences exist between the matter cited as forming part of the "state of the art" and the inventive

concept of the claim or the claim as construed;

(4) Viewed without any knowledge of the alleged invention as claimed, do those differences constitute steps which would have been obvious to the person skilled in the art or do they require any degree of invention?

[35] For an invention to have been obvious it must be “very plain” (*Sanofi* at para. 65).

[36] In the analysis below we follow the four-step *Sanofi* framework as we advised the Applicant we would in the letter of September 26, 2013.

Analysis

(1)(a) The person skilled in the art

[37] This person has already been identified within the context of claim construction at para. [21].

(1)(b) The relevant common general knowledge

[38] This has also been set out earlier and can be found at para. [23].

(2) Identify the inventive concept or construe the claims

[39] In the panel letter of September 26, 2013, the panel set out its view of the inventive concept of the independent claims, based on the solution set out in the claims to the problem of seeder plugging. Such plugging was due to the crop stubble being longer than the distance between furrow openers.

[40] The Applicant was advised in our letter that we would use this characterization of the inventive concept in our analysis absent any further comments, and as there have been none, we apply it below. It was stated as follows:

to incorporate into a no-till solid seeding operation, a guiding system which senses the standing stubble rows and guides the furrow openers between them, thereby reducing the plugging problem.

[41] With respect to the additional features of the dependent claims, as shown below in step (3), regardless of whether these features add to the inventive concept of the independent claims, they do not represent differences in relation to the state of the art, and therefore do not show up for consideration at step (4).

(3) Differences between the “state of the art” and the inventive concept

[42] In the letter of September 26, 2013, the panel notified the Applicant that despite Applicant’s arguments to the contrary it considered the “state of the art” to include documents related to row crop operations as well as solid seeding operations, in accordance with the definition of the person skilled in the art as someone skilled in agricultural practices generally. Again, this has not been contested by the Applicant and so such documents are included below in our analysis.

[43] In the Final Action and the SOR, the Examiner cited six patent documents against the claims, listed below:

<u>United States Patents</u>	<u>Date Published</u>	<u>Inventor</u>
4,624,197	November 25, 1986	Drake
4,771,713	September 20, 1988	Kinzenbaw
4,616,712	October 14, 1986	Jorgensen
4,821,807	April. 18, 1989	Trumm
4,930,581	June 5, 1990	Fleischer et al.
5,181,572	January 26, 1993	Andersen et al.

- [44] After reviewing the references we find that two of them will not be further considered in our analysis as they do not help us answer the question as to whether or not the claimed invention would have been obvious.
- [45] The Drake document relates to a minimum tillage farm implement. Such an implement attempts to combine all the steps of soil preparation into essentially one apparatus. It cannot be said to be a “no-till solid-seeded” application. The document makes many references to the use of the apparatus in association with row crop seeding. The drawings also illustrate an operation where the tractor wheels are narrower than the spacing between crop rows, consistent with a row crop environment. The Drake reference also does not discuss the use of any type of guidance system, unlike the pending claims. While Drake does discuss the idea of not disturbing last year’s crop stubble, again this is with respect to a row crop. Since the Drake reference neither relates to a no-till solid-seeded operation, nor discusses a guidance system used to avoid disturbing the stubble, it is merely a prior art example of row crop seeding which discloses nothing more relevant than what we have already outlined as common general knowledge.
- [46] The Kinzenbaw document was cited by the Examiner to illustrate that row crops and solid-seeded crops are related fields of endeavour. Kinzenbaw discloses a planter with an adjustable crop seeding spacing such that the spacing can be reduced as low as 10 inches, which is within the typical range of spacing for solid-seeded crops. While this document does illustrate a seeder which might be used to perform row crop or solid seeding, it discloses no guidance system used to avoid contact with the standing stubble or crop rows.
- [47] From the common general knowledge discussed earlier, we already know that the skilled person has knowledge of both seeding operations and the equipment used in relation to each one. Kinzenbaw adds nothing beyond what is known to have been part of the common general knowledge. Therefore we do not use Kinzenbaw to determine any

differences with respect to the state of the art.

