Federal Court  Cour fédérale

Date: 20220107

Docket: T-451-20

Citation: 2021 FC 1437

Ottawa, Ontario, January 7, 2022

PRESENT: The Honourable Mr. Justice Zinn

BETWEEN:

KOBOLD CORPORATION,
KOBOLD COMPLETIONS INC.,
AND 2039974 ALBERTA LTD.

Plaintiffs/
Defendants by Counterclaim

and

NCS MULTISTAGE INC.

Defendant/
Plaintiff by Counterclaim

PUBLIC JUDGMENT AND REASONS

(Confidential Judgment and Reasons were issued December 17, 2021)

I. Introduction

[1] The Plaintiffs [Kobold] and the Defendant [NCS] are both in the business of providing equipment to the oil and gas industry for hydraulic fracturing, commonly known as fracking. In

this action, Kobold claim that NCS has infringed and is infringing Canadian Patent No. 2,919,561 [the ‘561 Patent] with four of its proprietary tools used in fracking.

[2] NCS moves for summary judgment on all of the claims raised in the pleadings pursuant to Rule 213 of the *Federal Courts Rules*, SOR/98-106. NCS asks to have the action resolved based on its defence of prior use pursuant to section 56 of the *Patent Act*, RSC 1985, c P-4. If successful, it says it will drop its counterclaim.

[3] In these Reasons I shall first describe (1) the fracking process, (2) the ‘561 Patent, (3) the NCS tools or devices at issue, and (4) the evidence of Kobold’s expert witness, Dr. Fleckenstein. After that, I shall analyze and discuss the issues involved in the matter, being (1) whether the matter is appropriate for summary judgment, (2) the proper interpretation of section 56 of the *Patent Act*, (3) the construction of the ‘561 Patent, (4) whether the NCS products or activities infringe the ‘561 Patent, and (5) whether NCS can rely on section 56 of the *Patent Act* as a defence to the action.

II. Facts

A. *Fracking*

[4] Fracking is a method of extracting oil and natural gas. It was explained in some detail at paragraphs 27 to 37 of the affidavit of the Plaintiff’s expert, Dr. William W. Fleckenstein. This explanation is not challenged and indeed accords with the description offered by counsel for NCS. I will summarize it.

[5] Hydrocarbons such as oil and natural gas are contained in formations below the earth's surface. In order to access these hydrocarbons and bring them to the surface, a well is drilled. The formation may require additional treatment, such as hydraulic fracturing, in order to stimulate the extraction of the hydrocarbons. This typically involves pumping large volumes of fluid at high pressure into the well.

[6] After drilling vertically, horizontal drilling may be required to allow the formation to be stimulated in multiple stages, typically starting from the toe of the horizontal lateral, the point furthest from the vertical portion of the well, and working back to the heel.

[7] This litigation concerns the bottomhole assembly [BHA], a tool used to prepare a well for production. The BHA is run down the well until it reaches a zone of interest (i.e. the area underneath a formation from which the operator wishes to extract oil or gas). An element of the BHA known as a packer is used to seal the well so that fluid cannot pass beyond it.

[8] The packer has anchors that it uses to attach itself to the wall of the well. The packers at issue in this litigation also have an element made of an elastomeric material. An elastomeric material is one that can be stretched. The elastomeric element is squeezed until it expands outward enough to seal the well, preventing fluids from flowing beyond the zone of interest. This squeezing is done by anchoring the packer and then continuing to push the BHA further into the hole. The anchor keeps some elements of the packer in place while others continue to move. Those moving elements push the elastomeric element into the non-moving elements, compressing it.

[9] Once the packer is set, sealing the well, the fracking fluid is injected into the well. The high pressure of the fluid further compresses the elastomeric element and assists in blocking off the downhole portion of the well.

[10] There are various ways for the fluid to enter the formation. In some cases, the pressure of the fluid is used to cut through the wall of the well at the zone of interest, creating permanent holes in the well lining. In other cases, ports are installed in the well casing. The BHA opens these ports to allow fluid to pass through. In some cases, the ports can be closed when the packer is unset.

[11] After the injection is complete, the packer must be unset by contracting the elastomeric element and disengaging the anchors. However, after injecting the fluid, there is a large difference in the pressures above and below the packer. These pressures need to be equalized before unsetting the BHA. The most common ways to do this in the prior art are by placing a valve, called an equalization valve, on the sealing element, or by having a passageway through the centre of the tool that allows fluid to pass through, equalizing pressure. The ‘561 Patent discloses a new method of equalizing pressure by pulling on the sealing element.

[12] Once the packer is unset, the BHA can be moved to the next zone of interest. In cases where permanent holes are created or where the ports cannot be closed, the completion must take place starting from the toe end of the well and moving towards the heel. Otherwise, the fluid would exit through the previously opened holes, causing a loss of pressure. If the ports can be

closed, this is not a concern. Therefore, an advantage of closable ports is the ability to frack zones of interest in any order and to re-frack previously fracked zones.

B. *The '561 Patent*

[13] The inventive concept of the '561 Patent is a new way of equalizing pressure in the BHA by pulling on the sealing element. In so doing, the sealing element can be disengaged from the wall of the well, creating an annular (i.e. ring shaped) passageway on the outside of the sealing element for fluid to flow through.

[14] Independent claim 1 of the '561 Patent reads as follows:

> 1. A method for completing a wellbore comprising:
>
> running a completion tool, having a resealable packer therein, into the wellbore, the resealable packer having
>
> an annular elastomeric sealing element;
>
> an anchor for anchoring the sealing element into the wellbore; and
>
> a mandrel and a housing, the mandrel being axially and telescopically moveable within the housing, the elastomeric sealing element being positioned circumferentially about the mandrel and connected at least a pull end thereof;
>
> locating the sealing element below a zone of interest in the wellbore;
>
> axially compressing the elastomeric sealing element into sealing engagement with the wellbore and actuating the anchor by moving the mandrel axially toward the housing;

> treating the zone of interest above the compressed elastomeric sealing element, creating a pressure differential across the sealing element, and thereafter;
>
> applying axial tension to the pull end of the elastomeric sealing element for radially retracting at least the pull end thereof by moving the mandrel axially away from the housing for forming an annular passageway between the elastomeric sealing element and wellbore, allowing pressure thereabove to equalize with pressure therebelow, for releasing the packer from sealing engagement with the wellbore.

[15] Much of the method described in this claim is a recitation of the known prior art, which has been discussed above. The novel aspects involve pulling on the sealing element to create an annular passageway.

[16] The method of claim 1 makes use of a resealable packer (i.e. a packer that can be used multiple times). The packer has an elastomeric sealing element, an anchor, and a mandrel and housing. A mandrel is a slightly tapered cylinder. In the packer in claim 1, the mandrel is contained within a housing. The mandrel can move telescopically within the housing, that is to say, it can move back and forth along the axis of the housing like a telescope being opened or closed.

[17] The elastomeric sealing element is connected to the mandrel. This connection exists at least at the “pull end” of the sealing element. This is defined in the specification as the end at which the sealing element is eventually pulled to decompress it.

[18] The packer is positioned near a zone of interest. The mandrel is then pushed into the housing which engages the anchor and compresses the sealing element, sealing the well. Fracking fluid is injected and a pressure differential forms.

[19] After injecting the fluid, the mandrel is pulled away from the housing. Because the mandrel is connected to the sealing element, it pulls on it, which causes it to decompress, forming an annular passageway for fluid to flow through and allowing the pressure to equalize.

[20] Independent claim 9 is similar to claim 1. It claims a method of equalizing pressure above and below a sealing element of a packer. In effect, it describes the final step in claim 1. However, unlike in claim 1, the pull end of the sealing element is described as being "secured" to the mandrel rather than being "connected" to it.

[21] Independent claim 12 is virtually identical to claim 9. However, rather than being a method for equalizing pressure, it is a method for protecting the sealing element. The specification of the '561 Patent indicates that debris can build up in the wellbore during fracking. The '561 Patent claims that creating an annular passageway around the sealing element can reduce the risk of this debris damaging the sealing element. As with claim 9, the pull end of the sealing element in claim 12 is described as being "secured" to the mandrel.

[22] Independent claim 15 is for a pressure equalization tool. It is largely equivalent to claim 9, the pressure equalization method. However, in claim 15, as in claim 1, the mandrel and the

pull end of the sealing element are described as being “connected” to each other rather than “secured.”

[23] Most of the dependent claims are not relevant for this matter. However, four dependent claims are of interest: Claims 8, 11, 14, and 29 are dependent on claims 1, 9, 12, and 15, respectively. In claims 8 and 29, there is a ring “secured” to the uphole end of the sealing element (i.e. the end closest to the entrance of the well). This ring is attached to the mandrel by threads. In the case of claim 8, the ring is described as being “connected” to the mandrel by threads, while claim 29 it is described as being “operatively connected.” In claims 11 and 14 the pull end of the sealing element is described as being “secured” to the mandrel by threads.

