

Federal Court
of Appeal



CANADA

Cour d'appel
fédérale

Date: 20100714

Docket: A-86-09

Citation: 2010 FCA 188

**CORAM: NADON J.A.
SHARLOW J.A.
TRUDEL J.A.**

BETWEEN:

**BRIDGEVIEW MANUFACTURING INC. and
HIGHLINE MANUFACTURING LTD.**

Appellants

and

**931409 ALBERTA LTD. c.o.b. CENTRAL ALBERTA HAY CENTRE,
DENNILL'S AGRICENTER LTD. and
DURATECH INDUSTRIES INTERNATIONAL, INC.**

Respondents

Heard at Ottawa, Ontario, on February 10, 2010.

Judgment delivered at Ottawa, Ontario, on July 14, 2010.

REASONS FOR JUDGMENT BY:

SHARLOW J.A.

CONCURRED IN BY:

NADON J.A.
TRUDEL J.A.

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REASONS FOR JUDGMENT

SHARLOW J.A.

[1] Bridgeview Manufacturing Inc. (“Bridgeview”) and Highline Manufacturing Ltd. (“Highline”) brought an action in the Federal Court against Duratech Industries International, Inc. (“Duratech”), 931409 Alberta Ltd. c.o.b. Central Alberta Hay Centre, and Dennill's Agricenter Ltd. claiming damages and other relief for the infringement of claims 1, 2 and 4 of Canadian Patent No. 2,282,334 (the “334 patent”). The respondents denied infringement and counterclaimed for a declaration that claims 1, 2 and 4 of the 334 patent are invalid for obviousness. The judge dismissed

Bridgeview's claim of infringement, allowed the counterclaim, and granted costs to the respondents (2009 FC 50).

[2] Bridgeview is appealing the judgment, alleging a number of errors in the construction of the patent, the finding of no infringement and the granting of the counterclaim. For the reasons that follow, I would dismiss the appeal in relation to patent construction and infringement, and allow it in relation to the claim of invalidity.

Background facts

[3] The 334 patent is owned by Bridgeview. It was issued on November 20, 2001 from an application filed on September 17, 1999 and published on April 13, 2000. It claims priority from U.S. Patent Application Serial No. 09/303,263 filed on April 30, 1999.

[4] The 334 patent relates to bale processors, machines designed to disintegrate or break up large bales of straw, hay or other crop material. The invention disclosed in the 334 patent is embodied in a bale processor named the "Bale King", manufactured and sold by Bridgeview, and a bale processor named "Bale Pro", manufactured and sold by Highline under patent licence from Bridgeview. The evidence is that the Bale King was commercially successful.

[5] The "Balebuster 2650" and the "Balebuster 2800" are bale processors manufactured and sold by Duratech. The Balebusters are also sold by the other respondents. The judge found, and it is undisputed, that the Balebuster design was inspired by the Bale King, and that Duratech knew of the

334 patent when developing the design for the Balebuster. Both models of the Balebuster were alleged to infringe the 334 patent but, because they are of similar design, the infringement aspect of the trial dealt with the Balebuster 2650.

[6] Generally, a bale processor consists of a container large enough to hold a large bale of crop material, which is typically round. Inside the container are tools that are capable of cutting the outside of the bale to disintegrate it into shreds. By some means, the bale is made to rotate and press against the cutting tools so that they are engaged against the moving surface of the bale. The shreds of disintegrated material are discharged through an opening in the container.

[7] The patent disclosure explains at some length that bale processors are prone to becoming jammed because the shreds of disintegrated material become entangled in the moving parts of the machinery. The patent specification states that it is “an object of this invention to provide a baled crop material processor that minimizes jamming.” The position of Bridgeview is that the inventive step relates to what I will call the “right hand discharge” of the disintegrated crop material. The meaning of that phrase, and what I understand to be the functional importance of right hand discharge, will become apparent in the following paragraph.

[8] Bale processors are designed to be pulled by a tractor. The disintegration rotor of a bale processor is powered by the tractor’s power take off drive. Before the Bale King was on the market, most bale processors were designed so that the disintegration rotor would rotate in the same direction as the tractor’s power take off drive, namely, counter clockwise as viewed by a person

looking at the bale processor from the front. That necessarily caused the disintegrated material to be discharged to the left side of the bale processor (that is, to the left of the tractor operator when facing forward). The control console of a tractor is typically positioned on the right side of the tractor. Therefore, the operator of a tractor pulling a bale processor with a left side discharge must turn uncomfortably to the left in order to watch for the jamming of the discharged shreds, while at the same time maintaining control of the steering wheel and other controls. It is physically easier for the driver of a tractor to watch for jamming, and therefore to control it, if the shreds are discharged to the right (right hand discharge).

Patent construction

[9] In an action for infringement or an action to invalidate a patent, the first step is to construe the patent. The construction of a patent is a question of law to be determined by the Court, with the assistance of persons of ordinary skill in the art to which the invention relates. A patent must be construed purposively, taking into account the entire context of the specification, including the disclosure and the claim, as they would be understood by the skilled person reading the patent with the object of understanding what the inventor claims to have invented and the scope of the monopoly the inventor wishes to claim. See *Whirlpool Corp. v. Camco Inc.*, [2000] 2 S.C.R. 1067, 2000 SCC 67, *Consolboard Inc. v. MacMillan Bloedel (Saskatchewan) Limited*, [1981] 1 S.C.R. 504.

[10] The challenge represented by the construction of the 334 patent, and the nature of the debate between the experts, makes it helpful to reproduce most of the specification, which I have done below. At this point it is enough to note that there are two key disputes on patent construction.

[11] The first dispute is whether the word “manipulator” as used in the claims of the patent should be understood to refer to manipulators of every kind known to the skilled person at the relevant time as a typical component of a bale processor, or only to a particular kind of manipulator comprising at least two rollers with one roller on each side of and above the disintegrator, which is the only kind of manipulator referred to in the disclosure portion of the specification. The latter interpretation was accepted by the judge, based on the analysis presented by Duratech’s expert, Dr. Richard L. Parish. The contrary opinion was expressed by Bridgeview’s expert, Mr. Craig Hanson.

[12] The second dispute is the meaning of the phrase “discharge opening at the bottom of the right side wall to discharge material from the right side of the processor.” Dr. Parish interpreted that language literally. Mr. Hanson was of the view that the exact location of the opening is not essential, as long as the opening served its function of permitting the disintegrated material to be discharged to the right.

[13] The disclosure of the 334 patent begins with the following explanation (I have inserted paragraph numbers for ease of reference):

Field of the Invention

¶1. The present invention relates generally to a crop material processor and more particularly to a crop material processor for disintegrating baled crop materials.