- [48] The other documents, namely Jorgensen, Trumm, Fleischer et al. and Andersen et al., all relate to guidance systems used in a row crop operation.
- [49] Jorgensen describes an attachment for an implement such as a planter or cultivator. The attachment is used to sense the location of a ridge during planting or the growing crop plants during cultivation, and as a result, to laterally adjust the implement to centre it between the ridges or row crop plants. The attachment includes row location sensors 10, 10', and a seeder position adjuster 12 to laterally move a toolbar 20 in relation to the tractor.
- [50] A “first hitch member” and “second hitch member” (in particular tube 136 and sleeve 132, the sleeve being attached to toolbar 20) move laterally with respect to each other in response to signals from the sensors 10, 10'. Such movement is effected by a hydraulic cylinder 86 which itself is actuated by a solenoid valve assembly 92.
- [51] Similarly, the Trumm document discloses an apparatus for laterally shifting a tool bar containing a tillage unit or units. The tool bar is shifted in response to a crop row sensing device. The apparatus includes a position adjuster in the form of a transverse guide assembly 38 moved by a hydraulic cylinder 48 which is actuated by a hydraulic control valve 100. Also included is, in terms of the claims, a row location sensing assembly 56 which senses the stems or stalks of row plants. Trumm discloses that such a system is also suitable for ridge planting (see col. 5, lines 7-15).
- [52] Fleischer et al. discloses a guidance system for use with an agricultural implement which may be a cultivator or ridge planter for row crops. The system uses a control hitch 20 mounted to the three-point hitch of a tractor, with the frame or toolbar mounted behind the control hitch so as to pivot about a vertical axis. By pivoting the toolbar (i.e., “second hitch member” in terms of the claims of the instant application) about such an axis it is

shifted laterally as well as along an axis in the direction of travel. The system utilizes a sensor 21 to sense, e.g., the centre line between the crop rows, which sensor 21 actuates a “seeder position adjuster” (i.e., the control hitch 20). The adjuster is moved by hydraulic cylinders 36, 37 which themselves are actuated by a hydraulic solenoid valve 84.

- [53] While the main embodiment in Fleischer et al. is focussed on a mechanism which rotates the toolbar about a point, the document also describes an embodiment which uses four-bar linkage arrangement moved by a hydraulic cylinder 135 to effect lateral movement.
- [54] The Andersen et al. document is similar to Jorgensen, Trumm and Fleischer et al., however rather than laterally shifting a portion of the implement in relation to a control hitch attached to the three-point hitch of a tractor, the Anderson system laterally shifts one of the three-point hitch arms of the tractor itself (which is engaged with bar 36 attached to the implement). The three-point hitch arm is attached to one end of a hydraulic cylinder 106, the other end of which is attached to the stationary draw bar 14. Movement of the cylinder piston and corresponding movement of the three-point hitch arm effects lateral movement of the implement. Despite this different arrangement, we find that Andersen et al. discloses a “first hitch member” in the form of the draw bar 14 and a “second hitch member” in the form of the arm and bar 36 which moves laterally in relation to the first hitch member.
- [55] As we noted earlier in defining the inventive concept, the Jorgensen, Trumm, Fleischer et al. and Andersen et al. documents all disclose the details of the sensing and guidance systems as specified in the dependent claims, the corresponding features having been discussed above. However we acknowledge that these systems were used in association with implements associated with row crop applications, as opposed to those of solid-seeded crops.
- [56] The difference between the state of the art and the inventive concept then becomes the fact

that the prior art does not disclose the use of these known guidance systems in association with a no-till solid-seeding operation, thereby reducing the plugging problem. This is essentially the inventive concept as we have previously defined it.

[57] It is important to note that the difference identified above is in fact merely the idea of using the known guidance systems in a no-till solid-seeding operation to solve the plugging problem. As we have found, there are no differences in the implementation of such an idea (since the features of the sensing and guidance system claimed were known). Therefore what is to be decided at step (4) is whether the idea of using such known systems in a no-till solid-seeding operation would have been obvious at the claim date, not whether any particular adaptation or manner of implementation of the idea would have been.

(4) Do the differences constitute steps that would have been obvious?

[58] We begin with the starting point from which the presently claimed invention developed.

[59] As we know from the common general knowledge (outlined earlier in association with claim construction), the skilled person was aware of both row seeding and no-till solid-seeding operations. They were also aware of the equipment used in association with each operation, including the common use of guidance systems in a row crop environment to keep implements aligned with furrows or plant rows (for later cultivating, spraying and harvesting).

[60] The skilled person was also aware of the common problems associated with no-till solid-seeding, namely plugging of the seeder due to the standing stubble from a previous crop being knocked down during seeding and ultimately plugging the seeder. This resulted from the common and inevitable practice of driving the tractor without regard to the stubble (due to the tractor wheels being wider than solid-seeding crop row spacing).