[24] Most of the figures in the ‘561 Patent show embodiments in which the sealing element is attached to a ring, with the ring being attached to the mandrel by threads. However, in addition to examples in which the mandrel is attached to the ring by threads, there is also an example that operates by way of “co-operating shoulders” on the mandrel and the ring. These shoulders can be seen in Figure 8 of the ‘561 Patent (elements 86 and 88).

[25] When the mandrel is pushed telescopically into the housing, the space between the shoulders increases. When the mandrel is pulled back out, the mandrel is able to move for some distance without the ring moving. Eventually however, the shoulders push against each other and pulling the mandrel further will also cause the ring to move in the same direction. The effect of this is that there is some distance for which the mandrel can move without the ring also moving. In the case of a threaded connection, the mandrel and the ring always move together.

C. *NCS's Devices*

[26] NCS builds and operates a number of BHAs. The four BHAs at issue in this litigation are known as the Mongoose, Shift Frac Close [SFC], Shift Frac Close 2 [SFC 2], and Innovus. The Innovus BHA is also referred to as the Shift Frac Close 3 in some of the materials.

[27] The evidence is that each of these BHAs uses as part of its packer assembly a device named the Blue Bullet. Each is used in conjunction with an equalization value which releases the fluid pressure and unsets the packer.

[28] According to Ryan Redecopp, an employee of NCS, NCS has been using the Blue Bullet packer element in its BHAs since 2012. Mr. Redecopp says that the Blue Bullet element was tested in the field in 2012 and since then has been used in all of the NCS's BHAs that require the use of a compression set packer.

[29] While the Blue Bullet element has been used in NCS's BHAs since 2012, variants of this device have been developed over time, including a "scalloped" Blue Bullet element.

[30] The Mongoose BHA has been in use since 2012. The evidence of the dates of first use of the other BHAs is unclear, but appear to have been subsequent to the Mongoose.

[31] At the hearing, Kobold admitted that NCS can continue to manufacture and use the 2012 Mongoose (presumably because of section 56 of the *Patent Act*), but says that what NCS cannot do is expand into new commercial products, such as the other three BHAs.

D. *The Fleckenstein Affidavit*

[32] As noted, Kobold filed the affidavit of Dr. William Fleckenstein, their expert in this proceeding. A motion by NCS to file a reply expert affidavit was dismissed: see *Kobold Corporation v NCS Multistage Inc,* 2021 FC 742. Dr. Fleckenstein is a registered engineer in the state of California and a professor at the Colorado School of Mines in Petroleum Engineering. He is also a principal at a petroleum engineering consulting firm.

[33] In his affidavit, Dr. Fleckenstein construes the claims of the ‘561 Patent, discusses the differences in structure and function of the various BHAs of NCS, and determines whether any of the four packer assemblies that he reviewed, or their use in a completion tool, fall within the scope of the independent claims of the ‘561 Patent.

[34] Dr. Fleckenstein’s construction of the ‘561 Patent’s claims is largely uncontroversial except on a single point. Much of his construction has already been summarized above. The major point of contention regarding Dr. Fleckenstein’s construction is with respect to the terms “secured” and “connected.”

[35] At paragraphs 52 to 65 of his affidavit, Dr. Fleckenstein defines several terms in the ‘561 Patent as, in his opinion, they would be understood by the person ordinarily skilled in the art. “Connected” and “secured” are defined by Dr. Fleckenstein as follows:

> [0055] **Connected** – two or more elements that are in some way linked together. This is a broad term that does not specify or limit the type of connection between the elements.
>
> […]
>
> [0057] **Secured** – two elements that are attached together to allow a force to be transmitted from one structure to the next, and to allow co-movement of the two elements.

[36] As an example of elements that may be connected but not secured, one can imagine two objects joined by a loose rope. While they are connected, moving one object will not necessarily move the other, unless the movement is so great as to cause the rope to become fully extended. This is in contrast with two objects connected by a rigid metal bar. Any movement of one object will always cause the other object to move with it. Dr. Fleckenstein would describe the objects connected by a rigid bar as secured to one another.

[37] The distinction between “connected” and “secured” is relevant, as claims 1 and 15 describe the mandrel and the sealing element as being “connected” to each other, while claims 9 and 12 describe the sealing element being “secured” to the mandrel.

[38] In Dr. Fleckenstein’s opinion, devices in which the sealing element is connected to the mandrel by threading (as in Figures 1-7 of the ‘561 Patent) are both connected and secured. However, devices which operate by way of co-operating shoulders are connected but not

secured, as the mandrel can be moved, at least for some distance, without moving the sealing ring.

[39] Dr. Fleckenstein notes in his claim construction that the claims of the ‘561 Patent make no mention of an equalization valve. In his opinion, the presence of an equalization valve is not mutually exclusive with the claims of the ‘561 Patent. A device falling under the claims of the ‘561 Patent could include an equalization valve to further increase the speed at which equalization occurs. Dr. Fleckenstein notes that a major drawback of equalization valves is that they have limited cross-sectional area, which affects equalization time. Using both an equalization valve and the methods disclosed in the ‘561 Patent would reduce this time, leading to less expense on a wellsite.

[40] Dr. Fleckenstein engages in a thorough analysis of the Mongoose, SFC, SFC 2, and Innovus packer assemblies. He finds the following as the major differences between NCS’s packer assemblies:

- the Innovus BHA has an additional set screw to secure and attach the ring on the Blue Bullet (which is attached to the sealing element) to the mandrel, allowing for co-movement of the mandrel and the sealing element;

- the SFC 2 BHA has a split ring on the mandrel to more directly connect the Blue Bullet element to the mandrel;

- the Innovus BHA has a mechanical locator incorporated into the packer housing, while in the other BHAs this is a separate component;

- the Innovus BHA has a number of new components, including a secondary housing, which appear to be designed to maintain the locator in a specific location;

- the SFC packer has drilled holes in the mandrel and cone of the SFC packer as compared to the Mongoose packer;

- the SFC 2 packer has additional drilled holes in the mandrel, set screws, an O-ring, and a backup ring that are not present in the SFC packer;

- the Mongoose packer does not have dual-setting functionality (tension and compression);

- the Mongoose packer has a slip retaining ring, while the other packers do not;

- the Mongoose packer has a one-piece mandrel while the other packers have a two-piece mandrel; and

- the SFC and SFC 2 packers have two-piece cones, while the Mongoose and Innovus packers have one-piece cones.

[41] In Dr. Fleckenstein's opinion, all four of NCS's BHAs fall under claims 1 and 15 of the '561 Patent. However, only the Innovus BHA infringes claims 9 and 12. This is because all of NCS's BHAs operate by way of co-operating shoulders and therefore the sealing element is not "secured" to the mandrel. However, in the case of the Innovus, there is a set screw running from the sealing ring to the mandrel, which secures them, despite the co-operating shoulders.

[42] Central to the infringement analysis for the Mongoose, SFC, and SFC 2 BHAs is the fact that NCS's standard operating procedures [SOPs] call for the operator to disengage the BHA by pulling it out of the hole and continuing to pull. Dr. Fleckenstein acknowledges that pulling the BHA out of the hole opens the equalization valve, which begins the process of pressure equalization. However, once the equalization valve is fully opened, pulling continues, which, according to Dr. Fleckenstein, would cause the sealing element to be pulled, creating an annular passageway allowing for further equalization.

[43] The SOPs indicate that the BHA is to be pulled no faster than [redacted] feet per minute. Dr. Fleckenstein indicates that the equalization valves on the Mongoose and SFC BHAs can move for [redacted] inches before further pulling would pull on the sealing element. At the maximum speed of [redacted] feet per minute, this would take [redacted] seconds. In the case of the SFC 2 BHA, there are multiple possible configurations so it is unclear how much the BHA can be pulled out of the hole before the sealing element is pulled.

[44] In the case of the Innovus BHA, in Dr. Fleckenstein's opinion, pulling on the sealing element would begin as soon as the BHA is pulled out of the hole, as the sealing element is secured to the mandrel by the set screw.

[45] NCS takes issue with some of the assertions of Dr. Fleckenstein regarding its products.

[46] NCS submits that Dr. Fleckenstein is mistaken that in the Innovus BHA the Blue Bullet is secured to the mandrel by a set screw. This is particularly relevant because Kobold asserts that

this constitutes a substantial change between the Innovus, which was released after the claim date, and the BHAs that pre-date the claim date.

[47] NCS notes that Dr. Fleckenstein agreed that the dimensions of the Innovus packer are essentially the same as the other packers and he agreed that those packers move as a result of the cooperating shoulders. NCS submits that if the dimensions are the same, then the cooperating shoulders of the Innovus packers are what causes the Blue Bullet to move with the mandrel, not the set screw.

[48] NCS further submits that the set screw does not even touch the mandrel. It says that the set screw is used, like set screws present on the other packers, to prevent unthreading of the equalization valve. It says that the set screw passes through a hole in the mandrel and does not touch it.

[49] NCS presented a CAD drawing of the Innovus around the set screw to Dr. Fleckenstein to demonstrate that the screw does not touch the mandrel. This CAD drawing was a zoomed in version of another drawing. Rather than accepting that this drawing shows that the set screw does not touch the mandrel, Dr. Fleckenstein suggested that the drawing was inaccurate.

