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Ottawa, Ontario, May 25, 2018

PRESENT: The Honourable Madam Justice McVeigh

BETWEEN:

SAFE GAMING SYSTEM INC

Plaintiff

and

ATLANTIC LOTTERY CORPORATION,
NOVA SCOTIA GAMING CORPORATION
and TECH LINK INTERNATIONAL
ENTERTAINMENT LIMITED

Defendants

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I. The Pleadings

[1] This action concerns Canadian Patent 2,331,238, entitled “Safe Gaming System” [the 238 Patent]. The 238 Patent was filed in Canada on January 17, 2001, and claims priority from United States Patent Application No 60/177,182 which issued to United States Patent 6,629,890. In connection to this, the 238 Patent has a priority date of January 20, 2000. The Canadian application was published on July 20, 2001, and issued on March 28, 2006. Safe Gaming System Inc. [Safe Gaming] is the current owner of the 238 Patent.

[2] The Plaintiff Corporation, Safe Gaming System Inc., has its principal place of business in Las Vegas, Nevada, United States of America. The Defendants are the Nova Scotia Gaming Corporation (since renamed the Nova Scotia Provincial Lotteries and Casino Corporation [Gaming Corp]), the Atlantic Lottery Corporation [ALC], and Tech Link International Entertainment Limited [Techlink].

[3] The Plaintiff alleges that the Defendants infringed the 238 Patent through the design and implementation of Nova Scotia's Responsible Gaming technology known as "My-Play."

[4] The Defendants argue that the My-Play system does not infringe the 238 Patent and counterclaim that the 238 Patent is invalid because it lacks novelty, is obvious, insufficient, overly broad, not soundly predicted, and contains non-patentable subject matter.

[5] Counsel for both parties must be complimented on their excellent advocacy and provision of documentation, compendiums and other aids to the Court.

[6] The following issues were raised in this action:

- A. Is Claim 6 of the 238 Patent valid?
- B. Does the My-Play system infringe Claim 6 of the 238 Patent?
- C. If Claim 6 of the 238 Patent is valid and infringed, what is the appropriate royalty for quantifying damages?

II. Summary of the Results in this Action

[7] The 238 Patent is invalid for lacking utility, and for providing an insufficient disclosure.

[8] Even if the 238 Patent had been valid, the My-Play system did not infringe the 238 Patent.

[9] No damages are awarded.

[10] The Defendants are entitled to have their costs in the action and counterclaim. If the parties are unable to agree on the quantum of cost, then I will receive submissions from the Defendants within (30) thirty days from the date of this Judgment. The submissions are not to exceed (10) ten pages in addition to the draft bill of costs. The Plaintiff shall file and serve its cost submissions of no more than (10) ten pages (as well as a draft bill of costs) within (15) fifteen days following receipt of the Defendants' submissions. The Defendants may file a reply of no more than (5) five pages within (7) seven days of receiving the Plaintiff's submissions.

III. Background

A. *The Parties*

[11] Safe Gaming describes itself as an implementer of technology-based solutions that provide gambling consumer protection measures, with an ultimate social mission to minimize harm from gambling.

[12] Gaming Corp is a Nova Scotia Crown corporation governed by the provincial *Gaming Control Act*, 1994-95, c 4, s 1 [*Gaming Control Act*], and carries out the management functions of regulated gaming in the province of Nova Scotia. Gaming Corp conducts and manages gaming within Nova Scotia for sustainability. It describes healthy gaming as a large number of gamblers spending a small amount of money rather than a few gamblers wagering a lot. Gaming Corp is also responsible for ticket lotteries, sports betting, casino properties, and online presence. The province of Nova Scotia has no involvement in Gaming Corp's annual business plan or

strategic direction. Before 2012, Gaming Corp board members were private citizens appointed by order of council. Now, board members are deputy Ministers who are appointed by legislation.

[13] Gaming Corp is also one of ALC's four shareholders and a manager/operator in Nova Scotia through an agency agreement with ALC. Gaming Corp does not pay ALC for operation services, and ALC assists in drafting budgets for Gaming Corp.

[14] ALC is a company incorporated under the *Canada Business Corporations Act*, RSC 1985, c C-44, and runs the day-to-day operations of many of the various gaming business lines in Nova Scotia. ALC is an agent of Gaming Corp.

[15] Gaming Corp, through its agent ALC, provides socially responsible gaming products to Nova Scotians. Gaming Corp and ALC offer and provide, by themselves and through their affiliates and agents, gambling products and services including video lottery terminals [VLTs], ticket lotteries, and sports betting products to Nova Scotians.

[16] Techlink was a Canadian-owned private company that performed research and development in the gaming marketplace, and created responsible gambling systems and products for the gaming industry. At trial, Mr. Rubin stated Techlink closed in 2015, and the evidence is that it went bankrupt.

B. *The 238 Patent*

[17] Attached in the Appendix is Figure 1 of the 238 Patent. That same flowchart is included above the abstract.

[18] The abstract of the 238 Patent describes this technology as follows:

A gaming control system applicable to all forms of gambling, electronic or otherwise, is disclosed. The system includes an Internet Web site, with associated control software, which is a portal that serves as a “safe gaming” interface between online gambling individuals and Internet-based gambling sites. The system also allows players at physical gaming locations to register with the system for “safe gaming” at video terminals or at gaming tables. The portal software and distributed components of the system, track an individual’s gaming transactions and provide alerts to the individual of reaching or exceeding loss limits, time limits, changes in gambling behavior, and other related services.

[19] At issue are Claim 1 and Claim 6.

[20] Claim 1:

A method in a computer system coupled to a global telecommunications network for monitoring, regulating, and terminating gaming activities of an individual, the method comprising the steps of:

- (a) establishing a unique record for the individual in a data base, and accepting at least one selected profile attribute agreed to by the individual into the unique record, the at least one profile attribute selected from the group consisting of personal factors, financial factors, social factors, psychological factors, speed of play, quality of decisions, and specific gaming control parameters;

- (b) providing unique means for the individual to identify the individual's unique record containing at least one profile attribute in the data base;
- (c) providing to a selected gaming site, access to at least a portion of the data base plus operating software for monitoring and terminating the gaming activities of the individual;
- (d) supplying the identifying means by the individual to the selected gaming site to commence the gaming activities;
- (e) monitoring by the operating software the gaming activities between the individual with unique record and profile attributes in said data base and the selected gaming site; and
- (f) providing regulation of the gaming activities of the individual, the regulation including at least one action selected from the group consisting of: monitoring changes in gambling behavior, monitoring changes in speed of play, monitoring changes in quality of decisions, monitoring monetary end point, monitoring total time end point, and terminating by the operating software the gaming activities of the individual upon the individual deviating from at least one of the selected profile attributes of the individual in the data base.

[21] Claim 6:

The method of claim 1 wherein the providing access to at least a portion of the data base plus operating software to each selected gaming site includes copying at least a portion of the data base plus operating software for monitoring and terminating the gaming activities of individuals to a server of the selected gaming site.

IV. Safe Gaming Expert Witnesses re infringement and validity

A. *Plaintiff's Expert Witnesses*

(1) Dr. David Hodgins

[22] Dr. Hodgins is a Registered Clinical Psychologist and a Professor at the University of Calgary, where he was Head of the Department of Psychology from 2011 to 2016. He has a Ph.D. in Clinical Psychology from Queen's University and has published over 150 peer-reviewed articles, a majority of which address addictions and problem gambling. He is a Registered Clinical Psychologist who has been in private practice since 1991. He specializes in the areas of addictive behaviours, including alcohol and gambling disorders and those psychiatric disorders that often occur concomitantly with those addictions.

[23] Since 2001, Dr. Hodgins has been the Research Coordinator at the Alberta Gaming Research Institute, University of Calgary Node. In 2010, he was recognized by the US National Center for Responsible Gaming with the Scientific Achievement Award for his outstanding contributions to the study of gambling disorders. He is also an editorial board member of several leading academic journals focused on gambling and addictions and has been published widely in this area.

[24] Dr. Hodgins was qualified as an expert psychologist in problem gambling.

(2) Dr. Hugh Smith

[25] Dr. Smith is a tenured Professor at the California Polytechnic State University in the College of Engineering's Department of Computer Science. He holds a Bachelor of Arts degree in Computer Science from Xavier University, as well as a Master's and a Ph.D. in Computer Science from Michigan State University. Dr. Smith is currently the Director of the Computer Engineering program at California Polytechnic.

[26] Prior to working in academics, Dr. Smith worked at the Merrell Dow Research Institute as a programming analyst and later worked for the Proctor & Gamble Company. Dr. Smith has received numerous awards including the Computer Science Department Professor of the Year Award from California Polytechnic State University in 2006, and the College of Engineering teaching award in 2002.

[27] Dr. Smith is qualified as an expert in computer science, software development, computer hardware, and networking including client server and distributed systems and databases.

B. *Defendants' Expert Witnesses*

(1) Stacy Friedman

[28] Mr. Friedman holds a Bachelor of Arts in Computer Science *magna cum laude* from Harvard University. He is a professional casino game designer and mathematician with over

18 years of experience of regulated casino game development and gaming mathematics. He has been a software developer for over 15 years.

[29] Mr. Friedman began his professional experience in the casino gaming industry in 1998 with Silicon Gaming as a designer and developer of VLTs. In 2001, he started an independent casino game design and analysis consultancy, Olympian Gaming, LLC, in Lake Oswego, Oregon of which he is still President.

[30] Mr. Friedman was qualified as an expert in computer science and software engineering, specifically as it relates to gaming, electronic wagering and systems, including networked systems.

(2) Dr. Mark Griffiths

[31] Dr. Griffiths is a Professor of Behavioural Addiction at Nottingham Trent University and is currently Director of the International Gambling Research Unit. From April 2002 through October 2015, Dr. Griffiths was a professor of Gambling Studies at Nottingham Trent University.

[32] In 1987, Dr. Griffiths received a First Class Bachelor's degree in Psychology from the University of Bradford, and a Ph.D. in Psychology from the University of Exeter in 1991. He is a Chartered Psychologist and a Fellow of the British Psychological Society, the Royal Society for the Arts, and the Academy of Social Sciences. Dr. Griffiths has researched the field of gambling studies since 1987, and is widely published in the field.

[33] Dr. Griffiths was qualified as an expert in problem gambling with an expertise in behavioural tracking.

V. Fact Witnesses

A. *Plaintiff's Fact Witnesses*

(1) Richard A. Johnson

[34] Richard A. Johnson is the sole named inventor in the 238 Patent and is the Chief Executive Officer (CEO) of Safe Gaming. He is a professional engineer with experience in telecommunications spanning fifty years. He has taught and consulted on communications technology internationally.

[35] Mr. Johnson applied for the 238 Patent on January 17, 2001, and claims priority from United States Patent Application No 60/177,182 (with priority date of January 20, 2000), which issued to United States Patent No 6,629,890. The Canadian application was laid open to public inspection on July 20, 2001 and issued on March 28, 2006. Mr. Johnson assigned his interest in the 238 Patent application to Safe Gaming on September 20, 2004.

[36] The 238 Patent issued under the signature of the Commissioner of Patents and was granted for a term of 20 years from the filing date. In this action, only independent Claim 1 and its dependent Claim 6 are at issue in this trial.

[37] Mr. Johnson was a straightforward and credible witness.

(2) Steve Keech

[38] Mr. Keech has a Bachelor's degree in Commerce from McMaster University and an MBA in Information Technology. Mr. Keech was President of Amtote International—a corporation implementing Safe Gaming System— from 2006 until July 2016.