Background of the Invention

¶2. Crop materials, such as straw, hay or other like forage, or animal bedding, are often baled for storage and transportation. In some instances, it is necessary to break the bale apart in order to spread the crop material for animal bedding or to dispense the crop material as feed.

¶3. A machine to disintegrate bales of crop material is sometimes known as a baled crop material processor. A typical machine is described in US Patent 4,830,292 which issued to Frey on May 16, 1989. A baled crop material processor basically comprises a container for receiving the bales, a disintegrator often in the form of a roller with cutters or flails for chopping or shredding the material from the bale, a mechanism including manipulator rollers to direct the bale to the disintegrator and a discharge slot such that the crop material is discharged from the bail [*sic*] processor. Any number of manipulator rollers are [*sic*] possible, however, the disintegrator is located between and below two of the manipulator rollers. The baled crop material is supported and rotated by the rollers. As the crop material bale rotates the disintegrator breaks apart the outer portion of the baled crop material first and then proceeds to break apart the crop material towards the centre of the bale until the crop material is completely broken apart. As the baled crop material is disintegrated, the loose crop material is driven by the flails to be discharged from the machine through the discharge slot. The discharged crop material can be formed into windrows or discharged into feed bunks to be used as feed or it may be scattered to be used as animal bedding.

¶4. One of the major problems which appears to occur with baled crop material processors is that they tend to jam. This occurs when loose crop material wraps around the manipulator rollers or passes between the manipulator rollers and the walls of the container. Jams are generally dislodged by reversing the direction of rotation of the manipulator rollers. It has been found that jamming rarely occurs when the bale is firm, the result being that the only loose crop material that is produced, is by the disintegrator in the disintegrator opening between the manipulator rollers; this loose crop material is immediately driven out of the processor through the discharge slot. Loose crop material may be created by the manipulator rollers themselves, the rotation of the bale may shake it apart or the engaging action of the rollers may tear or break the crop material bale apart.

¶5. Usually, as the crop material bale rotates, the amount of crop material disintegrated is not uniform from the outside to the inside of the crop material bale. This occurs because the outside is usually much harder than the inside, that is the inside is more loosely baled. Thus, when the exterior of the crop material bale is being disintegrated, that is at the start of the process, the crop material bale is hard. Rotating a hard crop material bale is relatively easy, and therefore uniform disintegration takes place along the periphery of the crop material bale. Furthermore, the crop material bale only breaks apart in the area of disintegration, the other parts of the periphery remain intact due to the hardness of the

bale. However, once the softer, inner core of the crop material is reached, the crop material bale is often too loose to remain intact. Therefore, the softer, inner core is sometimes difficult to rotate. The softer inner core tends to break apart because of the rotation, and this loose crop material can cause jamming and impede rotation of the manipulator rollers.

¶6. Also, the teeth on the manipulator rollers engage the crop material bale to effect the rotation. This engaging action tends to grab the crop material bale. This grabbing action can be very similar to the disintegration action, and hence loose crop material can be created. Furthermore, the grabbing action may not release the crop material bale and hence pull the crop material around the roller causing a wrap around situation.

¶7. Moreover, if the crop material bale moves longitudinally and impacts the front or back wall of the container, then the crop material may be torn from the bale by the wall or the rotation of the crop material bale may be impeded by the contact with the wall of the container. Often, the result of this impeded rotation is that the teeth of the manipulator rollers tend to break the crop material bale apart, and this crop material may jam the roller, which is undesirable.

¶8. A further difficulty is to control bales of irregular shape such as rectangular bales, frozen bales or bales that have been stored for a period of time and are flat on one side. Sometimes, irregularly shaped bales can cause a jam to occur since they do not rotate properly.

¶9. For the foregoing reasons, there is a need to provide a crop material processor for disintegrating baled crop material capable of keeping to a minimum the amount of loose crop material in the processor that may cause jamming.

Summary of the invention

¶10. It is therefore an object of this invention to provide a baled crop material processor that minimizes jamming.

¶11. These and other objects are achieved in a baled crop material processor for disintegrating baled crop material. The crop material processor comprises a container having a bottom, a front wall, a back wall, and left and right side walls for receiving and containing the crop material. A disintegrator having a flail roller that is rotatable about its own longitudinal axis is mounted to extend between the front and the back of the container. A number of flails are pivotally fixed about the flail roller such that they will extend radially from the flail roller as the flail roller rotates. The processor further includes a discharge opening at the bottom of either the left or the right side wall to discharge the disintegrated baled crop material and a mechanism for supporting and manipulating the baled crop material so that it will be moved to the disintegrator in such a manner that disintegration of the baled crop material is carried out primarily by the disintegrator.

¶12. In accordance with an aspect of this invention, the processor may be unidirectional, discharging the disintegrated crop material either to the left or to the right of the

processor, or the processor may be bidirectional with a mechanism for allowing the operator to discharge from the left or the right. The direction of rotation of the flail roller will depend on the side of the processor that discharge is desired. The flail roller will rotate in the counter-clockwise direction for discharge to the left and in the clockwise direction for discharge to the right.

¶13. In accordance with another aspect of the invention, the support and manipulation mechanism includes at least two manipulator rollers rotatably mounted inside the container substantially parallel to the flail roller wherein at least one roller is located on each side of the flail roller to define a disintegration opening where crop material is accessed by the disintegrator. The cross-section of the manipulator rollers may be substantially square. A number of paddles that are channel shaped with a projecting end that is curved outwardly are mounted about each of the rollers. The paddles are positioned such that the plane of the paddles is set at an angle θ to a plane through the axis of the manipulator roller, where $0 \leq \theta \leq 90^\circ$ and may be in the order of 45° .

¶14. With regard to a particular aspect of this invention, the lead surface of the paddles are [sic] made to face in different directions. In particular, the lead surface of the paddles at the front of the processor face [sic] towards the back of the processor, and the lead surface of the paddles at the back of the processor face [sic] towards the front of the processor.

¶15. With regard to another aspect of the invention, the processor includes a mechanism for connection between the processor flail roller and the a [sic] source of rotating power to assure that the flail roller rotates in the desired direction. In particular for a bidirectional processor, the direction of rotation may be switched from one to the other.

¶16. In accordance with another aspect of this invention, each of the side walls are [sic] shaped to form a protrusion into the container in close proximity to the paddles of the manipulator rollers. Each of the side walls also has a substantially vertical wall portion below the protrusions and a wall portion sloping outwardly from above the protrusion.

¶17. The support mechanism further includes a number of hoops mounted in spaced relationship within the container along the container length and positioned above and substantially perpendicular to the flail roller and the manipulator rollers.