[50] NCS takes issue with Dr. Fleckenstein's assertion that, using its devices, equalization could take some time. NCS points to the evidence of its affiant, Mr. Redecopp, who has used the devices and says that equalization occurs within a few seconds of the equalization valve being

opened. NCS submits that Dr. Fleckenstein's comments on equalization time take into account the bleed off time, when the equalization valve is not open and no pulling has occurred.

[51] NCS points to a chart showing pressure on either end of the BHA over time. It shows a relatively slow decrease in pressure at the uphole end with no change in pressure at the downhole end, and then a sudden change in pressure on both ends to equilibrium. NCS submits that the initial decrease uphole is due to bleeding off pressure ahead of opening the equalization valve and the later rapid drop is due to the valve being opened. It notes that this data is supported by Mr. Redecopp's evidence on cross-examination that equalization only takes a couple of seconds.

III. Analysis

[52] This summary judgment motion shall be analyzed and discussed under the following headings:

1. Is this matter appropriate for summary judgment or summary trial?

2. What is the proper interpretation of section 56 of the *Patent Act*?

3. What is the proper construction of the claims of the '561 Patent?

4. Do the NCS products or activities infringe the '561 Patent?

5. Can NCS rely on section 56 of the *Patent Act* as a defence to any infringement?

[53] This is the first judicial interpretation of section 56 of the *Patent Act*, and the first occasion the Court has had to consider it as a defence to a patent infringement action.

A. *Is this matter appropriate for summary judgment or summary trial?*

[54] NCS correctly notes that the purpose of summary judgment is to provide a proportionate, cost-effective, and timely dispute resolution: *Hryniak v Mauldin*, 2014 SCC 7 at paras 1-2. It further notes that summary judgment provides a mechanism to ensure a fair balance between expediency and a just resolution of disputes: *Canmar Foods Ltd v TA Foods Ltd*, 2021 FCA 7 at para 23.

[55] NCS submits that, win or lose, this motion will simplify the underlying action. If it is successful, the action is resolved; if Kobold are successful, then the defence of prior use need not be considered at trial.

[56] Rule 215 of the *Federal Courts Rules* provides this Court with clear direction on a summary judgment motion.

[57] The Court must grant summary judgment if it is satisfied that there is no genuine issue for trial: Rule 215(1). Where the only genuine issue for trial is a question of law, the Court may determine the question and grant summary judgment accordingly: Rule 215(2)(b). If the Court is satisfied that there is a genuine issue for trial, the Court may still determine that issue by way of summary trial or dismiss the motion in whole or in part, and order that the action or the issues in

the action not disposed of by summary judgment proceed to trial or that the action be conducted as a specially managed proceeding: Rule 215(3).

[58] The burden of establishing that there is no genuine issue for trial is heavy and summary judgment should be granted only in the clearest of cases: see *Watson v Canada (Indian and Northern Affairs)*, 2017 FC 321 at para 22. The Federal Court of Appeal has instructed that the proper test is whether the case is so doubtful that it does not deserve consideration by the trier of fact: see *Premakumaran v Canada*, 2006 FCA 213 at para 8. It has also instructed that the motions judge can only make findings of fact or law where the relevant evidence is available on the record and does not involve a serious question of fact or law which turns on the drawing of inferences: see *Apotex Inc v Merck & Co*, 2002 FCA 210 at para 49.

[59] The current version of the Rules with respect to summary trial were adopted from the British Columbia rules for summary trials. In *Louis Vuitton Malletier SA v Singga Enterprises (Canada) Inc*, 2011 FC 776 at paragraphs 95-96, this Court considered the British Columbia jurisprudence on summary trials and found that:

- the onus of proof is the same as at trial, that being the party asserting the claim or defence must prove it on a balance of probabilities;

- on a summary trial motion, the judge can find the facts as they would upon a trial;

- the judge should give judgment unless doing so would be unjust, regardless of complexity or conflicting evidence; and

- in determining whether summary trial is appropriate, the judge should consider factors such as the amount involved, the complexity of the matter, its urgency, any prejudice likely to arise by reason of delay, the cost of taking the case forward to a conventional trial in relation to the amount involved, the course of the proceedings, and any other matters that arise for consideration.

[60] For the reasons set out in detail below, I have concluded that some, but not all, aspects of this claim and defence are suitable for summary judgment.

[61] The proper interpretation of section 56 of *Patent Act* is a discrete question of law that can be resolved without reference to any of the factual issues at play. It is an issue suitable for summary judgment.

[62] Furthermore, it is appropriate to construe the claims of the ‘561 Patent on this summary judgment motion. There is evidence in the form of Dr. Fleckenstein’s affidavit to assist in resolving this issue.

[63] It has often been observed that in Canada, the construction of the claims of a patent is a question of law to be determined by the trial judge. The judge is to determine what a person skilled in the art of the patent would have understood the claim to mean at the relevant date.

Expert evidence can assist the trial judge, but the proper interpretation is ultimately left to the judge: see *Western Electric Co v Baldwin International Radio*, [1934] SCR 570 at 572-573; *Halford v Seed Hawk Inc*, 2001 FCT 1154 at para 24; *GlaxoSmithKline v Pharmascience Inc*, 2011 FC 239 at para 86.

[64] As will be seen below, there are areas of the claim and defence that I have concluded cannot be determined on the evidence before the Court and therefore must be left to be determined at a trial.

B. *What is the proper interpretation of section 56 of the Patent Act?*

(1) Legislative History of Section 56 of the *Patent Act*

[65] Section 56 of the *Patent Act*, as it currently reads, came into effect on December 13, 2018. It is reproduced in full at Annex A. This provision applies only in respect of an action or proceeding in respect of a patent issued on the basis of an application whose filing date is on or after October 1, 1989, and that is commenced on or after October 29, 2018. The amended provision came into effect by virtue of the *Budget Implementation Act, 2018, No 2*, SC 2018, c 27 [*Budget Implementation Act*], which is an omnibus statute modifying a number of statutes.

[66] Subsections (1), (6) and (9) of section 56 of the *Patent Act* are at play in this litigation. They read as follows:

56 (1) Subject to subsection (2), if — before the claim date of a claim in a patent — a	56 (1) Sous réserve du paragraphe (2), si une personne, avant la date d'une

person, in good faith, committed an act that would otherwise constitute an infringement of the patent in respect of that claim, or made serious and effective preparations to commit such an act, it is not an infringement of the patent or any certificate of supplementary protection that sets out the patent, in respect of that claim, if the person commits the same act on or after that claim date.

[…]

(6) Subject to subsection (7), the use of an article is not an infringement of a patent or any certificate of supplementary protection that sets out the patent, in respect of a claim, if the article was acquired, directly or indirectly, from a person who, before the claim date of that claim, in good faith, made or sold, or made serious and effective preparations to make or sell, an article that is substantially the same as the one used, for that use.

[…]

(9) Subject to subsection (10), the use of a service is not an infringement of a patent in respect of a claim if the

revendication se rapportant à un brevet et de bonne foi, a commis un acte qui par ailleurs constituerait une contrefaçon du brevet relativement à la revendication, ou a fait de bonne foi des préparatifs effectifs et sérieux en vue de commettre un tel acte, l'acte ne constitue pas une contrefaçon du brevet ou de tout certificat de protection supplémentaire qui mentionne le brevet, relativement à cette revendication, si cette personne commet le même acte à compter de cette date.

[…]

(6) Sous réserve du paragraphe (7), l'utilisation d'un article ne constitue pas une contrefaçon de brevet ou de tout certificat de protection supplémentaire qui mentionne le brevet, relativement à une revendication, si l'article est acquis, directement ou autrement, d'une personne qui, avant la date de la revendication, a de bonne foi fabriqué ou vendu — ou a fait de bonne foi des préparatifs effectifs et sérieux en vue de fabriquer ou de vendre — un article, qui est sensiblement le même que celui utilisé, pour cette utilisation.

[…]

(9) Sous réserve du paragraphe

service is provided by a person who, before the claim date of that claim, in good faith, provided, or made serious and effective preparations to provide, a service that is substantially the same as the one used, for that use.	(10), l'utilisation d'un service ne constitue pas une contrefaçon de brevet relativement à une revendication si le service a été fourni par une personne qui, avant la date de la revendication, a de bonne foi fourni — ou a fait de bonne foi des préparatifs effectifs et sérieux en vue de fournir — un service, qui est sensiblement le même que celui utilisé, pour cette utilisation.

[67] Prior to this amendment, the only substantive defence in section 56 was subsection 56(1) which then read as follows:

56 (1) Every person who, before the claim date of a claim in a patent has purchased, constructed or acquired the subject matter defined by the claim, has the right to use and sell to others the specific article, machine, manufacture or composition of matter patented and so purchased, constructed or acquired without being liable to the patentee or the legal representatives of the patentee for so doing.	56 (1) Quiconque, avant la date de revendication d'une demande de brevet, achète, exécute ou acquiert l'objet que définit la revendication peut utiliser et vendre l'article, la machine, l'objet manufacturé ou la composition de matières brevetés ainsi achetés, exécutés ou acquis avant cette date sans encourir de responsabilité envers le breveté ou ses représentants légaux.