[39] Mr. Keech's responsibilities as President of Amtote included details such as: setting strategy, technical changes, and negotiating new business ventures. Amtote also does fixed odds, perimutuel gaming, and percentage of handle.

[40] In July 2016, Mr. Keech became the Executive Vice President for the Stronach Group, which is involved with racing and gaming. Stronach Group holds the racing assets of the Stronachs (which includes breeding and race tracks, Amtote, and beef cattle). Mr. Keech now sets strategy and oversight for Amtote rather than operational details.

[41] Mr. Keech was a straightforward and credible witness.

B. *Defendants' Fact Witnesses*

(1) Mark Gwynn

[42] Mr. Gwynn holds a Master's of Business Administration from St. Mary's University. He has been with Gaming Corp since April 2006. He was the business analyst and later the senior manager of destination gaming and oversaw the implementation of the Informed Player Choice

System which became My-Play and will be referred to as My-Play in the decision for ease of reference. In September 2015, he became the Senior Manager of Casino Gaming with Gaming Corp.

[43] Mr. Gwynn was a straightforward and credible witness.

(2) Byron Bridger

[44] Mr. Bridger has worked with ALC since May 2000. He is ALC's Director of Marketing for destination gambling. ALC plans and operates VLTs for shareholders, and Mr. Bridger deals mostly with VLTs. ALC has about 500 employees, and operates about 1,000 retailers with about 7,000 VLTs. These assets are not just in Nova Scotia; ALC acquires VLTs and software that it then provides to overseas retailers. One of ALC's operational roles includes issuing requests for proposal and entering into contracts with vendors.

[45] Mr. Bridger was a straightforward and credible witness.

(3) Paul Vermette

[46] Mr. Vermette holds a Bachelor's degree with high honours in Computer Science from the University of New Brunswick. Around 2006, he started working with ALC, where he is now the Director of Workplace Technologies and is responsible for IT service desk and desk-side support, and business intelligence and analytics of the company. Previously, Mr. Vermette worked for Spielo for four years as software architect working on VLTs.

[47] Mr. Vermette was a straightforward and credible witness.

(4) Rumin Binder

[48] Mr. Binder is a design engineer, who is now the Director Engineering of VLTs at Canadian Bank Note. He joined Techlink in 2001 where he was employed for almost 15 years, and was Techlink's Chief Technology Officer. Techlink supplied VLTs as well as responsible gaming technology such as a Hotel Room Entertainment system that allowed players to monitor their game play.

[49] Mr. Binder was a straightforward and credible witness.

(5) Bob Mackinnon

[50] Mr. Mackinnon is the President and CEO of Gaming Corp, which he joined in November 2003. By 2006, he was part of its executive team. Starting in 2004, he was responsible for responsible gaming and on the Board to oversee and approve corporate strategy, ensure controls and policies were in place and effective, and oversee performance of the CEO. He testified very precisely, measured in a professional truthful manner.

[51] Mr. Mackinnon was a straightforward and credible witness.

C. *Expert Witnesses - Damages*

(1) Dr. Chris Vellturo - Plaintiff

[52] Dr. Vellturo is the founder and President of Quantitative Economic Solutions, LLC, a microeconomic consulting firm. He received his Ph.D. in Economics from Massachusetts Institute of Technology in 1989. His fields of specialization include industrial organization and econometrics.

[53] Dr. Vellturo has studied the valuation of intellectual property and the assessment of economic damages due to infringement. In this context, Dr. Vellturo has studied computer hardware and software, semiconductors, consumer products, pharmaceutical products, medical devices, and over-the-counter medications amongst others.

[54] Dr. Vellturo was qualified as an expert in Economics, Patent Damages, and the reasonable royalty in Patent Infringement.

(2) Russell Parr - Defendant

[55] Mr. Parr is President of IRPA Inc., an independent consulting firm that provides consulting services, including financial analysis and valuation assessments relating to intellectual property. Mr. Parr has a Bachelor of Science in Electrical Engineering and a Master's of Business Administration from Rutgers University. Mr. Parr is certified as a Chartered Financial

Analyst, an Accredited Senior Appraiser, and a Certified Licensing Professional. Mr. Parr has published three books on royalty rates in which intellectual property is licensed.

[56] Mr. Parr was qualified as an expert in the valuation of patents and the determination of intellectual property damages including reasonable royalties in infringement cases.

[57] There was confidential information testified to regarding damages but as I am not awarding damages, there is no need for any of this decision to be confidential.

VI. The Legal Framework

[58] A patent protects an invention by granting an exclusive monopoly over it as per section 42 of the *Patent Act*, RSC 1985, c P-4 [*Patent Act*]. The Plaintiff has claimed that the 238 Patent's monopoly is infringed by Defendants' My-Play system, and the Defendants have counter-claimed that the 238 Patent is invalid. Before determining either of these questions, the Court must first construe the claims to understand the scope of the protection afforded by the *Patent Act*. Once the Court has construed the claims, the patents at issue are compared to see if there is any infringement and the 238 Patent can be reviewed for validity.

VII. Analysis

A. *The Law on Claims Construction*

[59] Claims construction is a question of law, and determining the scope of the claims is therefore a judicial function. Expert testimony may enlighten the Court, but it is the words of the

claims that hold the meaning, not the experts (*Novartis Pharmaceuticals Canada v RhoxalPharma Inc*, 2005 FCA 11 at para 53). Claims construction is done before considering the issues of infringement and validity, and the same interpretation of the claims will apply to both these issues (*Pfizer Canada Inc v Canada (Minister of Health)*, 2005 FC 1725 at para 10, aff'd 2007 FCA 1).

[60] The principles of claims construction were set out by the Supreme Court of Canada [SCC] in three cases: *Whirlpool Corp v Camco Inc*, 2000 SCC 67 at paragraphs 49-55 [*Whirlpool*], *Free World Trust v Électro Santé Inc*, 2000 SCC 66 at paragraphs 44-54 [*Free World Trust*], and *Consolboard Inc v MacMillan Bloedel (Saskatchewan) Ltd*, [1981] 1 SCR 504 at paragraph 27 [*Consolboard*].

[61] A summary of the principles derived from these decisions is that:

- claims are read from the perspective of the person of ordinary skill in the art [POSITA] (who is equipped with the common general knowledge). They are construed as of the date of publication in an informed and purposive way, with a mind willing to understand;
- fairness and predictability are promoted by maintaining the inventor's intent. Evidence of this intent is derived from the language of the claims, in a way that is sympathetic to accomplishing the inventor's purpose; and
- both the disclosure and the claims reveal the nature of the invention, and while the construction of the claims must be neither benevolent nor harsh, it must be reasonable and fair to both the patentee and the public.

[62] Using these principles, the Court undergoes a purposive analysis to determine the scope of the claim through the POSITA's perspective (*Zero Spill Systems (Int'l) Inc v Heide*, 2015 FCA 115 at paras 41 [*Zero Spill*]; *ABB Technology AG v Hyundai Heavy Industries*, 2013 FC 947 at para 25). While the POSITA is equipped with the common general knowledge in claims construction, the prior art is not to be referred to while claims are construed as that is done in the invalidity analysis (*Zero Spill* at paras 41, 51).

[63] Many courts helpfully describe the claims as fence posts, and explain that construing claims asks what lies within the fence—any part falling outside the fenced area is not protected by the patent and thus cannot be infringed (*Frac Shack Inc v AFD Petroleum Ltd*, 2017 FC 104 at para 231 [*Frac Shack*]).

[64] It is worthwhile to explain some information about how patents are structured, as it is relevant for claims construction. A definition of a patent's "description" is provided in section 2 of the *Patent Rules*, SOR/96-423 [*Patent Rules*] which explains this as the "part of a specification other than the claims." These two parts—the claims and the description—make up the "specification." Looking to the prior jurisprudence, it is worth mentioning that "disclosure" was formerly used instead of "description." For example, the patent specification in *Consolboard* at 520, was said to consist of the disclosure and the claims.

[65] These two components of the specification are further set out in the *Patent Rules* and the *Patent Act*. For example, *Patent Rule* 80(1)(e) says the description shall briefly describe the figures in the drawings, if any. In addition, the *Patent Rules* at section 2 say a specification must

be in accordance with subsections 27(3) and (4) of the *Patent Act*. Subsections 27(3) and (4) of the *Patent Act* are included in the Appendix of this decision.

[66] The specification is relevant during claims construction, but the patent's prosecution history is not. This is one difference between Canadian and American patent law; while American courts construe claims using the prosecution history, Canadian courts undergo claims construction as an objective test, conducted through the eyes of the POSITA reading the claims. Canadian courts may also use the description if the claims are unclear and ambiguous (*Eurocopter v Bell Helicopter Textron Canada Ltee*, 2012 FC 113 at para 42 [*Eurocopter*]). Construing the claims with regard to the prosecution history is an error in Canada (*Free World Trust* at para 66).

[67] Therefore, the Defendants submit that the Plaintiff's expert Dr. Smith gave tainted evidence because he received a copy of the prosecution history before he wrote his claim construction report and used it. In contrast, Defendants' expert Mr. Friedman was not given the prosecution history and did it double blind. This could affect an expert's opinion or go to weight as of course a POSITA would not know the prosecution history and what changes were made. As I prefer the expert evidence of Mr. Friedman in the area the prosecution history was used by Dr. Smith, this allegation is of no consequence in this action.

[68] The experts do agree on much of the construction of the claim, but the few points, issues, and elements that they differ on are: a) whether an "expert system" or "assessment" in Claim 1 are essential elements (or whether every step is essential); b) whether the steps in Claim 1 must

be in a particular order; 3) whether all members of the groups of listed factors are essential elements; and 4) whether all the steps of the method are done by a computer.

[69] With regards to validity and infringement, both Mr. Friedman and Dr. Griffiths for the Defendants, and both Dr. Hodgins and Dr. Smith for the Plaintiff, possess expertise relevant to the issues in this matter and are qualified to give expert opinions. I find all of them to possess evidence that is of assistance and these reasons will advise where I prefer the evidence of one over the other.

(1) The Relevant Date

[70] As time goes by, “the meaning of particular words or phrases may change according to the state of the art” (Stephen J Perry & T Andrew Currier, *Canadian Patent Law*, 2nd ed (Ontario: Lexis Nexis Canada, 2014) at s 15.23). Thus, the claims are read through the eyes of the POSITA at the relevant time. In this case, the parties and their experts have analyzed the issues using the July 20, 2001 publication date which is the relevant date for claims construction (*Whirlpool* at para 56).

(2) Person Skilled in the Art

[71] Because the claims are addressed to the POSITA, the Court reads the claims from the POSITA’s perspective (*Whirlpool* at para 53). Therefore, the first step of claims construction is for this Court to determine who the POSITA is.

[72] The SCC elaborated on the characteristics of the POSITA in *Whirlpool* at paragraphs 53 and 74: the POSITA is uninventive but reasonably aware of the advances in the field, appreciates “the nature and description of the invention,” and applies the patent sensibly.

[73] As Justice Manson explained in *Frac Shack*, the parties may bring evidence to court to help determine who the POSITA is:

[120] A qualified expert’s task is to help the Court understand who a POSITA is, what he or she would know at the relevant time (i.e., the common general knowledge), and construction issues surrounding the patents in suit...

[74] I note that the *Patent Act* does not say the POSITA is the inventor. In *Frac Shack* at paragraph 120, Justice Manson explained that: “Witnesses on the subject need not be a POSITA themselves, so long as they can provide appropriate evidence to what a POSITA would have known.” Accordingly, although Mr. Johnson, the inventor of the 238 Patent, was present at trial, the testimony from other witnesses is helpful for claims construction, which is done through the eyes of the POSITA.