¶18. Another particular aspect of the present invention is exemplified in the flails that are mounted on the flail roller, each flail comprises a bar with one end having at least one prong with a bevelled edge and the other end having a hollow cylindrical section to receive a bolt for pivotally mounting the flail to the flail roller.

¶19. Many other objects and aspects of this invention will be clear from the detailed description of the drawings[.]

[14] The patent disclosure includes 14 drawings. They are described in detail in 11 pages of additional text. I reproduce below the portions of the detailed description that seem to be of particular relevance to this appeal (the superscript numbers refer to details in the drawings):

Detailed Description

¶20. By way of overview, the present description will include the structure of the crop material processor, the operation of the crop material processor and the advantages of the crop material processor in accordance with the present invention in that order.

¶21. The baled crop material processor ¹ ... is built on a chassis ³ that has a hitch ² fixed to it for pulling the processor ¹ by another machine, usually a tractor. Power to the baled crop material processor ¹ is usually in the form of a power take-off and hydraulics that is provided by the tractor.

¶22. The baled crop material processor includes a container ¹⁰ that is mounted on the chassis ³ into which bales of crop material ¹² are loaded. ... The container ¹⁰ includes a front wall ¹⁰⁰, a back wall ¹⁰², two sidewalls ^{104, 106} and a bottom ¹⁰⁸. The front wall ¹⁰⁰ of the container ¹⁰ is closest to the tractor, the back wall ¹⁰² is farthest from the tractor. ...

¶23. Mounted inside the container ¹⁰ is a disintegrator ¹⁴ that includes a flail roller ¹⁶. The flail roller ¹⁶ extends between the front wall ¹⁰⁰ of the container ¹⁰ and the back wall ¹⁰² of the container ¹⁰, normally along its entire length. The flail roller ¹⁶ is mounted on bearings fixed to the front and back walls ^{100 and 102} respectively so as to be rotatable about its longitudinal axis. An input shaft ¹⁶¹ for connection to the tractor power take-off is connected to the flail roller ¹⁶ to rotate it under the control of the tractor. The power take-off on most tractors rotates in only one direction, that being counter-clockwise when looking back from the tractor, thus the flail roller ¹⁶ of the disintegrator ¹⁴ will rotate in the counter-clockwise direction when looking at it from the front wall ¹⁰⁰ as shown by the arrow ¹⁷.

¶24. [Description of disintegrator omitted.]

¶25. A discharge opening ⁴⁰ is located at the bottom of the side walls ¹⁰⁴ of the container ¹⁰ which in this case is the left side wall. The discharge opening ⁴⁰ is formed by wall ¹⁰⁴, the bottom ¹⁰⁸ and the end walls ^{100 and 102} such that the flails ¹⁸ on the flail roller ¹⁶ drive the shredded crop material along the bottom ¹⁰⁸ to discharge it from the processor ¹. ...

¶26. The baled crop material processor ¹ further includes means ²⁴ for manipulating the crop material ¹² such that it will be disintegrated by the disintegrator ¹⁴, the purpose of the manipulation means ²⁴ is to maintain the crop material ¹² substantially intact for disintegration primarily by the disintegrator ¹⁴.

¶27. The manipulation means ²⁴ comprises at least two rollers ²⁶ rotatably mounted inside the container ¹⁰ parallel to and above the flail roller ¹⁶. Each roller ²⁶ extends between the

front wall ¹⁰⁰ and the back wall ¹⁰² of the container ¹⁰. Each roller ²⁶ is rotatable about its own longitudinal axis in either direction usually by a hydraulic motor ²⁶², though electrical motors may also be used. A pair of rollers ²⁶, one on each side of the flail roller ¹⁶, defines a disintegration opening ²⁸ where crop material ¹² is presented to the disintegrator ¹⁴. In this particular embodiment, the cross-section of the rollers ²⁶ is substantially square having flat surfaces ²⁶¹ however, it may also be round. In order to rotate the bale ¹² in a clockwise direction which is the preferred direction, both rotors ²⁶ are made to rotate in a counter-clockwise direction. In addition to rotating the baled crop material, the rollers ²⁶ define a support surface on which the crop material ¹² is supported.

¶28. [Description of paddles omitted.]

¶29. [Description of paddle mounting omitted.]

¶30. The manipulation means ²⁴ further includes the side walls ^{104, 106} of the container ¹⁰ to support the bale in the container. In addition, one or both side walls ^{104 and 106} are adapted to be in close proximity to the curved edge ³⁰¹ of the paddles ³⁰. The preferred profile for the walls ^{104 and 106} is illustrated in figure 2 wherein the walls ^{104 and 106} include a protrusion ³² projecting into the container ¹⁰ proximal to the support surface ²⁶¹ defined by the rollers ²⁶. The side walls ^{104 and 106} further have a substantially vertical wall portion ³⁴ located below the protrusion ³² and a wall portion ³³ sloping outwardly from above the protrusion ³².

¶31. Also mounted inside the container ¹⁰ are a number of hoops ²² which prevent the bale or bundles of loose crop material from dropping into the disintegrator ¹⁶ all at once. The hoops ²² are mounted between the sidewalls ^{104 and 106} of the container ¹⁰ and are spaced so that the flails ¹⁸ and the paddles ³⁰ pass between the hoops ²² as the roller ¹⁶ and the rollers ²⁶ rotate.

¶32. Though the embodiment of the baled crop material processor ¹ has been described as discharging the disintegrated bale crop material to the left of the processor ¹, it is within the scope of the present invention to provide a processor ¹ from which the disintegrated bale crop material is discharged from the right of the processor ¹ as illustrated in figure ⁸. The construction of such a machine would be the mirror image of the machines described with respect to figures 1 to 3. In this embodiment, the flail roller ¹⁶ would be made to rotate in clockwise direction and the flails ¹⁸ would be mounted on the roller ¹⁶ facing in the direction of rotation. In addition, the manipulator rollers ²⁶ would continue to be rotatable in either direction, though clockwise would be their preferred direction of rotation. The paddles ³⁰ on the rollers ²⁶ would be mounted facing the direction of preferred rotation. Finally, the discharge opening would be located on the right wall ¹⁰⁶.

¶33. to ¶47. [Description of certain variants omitted.]

¶48. The previously described embodiments of the present invention provide for many advantages, including the following.

¶49. The curved paddles ³⁰ contribute to the rotation of the baled the [*sic*] crop material ¹² without breaking the bale apart. The angled paddles ³⁰ guide the baled crop material ¹² to

remain centred within the length of the container ¹⁰. The paddles ³⁰ which are reinforced by their channel shape allow for aggressive rotation of the baled crop material ¹².