[68] The summary of the *Budget Implementation Act*, which is included in the statute as a preamble, specifically notes that:

Subdivision A of Division 7 of Part 4 amends the *Patent Act* in order to:	La sous-section A de la section 7 de la partie 4 modifie la *Loi sur les brevets* afin :
[…]	[…]
(c) expand the rights of a person in respect of a claim in a patent who meets the requirements to be considered a prior user;	c) d'étendre les droits, à l'égard d'une revendication se rapportant à un brevet, de toute personne qui satisfait aux conditions lui permettant d'être considérée comme un utilisateur antérieur;

[69] From this, it can be seen that the current version of section 56 is to be read as granting more expansive rights than the previous version. Aside from this, there is no guidance on the intention of the legislators to be obtained from any Parliamentary debate or committee review.

[70] The current version of subsection 56(1) differs in three key ways from the former.

[71] First, the previous version granted a prior user the right to use and sell a patented article, machine, manufacture, or composition of matter. In this respect, it was limited to physical inventions and did not cover patented methods. The current version grants a prior user the right to commit an "act" that would have otherwise constituted infringement. This is significantly broader and covers a wider set of circumstances than simply the sale or use of a physical product. The new statutory language includes the use of a patented process as a prior use. NCS submits, and I agree, that the word "act" in subsection 56(1) should be read in light of section 42 of the *Patent Act*, which speaks to a patent granting exclusive rights to "making, constructing and using

the invention and selling it to others to be used." These are the acts protected by subsection 56(1).

[72] Second, the previous English version of subsection 56(1) limited the protection to the sale or use of the "specific" physical manifestation of the invention. While the French version did not say this explicitly, it should be interpreted in this manner in order to be consistent with the English version. The current version of subsection 56(1), in both languages, instead protects the commission of "the same act" ("le même acte") that would have constituted infringement.

[73] Finally, the current version of subsection 56(1) grants protection not only to persons who committed an infringing act prior to the claim date, but also to those who "made serious and effective preparations to commit such an act." There is no such language in the previous version.

[74] In *Merck & Co, Inc v Apotex Inc*, 2006 FCA 323 [*Merck*], the Federal Court of Appeal applied former subsection 56(1) narrowly. In *Merck*, the defendant Apotex purchased batches of Lisinopril, the subject of the plaintiff's patent, from Delmar. The contract of purchase was drafted so that title in the product would only pass to Apotex upon Apotex being satisfied that the product batches met Apotex's requirements. The Federal Court of Appeal found at paragraphs 81 and 82 that Apotex did not have prior user's rights:

> […] Apotex cannot be said to have purchased or acquired the Delmar batches until they obtained title to them. If the Delmar batches were of a finished product, title would have passed to Apotex and Apotex could then claim the statutory benefit. However, that is not the case here. At trial, Dr. Dickinson, President of Delmar, testified that they were not satisfied that the Delmar batches met the description of the lisinopril Apotex sought to purchase. The lisinopril had not yet been isolated as a solid and

> still had to undergo purification steps followed by drying before it could be released as a finished product. These steps were eventually undertaken but it was not until October 23, 1990, and November 7, 1990, that the Delmar batches were packaged and ready for delivery.
>
> As a result, title could not pass to Apotex until the product was in a deliverable state (i.e. October 23, 1990, and November 7, 1990). By that time, the ′350 patent was already granted to Merck (October 16, 1990) and Apotex's right to reap the benefit of section 56 was already extinguished.

[75] The inclusion of "serious and effective preparations" in subsection 56(1) was likely designed to override the outcome in *Merck*. Under the new provisions, it is likely that a court would have found that serious and effective preparations had been made given that Apotex had ordered the Lisinopril and production had commenced but had not been completed.

[76] Subsections 56(6) and 56(9) deal with the use of a purchased article or service. They appear designed to extend prior user rights to third parties. There are no corresponding provisions in the previous version of the *Patent Act*.

(2) The Parties' Submissions on Section 56 of the *Patent Act*

[77] Kobold and NCS differ on the standard of similarity subsection 56(1) of the *Patent Act* requires. What does "the same act" in that subsection mean?

[78] NCS submits that it means the same or substantially the same. Kobold submit that it means identical or nearly identical. This is not a mere semantic dispute. The resolution of this

issue of interpretation guides how different, if at all, the act subsequent to the issuance of the patent can be from the act prior and still obtain the protection of subsection 56(1).

[79] Both parties directed the Court to English jurisprudence interpreting its legislative provision providing for a prior use defence. The British provision is subsection 64(1) of the United Kingdom's *Patents Act 1977* [the UK Act] which provides as follows:

> 64 (1) Where a patent is granted for an invention, a person who in the United Kingdom before the priority date of the invention –
>
> > (a) does in good faith an act which would constitute an infringement of the patent if it were in force, or
> >
> > (b) makes in good faith effective and serious preparations to do such an act,
>
> has the right to continue to do the act or, as the case may be, to do the act, notwithstanding the grant of the patent; but this right does not extend to granting a licence to another person to do the act.

[80] One immediately notices that the UK legislation refers to doing "the act" after the patent issues; whereas the Canadian Act speaks to doing "the same act on or after that claim date." [emphasis added]

[81] In *Lubrizol Corporation v Esso Petroleum Co Ltd*, [1997] RPC 195 (Eng CA) at 216, the Court of Appeal interpreted "the act" in the UK statute to mean "substantially the same act":

> In deciding whether the activity is substantially the same all the circumstances must be considered. Both technical and commercial matters must be taken into account. That is important in a case such as the present where there are inherent minor variations in starting materials or the like. If the protected act has to be *exactly* the same (whatever that may mean) as the prior act then the protection given by the section would be illusory. The section is

> intended to give a practical protection to enable a man to continue doing what in substance he was doing before.
>
> [emphasis added]

[82] NCS submits that the UK Act is similar to the Canadian Act and therefore English jurisprudence is informative on how to interpret the Canadian Act. It submits, based on judicial interpretation of the UK Act, that the Canadian Act should be interpreted to mean that a prior user can commit "substantially the same act" without infringing the patent. As noted above, it also submits that "an act" should be taken to mean any action that would infringe a patent, namely making, constructing, and using the invention, or selling it to others to be used.

[83] NCS further submits that because subsection 56(1) limits its application to "an act that would otherwise constitute an infringement of the patent in respect of that claim," a prior user is granted immunity from any infringement of a claim that it infringed prior to the claim date and that changes to ancillary technologies, not related to the patent claims, do not prevent the application of subsection 56(1).

[84] NCS submits that this Court can find the prior use defence applies without first finding that infringement has occurred. NCS relies on its factual assertion that it has been preforming the same acts after the claim date of the '561 Patent as before the claim date. There are therefore two possibilities: If its acts would constitute an infringement but for section 56, then section 56 is engaged and there is no infringement. If its acts do not constitute infringement, then there is no need to consider section 56 as no infringement has occurred. In either scenario, the acts do

not infringe the ‘561 Patent. The only relevant consideration is whether it has been performing substantially the same acts.

[85] Kobold agree that the UK Act has interpreted the language “the act” to mean “substantially the same act.” In the UK, the prior use and the current use need not be identical, but the prior user does not have full rein to manufacture any infringing product or to expand into other products.

[86] Kobold note that the Canadian Act does not use the same language as the UK Act. They observe that section 56 of the Canadian *Patent Act* sets out two different standards of similarity for what acts are protected by prior user’s rights. Subsections 56(1), 56(3), and 56(4) make reference to “the same” act, while subsections 56(6) and 56(9) make reference to “substantially the same” article or service.

[87] Kobold submit that by using different phrases in the different sections, Parliament is presumed to have intended that the words should have different meanings. They say that this presumption is strengthened by the fact that the different phrasings are found within the same section of the *Patent Act* and were introduced as part of the same amending legislation.

[88] Therefore, Kobold submit that the words “same act” should be interpreted to require near identicality to benefit from subsection 56(1), while the words “substantially the same” in subsections 56(6) and 56(9) imply a standard similar to that of the UK Act.

[89] Under the interpretation proposed by Kobold, the proper approach in applying subsection 56(1) is to (i) determine what act(s) occurred before the claim date, (ii) determine whether the act(s) would constitute an infringement, and (iii) determine whether the act(s) after the claim date are the same or nearly identical as the act(s) before.

[90] Kobold submit that the language of the section is clear that the comparison to be made is between two acts to each other and is not an assessment of whether both a prior and subsequent act infringe a claim, as there are multiple ways to infringe a patent claim. They rely on the judgment of Justice Kitchin of the England and Wales High Court (as he then was) in *Forticrete Ltd v Lafarge Roofing Ltd*, [2005] EWHC 3024 at paragraph 25, where he rejected an argument from a defendant that, having made one infringing product, it was entitled to make any other product falling within the scope of the patent.