[75] The parties agreed that the POSITA has knowledge of information technology, computer programming, software development, and problem gambling.

[76] The Plaintiff submits that because Mr. Johnson, the actual inventor, had no knowledge of gambling games that the POSITA is a team consisting of the “Technical Skilled Person” and the “Gambling Skilled Person.” They submit the Technical Skilled Person has knowledge of information technology, computer programming, and software development, and the Gambling

Skilled Person has knowledge of problem gambling. Based on this distinction, the Plaintiff asked that I do not prefer the Defendants' expert (Mr. Friedman) over their own expert (Dr. Smith) on the basis that Mr. Friedman has knowledge of gambling games while Dr. Smith does not.

[77] Dr. Smith explained that the member of the skilled team with expertise in information technology would have a bachelor-level degree in computer science or computer engineering or an equivalent set of skills by working in the networking field. They would typically have a few years of industry experience in developing networking systems with specific technical skills in telecommunications networks and databases. Dr. Hodgins explained that the member of the skilled team with expertise in problem gambling would have a number of years of practical clinical experience and/or research experience in this field. This person may have a post-graduate degree in psychology or an undergraduate degree in medicine, with a specialty in psychiatry.

[78] Dr. Griffiths acknowledged that the POSITA would require both software development skills as well as expertise in the psychology of problem gambling. Mr. Friedman stated that the POSITA would be a team including a software developer and someone with psychological training. Mr. Friedman stated that the software developer would have at least an undergraduate degree in computer science and 3-5 years' work experience. Dr. Griffiths added that the POSITA would have been a psychologist with at least a few years of problem gambling research or treatment experience. However, this member would not necessarily have a Ph.D. in psychology or have to be a clinical psychologist. Dr. Griffiths concluded that through formal education or an equivalent in work-related experience, the POSITA would have had knowledge of the general psychology of problem gambling and the diagnostic screening instruments that were generally

used by psychologists to diagnose mental disorders of addiction, including problem and pathological gambling.

[79] The parties agree that the POSITA on these facts—whether a team or composite person—has expertise in computer science (information/technology) as well as expertise in problem gambling. There is disagreement (though I see it as very fine points on which they disagree) on the exact, specific expertise needed in each of these areas. I agree with the parties where they agree and prefer the evidence of Dr. Griffiths and Mr. Friedman on the points of disagreement, as I find that a POSITA would have knowledge of casino games and the gambling industry. This combination of expert testimony has resulted in my determination that the POSITA would have:

- An undergraduate degree in Computer Science and/or Information Technology and/or Engineering or have obtained the equivalent skills with training and education but without obtaining an actual degree.
- Three to five years' experience working as a software developer. Though Dr. Smith opined that it is helpful but unnecessary to have experience with casino systems, I disagree. A POSITA would have experience developing or designing networking systems, including distributed systems, telecommunication networks, and databases. I agree with Mr. Friedman that a POSITA would have knowledge of gambling games.
- A few years of problem gambling clinical research. This includes the use of diagnostic screening or testing available at the relevant time for mental disorders, research of addiction problems and pathological gambling, as well as treatment of a problem gambler.

- Psychological training. The POSITA has a combination of formal academic training as well as work experience. This would include a clinical psychologist with a Ph.D. in psychology, or a doctor specializing in Psychiatry.

(3) What the claims specifically enforce

(a) *Construing Claims: the steps*

(i) Construing Claims: Step 1: identify the word or phrase

[80] The first step is to identify the words or phrases in the Plaintiff's claim that are descriptive and identify the elements of the invention (*Free World Trust* at para 68). This analysis must be in accordance with section 12 of the *Interpretation Act*, RSC, 1985, c I-21, which states that words are interpreted in a way that "best ensures the attainment of its objects." Further, when doing a purposive claims construction, if the claims are unclear and ambiguous then the Court may turn to the disclosure for context to construe the claims (*Bombardier Recreational Products Inc v Arctic Cat Inc*, 2017 FC 207 at para 296 [*Bombardier Recreational Products*]).

[81] When analyzing these words, the Court must also use "a mind willing to understand." This means the author's purpose and intent must be kept in mind (*Whirlpool* at para 49). Knowing the purpose gives the words context. This helps the Court's interpretation to be "reasonable and fair to both patentee and public" (*Whirlpool* at para 49, citing Justice Dickson in *Consolboard* at 520-521).

- (ii) Claims Construction: Step 2: determine the non-essential and essential elements

[82] The process to determine what identified words and phrases are essential and non-essential was summarized succinctly by the Federal Court of Appeal [FCA] in *Halford v Seed Hawk Inc*, 2006 FCA 275 [*Halford*]:

[13] In the process of construing the claims of a patent, a court will identify some elements of the invention as essential. The determination of which elements are essential depends upon the language of the claims, read purposively, and informed by evidence as to how persons skilled in the art would understand the claims (*Whirlpool* at paragraph 45). An element may be found to be essential on the basis of the intent of the inventor as expressed or inferred from the claims, or on the basis of evidence as to whether it would have been obvious to a skilled worker at the time the patent was published that a variant of a particular element would make a difference to the way in which the invention works (*Free World* at paragraphs 31 and 55).

[83] And as described by Justice Binnie in *Free World Trust* at paragraph 20:

Based on the expert evidence given at trial as to the meaning of the terms used, and the understanding that these terms would convey at the date of the patent to an ordinary worker skilled in the art of electro-magnetotherapy devices and possessing the common knowledge of people engaged in that field, it appears that while some of the elements of the '156 and '361 patents are essential if the devices are to work as contemplated and claimed by the inventor, others are non-essential. **The non-essential elements may be substituted or omitted without having a material effect on either the structure or the operation of the invention described in the claims.**

[Emphasis added]

[84] In summary, an element is non-essential if, based on a contextual reading of the claims, the inventor intended for it to be non-essential (*Whirlpool* at para 68; *Halford* at para 13); or if

the POSITA would understand that changing this element would not change how the invention works (*Free World Trust* at para 20).

[85] In this case, the Defendants submit that all the elements were essential, and the Plaintiff argued some were non-essential. Having heard the evidence from the experts, I conclude that all of the elements of the claim as construed (below) are essential elements. Every step of the claim is an essential element as a POSITA would not have understood that any of the steps were non-essential and as each element is essential for the Safe Gaming System to function.

(b) *Claims Construction*

[86] A mind willing to understand “necessarily pays close attention to the purpose and intent of the author” (*Whirlpool* at para 49(c)). In this case, the 238 Patent’s purpose is to monitor gaming activities to mitigate problem gambling. (I use the term mitigate in this decision but that is not defined and easily mitigate could be substituted with help, lessen, decrease, reduce or any other number of these synonyms.)

[87] The 238 Patent explains this is to be done by a “method in a computer system coupled to a global telecommunications network for monitoring, regulating and terminating gaming activities of an individual” and then goes on to set out the steps of the method. From an overview perspective, the description explains this is all achieved by an expert system suggesting limiting parameters based upon the player’s responses in an assessment, including “any legislated or jurisdictional parameters, and the guidelines and norms maintained within the system.” Once the parameters are established, the software can then reveal variances from the norm or established

parameters, and recognize problems based upon comparison of monitored behaviour with the knowledge base. This system communicates between land based gaming, internet gaming, and online gaming so that the system can track “a player’s gaming time, expenditures, and other behaviour such as speed of play and quality of gaming decisions.”

[88] As would be clear to a POSITA from the foregoing, to carry out its purpose the 238 Patent needs players to register. The description states that the preferred method is for users to register personally on the Safe Gaming website. But alternative ways of registering include by telephone or through third party entities such as a “governmental agency, a gaming company, an online gaming site, or a credit card company may be permitted to perform the service of assisting in registering the user.”

[89] The 238 Patent description also states registration involves presenting the user with “a series of questions and information to fill out online.” In addition, the description explains “these gaming control parameters are used in the monitoring software that tracks gambling activity and intervenes when appropriate.” In other words, only by obtaining this information can the “assessment” of the user’s personal financial, social, and psychological factors occur; the assessment determines the “gaming control parameters” that should be implemented.

[90] As explained above, parameters are suggested based on factors including the user’s responses and legislation. Some suggested parameters will be monetary amounts, and time budgets. In addition, problem gambling susceptibility can be assessed in real time and presented with suggested actions. In the end, the user is to accept these limits, and (after verifications and

credit check) unique permanent account numbers and passwords are assigned. Possibly, the user will be issued an encoded smart card. The system is then to monitor and regulate (with warnings when limits are being reached) the gambling of that individual and terminate the gambling when the parameters are met.

[91] To monitor and control gaming activities at any time, this system functions continuously. The 238 Patent says that the initial assessment must be updated periodically as requested by the user or initiated by the system. This keeps the system up-to-date with the user's social or economic status and susceptibility to problem gambling. Various reports of gambling activity could be produced, and associated services are offered that provide "training, awareness, referrals to needed professional help, guidelines for safe gaming, and other features."

[92] The description includes a flow chart of the overall process of the invention referred to under the heading "Description of the Preferred Embodiments" under the subsection "Using the System."

[93] In summary, the purpose of the 238 Patent is to monitor, regulate, and terminate gambling behaviour that is a problem, including in brick and mortar locations, internet gaming, VLTs and other online gaming.

[94] For the purposes of this decision, I will rely on and accept the claims charts of Mr. Friedman and Dr. Griffiths as related to Claim 1 and Claim 6. I am relying on these claims charts as I determined that the POSITA would have knowledge of the gaming industry and that

knowledge is included in these charts. In addition, I agree with Mr. Friedman that the construction proposed by Dr. Smith ignores the inventor's purpose set out in the specification and has characterized the POSITA as having common general knowledge that I do not believe was so at the relevant time. Of course, what is available today regarding evaluation testing, behavioural tracking, treatment, and data concerning problem gambling is very developed—but I do not find the evidence shows that this was part of the common general knowledge at the relevant time. Again, I believe Dr. Smith's evidence was credible, and I believe where the experts' disagreement comes from is whether their analysis considered a POSITA would have knowledge of gaming.

(4) Claim 1

[95] The preamble states that the invention is a computer system connected to what we now know as the World Wide Web that monitors, regulates, and terminates gaming activities of an individual and the method to do so comprises of steps:

A method in a computer system coupled to a global telecommunications network for monitoring, regulating, and terminating gaming activities of an individual, the method comprising the steps of:

[96] Claim 1(a) states:

Establishing a unique record for the individual in a data base, and accepting at least one selected profile attribute agreed to by the individual into the unique record, the at least one profile attribute selected from the group consisting of personal factors, financial factors, social factors, psychological factors, speed of play, quality of decisions, and specific gaming control parameters;

[97] My construction of the claim 1(a) is as follows:

- a) **“Unique record”**: This refers to the way that a record is created for an individual person who wants to gamble. The unique record is put into a database where it could later be retrieved from. The ordinary meaning of this is that each person would have one record reflective of only themselves, as that is the purposive meaning of unique as it relates to a record for an individual. In order to fulfil the purpose of monitoring, regulating, and terminating problem gambling, a user logically first needs to undergo a personal assessment that creates the unique record. From the 238 Patent’s written description and as confirmed in the flow chart, in order to create a unique record the user would need to undergo an assessment that would touch on all the factors agreed to. The diagram shows that parameter files are the next step after a registration assessment. As indicated in the flow chart, the computer would have to set the parameter files based on the assessment. Only then would expert knowledge know what would mitigate (regulate) problem gambling in this individual.
- b) **Selected profile attribute agreed to by the individual**: Once the computer sets the parameters, then the user must accept one of the seven listed profile factors. This step on the flow chart is titled “Approve Parameters & SGS Set-aside Account.” So after at least one of the profile factors parameters is accepted, that information goes into the unique record. This allows the system to know when to terminate play is because it will know the parameter is met.
- c) **Selected from the group consisting of**: I have construed this keeping in mind the 238 Patent’s purpose of mitigating problem gambling. This patent lists the profile attribute options that a user can choose at least one from, and the personal assessment of each user

leads to a unique record. The patent says that choosing even one of these factors will allow the system to monitor, regulate, and terminate the gaming activities so that problem gambling is mitigated. Of these the first four are active input and the last three are limiting parameters. I agree with Dr. Griffiths that the wording “from the group consisting of” means that all seven factors are present to select from. The assessment would ask about all seven factors and then the expert system would provide the user with the limits to be established. Only then would the user be able to choose which parameter to be monitored, regulated, and terminated on.