¶50. The square cross-section of the rollers ²⁶ offers greater support and allows for more aggressive rotation of the baled crop material ¹². Further, square rollers ²⁶ may be more readily manufactured and the base of the paddles ³⁰ can be flat for mounting.

¶51. The shape of the side walls ^{104, 106} tends to prevent passage of loose material between the walls ^{104, 106} and rollers ²⁶ guiding the loose material upward and away from the rollers ²⁶ while at the same time allowing material falling by the walls ^{104, 106} to drop away freely. In addition, the falling loose material will fall into the flow of the material being discharged from the processor ¹. All of these contribute to the overall advantage of preventing jams within the processor ¹.

¶52. The ability to reverse the direction of rotation of rollers ²⁶ is also advantageous since it provides a mechanism for unjamming a processor ¹ particularly in the areas of the rollers ²⁶ or if the baled crop material ¹² refuses to rotate in any particular direction.

¶53. A processor ¹ which discharges the disintegrated baled crop material from the right of the processor ¹ is particularly advantageous in that it allows the operator to more adequately and comfortably control the operation. Most tractors have their controls located on the right hand side of the tractor and so it is more natural and common for the operator to observe the operation of the farm equipment behind him by turning to the right. The bidirectional processor ¹ (figures 11 and 12) provides the operator total versatility since it allows the operator to discharge the disintegrated baled crop material in any way desired.

¶54. A further advantage of the invention is that the flails ¹⁸ cut the twine that ties the crop material bale ¹² together. The cut twine usually wraps around the flail roller ¹⁶ during the operation of the crop processor ¹. The operator does not have to cut the twine around the crop material bale ¹² before loading and needs only to remove the twine from the flail roller ¹⁶ before an amount of twine accumulates and impedes the operation of the crop processor ¹.

¶55. Many modifications to the above described embodiments of the invention can be carried out without departing from the scope thereof, and therefore the scope of the present invention is intended to be limited only by the appended claims.

[15] There are five patent claims. They read as follows:

1. A crop material processor for disintegrating baled crop material comprising:
 - a container for receiving and containing the crop material, the container having a bottom, a front wall, a back wall, a left side wall and a right side wall;

- a disintegrator having a roller positioned along the length of the container mounted to rotate about its own longitudinal axis;
 - a manipulator mounted inside the container substantially parallel to the disintegrator;
 - a discharge opening at the bottom of the right side wall to discharge material from the right side of the processor; and
 - rotation conversion means having an input for connection to a rotating power source and an output connected to the disintegrator roller to provide a direction of rotation to the disintegrator roller opposite to the direction of rotation at the conversion means input.
2. A crop material processor as claimed in claim 1 wherein the disintegrator roller is adapted to rotate in a clockwise direction.
 3. A crop material processor as claimed in claim 1, wherein the rotation conversion means comprises a first gear and a second gear positioned to drive one another, the first gear being mounted on a first rotatable shaft having an extended end forming the conversion means input and the second gear being mounted on a second rotatable shaft having an end for connection to the flail roller.
 4. A crop material processor as claimed in claim 1, wherein the roller is a flail roller.
 5. A crop material processor as claimed in claim 1, wherein the manipulator comprises at least two manipulator rollers rotatably mounted inside the container substantially parallel to the disintegrator roller, and wherein at least one roller is located on each side of the disintegrator roller to define a disintegration opening where crop material is accessed by the disintegrator.

[16] Only claims 1, 2 and 4 were in issue in the action for infringement. As claims 2 and 4 are dependent on claim 1, the key points of patent construction are focused on claim 1.

[17] As mentioned above, the trial record includes the evidence of two experts, Mr. Hanson for Bridgeview and Dr. Parish for Duratech. Their opinions conflict in certain crucial respects. The judge preferred the opinion of Mr. Hanson on the question of identifying the person of ordinary skill in the art, and the opinion of Dr. Parish on patent construction.

[18] There is no challenge to the judge's identification of the person of ordinary skill in the art.

He concluded that the 334 patent is directed at the skilled person described as follows by Mr.

Hanson (quoted at paragraph 22 of the reasons):

In my view, the '334 Patent is addressed to someone with strong practical experience in agricultural machinery generally, as well as a sound understanding of the mechanical and structural aspects of such machinery. In other words, the '334 Patent is addressed to a broad range of people having a wide variety of practical experiences and/or varying levels of education.

A skilled addressee would also include someone who is employed to research, develop, manufacture, test, service and/or repair agricultural machinery generally, such as a welder, machinist or engineer. With respect to this latter skilled addressee, he/she may: (1) have formal training in relevant areas, such as a college or university degree in a mechanical-oriented program and at least a minimal amount (i.e., two years) of practical experience; or (2) have a body of knowledge concerning machinery from extensive years of practical experience.

In sum, a skilled person would generally understand how a bale processor and its various components work, as well as that such a processor is capable of forcefully and efficiently chopping or shredding material from a bale of hay, and rapidly discharging that material a relatively long distance.

[19] On the question of claim construction, the judge adopted the opinion of Dr. Parish in its entirety, rejecting the opinion of Mr. Hanson on the basis that "it is not based on a consideration of the whole of the disclosure". The judge did not explain this conclusion, but I assume he meant that, although Mr. Hanson makes numerous references to the disclosure (for example, at paragraphs 40, 53, 58, 59, 63, 71, 78, 82, 87, 89, 90, 96, 97 of his report), he does not appear to rely on the disclosure for a contextual construction.

[20] Bridgeview challenges the judge's construction of the patent on the basis that he has used the patent specification to narrow the scope of claim 1, contrary to the principle that the disclosure portion of the specification can be used to understand the meaning of words used in a claim, but not to construe a claim more narrowly or widely than the language of the claims will allow. Duratech supports the judge's construction of the patent on the basis that he was entitled to conclude, as he did, that given the context provided by the disclosure, certain words and phrases in claim 1 should be interpreted more narrowly than proposed by Bridgeview.

[21] The principle upon which Bridgeview relies is well established. Justice Binnie, writing for the Supreme Court of Canada in *Whirlpool* (cited above), explained it as follows (at paragraph 52) (my emphasis):

I have already given my reasons for concluding that to the extent the appellants are arguing for a simple "dictionary" approach to construction of the '803 claims, it must be rejected. In *Western Electric Co. v. Baldwin International Radio of Canada*, [1934] S.C.R. 570, the Court cited earlier authority dealing with the word "conduit" as used in a patent claim. Duff C.J. at p. 572 accepted the proposition that "[y]ou are not to look into the dictionary to see what 'conduit' means, but you are to look at the specification in order to see the sense in which the patentees have used it". In *Consolboard, supra*, as mentioned, Dickson J. considered that the whole of the specification (including the disclosure and the claims) should be looked at "to ascertain the nature of the invention" (p. 520). To the same effect is the statement of Taschereau J. in *Metalliflex Ltd. v. Rodi & Wienerberger Aktiengesellschaft*, [1961] S.C.R. 117, at p. 122:

The claims, of course, must be construed with reference to the entire specifications, and the latter may therefore be considered in order to assist in apprehending and construing a claim, but the patentee may not be allowed to expand his monopoly specifically expressed in the claims "by borrowing this or that gloss from other parts of the specifications".