(3) Analysis

[91] Subsection 56(1) provides a defence to a person doing an act that would otherwise be an infringement of a claim based on a comparison of the pre- and post-patent infringing "act" ("acte"). I agree with NCS that the word "act" is to be interpreted in keeping with the acts which the patent protects, as set out in section 42 of the *Patent Act*; namely "making, constructing and using the invention and selling it to others to be used." Those are the acts that are potentially protected.

[92] With respect to the standard of similarity, I find that subsection 56(1) of the *Patent Act* requires the acts pre- and post-patent must be the "same" ("le même acte"), i.e. identical. I reach this conclusion for the following reasons.

[93] First, the word "same" is used in subsection 56(1) as an adjective describing the noun "act" and in its ordinary grammatical meaning means identical. "Same" is defined in the Canadian Oxford Dictionary, 2nd ed, used as an adjective, as follows:

> **Same** *adjective* **1** (often prec. by *the*) **a** identical in form, appearance, or number (*how embarrassing, we're wearing the same dress; they are the same age*). **b** not different (*we go to the same doctor*). **2** unchanged, unvarying, uniform (*they've been giving the same service for over fifty years*). **3** (usu. prec. by *this, these, that, those*) (of a person or thing) previously alluded to; just mentioned (*this same medical student went on to become a doctor*). **4** (in *combination*) identical, not different (*same-age partners*).

"Même" is defined in Le Petit Robert, 2022 ed as follows:

> **adj. Indéf. 1** (Devant le nom) Marque l'identité absolue....Marque la simultanéité….Marque la similitude → **semblable...**Marque l'égalité. → **égale.**

[94] Second, it is to be noted that subsections 56(6) and subsections 56(9) allow a third party defence of prior use on the less stringent standard of "substantially the same" ("sensiblement le même"). The choice to use the phrase "substantially the same" in subsections 56(6) and 56(9) of the *Patent Act* while using the phrase "the same" in subsection 56(1) makes it clear that Parliament intended different standards to apply.

[95] Third, and as submitted by Kobold, while the phrase “the act” in the UK Act has been interpreted to mean “substantially the same act”, Parliament did not use the same language as the UK Act. The language of the UK Act is more open ended and invites a more flexible interpretation as to what is meant by “the act.” The Canadian statute on the other hand clearly indicates what kind of act is meant: the same act in subsection 56(1) and substantially the same act in subsections 56(6) and (9).

[96] Fourth, the *Budget Implementation Act* indicates that the new legislation is intended to grant more expansive prior user rights. This interpretation is consistent with that purpose, as the rights provided are more expansive than those found in the previous version of subsection 56(1). The previous version made reference to being able to make use of a “specific” physical manifestation of the invention. On a plain reading of the previous version, a person who had previously constructed a patented invention was able to use or sell that physical manifestation of the invention but not to construct additional or somewhat different physical manifestations. It was effectively a right to deplete one’s existing stock. The new version grants the much broader right to perform “the same act.” A person who previously committed an act that would, had the patent have been issued, have infringed the patent may now continue to do that same act. If they previously manufactured and sold an article, they would be entitled to continue to manufacture and sell more of the same article, rather than simply sell existing inventory.

[97] As noted above, the pre- and post-patent acts must be identical in the sense that one can only perform those acts set out in section 42 of the *Patent Act* which were actually performed pre-patent, or those acts for which substantial preparations to perform were made.

[98] On this interpretation, if the person claiming the protection of subsection 56(1) had, for example, previously only manufactured and used its device, then they can continue to manufacture and use it, but they cannot now sell the device to others to use, as selling is not an act done prior to the issuance of the patent.

[99] This interpretation then leads one to ask if the same act is the manufacture of a device, must it be an identical device that is manufactured to obtain the protection of subsection 56(1) as Kobold submit.

[100] I agree with Kobold that the language of the section is clear that the comparison to be made is between two acts to each other and I further agree that to some extent it is not merely an assessment of whether both a prior and a subsequent act infringes the patent. The prior user does not have *carte blanche* to infringe the patent in any way that it wishes. What is protected is the doing of the same act so that both pre- and post-patent it is not an infringement of the patent "in respect of that claim." Accordingly, if the act done pre-patent would have infringed claim 1, but no other, the subsequent act is protected vis-à-vis claim 1, but no other.

[101] If the prior user manufactured the infringing device prior to the patent and painted it green, would it be prevented from manufacturing the identical device but painting it red? I can see no practical, logical, or legal reason why the protection of section 56 of the *Patent Act* would be so restricted. Similarly, I see no reason why the prior user should be restricted from making changes to its device so long as those changes do not relate to what is disclosed by the patent. After all, the protection afforded the inventor is the invention as claimed in the patent.

[102] Therefore, in my view, the prior user has the ability to make changes to aspects of its device or process that are part of the prior art or outside the claims of the patent. Patent claims must be drafted to contain all aspects of the invention and so will usually contain elements that are well established in the prior art and described in general terms. For example, in claim 1 of the ‘561 Patent, a reference is made to locating the sealing element below a zone of interest in the wellbore. This element must be included in the claim in order to provide a complete description of a method of completing a wellbore. However the claims give no mention as to how this step in the method is performed and it could be done in any number of ways that are previously known.

[103] In my opinion, it would be unreasonable for the prior user, having selected one method known in the prior art, to be restricted to only using that particular method when the patent is silent as to what method should be used and where that aspect of the claims does not form part of the inventive concept. I see no reason why Kobold, having chosen to recite established steps in operating a completion tool, would be able to prevent NCS from making any changes in how it performs those established steps, despite Kobold having introduced no innovation to them. If, for example, a new, more efficient fracking fluid was developed, should NCS be prevented from using it because it would represent a change in the step of “treating the zone of interest” as set out in claim 1? I think it should not. To do so would grant Kobold protection for more than what has been invented.

[104] Similarly, if the prior user made a device that benefitted from a subsection 56(1) defence, I see no reason why it should be restricted to making just that device standing alone in the future,

provided any additions to the device do not infringe the patent. Accordingly, with respect to BHAs, if it is the packer that was made prior to the patent, I can see no reason why the prior user cannot add additional components to the BHA and market them as one, provided the infringing element, the packer element of the BHA, remains identical pre- and post-patent.

[105] This then begs the question as to the scope of changes, if any, the prior user may make to its device vis-à-vis the aspects of it that infringe a specific claim of the patent. In the above example, is the prior user prevented from making improvements to or changing the packer element if that is the infringing aspect of the device?

[106] Subsection 56(1) protects a person who committed an act before the claim date of a patent and that would now infringe that patent's claims when they later, after the patent is in place, commit the "same act." In my view, the prior user cannot make any change to the infringing aspect of the device; otherwise, he is not engaging in the same act in respect of the patent's claims and has lost the protection of subsection 56(1) of the *Patent Act*. He is engaging in a different act vis-à-vis the infringed claim, even if they both infringe the same claim of the patent.

[107] Subsection 56(6) and (9) are markedly different in wording and scope to subsection 56(1). These subsections protect third parties whereas subsection 1 is directed to those with whom the third parties are dealing.

[108] Subsection 56(6) protects one who uses an article acquired from a manufacturer or a seller who previously made or sold "an article that is substantially the same" [emphasis added] as made or sold before the patent issued. The "substantially the same" description is materially different from the "same" description imposed on the manufacturer or seller of the article in subsection 56(1).

[109] Similarly subsection 56(9) protects one who uses a service "substantially the same" as one used before the patent. Like subsection 56(6) it does not protect the service provider. The service provider must find its protection in subsection 56(1).

[110] I find below that subsections 56(6) and (9) are not at issue in this matter as they cannot provide any protection to NCS on the facts before the Court.

(4) Conclusion on Interpretation of Subsection 56(1) of the *Patent Act*

[111] Subsection 56(1) provides a defence to one who makes, constructs, or uses an invention or sells it to others to use, that infringes a claim of the patent, if prior to the issuance of the patent that person did the same act of making, constructing, using, or selling, and the relevant (i.e. relating to the inventive concept) part of the invention is identical. While the prior user may add to or alter the invention in other respects that do not further infringe the patent, the prior user cannot change or alter the relevant (i.e. relating to the inventive concept) part of the invention, even if those modifications infringe the inventive concept in the same manner.

[112] The process to be followed in considering a defence under subsection 56(1) is as follows.

[113] First, one must determine whether the acts being performed before and after the claim date are identical (other than wholly non-functional changes, such as colour). If they are, then there is no need to consider infringement, as subsection 56(1) would always provide a defence to any potential infringement.

[114] Second, if the acts are not identical, one must determine whether the acts infringe the patent, and if they do, which claims. If the post-claim acts do not infringe the patent, then there is no "otherwise infringing acts" and therefore no need to rely on subsection 56(1). If the pre-claim acts do not infringe the patent, subsection 56(1) cannot apply. If the post-claim date acts infringe a particular claim of the patent that the pre-claim date acts do not, subsection 56(1) cannot apply.

[115] Finally, if the pre- and post-claim date acts are not identical but only infringe the same claims, then one must determine whether the changes relate to the inventive concept of the patent. If they do not, then subsection 56(1) will provide a defence.