- d) **Consisting of personal factors, financial factors, social factors, psychological factors, speed of play, quality of decisions, and specific gaming control parameters:** The experts Dr. Griffiths and Dr. Hodgins were in general agreement over the meaning of some of the seven terms, but disagreed with the definition of social factors, quality of decisions, speed of play, and specific gaming control parameters. None of these terms are defined in the 238 Patent, and no examples are given. The meaning of these terms remains ambiguous after reading the claims, and the description was turned to for context. The seven factors and their constructions are below:
- e) **“Personal factors”:** The word “personal” appears in the disclosure at paragraph 20, but used to modify three other factors from the list: “the user’s personal financial, social and psychological factors.” I construe that “personal factors” is an input function that is part of the creation of the unique record, but personal factors cannot be limiting parameters. For example your name, address, marital status, race or sex is a personal factor that can be input to create the unique record, but if chosen that factor cannot act as a limiting parameter for the purpose of mitigating problem gambling.

- f) “**Financial factors**”: This would be income and financial information regarding assets and debts.
- g) “**Social factors**”: Dr. Hodgins stated that this factor included marital status, employment status, alcohol or other drug use or abuse and level of social support. In contrast, Dr. Griffiths found that alcohol and drug use are psychological factors. I agree with Dr. Griffiths. I construe social factors as including whether the user typically gambles alone or with others, the individual’s peer group, whether the user’s family condones gambling, if the user typically gambles online, offline, or both, and if the user lives or works near gambling venues or has access to online gambling.
- h) “**Psychological factors**”: These factors are mental health functioning, personality factors such as risk taking or impulsivity, drug or alcohol use or abuse, and level of susceptibility to problem gambling.
- i) “**Quality of decisions**”: Quality of decisions must be construed in the context of problem gambling, and refers to decisions such as whether a player should have held on to a card, bet \$10,000 on the offsite horse betting 50 to 1 odds on a trifecta box, or in sports betting, knowing a goalie was injured and yet still picking that team to win. This is not defined in the Patent and is a very ambiguous term.
- j) “**Speed of play**”: the users speed of play during whatever game they were partaking in.
- k) “**Specific gaming control parameters**”: regulate when a limit is reached so that gambling will terminate.

[98] Claim 1(b) states:

providing unique means for the individual to identify the individual's unique record containing at least one profile attribute in the data base;

[99] The term "unique means" is a username and/or password that could be encoded into a smart card, and "unique record" was created as part of the registration process and assessment which included selected at least one profile attribute.

[100] Claim 1(c) states:

providing to a selected gaming site, access to at least a portion of the data base plus operating software for monitoring and terminating the gaming activities of the individual.

[101] This is construed to mean that the computer system from the preamble delivers the software code to the gaming site selected by the user that can then monitor and terminate the gaming activity. The computer system must provide the operating software to the gaming site.

[102] Claim 1(d) states:

supplying the identifying means by the individual to the selected gaming site to commence the gaming activities

[103] I construe this to mean that the user would put in, for example, their username and password to the site they were going to gamble at or on and it would be the link to their unique to one person identification.

[104] Claim 1(e) states:

monitoring by the operating software the gaming activities between the individual with unique record and profile attributes in said data base and the selected gaming site

[105] The information described in Claim 1(c) is already obtained, so the operating software provided by the computer system (as described in the preamble) to the gaming site is able to monitor a user's gaming activities at the gaming site. My finding that there is an order to performing the steps (the information in Claim 1(c) is first obtained) is confirmed by the arrows within the flow chart, and the POSITA would logically understand this.

[106] Claim 1(f) states:

providing regulation of the gaming activities of the individual, the regulation including at least one action selected from the group consisting of: monitoring changes in gambling behavior, monitoring changes in speed of play, monitoring changes in quality of decisions, monitoring monetary end point, monitoring total time end point, and terminating by the operating software the gaming activities of the individual upon the individual deviating from at least one of the selected profile attributes of the individual in the data base.

[107] My construction of Claim 1(f) is as follows:

- a) **Regulation** of gaming activities is the second of the three purposes of the 238 Patent. To regulate, the system must monitor the parameters and know when they are met. The particular activity (or activities) that are regulated is set after the assessment and the expert knowledge base have determined what target must be regulated in order to mitigate problem gambling. That target was agreed to by the user (see Claim 1(a),

above), stored in that user's database in the computer system, and then sent to the gaming site as per Claim 1(c).

- b) **Consisting of monitoring changes** in gambling behavior, monitoring changes in speed of play, monitoring changes in quality of decisions, monitoring monetary end point, monitoring total time end point. The experts agreed that most of the terms in the 238 Patent should be given their ordinary meaning. However there are a number of undefined terms in Claim 1(f) that are ambiguous and I felt it was necessary to turn to the description for context.
- (i) **Monitoring changes in gambling behaviour.** The difficulty with construing the term is that while the gaming site would monitor any changes from the user's gambling behaviour as contained in their unique record in the database, gambling behaviour is not one of the seven profile factors that are chosen in Claim 1(a). Gambling behaviour describes any number of a range of things, such as a nervous twitch when bluffing, or a player throwing the dice hard after placing a bet that is more than they can cover.
- (ii) **Monitoring changes in speed of play.** This suffers the same issues as discussed above. This term is undefined in the patent and "speed of play" is not a profile factor that may be selected during the assessment. This term must be construed to include how fast and slow a gambling game is played, everything from dice throws while playing roulette, to how fast you play your card in poker.
- (iii) **Monitoring changes in quality of decision.** This too suffers as it is not defined in the patent. Quality of decisions was construed, above, in the context of problem gambling, and refers to decisions such as whether a player should have held on to a

- card, bet \$10,000 on the offsite horse betting 50 to 1 odds on a trifecta box, or in sports betting, knowing a goalie was injured and yet still picking that team to win. The term, given the above observations, can only be construed as monitoring any changes in the quality of decisions that were determined by the expert system after the assessment given the limited knowledge of problem gambling at the relevant time.
- (iv) **Monitoring monetary end point.** This would mean that the user, (or according to the description, an entity such as a credit card company), would have chosen this factor and agreed to a monetary figure that when reached would cause play to be terminated. As the data is sent from the computer to the gaming site it would appear that this would occur each time that the site changed, so this would not be a monetary end point for just one venue or type of gaming site, but would be cumulative for the user.
- (v) **Monitoring total time end point.** This means that a user (or an entity as described in the description) would have chosen what time the user agrees within which to gamble, and when that time was reached the user would be terminated from play. It seems that it would be across all modes and venues of gambling because of the descriptor “total” being used.
- c) **Terminating by the operating software the gaming activities of the individual upon the individual deviating from at least one of the selected profile attributes of the individual in the database.** This operating system would have sent the gaming site at least one of the profiles that were chosen to regulate, and upon reaching that point the gaming would terminate. A POSITA would understand that all gaming would terminate if even one profile regulation point was reached that was being monitored by the system.

(5) Claim 6

[108] Claim 6 depends on Claim 1 and reads:

The method of claim 1 wherein the providing access to at least a portion of the data base plus operating software to each selected gaming site includes copying at least a portion of the data base plus operating software for monitoring and terminating the gaming activities of individuals to a server of the selected gaining site.

[109] I note that a server of a “gaining” site must be a spelling error, as that is an undefined term and not known to a POSITA. The author would have meant “gaming site.”

[110] With regard to construction of the terms in the dependent Claim 6, I agree again with Mr. Friedman’s construction.

[111] Dr. Smith’s proposed construction is that Claim 6 includes all the steps of Claim 1 and then makes Claim 1 less general by narrowing Claim 1(c), (d), (e) & (f). Dr. Smith advised this is apparent from the language of Claim 6 when it says “...copying at least a portion of the database plus operation software for monitoring and termination the gaming activities of individuals to a server of the selected gaming site.”

[112] Claim 6 is said to narrow Claim 1(c) where the computer mentioned in the preamble sent the operating software to the gaming site without specifics. The narrowing is that a POSITA would now know that “at least a portion of the data base plus the operating software” would be sent specifically to the each selected gaming site’s server.

[113] As pointed out by Mr. Friedman, the problem with Dr. Smith's construction is that the system did not do any copying of software for monitoring and terminating the gaming activities of individuals as claimed.

[114] Also problematic with that construction, neither the word "each" accompanying the phrase "selected gaming site" nor adding the phrase that it goes to the "selected [gaming] site" narrow Claim 1(c). The only real difference is that it now goes to the gambling site's server that the user selected. It is also unclear if "the selected gaming site" refers to the same site in Claim 1, and it is unclear where in Claim 1(c) the gaming system's operating site would have been running the operating software other than a server meanwhile Claim 6 specifies that it goes to the server. The only feasible construction is that each time a gaming site was selected the copying of at least a portion of the database plus operating software would be sent by the main computer to the server of the gaming site.

[115] Turning to the description for context, the schematic drawing is helpful. The drawing is complete with arrows that I find indicates an order for the steps to occur.

[116] A further construction proposed by Dr. Smith that I disagree with is that a POSITA would understand that access would be provided by copying at least a portion of the database plus the operating software to a server of a selected gaming site which provided shared resources and or services requested by clients. I do not agree as Claim 6 does not say that the server provides shared resources or services requested by clients, and that would not be within the common general knowledge of a POSITA.

[117] In 2000, the POSITA would know that you could download remotely, from a CD, or from a USB. But the internet at that time was slow, especially for a large file, as was the dialup connection to the internet. So as Dr. Smith said it was possible that a person could do this step but I prefer Mr. Friedman's construct that a computer would do the step in Claim 6 of "... copying at least a portion of the data base plus operating software..." A purposeful construction would mean this step was done by a computer and not a person.

B. *The Law on Validity – Principles of Utility, Ambiguity, Obviousness, Anticipation, non-patentable subject matter and Sufficiency*

(1) Utility

[118] Section 2 of the *Patent Act* tells us an invention must be new and useful. The presumption is that the 238 Patent is useful and onus is on the Defendants to prove there was no utility (*Eli Lilly Canada Inc v Novopharm Ltd*, 2010 FCA 197 at para 107).

[119] The law on utility was recently clarified by the SCC in *AstraZeneca Canada Inc v Apotex Inc*, 2017 SCC 36 [*AstraZeneca*], a decision which was released after this trial took place. Portions of this decision are included in the Appendix. Although *AstraZeneca* was issued after this trial, there was no need for further submissions as the parties had already provided arguments and the complete factual basis necessary to determine utility.

[120] Whether utility is assessed claim-by-claim or based on the whole patent requires some discussion. First, *AstraZeneca* says that the subject matter of the proposed invention is to be determined, not the subject matter of each claim. Logically, the subject matter of the patent stays

consistent throughout the claims. In addition, the statutory wording of section 2 of the *Patent Act* is unlike that of 28.2 and 28.3—wording which previously led the courts to determine that obviousness and novelty are assessed on a claim-by-claim basis. Therefore, the utility analysis looks at the patent as a whole.