More recently, [William L. Hayhurst, "The Art of Claiming and Reading a Claim", in G. F. Henderson, ed., *Patent Law of Canada*. Scarborough, Ont.: Carswell, 1994], at p. 190, cautioned that "[t]erms must be read in context, and it is therefore unsafe in many instances to conclude that a term is plain and unambiguous without a careful review of

the specification". In my view, it was perfectly permissible for the trial judge to look at the rest of the specification, including the drawing, to understand what was meant by the word "vane" in the claims, but not to enlarge or contract the scope of the claim as written and thus understood.

[22] In *Whirlpool*, the word “vane” was capable of being defined broadly to include both rigid vanes and flexible vanes but the trial judge in that case interpreted “vane” in the particular context of the patent to mean only rigid vanes. In doing so, he accepted the opinion of a person skilled in the art who relied to a significant extent on the fact that the drawings in the patent represented only rigid vanes. Justice Binnie concluded that it was open to the trial judge to interpret the claims as he did.

[23] In this case, the judge’s description of the essential elements of claim 1 of the 334 patent (see paragraph 31 of his reasons) is comprised of a combination of the language of the patent claims and the explanatory detail provided in the opinion of Dr. Parish, which is derived from his analysis of the disclosure. Paragraph 31 reads as follows (emphasis in original):

[Para 31] As a result, I find that the skilled person would use the disclosure to provide an expanded interpretation of Claim 1. Therefore, considering the disclosure, and considering Dr. Parish's expert evidence, I find that there are six essential elements of the invention claimed in the Patent. The following description of these elements includes the terms used in Claim 1 as underlined, together with references to the disclosure in the Patent and Dr. Parish's evidence as required:

1. A baled crop material processor for disintegrating baled crop material, comprising a container for receiving the bales, a disintegrator often in the form of a roller with cutters or flails for chopping or shredding the material from the bale, a mechanism including manipulator rollers to direct the bale to the disintegrator and a discharge slot such that the crop material is discharged from the bail processor. Any number of manipulator rollers are possible, however, the disintegrator is located between and below two of the manipulator rollers (Disclosure, p. 1, lines 17 — 23) and comprising:

a container for receiving and containing the crop material, the container having a bottom, a front wall, a back wall, a left side wall and a right side wall, with the bottom being a surface of the container underneath the disintegrator that receives and guides the shredded material to a discharge opening (Parish Report, para. 66, Disclosure, Fig. 1, 108);

a disintegrator mounted inside the container (Disclosure, p. 7. line 20) having a roller positioned normally (Patent, p. 7, line 22) along the entire length of the container mounted to rotate about its own longitudinal axis with the disintegration rotor mounted with its axis of rotation parallel to the direction of travel of the baled crop material processor so that the disintegrated material is discharged to the side of the machine (Parish Report, para. 66);

a manipulator mounted inside the container substantially parallel to the disintegrator comprised of at least two rollers (Disclosure, p. 1, lines 21 — 23) rotatably mounted (Parish Report, para. 73) with one on each side of the disintegrator (Parish Report, para. 73) and each located above the disintegrator (Disclosure, p. 1, lines 22 — 23);

a discharge opening at the bottom of the right side wall of the container (Parish Vol. 1, para. 75) to discharge material from the right side of the processor when facing forward (Parish Report, para. 75) along the bottom of the container (Disclosure, p. 8, line 15, Fig. 1, 108; and Parish Second Report, paras. 19 and 32); and

rotation conversion means having an input for connection to a rotating power source and an output connected to the disintegrator roller to provide a direction of rotation to the disintegrator roller opposite to the direction of rotation at the conversion means input.

[24] The first sentence of paragraph 31 requires particular attention. It says that the skilled reader would use the disclosure to *expand* the meaning of claim 1. However, as I understand the judge's reasons, he did not *expand* the meaning of claim 1 beyond its literal meaning. Rather, he adopted an analysis that used the disclosure as a basis for giving the disputed words and phrases in claim 1 a meaning that is *narrower* than the more general meaning proposed by Bridgeview, resulting in a correspondingly narrow interpretation of claim 1.

[25] Mr. Hanson for Bridgeview and Dr. Parish for Duratech each provided a comprehensive opinion that included the construction of the patent claims. They agreed that the inventor was referring to a machine that disintegrates large round bales of crop material by means of a manipulator that supports the bale while causing it to be engaged against the cutting device, and in which the disintegrated material is discharged from the machine. However, they disagreed on a number of points. In particular, they disagreed on what the inventor meant by the word “manipulator” and the phrase “discharge opening at the bottom of the right side wall to discharge material from the right side of the processor” in claim 1.

[26] Mr. Hanson focused on these points in paragraphs 73 and 74 and paragraphs 80 to 83 of his report (Appeal Book, page 1653, 1655-6):

73. The skilled person would understand what a “manipulator” is as referred to in claim 1. In this regard, such a skilled person would immediately take note of the inventor’s deliberate intention to broadly claim any device that accomplishes the purpose of this element of the invention, namely, to manipulate a bale of crop material. Such a manipulator is understood to re-orient (i.e., rotate and re-position) a bale of crop material towards the disintegrator for engaging and disintegrating all portions of the bale. There is an interaction of rotating parts, i.e., an interaction between a rotating disintegrator roller and a rotating bale that is rotated by a manipulator.

74. The inventor’s intent in claim 1 was not to claim a specific manipulating device with specific structural characteristics. As of April 2000, a skilled person would know of many different means and configurations for manipulating bales of hay in bale processors, each of which perform substantially the same function, in substantially the same way and achieve substantially the same result. The broad intent of claim 1 can be differentiated with the inventor’s particular intent in claim 5, which was to claim specific manipulator structure, namely, a manipulator that “comprises at least two manipulator rollers rotatably mounted inside the container substantially parallel to the disintegrator roller, and wherein one roller is located on each side of the disintegrator roller to define a disintegration opening where crop material is accessed by the disintegrator”.

...

80. The skilled person would understand that a “discharge opening” serves the purpose of allowing material to be discharged to the right. In other words, the inventor intended an essential purpose for the discharge opening, namely, that such discharge opening be of a configuration and size so as to allow for the “discharge [of] material from the right side of the processor”. This specific purpose for the discharge opening is spelled out in claim 1 with such specific language.

