

Commissioner=s Decision/Décision du Commissaire #1346

TOPIC/SUJET: J10, J30

Application No./Demande n°:2,237,438

IN THE CANADIAN PATENT OFFICE

DECISION OF THE COMMISSIONER OF PATENTS

Patent application number 2,237,438 having been rejected under subsection 30(3) of the *Patent Rules*, has consequently been reviewed in accordance with subsection 30(6) of the *Patent Rules* by the Patent Appeal Board and the Commissioner of Patents. The findings of the Board and the decision of the Commissioner are as follows:

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INTRODUCTION

[1] IGT owns patent application n° 2,237,438, entitled "Electronic Video Poker Games." The application outlines various methods of playing poker, and seeks patent protection specifically on ones that permit multiple hands to be played using only a single hold/discard decision, but claims them in computer-implemented form.

[2] This is a review of the application under subsection 30(6) of the *Patent Rules* following its rejection by a patent examiner. In the Examiner's opinion, the application is directed to subject matter that is not subject to patent protection (non-statutory subject matter), and, further, is obvious.

[3] It is unnecessary to address obviousness as the Board finds, for the reasons that follow, that the present claims are directed to non-statutory subject matter. Accordingly, the present recommendation will focus entirely on the issue of non-statutory subject matter.

[4] Whether the present claims are statutory will depend on whether the claims meet a "physicality requirement" or whether the claimed subject matter is abstract. However, it is first necessary to properly interpret the claims, applying a "purposive construction." Because of the physicality requirement, it is of particular importance in construing the claims of this application to determine whether the electronics in the video poker machine (i.e., the "computer") recited in the claims are essential to the invention. To resolve that question, it is first necessary to address the Applicant's submissions regarding the principles of construction.

[5] Accordingly, the issues before the Board are:

- 1) What are the principles to be applied in conducting a purposive construction of the present claims?
- 2) Is the computer essential in the present claims?

3) Are the construed claims directed to abstract matter or do they satisfy the physicality requirement?

PROCEDURAL NOTE

[6] While this application was pending before the Board, the law on statutory subject matter was addressed by the courts, largely rejecting the Office practice that had been applied by the Examiner in this case; see *Amazon.com v. Canada*, 2011 FCA 328, rev=g 2009 FC 1011.

[7] The Board provided the Applicant with a letter outlining how it saw *Amazon FCA* impacting the present case. The Applicant responded with a 100-page submission and declined an offer of an oral hearing before the Board.

[8] The Office=s practice on statutory subject matter was later set; see the Office Patent Notice published March 8, 2013 entitled "*Practice Guidance Following the Amazon FCA Decision*" and its accompanying memo, PN 2013-02. Though the Applicant=s submissions pre-date the practice notice, its submissions to the Board comprehensively addressed their views of the principles to be applied in this case.

BACKGROUND OF THE INVENTION

[9] The application is primarily directed to electronic video poker games but also involves features that may apply to casino table games; see the description of the present application at pg.1, lines 15-16.

[10] With respect to the Acomputer@ aspect of electronic video poker, the description makes several references to the manipulation of buttons, to conventional touch screens, to screen displays, to the use of Acomputer controls,@ and to altering software on the machine (see sentence bridging pg.16-17).

[11] The application describes many variations on the game of poker, Athe common thread being that the player is shown possible replacement cards face up at the time the player must make

his decision as to which cards to hold and which cards to discard@ (pg.1, lines 12-15 of the description).

[12] Of all the described variations, the present claims encompass only those that include the Aduplication@ of held cards into one or more additional hands. In so doing, multiple hands (e.g., two, three, or five hands) can be played concurrently with only a single discard/hold decision.

[13] Figures 14-16 of the application (reproduced below) illustrate one example of such a variation described as Version #2H on pg. 14 of the description, summarized as follows.

[14] Referring to Figure 14, a player is dealt a five-card hand face-up (410). The player decides which cards to hold and which, if any, to discard.