[116] Only in the clearest of cases, where the acts before the claim date are identical to those after the claim date, is there no need to construe the claims of the patent or conduct an infringement analysis. Such cases would be particularly well suited for summary judgment.

C. *What is the proper construction of the claims of the '561 Patent?*

[117] NCS submits that Dr. Fleckenstein erred in construing the phrase "secured thereto" in claims 9 and 12 of the '561 Patent, which he alleges the Innovus packer infringes, while the

other packers do not. According to Dr. Fleckenstein, two elements are "secured" if they are "attached together to allow a force to be transmitted from one structure to the next, and to allow co-movement of the two elements."

[118] NCS notes that the '561 Patent shows two different types of connections between the mandrel and the pull-end ring: a threaded connection, shown in Figures 1-7, and a configuration that operates via corresponding shoulders, shown in Figure 8. NCS submits that the description of the '561 Patent describes both embodiments using threads and embodiments using shoulders as being "secured", and differentiates the two embodiments by describing the threaded embodiments as being "fixed." The term "fixed" does not appear in any of the claims.

[119] NCS submits that a purposive construction of the claims is consistent with the description of the '561 Patent. In both sets of claims, the purpose of being "connected" or "secured" is to ensure that the pull end of the sealing element moves with the mandrel. It submits that this construction would include both threading and shoulders.

[120] NCS submits that claim differentiation also reaches the same result. It submits that if "secured thereto" limits connections only to threads, then the dependent claims 11 and 14 would be redundant, as claims 11 and 14 add a limitation to claims 9 and 12 that the pull end is secured by threads.

[121] Kobold submit that NCS's position is that the only relevant act is the making and using of the Blue Bullet element, which would require the claims of the '561 Patent to be construed in

such a way that only the annular sealing element is an essential element of the patent claims. Kobold submit that this goes against the presumption that all elements are essential and would also lead to a non-purposive construction.

[122] Kobold support Dr. Fleckenstein's opinion that "secured" should be construed as requiring co-movement, while "connected" does not. They submit that the principle of claim differentiation does not support NCS's position. They say that NCS has failed to consider that there are other means of securing the mandrel and sealing element other than threading. The specification of the '561 Patent provides three examples of secured connections: mechanical bonding, elastomeric bonding, and threading.

[123] Kobold further submit that the argument regarding the use of the term "secured" in the specification is flawed. While the term "secured" was used in relation to an embodiment incorporating co-operating shoulders, "secured" was used in that passage to describe the relationship between the ring and the elastomer and not between the ring and the mandrel. They point to Dr. Fleckenstein's cross-examination and the plain reading of the disclosure for this point.

[124] I find that Kobold's submissions are correct: Dr. Fleckenstein made no error in his construction of the independent claims of the '561 Patent.

[125] The principles of claim construction and the specification of the '561 Patent support Dr. Fleckenstein's distinction between the words "secured" and "connected." The drafter of the '561

Patent used consistent terminology throughout the independent claims. Where the drafter deviated in the language used, it should be presumed that a different meaning was intended.

[126] NCS's submission with respect to claim differentiation is flawed. It assumes that threading and co-operating shoulders are the only possible means to connect the sealing element with the mandrel; however, as noted by Kobold, there are many alternative means of securing the two elements so as to cause co-movement, several of which are discussed in the specification.

[127] NCS's submissions regarding the use of the term "secured" in the specification are also flawed. As pointed out by Kobold, the passage cited by NCS uses the word "secured" to describe the connection between the ring and the sealing element, not the connection between the ring and the mandrel. The ring and the sealing element move as one, making this usage consistent with Dr. Fleckenstein's construction of "secured."

[128] Lastly, Kobold submit that NCS is seeking to construe the '561 Patent claims as requiring the absence of a separate equalization valve. Kobold submit that NCS is improperly reading limitations not present in the claims based on the specification. They note that none of the claims of the '561 Patent refer to the addition or exclusion of a separate equalization valve. Accordingly, Kobold support Dr. Fleckenstein's opinion that the addition of an equalization valve would not cause a tool to fall outside of the claims.

[129] In my opinion this is a mischaracterization of the submissions. NCS is arguing that where equalization is caused entirely by an equalization valve, the patent is not infringed. Given

that the claims explicitly indicate that the purpose of pulling on the sealing element is to create an annular passageway to allow pressure to equalize, I agree that the claims of the '561 Patent do not include any device or method in which equalization is entirely due to an equalization valve (i.e. equalization is complete before the annular passageway is formed).

D. *Do the NCS products or activities infringe the '561 Patent?*

[130] There is insufficient evidence before the Court to make a determination on infringement on this motion or on a summary trial.

[131] The evidence is unclear as to whether NCS's BHAs infringe the '561 Patent. According to the claims of the '561 Patent, pulling on the sealing element creates an annular passageway that allows fluid to flow through, equalizing pressure. Therefore, even if NCS's operations cause the sealing element to be pulled on, there is only infringement if this pulling creates an annular passageway that equalizes pressure. Given that NCS's BHAs feature equalization valves, if the equalization valves equalize pressure before the annular passageway is formed, then the annular passageway does not equalize pressure and there is no infringement.

[132] According to Dr. Fleckenstein's report, the mandrel of the Mongoose, SFC, and SFC 2 packers move [redacted] inches to open the equalization valves. Once the valves are opened, further pulling on the mandrel will cause pulling on the sealing element.

[133] Dr. Fleckenstein's infringement analysis appears to operate on the assumption that as soon as the sealing element is pulled on, infringement occurs. However, this is not the case. The

specification of the ‘561 Patent is clear that an annular passageway is not formed immediately after the sealing element is pulled.

[134] This is perhaps best exemplified by Figure 2 of the ‘561 Patent, which shows the sealing and unsealing process (Figure 3 also shows this process). In Figure 2C, the sealing element is fully compressed and the wellbore is sealed. In Figure 2D, the mandrel is pulled uphole and the ring begins to pull on the sealing element. However, as can clearly be seen in Figure 2D, the pull end of the sealing element disengages from the wall of the wellbore, but the opposite end does not. There is no annular passageway through which fluid can flow. This continues in Figure 2E. The mandrel has been pulled further uphole and the sealing element has been further detached as a result. However, the downhole end of the sealing element is still pressing against the wall of the wellbore. Only in Figure 2F does the sealing element fully disengage, creating an annular passageway and allowing fluid to flow.

[135] The process of forming an annular passageway takes time. It is entirely possible that in a device that features an equalization valve, equalization will already be complete by the time that the annular passageway is formed. This is especially the case where, as in the Mongoose, SFC, and SFC 2 BHAs, the equalization valve is fully opened before any pulling on the sealing element occurs.

[136] There is conflicting evidence as to how long it takes for equalization to occur. Dr. Fleckenstein’s evidence is that the time to equalize could be on the order of minutes. Mr. Redecopp’s evidence is that equalization is almost instantaneous and takes a matter of seconds.

While Mr. Redecopp admitted that it was possible for equalization to take longer, he states that he has never personally seen this occur.

[137] On the one hand, the Court has the evidence of Dr. Fleckenstein that equalization takes minutes. Dr. Fleckenstein is an expert in BHAs. On the other hand, the Court has the evidence of Mr. Redecopp that equalization takes seconds. While Mr. Redecopp may not be an expert, he has firsthand experience with at least some of NCS's BHAs as they actually operate in the field.

[138] In my opinion, there is insufficient evidence on this motion as to how long it takes to equalize pressure using an equalization valve. Combined with the uncertainty of how long it takes for an annular passageway to form by pulling on the sealing element, it is unclear whether equalization would already be complete prior to the annular passageway being formed.

[139] I note that Dr. Fleckenstein distinguished the Innovus BHA from the other BHAs due to the presence of a set screw that, in his opinion, secured the sealing element to the mandrel. NCS disputes Dr. Fleckenstein's assertion that the sealing element is secured to the mandrel. If the sealing element is secured to the mandrel then, unlike in the case of the other BHAs, the sealing element would be pulled at the same time that the equalization valve is being opened.

[140] If this is the case, then there is a greater chance that equalization via the equalization valve would not be complete by the time that the annular passageway forms, as there would be no time delay between the equalization valve being opened and the sealing element being pulled.

However, there is still no indication of how long it would take for an annular passageway to form and whether this would be faster than the time required to open the equalization valve.

[141] Without a proper understanding of the durations of these two processes, it is not possible to come to a conclusion as to whether NCS's BHAs infringe the '561 Patent. It is likely that more evidence would be made available at a full trial to resolve this point. Certainly, the trial judge would have the benefit of live witnesses and cross-examination.

[142] Accordingly, the question of whether NCS's BHAs infringe the '561 Patent is not appropriate for summary judgment or summary trial.

E. *Can NCS rely on section 56 of the Patent Act as a defence to any infringement?*

[143] NCS submits that it has purchased the Blue Bullet element from a third-party manufacturer since 2012, prior to the claim date of the '561 Patent. Therefore, it submits that subsection 56(6) grants it the right to continue using Blue Bullet elements that are the same in substance and work in the same way as those obtained prior to the claim date. Similarly, it submits that the services provided using the Blue Bullet element is substantially the same today as it was in 2012, and so subsection 56(9) applies.