81. In light of the inventor’s stated purpose of the discharge opening, the skilled person would construe the phrase “a discharge opening at the bottom of the right side wall” as requiring an opening where materials may be discharged from the processor generally alongside, i.e., roughly parallel to, the disintegrator roller such that the discharge path is to the right. The exact dimensions and location of the discharge opening are not essential provided that there is an opening that allows for the discharge of materials out the right side of the crop material processor.

82. Such claim construction is consistent with how “a discharge opening at the bottom of the right side wall to discharge material from the right side of the processor” is described in the disclosure of the ’344 patent:

The discharge opening ⁴⁰ is formed by wall ¹⁰⁴, the bottom ¹⁰⁸ and the end walls ^{100 and 102} such that the flails ¹⁸ on the flail roller ¹⁶ drive the shredded crop material along the bottom ¹⁰⁸ to discharge it from the processor ¹.

83. The skilled person would understand that having a discharge opening “to discharge material from the right side of the processor” would be an essential element of the invention in claim 1 of the ’334 Patent. Furthermore, the skilled person would understand that while the exact dimensions and location of the discharge opening are not essential, it is an essential element of the invention in claim 1 of the ’334 Patent that the “discharge opening at the bottom of the right side wall” be generally located at the right side of the crop material processor as construed above.

[27] The last sentence of Mr. Hanson’s paragraph 74 is intended to invoke the presumption against redundancy derived from section 87 of the *Patent Rules*, SOR/96-423, that a dependent claim (in this case claim 5) is understood to include all of the limitations in the claim to which it refers (in this case claim 1) and is required to state “the additional features thereof”. The suggestion is that, because the manipulator specifically described in claim 5 is the two roller type, the general word “manipulator” in claim 1 must have been intended to refer to the two roller type of manipulator as well as manipulators of the other known types.

[28] In summary, Mr. Hanson's opinion is that the word "manipulator" in claim 1 should be construed to include manipulators of all forms known to the person skilled in the art at the relevant time, which would include the moving table device in Duratech's Balebuster. As to the discharge opening, his opinion is that this element contemplates an opening of any shape and size that will permit the discharge of disintegrated material to the right.

[29] Dr. Parish proposes an entirely different analysis. He explains that at the relevant time, at least three types of manipulator for supporting and feeding a bale into a disintegrator. One type of manipulator employs two "support rollers" that hold the bale while rotating it into the flail rotor. This is the manipulator described in the disclosure of the 334 patent, and it is also the mechanism used in Bridgeview's Bale King. A second type of mechanism employs a "traveling table", in which an inclined chain conveyor supports the bale and feeds it into the flail rotor. This is the mechanism used in Duratech's Balebuster. A third type involves a tub that rotates around a vertical axis to rotate a bale over a flail rotor mounted in an opening in the stationary floor that supports the bale.

[30] Dr. Parish notes that the disclosure begins by stating that it relates to crop material processors, without immediately explaining whether the invention relates to an entirely new bale processor or an improvement in an existing type. That question, he says, is immediately answered in the rest of the disclosure which refers in a number of ways to bale processors using a manipulation device of the first type, that is, the support roller mechanism. He takes into account that jamming, which forms a large part of the description of the problem with bale processors, is "inherently related to the support and rotation of a bale on manipulator rollers adjacent to the container walls

and over the disintegrator roller.” He concludes that a skilled person would understand that the inventor was using the term “baled crop processor” to refer to the type of processor that uses such rollers as the manipulator.

[31] Dr. Parish construed literally the phrase “discharge opening at the bottom of the right side wall to discharge material from the right side of the processor”. He suggests in his second report, answering the report of Mr. Hanson, that the inventor had a reason for locating the opening at the bottom of the right side wall. In the bale processor described in the disclosure, the discharged material would be sliding over the container bottom to the right side wall, so that was where the inventor put the opening.

[32] Having reviewed carefully the reports of both experts and the portions of the transcript to which the parties referred in argument, I conclude that it was open to the judge to accept the opinion of Dr. Parish on the construction of the 334 patent, and in particular to adopt his interpretation of the disputed words and phrases in claim 1. Dr. Parish’s interpretation of the patent is based on the context of the entire specification as it would be understood by a person skilled in the art at the relevant time, and it is soundly reasoned. In my view, there is no basis for concluding that the construction of the patent that he proposes is wrong in law.

[33] I agree with Bridgeview that this construction of the patent tends to make claim 5 redundant. However, that by itself cannot overcome a purposive interpretation of the specification (*Abbott*

Laboratories v. Canada, (Minister of Health), 2007 FCA 83 at paragraph 33, and *Nekoosa Packaging Corp. v. AMCA International Ltd.* (1994), 172 N.R. 387 (F.C.A.) at paragraph 37).

Infringement

[34] Duratech defended the infringement claim on the basis of two aspects of the Balebuster. First, the Balebuster uses a rolling table or conveyor style manipulator, not the support roller mechanism that the judge found to be an essential element of the relevant claims of the 334 patent. Second, in the Balebuster, the disintegrated material is not discharged through an opening at the bottom of the right side wall of the container, which the judge found to be another essential element of the relevant claims. Rather, the bale is disintegrated by flails that reach into the container between bars in an opening at the bottom of the left side wall. The disintegrated material is pulled out of the container through the *left* side wall opening, and flows *under* the container to be dispersed to the right of the processor.

[35] With respect to the manipulator, it is argued for Bridgeview that the conveyor or rolling table manipulator in the Balebuster infringes claim 1 because it performs substantially the same function as the two roller type of manipulator (it facilitates the disintegration of the bale), in substantially the same way (by supporting, rotating and manipulating the bale to move it to the disintegrator), to obtain substantially the same result (the bale is disintegrated and the disintegrated material is discharged out the right side of the processor). Bridgeview relies on the three part test from *Improver Corp. v. Remington Consumer Products Ltd.*, [1990] F.S.R. 181 (Pat. Ct.), cited by

Justice Binnie, writing for the Supreme Court of Canada in *Free World Trust v. Électro Santé Inc.*, [2000] 2 S.C.R. 1024, 2000 SCC 66.

[36] In my view, the difficulty with Bridgeview's argument is that the third *Improver* test is not met. That test asks whether a person skilled in the art would have understood from the language of the claim that the patentee intended that strict compliance with the primary meaning was an essential requirement of the invention. If the answer is yes, the variant is outside the claim. Bridgeview argues that the answer to this question is no. In my view, that cannot be the correct answer, because it is based on a construction of the patent that was rejected by the judge.