[121] At trial the Defendants argued that there was no sound prediction by the filing date that the five steps could be carried out and result in a working method. The Plaintiff argued that the basic utility is the monitoring, regulating, and terminating gaming of an individual, and that this basic utility was met.

[122] The first step in the utility analysis is to determine the subject matter of the invention. As the SCC explained, “ultimately, every invention pertains to a single subject-matter, and any single use of that subject-matter that is demonstrated or soundly predicted by the filing date is sufficient to make an invention useful for the purposes of s. 2” (*AstraZeneca* at paras 49, 54).

[123] The subject matter of the 238 Patent involves an expert system with knowledge of individual users (obtained after an assessment) in any gambling venue (internet; video terminals; and gaming tables at a brick and mortar location) that monitors changes in gambling behaviour. The expert system regulates what the limits should be for that person (using that individual’s susceptibility) and terminates gambling when those personal limits are met. In sum, the subject matter of the 238 Patent is a gaming control system for problem gambling.

[124] The second step of the utility analysis is to ask if the subject-matter is useful. In other words, “is it capable of a practical purpose (i.e. an actual result)?” Not every potential use needs an actual result, and a scintilla of utility will do. The purpose of this second step is to prevent fanciful, speculative, or inoperable inventions, and the utility. While a scintilla of utility will do, the utility must be related to the nature of the subject-matter (*AstraZeneca* at paras 55, 57).

[125] The basic utility argued by the Plaintiff is not useful because it is not related to the nature of the subject matter; it is far too general. The Plaintiff’s argument is that the utility is monitoring, regulating, and terminating play of any individual. The Plaintiff says that sound prediction was established by the Defendants’ expert witness, Dr. Griffiths, who agreed that in 2001 a POSITA could have created a computer system that performed the basic utility.

[126] This is a very general statement and I find that the subject-matter of the invention was to monitor, regulate, and terminate play of problem gambling, not merely the play of all individuals as submitted by the Plaintiff. The nature of the subject-matter is an individual who is a problem gambler, or a person who needs to monitor behavior to avoid problem gambling.

[127] I also disagree with the Plaintiff that Dr. Griffiths’ opinion that someone could design a distributed system that shut off when someone chose a gender as a factor is within the scope of the patent’s subject-matter. For example, the fact someone at the time could design a program that would terminate play if a user identified as a particular gender no utility relation to the nature of the subject-matter which includes problem gambling.

[128] Additionally, if at the date of filing the invention could stop play based on the age of a player, this is not related to the problem gambling subject-matter of the claims. As a result, the basic utility argued by the Plaintiff is not useful in relation to the 238 Patent's subject-matter, and fails the test in *AstraZeneca*. The invention as claimed at the relevant time would not be able to monitor, regulate or terminate play such that it would mitigate problem gambling.

[129] Turning first to the Defendants' arguments on sound prediction, the Defendants submit that the utility is properly understood as regulating, monitoring, and terminating an individual's problem gambling based on at least one profile attribute selected from the list in Claim 1(a).

[130] The leading case on this sound predication is *Apotex Inc v Wellcome Foundation Ltd*, 2002 SCC 77 at para 70 [*Wellcome*]. Whether or not there is sound prediction is a finding of fact that requires evidence about what was known at the priority date (at para 71). If there is no sound prediction then the patent is invalid (*Wellcome* at para 56).

[131] The doctrine of "sound prediction" balances two competing public interests: the public interest in early disclosure of inventions and the public interest in avoiding granting monopoly rights in exchange for misinformation. This is part of the *quid pro quo* an inventor gives in exchange for the monopoly. It isn't enough if the result turns out to be correct because sound prediction is not about good luck or speculation (*Wellcome* at paras 66, 69, 83, 84).

[132] The amount of disclosure required to soundly predict the patent's utility depends the POSITA's knowledge (*Eurocopter* at para 152). If the sound prediction relies on data outside of

the common general knowledge, “then disclosure in the specification may indeed be required to support a sound prediction” (*Eurocopter* at para 153).

[133] Finally, in *Wellcome* at paragraph 70, Justice Binnie laid out three requirements for sound prediction:

- 1) There must be a factual basis for the prediction.
- 2) The inventor must have at the date of the patent application an articulable and “sound” line of reasoning from which the desired result can be inferred from the factual basis.
- 3) There must be proper disclosure. However, it is generally not necessary for an inventor to provide a theory of why the invention works.

[134] In this case, the inventor did not demonstrate sound prediction at the priority date (January 20, 2000) because there was not an articulable sound line for reasoning from which the result can be inferred from the factual basis for the reasons that follow:

- A. The inventor, Mr. Johnson, advised that he made the invention on his home computer and without the requisite networking architecture for a distributed system. His evidence was that a grade school child could have done the programming. His evidence was it was not fully developed and was just an idea. Further he said this was not the whole invention.
- B. The inventor stated that although a registration assessment was a step on his flowchart, his evidence was he did not know anything about the registration assessment.
- C. The schematic flowchart included in the patent was not fully developed and even though there are clearly arrows indicating a direction to follow, Mr. Johnson’s evidence at trial was that the order of the flowchart (see Appendix) would not necessarily be in that order because now there are different ways of doing it.

- D. There was no program invented when Mr. Johnson filed his patent to monitor a person's speed of play prior to January 2001, and the 238 Patent did not have any thresholds for the player's speed of play that then terminates play.
- E. The inventor did not have a database or anything to monitor speed, quality of decisions, gambling behaviour, gaming probabilities, quality of play.
- F. The prototype was not connected to a gaming environment. The testing consisted of putting in test values and the test was to see if it would shut down from further play when the value was exceeded.
- G. The inventor did not develop a program that would shut down play based on a player's change in their speed of play at the time of the invention, nor were termination levels developed that could be used to terminate play. Additionally, there was no method to determine the quality of decisions made by a gambler or a way to monitor changes or the termination thresholds set in which to stop the play.
- H. No testing was done on the system to see if it would reduce problem gambling.

[135] The Defendants argued that there was no empirical data that the five steps could be carried out and result in a working method. Because there was no factual basis they submit that there cannot be sound prediction, and the regulation of problem gambling through those five steps does not have utility in the 238 Patent.

[136] I agree with the Defendants and prefer the opinion of Dr. Griffiths and Mr. Friedman who both are of the opinion that this invention was not soundly predicted or disclosed sufficiently to have a scintilla of utility.

[137] The possibility of monitoring *in general* is possible with this patent, but a POSITA at the time did not have the psychological tools to monitor and mitigate *problem gambling*, and the utility is not soundly predicted or demonstrated. At most the POSITA could monitor what a player did, but the POSITA would not know what is safe for one person (and what is safe for one person may not be safe for another).

[138] Furthermore, a POSITA in 2001 would not have a developed field of behavioural tracking data to assist them in developing rules to regulate a player's gambling or adjust those rules depending on the games or gambling they were doing. For example, how could the POSITA monitor changes in a player's quality of decisions with no baseline or physiological baseline for the given game and player? The 238 Patent does not include the baseline comparators which would be necessary and would not have been part of the POSITA's general knowledge. Even if the patent could monitor the necessary factors, that two people each spend \$100.00 a day does not mitigate problem gambling as one player could have a problem if they are on social assistance while another player who is wealthy may not. Again, in 2001 there were no tools to assess or to set limits that would mitigate problem gambling as this 238 Patent required and relied on. There were screening tools regarding gambling for example of a couple such as South Oaks Gambling Screening and the Canadian Problem Gambling Index (CPGI) but they were in their infancy and not fully developed and there was not a lot of long term data at the relevant date.

[139] Thus, the utility of the 238 Patent does not satisfy section 2 of the *Patent Act*, and the patent is invalid. If Claim 1 is invalid in this way so is Claim 6, because Claim 6 does not narrow

Claim 1 in this aspect. I do not find there is a scintilla of utility in the 238 Patent and I am supported by Mr. Friedman and Dr. Griffiths and adopt their reasoning.

[140] A patent that could do what this patent says it can would be a very useful tool with regards to “problem gambling.” But this patent could not do what it says it could, nor was it soundly predicted, no matter how purposeful I attempt to construct the terms. At the relevant time little was even known about “problem gambling” and the screening tests were in infancy. Then the mere impossibility of what the patent says the invention will do and what it could do makes this patent difficult due to the insufficient disclosure (discussed more below). The testimony of Mr. Johnson confirms that in fact the patent could not do what it says as it was not fully developed.

[141] This patent cannot be operationalized as a POSITA would not be able to program a computer to do the things it says it can.

(2) Sufficiency of Disclosure

[142] According to section 27(3) of the *Patent Act*, the claims and description must fully and correctly describe the invention. Section 27(4) of the *Patent Act* states “the specification must end with a claim or claims defining distinctly and in explicit terms the subject-matter of the invention for which an exclusive privilege or property is claimed.” When a claim in a patent exceeds or is broader than the invention made or disclosed it may be found invalid (*Pfizer Canada Inc v Canada (Minister of Health)*, 2007 FCA 209 at para 115; *Amfac Foods Inc v Irving Pulp & Paper Ltd* (1986), 12 CPR (3d) 193 (FCA)).

[143] Under section 58 of the *Patent Act*, claims which do not satisfy the disclosure requirement can be severed from those that are overly broad (*AstraZeneca* at para 46). Therefore an entire patent may or may not be rendered invalid based on this ground.

[144] Sufficient disclosure is a part of the patentee's *quid pro quo* for the monopoly, and it is the heart of the patent system (*Teva Canada Ltd v Pfizer Canada Inc*, 2012 SCC 60 at paras 31-32). The purpose of disclosure is to ensure that a POSITA can "make full use of the invention without having to display inventive ingenuity" (*Pfizer Canada Inc v Canada (Minister of Health)*, 2008 FCA 108 at para 64).

[145] The SCC explained the test of sufficient disclosure in *Pioneer Hi-Bred Ltd v Canada (Commissioner of Patents)*, [1989] 1 SCR 1623 at 1638, saying that a sufficient specification sets out the way the invention is built and describes the way it is put into operation:

The applicant must disclose everything that is essential for the invention to function properly. To be complete, it must meet two conditions: it must describe the invention and define the way it is produced or built... The applicant must define the nature of the invention and describe how it is put into operation. A failure to meet the first condition would invalidate the application for ambiguity, while a failure to meet the second invalidates it for insufficiency. The description must be such as to enable a person skilled in the art or the field of the invention to produce it using only the instructions contained in the disclosure

[Citations omitted]

[146] The Plaintiff argued that the common general knowledge would have allowed the POSITA to fill in any gaps in the 238 Patent. In *AstraZeneca Canada v Apotex Inc*, 2015 FC 322, Justice Barnes explained that the POSITA brings "considerable background knowledge and

experience” and that claims are not overbroad if they require the POSITA “to avoid known unsuitable choices” (at paras 276-277).

[147] But I agree with the Defendants that in this case, the POSITA needs to do more than just bring their knowledge and experience; the POSITA must “undertake a major research project to ‘figure out’ how to work the claimed method.” This is because the claims do not define essential terms like “selected profile attributes” or contain information about how to select profile attributes. Nor does the 238 Patent define many other essential terms, such as personal factors, financial factors, social factors, and psychological factors (of which there are hundreds of possible variables), speed of play, or monitoring changes in speed of play (which varies by the game), nor quality of decisions.

[148] In *Bombardier Recreational Products* at paragraph 568, Justice Roy held that there is insufficient disclosure if the POSITA would need to conduct a research project to build the invention:

[568] ...What is disclosed? Nothing. The only evidence in this case is not that the skilled person would have to undertake a minor research project, which is already too much (*Teva*, para 75). It is a major research project.