[144] Kobold submit that the Defendant cannot rely on subsections 56(6) and 56(9) of the Act as these only create defences for third party users, which the Defendant is not. They argue that these subsections create a broader scope of protection because an innocent third party may not be aware all of the details of an article it purchases or service it uses. Kobold submit that this

broader protection protects a third party from having to prove what it is using is the same as what was previously available, provided it is still substantially the same and used for the same use.

[145] I agree with the submissions of Kobold that NCS cannot rely on subsections 56(6) and 56(9) of the *Patent Act*.

[146] It is clear that subsections 56(6) and 56(9) of the *Patent Act* are intended to benefit third parties who purchase articles or the services of others. With respect to subsection 56(9), there is no evidence NCS is purchasing services from others; the evidence shows that NCS itself is performing the services. While its customers may be able to rely on subsection 56(9), NCS cannot.

[147] With respect to subsection 56(6), there is no evidence to establish that NCS purchases the Blue Bullet element from a third party. It has not identified this party. It has provided numerous engineering drawings showing the design of the Blue Bullet element and its BHAs. At best, this could suggest that NCS commissioned a third party to construct the Blue Bullet element on its behalf. I can see no reason why a party should be able to benefit from the more generous rights under subsection 56(6) merely because it chooses to outsource production of devices which it designed.

[148] Parties on summary judgment are required to put their best foot forward and when evidence is not provided the Court may infer that the evidence would not be favourable (see

Kirkbi Ag v Ritvik Holdings Inc (1998), 150 FTR 205 (TD) at para 56). Given that no evidence of the third-party manufacturer was provided, it can be inferred that this party does not exist.

[149] I also agree with Kobold's further submission that subsection 56(6) does not apply because the use of the Blue Bullet element is not the potentially infringing act. Claims 1, 9, and 12 of the '561 Patent are for the use of tools that incorporate elements that are not present in the Blue Bullet element. Claim 15 is for a pressure equalization tool having elements not present on the Blue Bullet element. It is only the use of the Blue Bullet element in conjunction with the other elements of NCS's packer assemblies that infringes the claims.

[150] Given the lack of evidence provided by NCS to support the defences under subsections 56(6) and 56(9) of the *Patent Act*, it is appropriate to grant summary judgment on the issue of whether these subsections apply. These defences are dismissed.

[151] Given my interpretation of subsection 56(1) of the *Patent Act*, unless NCS's acts prior to the claim date of the '561 Patent are identical to those after the claim date, then it is necessary to determine which of its acts are alleged to infringe the '561 Patent. This is not a case in which there have been no changes in the defendant's actions and therefore an infringement analysis is necessary to determine which acts must be compared.

[152] As set out above, in my opinion there is insufficient evidence to determine which acts of NCS infringe the '561 Patent.

[153] Setting aside the requirement that the acts must be otherwise infringing acts, there is also, based on my interpretation of subsection 56(1), a requirement that the acts be related to the inventive concept of the patent. In my opinion, it is clear that the inventive concept of the ‘561 Patent is the connecting of the sealing element to the mandrel so that when the mandrel is pulled the sealing element is also pulled, thus forming an annular passageway that equalizes pressure.

[154] Many of the changes cited by Dr. Fleckenstein in his affidavit do not appear to relate to the inventive concept of the ‘561 Patent. However, the additional set screw on the Innovus BHA and the addition of a split ring on the SFC 2 BHA both relate to the connection between the mandrel and the sealing element, which is part of the inventive concept of the ‘561 Patent.

[155] The addition of the split ring on the SFC 2 would constitute a different act than those prior to the claim date and, if it can be shown that using the SFC 2 BHA infringes the ‘561 Patent, then NCS would be prevented from relying on its prior use of the Mongoose BHA to avoid infringement with respect to the SFC 2 BHA.

[156] There is some disagreement as to whether the set screw on the Innovus BHA secures the sealing element to the mandrel. If it does, and if the equalization of the Innovus BHA was caused, at least in part, by the formation of an annular passageway, then the Innovus BHA would infringe claims 9 and 12 of the ‘561 Patent. This would clearly constitute a different act by NCS than those prior to the claim date, as NCS’s pre-claim date sealing elements were connected but not secured to the mandrel and so did not infringe claims 9 and 12.

[157] NCS has attempted to counter Dr. Fleckenstein's assertion that the set screw on the Innovus BHA secures the sealing element to the mandrel by providing a zoomed-in image of the a drawing of the Innovus BHA. On cross-examination, Dr. Fleckenstein questioned the accuracy of this drawing.

[158] I agree with Kobold that accepting this drawing as accurate would require accepting a bald assertion of fact from NCS's counsel. The zoomed-in image was not a part of the NCS documentary disclosure. It appears to me that neither the zoomed-in document nor the original document was identified by Mr. Redecopp. There is no evidence before this Court as to the origin, authenticity, or accuracy of either the zoomed-in or original drawing. Therefore, there does not appear to be any compelling reason to ignore Dr. Fleckenstein's evidence that the set screw secures the sealing element to the mandrel of the Innovus BHA.

[159] For these reasons, the motion fails with respect to the reliance by NCS to subsection 56(1) of the *Patent Act*. This is a matter requiring a trial.

IV. Conclusion

[160] Summary judgment will be granted with respect to the interpretation of section 56 of the *Patent Act*, the construction of the '561 Patent, and the non-availability of the defences under subsections 56(6) and 56(9) of the *Patent Act*. In light of the admission by Kobold that NCI can continue manufacturing and using the Mongoose, the claim as it relates to that device is dismissed. Summary judgment will not be granted with respect to issues of infringement and the application of subsection 56(1) of the *Patent Act* to the facts of this matter.

[161] Success on this motion has been divided. I find it appropriate to award costs to the party successful in the cause.

[162] This has been labelled as Confidential because of a Confidentiality Order in effect in this proceeding. The Court has used best efforts to avoid the inclusion of any confidential information in the Reasons. The parties are directed to advise the Court by January 5, 2022, of any redactions they propose should be made to the public version of these Reasons.

JUDGMENT IN T-451-20

THIS COURT'S JUDGMENT is that:

1. Summary judgment is granted with respect to the interpretation of subsections 56(1), (6) and (9) of the *Patent Act* which are to be interpreted as described in the Reasons for Judgment;

2. Summary judgment is granted to the Plaintiffs with respect to the defences claimed by the Defendant pursuant to subsections 56 (6) and (9) of the *Patent Act*;

3. Summary judgment is granted with respect to the interpretation of Canadian Patent No. 2,919,561, which is to be interpreted as described in the Reasons for Judgment;

4. Summary Judgment is granted to the Defendant with respect to the claims relating to its Mongoose device;

5. In all other respects, the motion for summary judgment is dismissed, and the action shall proceed to trial; and

6. Costs are to the party successful in the cause.

"Russel W. Zinn"
Judge

Annex A

Exception – Prior Use

56 (1) Subject to subsection (2), if — before the claim date of a claim in a patent — a person, in good faith, committed an act that would otherwise constitute an infringement of the patent in respect of that claim, or made serious and effective preparations to commit such an act, it is not an infringement of the patent or any certificate of supplementary protection that sets out the patent, in respect of that claim, if the person commits the same act on or after that claim date.

Exception — utilisation antérieure

56 (1) Sous réserve du paragraphe (2), si une personne, avant la date d'une revendication se rapportant à un brevet et de bonne foi, a commis un acte qui par ailleurs constituerait une contrefaçon du brevet relativement à la revendication, ou a fait de bonne foi des préparatifs effectifs et sérieux en vue de commettre un tel acte, l'acte ne constitue pas une contrefaçon du brevet ou de tout certificat de protection supplémentaire qui mentionne le brevet, relativement à cette revendication, si cette personne commet le même acte à compter de cette date.

Transfer

(2) If the act referred to in subsection (1) is committed or the preparations to commit it are made in the course of a business and that business, or the part of that business in the course of which the act was committed or the preparations were made, is subsequently transferred,

(a) subsection (1) or paragraph (b), as the case may be, does not apply to an act committed by the transferor after the transfer; and

Transfert

(2) Si l'acte visé au paragraphe (1) a été commis, ou si les préparatifs en vue de la commission de l'acte ont été faits, dans le cadre d'une entreprise et que celle-ci, ou la partie de celle-ci dans le cadre de laquelle l'acte a été commis ou les préparatifs ont été faits, est ensuite transférée, les règles suivantes s'appliquent:

a) le paragraphe (1) ou l'alinéa b), selon le cas, ne s'applique pas à l'acte commis par le cédant après le transfert;

(b) it is not an infringement of the patent or any certificate of supplementary protection that sets out the patent, in respect of the claim, if the transferee commits the act after the transfer.

b) l'acte ne constitue pas une contrefaçon du brevet ou de tout certificat de protection supplémentaire qui mentionne le brevet, relativement à la revendication, si le cessionnaire le commet après le transfert.