[37] With respect to the discharge opening, the judge found no infringement. He relied primarily on the evidence of Dr. Parish to the effect that there is a substantial difference in the way the Balebuster discharges the shredded material from that which is claimed in the 334 patent. Having carefully reviewed the evidence to which the parties referred in argument, it seems to me that this conclusion was reasonably open to the judge.

[38] In my view, there is no basis upon which this Court may intervene in the judge's conclusion on infringement.

Invalidity for obviousness

[39] Section 28.3 of the *Patent Act*, R.S.C. 1985, c. P-4, reads as follows:

28.3 The subject-matter defined by a claim in an application for a patent in Canada must be subject-matter that would not have been obvious on the claim date to a person skilled in the art or science to which it pertains, having regard to

(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.

28.3 L'objet que définit la revendication d'une demande de brevet ne doit pas, à la date de la revendication, être évident pour une personne versée dans l'art ou la science dont relève l'objet, eu égard à toute communication :

a) qui a été faite, plus d'un an avant la date de dépôt de la demande, par le demandeur ou un tiers ayant obtenu de lui l'information à cet égard de façon directe ou autrement, de manière telle qu'elle est devenue accessible au public au Canada ou ailleurs;

b) qui a été faite par toute autre personne avant la date de la revendication de manière telle qu'elle est devenue accessible au public au Canada ou ailleurs.

[40] The general test for obviousness as stated by Justice Hugessen, writing for this Court in *Beloit Canada Ltd. v. Valmet Oy* (1986), 8 C.P.R. (3d) 289 (at page 294), may be the most quoted passage in Canadian patent law. It reads as follows:

The test for obviousness is not to ask what competent inventors did or would have done to solve the problem. Inventors are by definition inventive. The classical touchstone for obviousness is the technician skilled in the art but having no scintilla of inventiveness or imagination; a paragon of deduction and dexterity, wholly devoid of intuition; a triumph of the left hemisphere over the right. The question to be asked is whether this mythical creature (the man in the Clapham omnibus of patent law) would, in the light of the state of the art and of common general knowledge as at the claimed date of invention, have come directly and without difficulty to the solution taught by the patent. It is a very difficult test to satisfy.

[41] The analytical framework for determining whether a patent is invalid for obviousness, as developed by Oliver LJ in *Windsurfing International Inc. v. Tabur Marine (Great Britain) Ltd.*,

[1985] R.P.C. 59 (C.A.) and adapted by Jacob LJ in *Pozzoli SPA v. BDMO SA*, [2007] F.S.R. 37 (p. 872), [2007] EWCA Civ 588, at paragraph 23, was cited with approval by the Supreme Court of Canada in *Apotex Inc. v. Sanofi-Synthelabo Canada Inc.*, [2008] 3 S.C.R. 265, 2008 SCC 61 (at paragraph 67). The *Pozzoli* approach requires consideration of the following series of questions:

- (1) Identify the notional "person skilled in the art" and 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?

[42] The decision in *Sanofi* went on to discuss "obvious to try", which I understand to be a refinement of the fourth question that may be appropriate to consider where, in the relevant art, advances are won by experimentation. The judge concluded, and I agree, that this is not a case where that refinement has any application.

[43] The judge's conclusion on the validity of the 334 patent is expressed as follows at paragraph 68 of his reasons, under the heading "*Conclusion: The Patent is invalid for obviousness*":

. . . I find that, on the claim date, in light of the state of the art and the common general knowledge of discharge systems on farm equipment generally, and bale processors specifically, the skilled person would not consider recognition of an advantage in most cases of a right-hand discharge in a bale processor to be novel.

(As I understand this paragraph, it was intended to express the judge's conclusion on the counterclaim of invalidity for obviousness, not for lack of novelty. It was not argued in this case that the 334 patent was invalid because it lacked novelty.)

[44] The judge cited the *Pozzoli* questions in an appendix to his reasons. He did not expressly incorporate the *Pozzoli* questions into his reasons but I assume that his analysis was intended to reflect them. As I understand his reasons, he concluded that the patent was invalid for obviousness on the basis of the following analysis:

- (1) The essence of the inventive concept, and that which is to be compared to the prior art, is “recognition of an advantage in most cases of a right-hand discharge in a bale processor using a gearbox”.
- (2) The state of the art at the relevant time included the following common knowledge of persons skilled in the art:
 - (a) A reversing gear box can be used to change the direction of a tractor's power take off from counter-clockwise to clockwise.
 - (b) Tractors generally have their controls on the right and it is natural for a tractor operator to look to the right to view the operation of pulled equipment.
 - (c) There is a trend away from left hand operation and toward right hand operation in other kinds of pulled farm equipment.
 - (d) There was on the market at the relevant time a bale processor called the Hesston BP 20 which, in relation to the 334 patent, was prior art, which had right hand discharge, which used a gear box, and from which a person skilled in the art would recognize the advantage in a bale processor of right hand discharge.
- (3) There is no relevant difference between the Hesston BP 20 and the inventive concept of the claim or the claim as construed.
- (4) Therefore the 334 invention is invalid for obviousness.

[45] In effect, because the judge found that the inventive concept of the 334 patent was the recognition of an advantage in most cases of a right-hand discharge in a bale processor using a gearbox, and the Hesston BP 20 was a right hand discharge bale processor that used a gear box, the fourth *Pozzoli* question was irrelevant.

[46] In my respectful view, the third point in the judge's analysis, which in effect was his answer to the third *Pozzoli* question, is incorrect because it does not take into account all of the essential elements of the claimed invention as compared to the Hesston BP 20. That error led directly to the failure of the judge to put his mind to the critical fourth *Pozzoli* question.

[47] The fourth *Pozzoli* question, in the context of this case, is whether a person skilled in the art of bale processors at the relevant time, knowing the advantage of right hand discharge and knowing that a gear box can be used to change the direction of a tractor's power take off from counter-clockwise to clockwise, would have come directly and without difficulty to the solution taught by the 334 patent.

[48] The technology employed by the Hesston BP 20 bale processor for the disintegration of bales was different than the technology disclosed in the 334 patent which, as the judge concluded, was limited to the kind of bale processor in which the manipulator was of the two roller type. In the Hesston BP 20, the bale was rotated vertically, not horizontally, and the rotation was accomplished by rotating the entire round tub container, not by a manipulator located inside the container. While the Hesston BP 20 did discharge to the right, and did employ a gear box to reverse the direction of

the tractor's power take off prior to driving the disintegration rotor, the evidence was that the gear box was added in order to increase the speed of rotation. Right hand discharge was a *result* of the addition of the gear box, but not the *purpose*. Further, the evidence was that the gear box was considered to be a detriment because it increased the cost of the machine. The Hesston BP 20 was on the market for approximately two years, and was replaced by a more economical model with a *left hand discharge*.