- [61] We acknowledge that, as disclosed by the Applicant, various methods had been attempted to alleviate this problem, such as: increasing the spacing between hoe openers; increasing the number of rows of openers to increase individual opener spacing in a row; increasing the length of the openers themselves; and ensuring that the length of crop stubble was no longer than the spacing between openers.
- [62] However, given that the source of the plugging problem was well known, namely the crossing of crop stubble rows during seeding, in our view, a logical and immediately apparent solution would have been to not cross the rows, thereby avoiding knocking down the stubble (at least not by the furrow openers, the tractors tires still being a problem in any case). The problem of avoiding the crossing of rows was one common to row crop seeding operations as well. In such operations this problem was avoided by the use of guidance systems which sense the plant stalks and direct the implement so as to avoid them.
- [63] Therefore, in our view, the idea of using a guidance system to avoid crossing the rows would have immediately occurred to the skilled person at the claim date, a person who was aware of both environments, the difference between the two being a matter of row spacing. It is this idea (or mere use) which is claimed in the present application. We characterize it this way because as seen at step (3), the features of the implement control system of the claims were already known in multiple row crop related documents. The difference was that such a system was not known to be used in no-till solid-seeding operations.
- [64] There is nothing in the claims with respect to the details of the sensing element or any specific adaptation of a conventional row crop sensing mechanism, in order for such a device to be able to function in guiding an implement between the stubble rows in a no-till solid-seeding environment. The sensing element is claimed in very general terms as a “row location sensor.”

[65] Therefore although there may have been difficulties apparent to the skilled person in using a guidance system associated with row crops in a no-till solid-seeder (and from the evidence discussed below under “Commercial Success”, it seems that there were), the claims do not address any such implementation difficulties.

[66] The claims represent, in our view, the use of a known apparatus in an analogous field. In *Burt Business Form Ltd. v. Autographic Register System Ltd.* [1933] S.C.R. 230 the Court stated:

No doubt mere smallness or simplicity will not prevent a patent being valid; but if you apply a known device in the ordinary way to an analogous use, without any novelty in the mode of applying it, you may get a useful article, you may get an article which, in a sense, is improved and novel, but unless you shew invention, that is to say, that in adapting the old device there were difficulties to overcome or there is ingenuity in the mode of making the adaptation, you do not shew a valid subject-matter of a patent.

[67] The same sentiment was later expressed by the Exchequer Court in *Sommerville Paper Boxes Ltd. v. Cormier* (1939), 2 C.P.R. 181; aff’d, (1940), 2 C.P.R. 206 (S.C.C.):

In order that a new use of a known device may constitute the subject matter of an invention, it is necessary that the new use be quite distinct from the old one and involve practical difficulties which the patentee has by inventive ingenuity succeeded in overcoming; if the new use does not require any ingenuity but is in manner and purpose analogous to the old use, although not exactly the same, there is no invention.

[68] It is also a well known principle of patent law that invention may lie in the underlying idea, or in the practical application of that idea (*Canadian Gypsum Co. v. Gypsum, Lime & Alabastine, Canada Ltd.*, [1931] Ex.C.R. 180).

[69] In the present case the use is not, in our view, quite distinct from the old one. It is a very

analogous field since, in accordance with the identification of the skilled person as “a person skilled in the art of agricultural practices” and that person’s common general knowledge, such a person would have been well aware of both row crop and no-till solid-seeding practices and associated equipment. We also note that as part of the submissions of November 22, 2007, the Applicant referred to a document from January 1998 entitled “Crop Rotations for Increased Productivity”, which discusses the advantages of crop rotation in a farming operation. Rotations are encouraged to be made between solid-seeded crops and row crops (see page 6 of the document). In such cases both operations would be performed within the same farming operation.

[70] As for practical difficulties, or an inventive practical application, the claims merely specify the use of guidance systems known in association with row crop operations, in a no-till solid-seeding one.

[71] In the submissions of November 22, 2007 the Applicant contended that, as row crops and solid-seeded crops are separate fields of endeavour:

it would not then be obvious to take a well known practice from row cropping, such as guiding equipment between widely spaced rows, and adapting it to solid seeded crops.

[72] Similarly, in the submissions of November 25, 2009 the Applicant contended that:

guiding the furrow openers between the standing stubble rows ... was a daunting task at the time it was conceived, and the idea was met with considerable incredulity.

[73] However, the claims do not specify any adaptation of the row crop systems in order to use them in solid-seeding, and if the task was daunting, there is nothing in the claims which overcomes it.

[74] Before reaching an ultimate conclusion under step (4) on the issue of obviousness, we address below the other points put forward by the Applicant in support of the unobviousness of the claims. These points relate to the application of an obvious to try assessment, as set out in *Sanofi*, and specific factors which have been identified by the courts as relevant to the obviousness inquiry.

Obvious to try

[75] In the submissions of November 25, 2009 the Applicant presented arguments in relation to the “obvious to try” assessment outlined in *Sanofi*. However the Examiner never applied such as analysis during prosecution. We do not see such an assessment to be necessary in the present case, as there is nothing claimed which indicates that any experimentation was needed to arrive at the invention. As we have stated, the claims do not specify any adaptations to the known guidance systems which might involve experimentation. Even if adaptation is needed this does not necessarily require the use of an “obvious to try” assessment (*Wenzel Downhole Tools Ltd. v. National Oil Well Canada Ltd.*, 2012 FCA 333 at para. 97).