Exception — use or sale of article

(3) The use or sale of an article is not an infringement of a patent or any certificate of supplementary protection that sets out the patent if that article was acquired, directly or indirectly, from a person who, at the time they disposed of it, could sell it without infringing the patent or the certificate

Exception — utilisation ou vente d'un article

3) L'utilisation ou la vente d'un article ne constitue pas une contrefaçon de brevet, ou de tout certificat de protection supplémentaire qui mentionne le brevet, si l'article est acquis, de façon directe ou autrement, d'une personne qui, au moment où elle s'en est départie, pouvait le vendre sans contrefaire le brevet ou le certificat:

(a) because the person, before the claim date of a claim in the patent, in good faith, committed an act that would otherwise constitute an infringement of the patent in respect of that claim and they disposed of the article before that claim date; or

a) parce que la personne, avant la date d'une revendication se rapportant au brevet et de bonne foi, a commis un acte qui par ailleurs constituerait une contrefaçon du brevet relativement à la revendication et qu'elle s'en est départie avant cette date;

(b) under subsection (1) or paragraph (2)(b).

b) aux termes du paragraphe (1) ou de l'alinéa (2)b).

Exception — use of service

Exception — utilisation d'un service

(4) The use of a service is not an infringement of a patent if the service is provided by a person who, under subsection

(4) L'utilisation d'un service ne constitue pas une contrefaçon de brevet si le

(1) or paragraph (2)(b), is able to provide it without infringing the patent.

Non-application

(5) Subsection (1) or paragraph (3)(a) does not apply if the person referred to in that subsection or that paragraph was able, as the case may be, to commit the act or make the preparations to commit the act only because they obtained knowledge of the subject-matter defined by the claim, directly or indirectly, from the applicant of the application on the basis of which the patent was granted and they knew that the applicant was the source of the knowledge.

Exception — use of article

(6) Subject to subsection (7), the use of an article is not an infringement of a patent or any certificate of supplementary protection that sets out the patent, in respect of a claim, if the article was acquired, directly or indirectly, from a person who, before the claim date of that claim, in good faith, made or sold, or made serious and effective preparations to make or sell, an article that is substantially the same as the one used, for that use.

service est fourni par une personne qui peut, aux termes du paragraphe (1) ou de l'alinéa (2)b), le faire sans contrefaire le brevet.

Non-application

(5) Le paragraphe (1) ou l'alinéa (3)a) ne s'applique pas si la personne visée à ce paragraphe ou à cet alinéa a pu, selon le cas, commettre l'acte ou faire les préparatifs en vue de le commettre uniquement parce qu'elle a obtenu, de façon directe ou autrement, l'information à l'égard de l'objet que définit la revendication de la part du demandeur de la demande au titre de laquelle le brevet a été accordé et qu'elle savait que cette information provenait du demandeur.

Exception — utilisation d'un article

(6) Sous réserve du paragraphe (7), l'utilisation d'un article ne constitue pas une contrefaçon de brevet ou de tout certificat de protection supplémentaire qui mentionne le brevet, relativement à une revendication, si l'article est acquis, directement ou autrement, d'une personne qui, avant la date de la revendication, a de bonne foi fabriqué ou vendu — ou a fait de bonne foi des préparatifs effectifs et sérieux en vue de fabriquer ou de vendre — un article, qui est sensiblement le

même que celui utilisé, pour cette utilisation.

Transfer

(7) If the making or selling referred to in subsection (6) was done or the preparations to do so were made in the course of a business and that business, or the part of that business in the course of which the making or selling was done or the preparations were made, is subsequently transferred, then

Transfert

(7) Si la fabrication ou la vente visée au paragraphe (6), ou les préparatifs en vue de la fabrication ou de la vente, ont été faits dans le cadre d'une entreprise et que celle-ci, ou la partie de celle-ci dans le cadre de laquelle la fabrication, la vente ou les préparatifs ont été faits, est ensuite transférée, les règles suivantes s'appliquent:

(a) subsection (6) or paragraph (b), as the case may be, does not apply in respect of an article that is made or sold by the transferor after the transfer; and

a) le paragraphe (6) ou l'alinéa b), selon le cas, ne s'applique pas à l'égard de l'article qui, après le transfert, est fabriqué ou vendu par le cédant;

(b) it is not an infringement of the patent or any certificate of supplementary protection that sets out the patent, in respect of a claim referred to in subsection (6), to use an article for the use referred to in that subsection if it was made or sold for that use by the transferee after the transfer.

b) l'utilisation de l'article ne constitue pas une contrefaçon du brevet ou de tout certificat de protection supplémentaire qui mentionne le brevet, à l'égard de la revendication visée au paragraphe (6), si l'utilisateur en fait la même utilisation que celle prévue à ce paragraphe et que l'article est fabriqué ou vendu par le cessionnaire, après le transfert, pour cette utilisation.

Non-application

(8) Subsection (6) does not apply if the person referred to in that subsection was able to

Non-application

(8) Le paragraphe (6) ne s'applique pas si la personne visée à ce paragraphe a pu

make or sell, or to make the preparations to make or sell, the article only because they obtained knowledge of the use defined by the claim, directly or indirectly, from the applicant of the application on the basis of which the patent was granted and they knew that the applicant was the source of the knowledge.

fabriquer ou vendre l'article, ou faire les préparatifs en vue de le fabriquer ou de le vendre, uniquement parce qu'elle a obtenu, de façon directe ou autrement, l'information à l'égard de l'utilisation que définit la revendication de la part du demandeur de la demande au titre de laquelle le brevet a été accordé et qu'elle savait que cette information provenait du demandeur.

Exception — use of service

(9) Subject to subsection (10), the use of a service is not an infringement of a patent in respect of a claim if the service is provided by a person who, before the claim date of that claim, in good faith, provided, or made serious and effective preparations to provide, a service that is substantially the same as the one used, for that use.

Exception — utilisation d'un service

(9) Sous réserve du paragraphe (10), l'utilisation d'un service ne constitue pas une contrefaçon de brevet relativement à une revendication si le service a été fourni par une personne qui, avant la date de la revendication, a de bonne foi fourni — ou a fait de bonne foi des préparatifs effectifs et sérieux en vue de fournir — un service, qui est sensiblement le même que celui utilisé, pour cette utilisation.

Transfer

(10) If the service referred to in subsection (9) was provided or the preparations to provide it were made in the course of a business and that business, or the part of that business in the course of which the service was provided or the preparations to do so were made, is subsequently

Transfert

(10) Si le service visé au paragraphe (9) a été fourni, ou si les préparatifs en vue de la fourniture du service ont été faits, dans le cadre d'une entreprise et que celle-ci, ou la partie de celle-ci dans le cadre de laquelle le service a été fourni ou les préparatifs ont été faits, est ensuite transférée,

transferred, then, after the transfer

(a) the transferor is deemed to no longer be the person referred to in subsection (9) for the purposes of that subsection; and

(b) the transferee is deemed to be the person who provided the service for the purposes of subsection (9).

Non-application

(11) Subsection (9) does not apply if the person referred to in that subsection was able to provide the service or make the preparations to provide it only because they obtained knowledge of the use defined by the claim, directly or indirectly, from the applicant of the application on the basis of which the patent was granted and they knew that the applicant was the source of the knowledge.

les règles ci-après s'appliquent après le transfert :

a) le cédant est réputé ne plus être la personne visée au paragraphe (9) pour l'application de ce paragraphe;

b) le cessionnaire est réputé être la personne qui a fourni le service pour l'application du paragraphe (9).

Non-application

(11) Le paragraphe (9) ne s'applique pas si la personne visée à ce paragraphe a pu fournir le service ou faire les préparatifs en vue de le fournir uniquement parce qu'elle a obtenu, de façon directe ou autrement, l'information à l'égard de l'utilisation que définit la revendication de la part du demandeur de la demande au titre de laquelle le brevet a été accordé et qu'elle savait que cette information provenait du demandeur.

FEDERAL COURT

SOLICITORS OF RECORD

DOCKET:	T-451-20
STYLE OF CAUSE:	KOBOLD CORPORATION ET AL v NCS MULTISTAGE INC
PLACE OF HEARING:	HELD VIA VIDEOCONFERENCE
DATE OF HEARING:	SEPTEMBER 29, 2021
JUDGMENT AND REASONS:	ZINN J.
CONFIDENTIAL JUDGMENT AND REASONS ISSUED:	DECEMBER 17, 2021
PUBLIC JUDGMENT AND REASONS ISSUED	JANUARY 7, 2022

APPEARANCES:

William D. Regan Christopher J. Kvas Evan Reinblatt Rachel Meland	FOR THE PLAINTIFFS/ DEFENDANTS BY COUNTERCLAIM
Patrick Smith Sharn Mashiana Mike Myschyshyn	FOR THE DEFENDANT/ PLAINTIFF BY COUNTERCLAIM

SOLICITORS OF RECORD:

Piasetzki Nenniger Kvas LLP Barristers and Solicitors Toronto, Ontario	FOR THE PLAINTIFFS/ DEFENDANTS BY COUNTERCLAIM
Seastone IP LLP Barristers and Solicitors Calgary, Alberta	FOR THE DEFENDANT/ PLAINTIFF BY COUNTRCLAIM