[149] The invention must teach some new solution to a problem. That is the whole point of the *quid pro quo*. The Plaintiff described Claim 1(a) and 1(f) as Markush claims. Whether or not they are Markush claims, the essential elements have limitless boundaries which make the disclosure insufficient. Therefore, I agree with the Defendants that there was insufficient disclosure of Claim 1 in this case, especially in the case of Claim 1(a) and 1(f). I do not believe it

is a Markush claim either but do not need to deal with it as my construction is clear that there was an order in the steps.

[150] In particular, Dr. Griffiths opines and I agree with his opinion that the following terms in Claim 1(a) and 1(f) are ambiguous or indefinite, and not defined in the 238 Patent:

- a) Profile attribute;
- b) Social factors;
- c) Psychological factors;
- d) Speed of play;
- e) Quality of decisions;
- f) Specific gaming control parameters;
- g) Monitoring changes in gambling behavior; and
- h) Monitoring quality of decisions.

[151] For example, regarding speed of play, the disclosure is silent about how to monitor changes in different games. The POSITA at the time would not have had the data or the research of how monitoring the changes in the speed of play would have been used by the expert system to set what deviations should be regulated. Nor is there disclosure that says how much of a deviation in changes of your speed of play must be determined by the expert system.

[152] Further there is no data to show on some games speed of play has anything to do with whether you are a problem gambler let alone be able to monitor it. For example if you are playing on a VLT you could play 1000 times in one hour, but on a roulette table you could not. Another example was that if you are playing blackjack at a full table there are more hands to deal

so you get less hands to play in an hour but if a player leaves you get more hands so your speed of play increases. But how could this deviation be monitored, and how could speed of play be regulated and terminated? This would not meet the purpose of mitigating problem gambling as speed of play at blackjack is not something necessarily indicative of most problem gamblers and would not be something the screening tests during the relevant period would address for each gambling game. Therefore I disagree with the Plaintiff that the common general knowledge would “fill the gaps.”

[153] Similarly, regarding quality of decisions, the 238 Patent does not disclose what a quality decision is and the possibilities are endless. There is no disclosure about what “quality of decision” is or how to monitor it. In Dr. Hodgins’ opinion, a POSITA would be able to understand that, for example “the quality of decisions” includes cognitive distortions such as a player’s illusions of control. I believe both experts gave similar examples of illusion of control which could include everything from having a lucky machine to the speed that they hit the button or lucky socks. Dr. Griffiths called the lucky socks an illusory correlation issue. The patent does not define this term nor tell us how to measure or even say the rules for deviation. The patent assumes that someone already has all of this knowledge. A POSITA at the relevant time would not have known so this is not sufficiently disclosed.

[154] The description does not sufficiently describe the invention and it does not define the way the invention is produced or built as required by the *Patent Act* in exchange for the grant of a monopoly. Nor could the POSITA, using only the instructions contained in the disclosure put the invention into operation.

[155] Having construed the 238 Patent, I do not find the patent descriptive enough for a POSITA to be able to understand how the invention is defined. It is not sufficiently explained as the terms are ambiguous and they are so wide as to be infinitive, and not instructive of how the actual limits could be set to monitor, regulate, and terminate to the mitigate problem gambling.

[156] Though Dr. Griffiths agreed in cross-examination that some of the factors could be used as limiting parameters, (and though he agreed when asked if a method in a computer that could detect if the player was gambling at home or at a casino could be used as a limiting parameter, and the player could be asked if they suffered from depression, or a number of the factors), it does not change the fact that the terms as construed are so wide with such an infinite number of what-ifs that they are ambiguous.

[157] Further, a POSITA at the relevant time did not have the data on problem gambling to know the factors to mitigate problem gambling. There was not the science or the data of internet/online problem gambling. There may have been limited information regarding general problem gambling at the relevant time, but not enough that the POSITA would have understood the 238 Patent.

[158] The patent does not describe the invention and define the way it is produced or built, and the allegation of invalidity of Claim 1 and its dependent Claim 6 for ambiguity is successful in this case.

[159] As the SCC has explained, it is possible to sever insufficient claims from sufficient claims under section 58 of the *Patent Act*. But in this case, Claim 6 does not specify or narrow the ambiguous elements found within Claim 1. Therefore, Claim 6 is not saved by severing it under section 58 and both Claims 1 and 6 are invalid.

C. *Obviousness*

[160] Section 28.3 of the *Patent Act* statutorily requires inventions to be unobvious in view of the prior art as of the claim date. The claim date in this case is the January 20, 2000 priority date as defined under section 28.1 of the *Patent Act*. Obviousness is analysed without hindsight, and is a difficult test to satisfy (*Frac Shack* at para 205).

[161] The wording of section 28.3 of the *Patent Act* illustrates that obviousness is assessed claim-by-claim. This is due to the relationship between independent and dependent claims. Since dependent claims are narrower in scope than independent claims, it is possible that the narrower dependent claim will escape the prior art and remain inventive. Failing to consider each allegedly obvious claim is a legal error, and therefore both Claim 1 and Claim 6 must be assessed (*Zero Spill* at paras 81-83, 89, 94).

[162] The Plaintiff has argued the invention was not obvious. The Plaintiff argues that although the prior art included “Lasseters Online” and “ACES” systems, these are both centralized systems. The Plaintiff submits this distinguishes the 238 Patent’s invention, which is a distributed system, and that no piece of prior art operates like that described in Claim 6.

[163] The Defendants argue that both Claim 1 and Claim 6 were obvious. In regards to Claim 1, the Defendants submit that there is no difference between what Dr. Smith and Dr. Hodgins have testified the POSITA knew and the patent itself saying “there is nothing left to worry about being obvious. It’s already there.”

[164] To determine if the invention was obvious, the SCC explained a four-step test in *Apotex Inc v Sanofi-Synthelabo Canada Inc*, 2008 SCC 61 at paragraphs 67 to 69 [*Sanofi*]:

- (1)(a) Identify the notional “person skilled in the art”;
 - (b) Identify the relevant common general knowledge of that person;
- (2) Identify the inventive concept of the claim in question or if that cannot readily be done, construe it;
- (3) Identify what, if any, differences exist between the matter cited as forming part of the “state of the art” and the inventive concept of the claim or the claim as construed;
- (4) Viewed without any knowledge of the alleged invention as claimed, do those differences constitute steps which would have been obvious to the person skilled in the art or do they require any degree of invention?
 - 4(1) Is it more or less self-evident that what is being tried ought to work? Are there a finite number of identified predictable solutions known to persons skilled in the art?
 - 4(2) What is the extent, nature and amount of effort required to achieve the invention? Are routine trials carried out or is the experimentation prolonged and arduous, such that the trials would not be considered routine?
 - 4(3) Is there a motive provided in the prior art to find the solution the patent addresses?

[165] Justice O'Reilly succinctly summarized the test in *E Mishan & Sons v Supertek Canada Inc*, 2014 FC 326 at paragraph 129, aff'd 2015 FCA 163. The wording at part (d) was appealed, but upheld by the FCA:

[129] In determining obviousness the Court must:

- a) Identify the national person skilled in the art;
- b) Identify the relevant common general knowledge and prior art forming the state of the art;
- c) Identify the inventive concept of the claims at issue;
- d) Identify what, if any, differences exist between the state of the art and the inventive concept;
- e) With respect to those differences was a degree of inventiveness required to arrive at the claimed inventor, questions may be asked such as:
 - Was it more or less self evident?
 - What effort, routine or not, was required?
 - What motive was there to find a solution?

[166] The test may also include consideration of how the inventor came up with the invention. If it was invented quickly, easily, directly, or inexpensively then it may have been an obvious step. It may be unobvious if the inventor searched fruitlessly (*Sanofi* at para 71).

[167] Prior art in step 3 of the obviousness test is looked at differently than under novelty. In novelty the disclosure must occur in one publication. But the Court can find obviousness in view of the entire prior art known by the POSITA at the relevant statutory date as set out in section 23.3(a) and (b) of the *Patent Act*. The process has been described as considering a “mosaic of the relevant prior art and the common general knowledge” (*Alcon Canada Inc v*

Apotex Inc, 2014 FC 791 at para 208). If a mosaic is argued by the defence, then the defence must demonstrate “not only that the prior art exists but how the person of ordinary skill in the art would have been led to combine the relevant components of the mosaic of prior art” (*Laboratories Servier v Apotex*, 2008 FC 825 at para 254). Expert evidence is helpful to determine the prior art (*Apotex Inc v Bayer AG*, 2007 FCA 243 at para 19).

[168] **Identify the POSITA:** The POSITA is a team of people with an undergraduate degree in computer science, IT, or engineering, or has equivalent training and education. The POSITA also has three to five years’ experience working as a software developer, a few years’ experience with problem gambling clinical research, psychological training, and knowledge of gambling games.

[169] **Identify the relevant common general knowledge and prior art forming the state of the art:** Due to different the dates relevant in claims construction and obviousness, the common general knowledge may be different in some cases (Donald MacOdrum, *Fox on the Canadian Law of Patents*, 5th ed (Toronto: Carswell, 2013) at 4:13(b)). In this case, however, the evidence I have accepted is that the common general knowledge was the same during this short period between the priority (claim) date and the date of publication. Therefore, although the experts’ discussion at times speaks of the period up to and including July 2001, it makes no substantive difference in this particular case.

[170] Dr. Hodgins’ opinion was that “Dr. Griffiths focused on what the state of the art did not consist of rather than what it did at the relevant time, noting at paragraph 29 that ‘by the end of 2001 the gambling studies field was still an emerging field with relatively few largescale

epidemiological studies.” Dr. Hodgins disagreed with this and opined that it was “already reasonably well-established at the time.” Dr. Hodgins said that because Dr. Griffiths restricted himself to online gambling he disagreed with Dr. Griffiths’ evidence that there were no empirical studies of the psychology of gambling in the period of January 2000 and July 2001. He does agree that the psychology and research regarding online gambling was very new in the 2000-2001 timeframe but not with more general gambling. He stated that there were numerous peer studies prior to 2001 that published “scientific research on gambling issues” and referred to a dedicated research journal called *Journal of Gambling Studies* (formerly the *Journal of Gambling Behavior*), as well as articles appearing in respected journals such as the *British Journal of Psychology*, the *American Journal of Psychiatry*, the *British Journal of Addiction*, *Addictive Behaviours*, and the *Psychology of Addictive Behaviors*. Therefore, Dr. Hodgins found that even if Dr. Griffiths’ academic paper may have been the first on internet gambling, it was not the first on gambling.

[171] He agreed with Dr. Griffiths that the screening tool existed but also points out that the state of the art at the time had other tools (such as the CPGI and Problem Gambling Severity Index). He opined that a POSITA would understand that these tools had limitations but they could be “useful for predicting an individual’s susceptibility to developing a gambling problem, and would be helpful in an overall strategy to provide feedback and limit an individual’s play.” Dr. Hodgins does, however, agree more with Mr. Friedman that “pathological gambling was a public health problem widespread by January 20, 2000” and that “multiple Australian states had published policies or recommendations for problem gambling mitigation, and specifically references a law passed in Queensland in 1998, and a report out of New South Wales that

discussed Internet wagering and the functionality of setting wagering limits within gaming systems.”