[76] We also note that in the same submissions the Applicant comments on factors such as “climate in the relevant field” and “motivation”, factors which were presented as forming part of an obviousness assessment in *Janssen-Ortho Inc. v. Novopharm Ltd.*, 2007 FCA 217 at para. 25 (“*Janssen*”).

[77] With respect to climate in the relevant field the Applicant contends that the invention was met with “incredulity”. However, as shown below within the discussion in relation to “Commercial Success”, in our view, this reaction was more due to the fact that the guidance system was actually made to work in a no-till solid-seeded operation rather than the mere idea of using such a system .

[78] With respect to motivation, we agree that motivation existed to solve the plugging problem. As we have already found, such motivation would have led the skilled person to the idea of guiding a no-till solid-seeder between the stubble rows.

Commercial Success

[79] The Applicant contends, both in the most recent submissions of February 28, 2012 and in earlier submissions dated August 29, 2008, that the commercial success of their seeder and associated “Smart Hitch” (which is a refinement of the sensing and guiding steps of the claims) is indicative of the inventive ingenuity of the claims.

[80] We agree that commercial success is a secondary factor to be assessed in an obviousness analysis (*Janssen*). However the Court in that case indicated that such secondary factors generally bear less weight than others.

[81] In reviewing the publications submitted by the Applicant we find that the commercial success that seems to be enjoyed by the “Smart Hitch” appears to be related to the details of the sensing mechanism, which details make the apparatus particularly suitable for guiding a seeder in a no-till solid-seeding operation. However such details are not found in the pending claims.

[82] For example, the excerpt from *Grainnews* (June 2005) entitled “Seeding between rows boosts yields, cuts costs” discusses how the inventor Norbert Beaujot field tested the hitch mechanism for six years before release to the market. What was released includes a sensor mechanism comprising two metal discs that ride along the ground independently, straddling a furrow 5 inches apart. Movement of one disc even slightly sends a correction signal to the hydraulic cylinder which shifts the seeder.

[83] Similarly, the article from *FARMING* magazine (July 14, 2005) entitled “Stop double

stubble trouble”, discusses the evolution of the “Smart Hitch” including the requirement that, in order to make a guidance system work in a no-till solid-seeded operation a one-inch accuracy was needed for the sensing arrangement. Such a requirement is not mentioned in the patent application. According to the article a pair of aluminum paddles on an arm that straddles a single row of standing straw was originally used for the sensing mechanism, whereas later discs were used to straddle the straw row (as discussed in the previously noted article).

[84] Another article from *WHEAT OATS & BARLEY* magazine (February 2006) entitled “Seed between the stubble for a better crop start” discusses the advantages of the commercial “Smart Hitch”. The article discusses the hitch in relation to its use with the Applicant’s commercial seeder, the “Seed Master”, which according to the article, itself has advantages over other seeders.

[85] The Applicant has also submitted a document with the August 29, 2008 submissions showing a device being marketed by Seed Hawk, a competitor, which uses a sensing mechanism similar to that of the Smart Hitch.

[86] Although the hitch (i.e., Smart Hitch) which the Applicant has marketed has apparently met with some commercial success and has possibly even been emulated by a competitor, it does not appear to the panel that these outcomes have resulted from the mere use of a guidance system in a no-till solid-seeder, as is claimed. We take from these publications that a particular sensing mechanism was necessary in order to deal with the difficulty in following crop rows with spacing as low as 6 inches.

[87] However, as set out previously at paras. [64] - [65], the claims do not provide any details of the sensing mechanism, which details, in our view, led to the commercial success of the hitch (based on our assessment above of the publications submitted by the Applicant). Therefore we are unable to establish a causal link between the subject matter claimed and the commercial success of the device marketed which would point towards the inventiveness of the claimed method.

Conclusion

[88] In view of the above we find that claims 1-15 would have been obvious and are therefore non-compliant with section 28.3 of the *Patent Act*.

RECOMMENDATION OF THE BOARD

[89] In view of the above findings, the Board recommends that the application be refused because claims 1-15 would have been obvious and are therefore non-compliant with section 28.3 of the *Patent Act*.

Stephen MacNeil
Member

Andrew Strong
Member

Cara Weir
Member

DECISION OF THE COMMISSIONER

[90] I concur with the Patent Appeal Board's findings and its recommendation that the application be refused because claims 1-15 would have been obvious and are therefore non-compliant with section 28.3 of the *Patent Act*.

[91] Accordingly, I refuse to grant a patent on this application. Under section 41 of the *Patent Act*, the Applicant has six months within which to appeal my decision to the Federal Court of Canada.

Sylvain Laporte
Commissioner of Patents

Dated at Gatineau, Quebec,
this 24th day of March, 2014