[15] Next, cards that are held (412-415) are duplicated into each additional hand (420 and 430); see Figure 15.

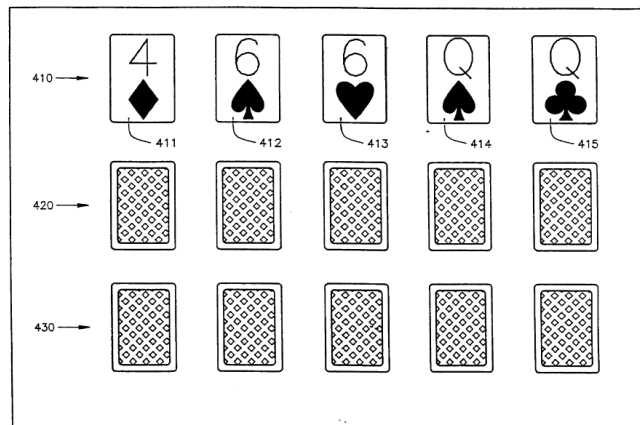


FIG-14

[16] Finally, additional cards (416, 421, and 431) are dealt face-up to provide each hand with five cards; see Figure 16. Each hand is then treated as a separate hand for pay-out purposes and evaluated for poker hand ranking.

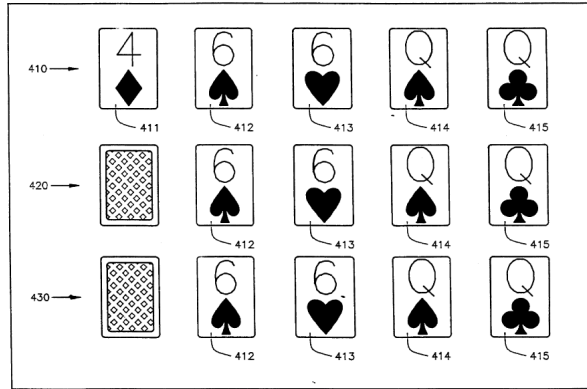


FIG-15

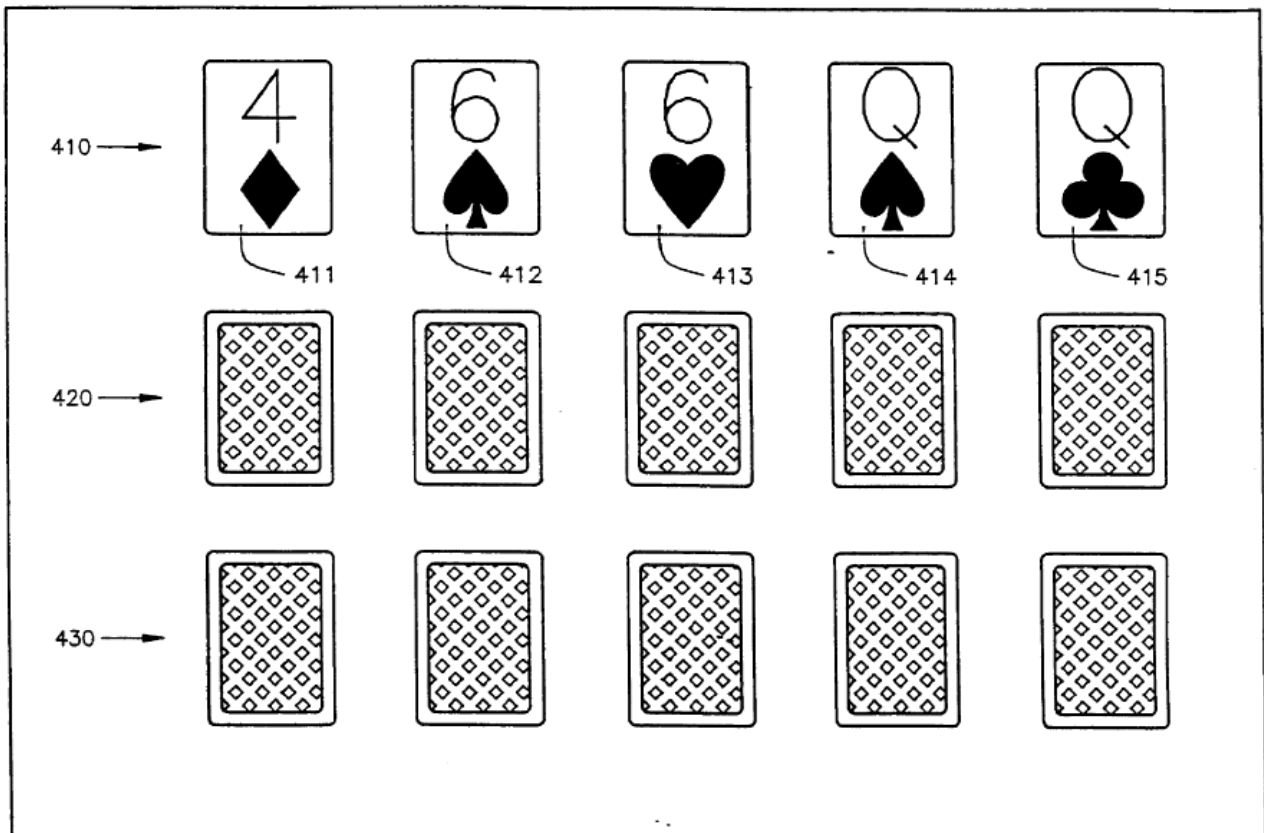


FIG-14

ISSUE 1. WHAT ARE THE PRINCIPLES TO BE APPLIED IN CONDUCTING A PURPOSEFUL CONSTRUCTION OF THE PRESENT CLAIMS?

Purposive construction in general

[17] Purposive construction entails interpreting the meaning of the terms and expressions used in the claims as well as differentiating the essential features (>the pith and marrow') from the unessential@ (see *Whirlpool Corp v Camco Inc*, 2000 SCC 67 at para. 48). It is conducted through the eyes of the skilled person, based on a knowledgeable reading of the whole specification (which comprises both the description and the claims).

[18] Whether an element is essential is determined in accordance with the following principles from *Free World Trust v Électro Santé Inc*, 2000 SCC 66 at para 31 (emphasis added):

The claims language will, on a purposive construction, show that some elements of the claimed invention are essential while others are non-essential. The identification of elements as essential or non-essential is made:

- (i) on the basis of the common knowledge of the worker skilled in the art to which the patent relates;
- (ii) as of the date the patent is published;