[172] Mr. Friedman opined that networked gaming systems were developed in the 1980s and well-known in January of 2000. He believed they comprised two primary forms at that time: land-based gaming (connecting slot machines or table game pit terminals to central systems) and the internet casino industry. For land-based gaming, networks tracked player activity on gaming machines for the purpose of awarding complementarians. This system also determines gaming outcomes as opposed to technology within a machine itself (such as a typical slot machine). Mr. Friedman was of the opinion that all internet gaming transactions are easily monitored and are tracked as a matter of course because all internet casino transactions are attributable to an identified player who must log in prior to play. In 2000, internet casino wagers were typically made through a pre-funded player account maintained by the internet casino itself. This required tracking of player transactions.

[173] Also according to Mr. Friedman, by January 20, 2000, there were the beginnings of understanding that pathological gambling was a public health problem. He pointed to several government reports to illustrate this point, including an Australian report from 1999 published by Australia’s Gambling Industries, United States’ National Council on Problem Gambling recommendations, and a 1996 Canadian report discussing the South Oaks Gambling Screen as a tool to assess problem gambling. Mr. Friedman also used a 2012 article on “pre-commitment” in gambling which references other academic articles pre-dating 2000. He relies on this, the *Queensland Australia Interactive Gambling (Player Protection) Act of 1998*, and a

recommendation from a vendor (Access Systems Pty Ltd.) to suggest that problem gambling and its potential solutions were already being discussed prior to January of 2000.

[174] Dr. Griffiths disagreed somewhat with Mr. Friedman, concluding that by the end of 2001, the gambling studies field was still an emerging field with relatively few largescale epidemiological studies. According to Dr. Griffiths, at the time the 238 Patent was registered, only one dedicated research journal to the scientific study of gambling existed (*Journal of Gambling Studies*, formerly the *Journal of Gambling Behavior*). He goes on to point out that up to July 2001, no empirical studies had been published concerning the psychology of online problem gambling. Dr. Griffiths explained that he published the first ever study on this in October 2001. In the 2000-2001 timeframe, Dr. Griffiths states that there was no generally accepted scientific research examining the psychology of online problem gamblers and that the behavioural indicators for online problem gamblers were empirically unknown.

[175] Dr. Griffiths explains that the screening instruments for problem gambling were directed to the consequences of problem gambling whereas computerized transaction data cannot monitor the consequences of an individual's problem gambling. Dr. Griffiths goes on to explain that problem gambling cannot be inferred from transactional data alone. He opined that in the period up to and including July 2001, the state of the art did not include any published studies identifying patterns of player data that could be observed in an online environment and which would indicate problem gambling issues for specific individuals.

[176] The prosecution history may be used for validity issues (*Free World Trust* at para 66 referring to *Foseco Trading AG v Canadian Ferrer Hot Metal Specialties, Ltd* (1991), 36 CPR (3d) 35 (Fed TD) at 46-47). The Defendants submit that the prosecution history reveals that the prior art included the United States 6012983 Walker Patent, which issued on January 11, 2000—nine days prior to the Safe Gaming January 20, 2000 priority date. In addition, the Defendants submits that two systems, the ACES and the Lasseters Online, are part of the prior art and together disclose all the elements of Claim 1, rendering the 238 Patent obvious.

[177] I will rely on Dr. Griffiths' findings regarding the prior art known at the relevant time as he considered both the state of the art of general problem gambling as well as the emerging internet/online problem gambling during the relevant time.

- (1) Identify the inventive concept of the claims at issue

[178] The inventive concept with both claims is the regulation, monitoring, and termination play of problem gamblers, achieved after conducting an assessment of users to establish a unique record and determining limiting parameters.

- (2) Identify what, if any, differences exist between the state of the art and the inventive concept

[179] The prosecution history illustrates that the Canadian Patent Office found that the Walker patent did not involve regulation of gaming activities, did not include an assessment, and did not monitor changes such as in speed of play, quality of decisions, monetary end point, and time end

point. And as pointed out by the Plaintiff, the Lasseters Online and ACES are different because they are both centralized systems.

(3) Was a degree of inventiveness required?

[180] The prior art as of the priority date was not self-evident, and found only after a very diligent search. Furthermore, the addition of the assessment was not an obvious step from the Walker patent, and required an inventive step. The effort to search for the other information extended far and beyond any routine effort. Obtaining the information required robust, diligent searches at a time when problem gambling knowledge was shown to be in its infancy, and would not have turned up prior art that would make this patent obvious. Obviousness is to be conducted on a claim-by-claim basis. In this case, since independent Claim 1 is unobvious, its narrower dependent Claim 6 is also not obvious. I agree with the Plaintiff that the 238 Patent is not obvious in view of the prior art at the relevant time.

D. *Anticipation*

[181] Although the two concepts of obviousness and novelty seem similar, they are different. *Eurocopter* explains the difference is that “anticipation considers whether the invention has previously been made available to the public, obviousness considers whether the invention was obvious and hence did not involve any inventive step” (at para 118). Unlike obviousness, novelty (or anticipation), means that the claimed invention was not made public before the relevant date in a single publication.

[182] Anticipation is a high threshold to prove. As the SCC explained in *Free World Trust*, (quoting from *Beloit Canada Ltd v Valmet OY* (1986), 8 CPR 3d 289 at 297):

One must, in effect, be able to look at a prior, single publication and find in it all the information which, for practical purposes, is needed to produce the claimed invention without the exercise of any inventive skill. **The prior publication must contain so clear a direction that a skilled person reading and following it would in every case and without possibility of error be led to the claimed invention.**

It is only the mechanical skills that are required, not inventiveness.

[Emphasis added]

[183] I find that the prior art did not contain a publication such that a POSITA would understand how to make this invention work. And in this case, the 238 Patent would not fail for anticipation when it was not sufficiently disclosed and has no utility. Even with all the prior art that was published at the relevant time, this invention could not have been produced. In this aspect I agree with Dr. Hodgins and his in-depth review which found the existing prior art did not teach to the system in the 238 Patent.

[184] I did not see the claims as constructing, as Dr. Smith suggested, a simple system for players, so I do not agree with Mr. Friedman that the prior art in general and in particular the Lasseters Online and ACES systems anticipate Claim 1. Novelty is to be conducted on a claim-by-claim basis but it is unnecessary to consider Claim 6 because the Defendants argued novelty only in respect to Claim 1 (and furthermore, Claim 6 is dependent on Claim 1 which I have already found to be novel). I find that the 238 Patent is not invalid for anticipation.

E. *Infringement*

[185] I have found that the 238 Patent is invalid. Although my invalidity finding means it is unnecessary to consider the infringement allegations, I will briefly explain my analysis of why there would not be infringement even if the 238 Patent had been valid.

[186] The same claims construction applies to issues of infringement (*Frac Shack* at para 134). The 238 Patent is only infringed if all of the essential elements of a claim are present in the Defendants' My-Play product (*Free World Trust* at paras 31 and 68). The claims have been construed already and all the elements are essential elements. The burden to show that all these essential elements have been infringed is the civil standard of proof of a balance of probabilities (*Tervita Corp v Canada (Commissioner of Competition)*, 2015 SCC 3). As the Plaintiff has now narrowed the issues, the only question is whether Claim 6 is infringed in this case.

[187] My finding on infringement is that the evidence does not meet the requisite burden of proof, and I find no essential element of the 238 Patent was infringed by the My-Play system developed by the Defendants.

[188] The My-Play system was designed by Techlink (June 3, 2004) after submitting a Request for Proposal [RFP] for a Responsible Gaming Device [RGD]. The evidence of Mr. Vermette and Mr. Binder is accepted as exactly how technically the My-Play system was developed and operated up until it was shut down. Both witnesses were credible, informed witnesses. Below is a

high level summary that in no way addresses all the evidence presented about the My-Play system and I will rely on Mr. Vermette and Mr. Binder's evidence at trial of the specifics.

[189] This system was originally called Informed Players Choice System [ICPS] and was rolled out in 2009. In February 2010, IPCS was rebranded My-Play. Mr. Mackinnon's evidence was that My-Play's purpose was for low, or no risk gaming users and had nothing to do with problem gaming. It was piloted in what was called the Windsor Trial in 2005. It had a tracking tool, a spending limit, a self-exclude for 48 hours, and was only for VLTs. The system was installed in August 2010. It was first voluntary in 2012, and then became mandatory for a period. On August 22, 2014, it went back to voluntary because VLT revenue dropped as well as other reasons related to use of the cards (of which a player could have many).

[190] The disposable user cards were pre-loaded with empty records before the user registered with the My-Play system. The record did not associate with a player but with the disposable card (which was unlike the "unique record" of the Safe Gaming System). The My-play cards were not for the individual. Nor does the My-Play system have a unique record for an individual as they may have several access cards. The My-Play system is not individualized to the player and does not create a unique record so it does not infringe.

[191] In addition, the My-Play system does not conduct an expert assessment of a player. The Plaintiff pointed out that the 238 Patent claims do not contain the word "assessment." Very simply, the claims were construed to show that, while the Safe Gaming patent does not use the word "assessment" in the claim at issue, the POSITA would understand that the unique record is

created via an assessment—this essential element is not part of the My-Play patent. I find that the My-Play system does not require any assessment. The My-Play system does not have an expert system like Safe Gaming that has the knowledge base to monitor, regulate, and terminate. It can only monitor and terminate if someone voluntarily sets that limit. This does not meet the test for infringement.

[192] My-Play also does not require a selection of any profile attribute. My-Play does not monitor, regulate, or terminate based on personal factors, social factors, psychological factors, speed of play, or quality of decisions. The My-Play system can monitor and terminate when the user voluntarily inputs that they wish to be terminated when a financial limit or time limit is reached. But those inputs are entered by the user themselves after they put the player card in, and there is no suggested or otherwise regulated termination end points. Evidence was given that the Defendants found that some players were using up to 25 cards each—that is, if they were using them at all. The cards in the My-Play system cards were disposable and for the most part not mandatory.

[193] The My-Play system did have a money limit function that could be set voluntarily by a player, but this does not infringe because they did not operate the same. The My-Play system would make a person cash out but only if they lost the bet that would then put them over, rather than not allow them to bet if the bet put them over the limit. The My-Play system allowed the bet because if the player won they would remain under the voluntarily set limit. Though similar, this does not meet the test for infringement.

[194] The My-Play system also does not have a total elapsed time playing limit like the Safe Gaming System did where it would terminate play when the time was reached. The time limiting feature on My-Play were simple and used for years as shown by the prior art and was completely voluntary. I do not find that this feature though similar in some aspects to Safe Gaming infringed.

[195] The My-play software was installed by a person at the gaming site on the RGD whereas the copying talked of in Claim 6 has the software installed by a computer. The SOGORO system (the backend) did not send the software and the evidence was lead that a person installed it on the RGD. Nor did the My-Play system copy operating software for monitoring and terminating the gaming activities of individuals to any server at a gaming site. A screen image is not the same as software. The RGD, I find, is not a server because it is one client per RGD. The ratio is one RGD to one VLT.

[196] Similarly, none of the five monitoring actions set out in Claim 1(f) of the 238 Patent, at least one of which are essential for the Safe Gaming patent, are required for the My-Play system.

[197] Though the My-Play system had a monetary limiting feature, it was not set until after the card was inserted at the RGD. And the player, if they chose, could then select a monetary limit if they wanted but of course could then use a different card and play after the monetary limit was reached using the other card. This does not infringe as even if the Safe Gaming System would not use this limit, that information would already be in the stored record as the parameters would be set by the computer of when to terminate.

[198] The Defendants claim that they developed their own system based on their needs and business model. After hearing the evidence, I agree with the Defendants.

[199] My-Play does not fall in the scope of the 238 Patent.

[200] I find that Claim 6 of the Safe Gaming System is not infringed by the Defendants' system My-Play and dismiss this action.