[49] Bridgeview argued at trial that the Hesston BP 20 could not fairly be considered "prior art" in relation to the invention disclosed in the 334 patent because there was no evidence of any recognition, among persons skilled in the art, of the advantages of right hand discharge. The judge did not agree. He relied on evidence from Dr. Parish and also from Mr. Davis, an engineer who was involved in the development of the Hesston BP 20. Mr. Davis testified among other things that the manufacturers of the Hesston BP 20 recognized that the right hand discharge feature was desirable because of the right hand location of the tractor controls. The judge accepted that evidence, rejecting the contrary evidence of Mr. Hanson. In my view, given the record before the judge, it was open to him to conclude, as he did, that the Hesston BP 20 was relevant prior art, and to infer from the evidence of Mr. Davis and Dr. Parish that persons skilled in the art would have recognized without difficulty the advantage of right hand discharge in pulled farm machinery, including bale processors.

[50] However, the conclusion that the Hesston BP 20 was relevant prior art, and that it taught the advantage of right hand discharge, does not establish that the invention disclosed in the 334 patent

was obvious. In that regard, it is useful to recall the well known caution against perfect hindsight as expressed by Justice Hugessen, writing for this Court in *Beloit* (cited above) at page 295:

Every invention is obvious after it has been made, and to no one more so than an expert in the field. Where the expert has been hired for the purpose of testifying, his infallible hindsight is even more suspect. It is so easy, once the teaching of a patent is known, to say, "I could have done that"; before the assertion can be given any weight, one must have a satisfactory answer to the question, "Why didn't you?"

[51] I agree with Bridgeview that the 334 patent discloses a combination invention. It is not fair to a person claiming to have invented a combination invention to break the combination down into its parts and find that, because each part is well known, the combination is necessarily obvious: see, for example, *Stiga Aktiebolag v. S.L.M. Canada Inc.* (1990), 34 C.P.R. (3d) 216 at page 245 (F.C.T.D.), which quotes this passage from *Wood & Amcolite Ltd. v. Gowshall Ltd.* (1936), 54 R.P.C. 37 at page 40 (per Greene L.J.):

The dissection of a combination into its constituent elements and the examination of each element in order to see whether its use is obvious or not is, in our view, a method which ought to be applied with great caution since it tends to obscure the fact that the invention claimed is the combination. Moreover, this method also tends to obscure the facts that the conception of the combination is what normally governs and precedes the selection of the elements of which it is composed and that the obviousness or otherwise of each act of selection must in general be examined in the light of this consideration. The real and ultimate question is "Is the combination obvious or not?"

See also *Omark Industries (1960) Ltd. v. Gouger Saw Chain Co. et al* (1964), 45 C.P.R. 169 (Ex. Ct.) and *Canamould Extrusions Ltd. v. Driangle Inc.*, 2003 FCT 244 (affirmed 2004 FCA 63).

[52] The invention claimed in the 334 patent is not simply the use of a gear box to change the direction of a tractor's power take off. The claimed invention includes the use of a gear box for that purpose, but only in combination with the other essential elements, resulting in a bale processor that disintegrates the bale in a particular way and discharges the disintegrated material in a particular way to the right. The question the judge should have asked, but did not, is whether the common general knowledge that he identified would have led the skilled but uninventive person to come directly and without difficulty to the particular combination of elements of the invention disclosed in the 334 patent, as construed by the judge.

[53] The evidence on this question that most favours the position of Duratech is found in the opinion of Dr. Parish. He opined that, given knowledge of the Hesston BP 20, it would have been obvious to a person skilled in the art who wished to design a right hand discharge bale processor to use a gear box or other reversing mechanism, combined with a right discharge opening, and that there was motivation to do so in light of the trend in the industry to right hand discharge for farm machinery pulled by tractors. This opinion, unlike Dr. Parish's opinion on patent construction and infringement, is weakened by the absence of supporting analysis. Indeed, it is little more than a bare conclusion. For example, it does not explain why at the relevant time, no one except the inventor of the Bale King had managed to produce a commercially successful right hand discharge bale processor. As mentioned above, the Hesston BP 20 was not commercially successful. It is reasonable to infer that the successful development of a right hand discharge bale processor required more than simply adding a reversing gear box to an existing bale processor.

[54] On the question of obviousness, Duratech cited in argument two additional items of prior art, namely U.S. patents 4,830,292 and 4,879, 810 (the “Frey patents”), which are patents for bale processors that pre-date the 334 patent. Indeed, U.S. patent 4,830,292 is disclosed in the 334 patent. I was able to find in the record no expert opinion construing these U.S. patents, but on a literal reading they appear to relate, in the one case, to a particular kind of cutting device in place of flails for disintegrating the bale, and in the other case, to an improvement in the means for manipulating the bale. I can find no mention in either U.S. patent of right hand discharge. Duratech says that these patents teach right hand discharge because they “implicitly” have a reversing gear. However, I am unable to discern from the patent alone whether that assertion is valid, and Duratech has not cited any evidence on the point.

[55] I conclude that the judge erred in law when he held that, given the state of the art at the relevant time, the skilled but un inventive person would have been led directly and without difficulty to the solution taught by the 334 patent. For that reason, the judge’s conclusion as stated in paragraph 68 of his reasons cannot stand. I would allow the appeal on that issue.

Conclusion

[56] For these reasons, I would allow the appeal in part. I would set aside the Federal Court judgment and replace it with a judgment that reads as follows:

The Plaintiffs' claim is dismissed and the Defendants' counterclaim is dismissed.

As success on the appeal is divided, I would award no costs on the appeal or in the Federal Court.

“K. Sharlow”

J.A.

“I agree

M. Nadon J.A.”

“I agree

Johanne Trudel J.A.”

FEDERAL COURT OF APPEAL

NAMES OF COUNSEL AND SOLICITORS OF RECORD

DOCKET: A-86-09

**APPEAL FROM A JUDGMENT OF THE HONOURABLE MR. JUSTICE
CAMPBELL OF THE FEDERAL COURT, DATED JANUARY 20, 2009 FILE NO.
T-1554-05.**

STYLE OF CAUSE: Bridgeview Manufacturing Inc.
and Highline Manufacturing Ltd.
v. 931409 Alberta Ltd. c.o.b.
Central Alberta Hay Centre,
Dennill's Agricenter Ltd. and
Duratech Industries International,
Inc.

PLACE OF HEARING: Ottawa, Ontario

DATE OF HEARING: February 10, 2010

REASONS FOR JUDGMENT BY: Sharlow J.A.

CONCURRED IN BY: Nadon J.A.
Trudel J.A.

DATED: July 14, 2010

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