VIII. Remedies

[201] My conclusions are that the 238 Patent is invalid, and even if it was valid I find that My-Play did not infringe the 238 Patent. It is therefore not necessary for me to determine whether Safe Gaming Systems Inc. is entitled to the remedy as sought. No damages are awarded.

IX. Relief

[202] The Defendants are entitled to a declaration that Claim 1 and 6 of Patent Number 2,331,238 are and have always been invalid, void, and of no force or effect. The Plaintiff's claim for infringement will be dismissed.

[203] The Defendants are entitled to have their costs in the action and counterclaim. If the parties are unable to agree on the quantum of cost then I will receive submissions from the Defendants within thirty days from the date of this judgment (not to exceed 10 pages in addition to the draft bill of costs). The Plaintiff shall file and serve its cost submissions of no more than

10 pages (as well as a bill of costs) within 15 days following receipt of the Defendants' submissions. The Defendants may file a reply of no more than 5 pages within 7 days of receiving the Plaintiff's submissions.

JUDGMENT in T-1043-12

THIS COURT'S JUDGMENT is that:

1. The Action is dismissed and the Counterclaim is successful.
2. The Defendants are entitled to a declaration that Claims 1 and 6 of Patent 2,331, 238 are and have always been invalid, void and of no force or effect.
3. The Defendants are entitled to have their costs in the action and counterclaim. If the parties are unable to agree on the quantum of cost then I will receive submissions from the Defendants within thirty days from the date of this judgment (not to exceed 10 pages in addition to the draft bill of costs). The Plaintiff shall file and serve its cost submissions of no more than 10 pages (as well as a bill of costs) within 15 days following receipt of the Defendants' submissions. The Defendants may file a reply of no more than 5 pages within 7 days of receiving the Plaintiff's submissions.

"Glennys L. McVeigh"

Judge

APPENDIX

Figure 1 – 238 Patent

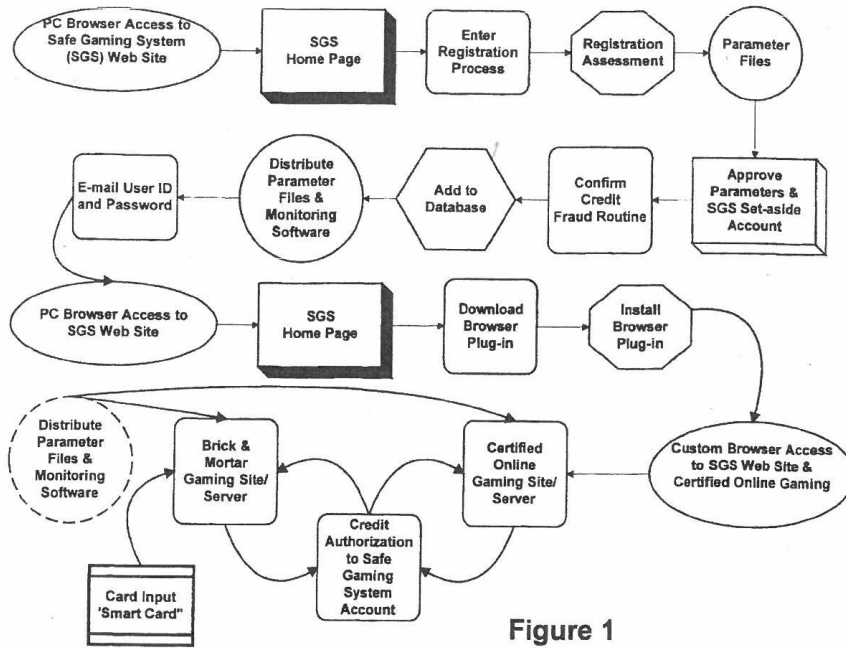


Figure 1

CA 02331238 2001-01-17

AstraZeneca Canada Inc v Apotex Inc, 2017 SCC 36

[52] The words in s. 2 of the Act ground the type of utility that is pertinent by requiring that it is the subject-matter of an invention or improvement thereof that must be useful. For the subject-matter to function as an inventive solution to a practical problem, the invention must be capable of an actual relevant use and not be devoid of utility. As stated by Justice Binnie in AZT, a patent “is a method by which inventive solutions to practical problems are coaxed into the public domain by the promise of a limited monopoly for a limited time” (para. 37, (emphasis added)).

[53] Utility will differ based on the subject-matter of the invention as identified by claims construction. Thus, the scope of potentially acceptable uses to meet the s. 2 requirement is limited – not *any* use will do. By requiring the usefulness of the proposed invention to be related to the nature of the subject-matter, a proposed invention cannot be saved by an entirely unrelated use. It is not sufficient for a patentee seeking a patent for a machine to assert it is useful as a paperweight.

[54] To determine whether a patent discloses an invention with sufficient utility under s. 2, courts should undertake the following analysis. First, courts must identify the subject-matter of the invention as claimed in the patent. Second, courts must ask whether that subject-matter is useful — is it capable of a practical purpose (i.e. an actual result)?

[55] The Act does not prescribe the degree or quantum of usefulness required, or that every potential use be realized — a scintilla of utility will do. A single use related to the nature of the subject-matter is sufficient, and the utility must be established by either demonstration or

52 Le libellé de l’art. 2 de la Loi donne le fondement au type d’utilité qui est pertinent en exigeant que ce soit l’objet de l’invention ou de son amélioration qui soit utile. Pour que l’objet fonctionne en tant que solution ingénieuse à un problème concret, l’invention doit avoir une utilisation pertinente réelle et qui ne soit pas dénuée d’utilité. Comme l’a conclu le juge Binnie dans AZT, un brevet “est un moyen d’encourager les gens à rendre publiques les solutions ingénieuses apportées à des problèmes concrets, en promettant de leur accorder un monopole limité d’une durée limitée” : par. 37, je souligne.

53 Ce qui constitue une utilité acceptable variera en fonction de l’objet de l’invention cerné à la suite de l’interprétation des revendications. Ainsi, la portée des utilisations potentielles acceptables pour qu’il soit satisfait à la condition énoncée à l’art. 2 est limitée -- ce n’est pas *n’importe quelle* utilisation qui suffira. Puisqu’il est exigé que l’utilité de l’invention proposée soit liée à la nature de l’objet, une invention proposée ne peut être sauvée par une utilité qui n’a aucun lien avec lui. Il ne suffit pas que la personne voulant faire breveter une machine fasse valoir qu’elle est utile en tant que presse-papier.

54 Pour déterminer si un brevet divulgue une invention dont l’utilité est suffisante au sens de l’art. 2, les tribunaux doivent procéder à l’analyse suivante. Ils doivent d’abord cerner l’objet de l’invention suivant le libellé du brevet. Puis, ils doivent se demander si cet objet est utile -- c’est-à-dire, se demander s’il peut donner un résultat concret?

55 La Loi ne prescrit pas le degré d’utilité requis. Elle ne prévoit pas non plus que chaque utilisation potentielle doit être réalisée -- une parcelle d’utilité suffit. Une seule utilisation liée à la nature de l’objet est suffisante, et l’utilité doit être établie au

sound prediction as of the filing date (AZT, at para. 56).

[57] The application of the utility requirement in s. 2, therefore, is to be interpreted in line with its purpose — to prevent the patenting of fanciful, speculative or inoperable inventions.

[58] Even though utility of the subject-matter is a requirement of patent validity, a patentee is not required to disclose the utility of the invention to fulfill the requirements of s. 2. As was stated by Dickson J. in *Consolboard*:

I do not read the concluding words of s. 36(1) [now s. 27(4)] as obligating the inventor in his disclosure or claims to describe in what respect the invention is new or in what way it is useful. He must say what it is he claims to have invented. [p. 526]

moyen d'une démonstration ou d'une prédiction valable à la date de dépôt : AZT, par. 56.

57 Par conséquent, l'application de la condition d'utilité prévue à l'art. 2 doit être interprétée conformément à l'objectif qu'il vise, soit empêcher qu'un brevet soit octroyé pour une invention fantaisiste, hypothétique ou inutilisable.

58 Même si l'utilité de l'objet est une exigence pour que le brevet soit valide, le breveté n'est pas tenu de divulguer l'utilité de l'invention pour satisfaire aux exigences énoncées au par. 2. Comme l'a affirmé le juge Dickson dans *Consolboard* :

...je ne donne pas aux derniers mots du par. 36(1) [aujourd'hui le par. 27(4)] une interprétation qui oblige l'inventeur à décrire, dans sa divulgation ou ses revendications, en quoi l'invention est nouvelle et de quelle manière elle est utile. Il doit dire ce qu'il revendique avoir inventé. [p. 526]

Patent Act, RSC 1985, c P-4

Definitions

2 In this Act, except as otherwise provided,

invention means any new and useful art, process, machine, manufacture or composition of matter, or any new and useful improvement in any art, process, machine, manufacture or composition of matter; (invention)

Specification

27 (3) The specification of an invention must

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

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

(c) in the case of a machine, explain the principle of the machine and the best mode in which the inventor has contemplated the application of that principle; and

(d) in the case of a process, explain the necessary sequence, if any, of the various steps, so as to distinguish the invention from other inventions.

Claims

27 (4) The specification must end with a claim or claims defining distinctly and in explicit terms the subject-matter of the invention for which an exclusive privilege or property is

Définitions

2 Sauf disposition contraire, les définitions qui suivent s'appliquent à la présente loi.

invention Toute réalisation, tout procédé, toute machine, fabrication ou composition de matières, ainsi que tout perfectionnement de l'un d'eux, présentant le caractère de la nouveauté et de l'utilité. (invention)

Mémoire descriptif

27 (3) Le mémoire descriptif doit :

a) décrire d'une façon exacte et complète l'invention et son application ou exploitation, telles que les a conçues son inventeur;

b) exposer clairement les diverses phases d'un procédé, ou le mode de construction, de confection, de composition ou d'utilisation d'une machine, d'un objet manufacturé ou d'un composé de matières, dans des termes complets, clairs, concis et exacts qui permettent à toute personne versée dans l'art ou la science dont relève l'invention, ou dans l'art ou la science qui s'en rapproche le plus, de confectionner, construire, composer ou utiliser l'invention;

c) s'il s'agit d'une machine, en expliquer clairement le principe et la meilleure manière dont son inventeur en a conçu l'application;

d) s'il s'agit d'un procédé, expliquer la suite nécessaire, le cas échéant, des diverses phases du procédé, de façon à distinguer l'invention en cause d'autres inventions.

Revendications

27 (4) Le mémoire descriptif se termine par une ou plusieurs revendications définissant distinctement et en des termes explicites l'objet de l'invention dont le demandeur

claimed.

Subject-matter of claim must not be previously disclosed

28.2 (1) The subject-matter defined by a claim in an application for a patent in Canada (the “pending application”) must not have been disclosed

(a) 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 subject-matter became available to the public in Canada or elsewhere;

(b) before the claim date by a person not mentioned in paragraph (a) in such a manner that the subject-matter became available to the public in Canada or elsewhere;

Invention must not be obvious

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

revendique la propriété ou le privilège exclusif.

Objet non divulgué

28.2 (1) L’objet que définit la revendication d’une demande de brevet ne doit pas :

a) plus d’un an avant la date de dépôt de celle-ci, avoir fait, de la part du demandeur ou d’un tiers ayant obtenu de lui l’information à cet égard de façon directe ou autrement, l’objet d’une communication qui l’a rendu accessible au public au Canada ou ailleurs;

b) avant la date de la revendication, avoir fait, de la part d’une autre personne, l’objet d’une communication qui l’a rendu accessible au public au Canada ou ailleurs;

(...)

Objet non évident

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.

FEDERAL COURT

SOLICITORS OF RECORD

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