- (iii) having regard to whether or not it was obvious to the skilled reader at the time the patent was published that a variant of a particular element would not make a difference to the way in which the invention works; or
- (iv) according to the intent of the inventor, expressed or inferred from the claims, that a particular element is essential irrespective of its practical effect;
- (v) without, however, resort to extrinsic evidence of the inventor=s intention.

[19] In light of the wording used in (iii) and (iv) and in the so-called *Improver* questions (see below), the Board equates the expression *make a difference to the way in which the invention works* with *practical effect* and *material effect*.

[20] From our understanding of the Applicant's submissions, the relationship between points (iii) and (iv) are central to this review. A key consideration is the presentation of these two points in the alternative by the Supreme Court.

[21] In considering questions of statutory subject matter, the Court noted in *Amazon FC* (at para. 41) that purposive construction can *avoid raising form over substance*, that *leading the claims with a >mind willing to understand=* does not translate into wilful blindness, and that *if the inventor is simply claiming an idea, or a theory, the means of implementation (i.e. a human mind or a computer) could be replaced and the invention would remain in essence the same*.

[22] Additionally, purposive construction ensures that the Commissioner *is alive to the possibility that a patent claim may be expressed in language that is deliberately or inadvertently deceptive*; see *Amazon FCA* at para. 44.

[23] Given that the application claims computer-implemented subject matter, it is important to remain grounded in the latest guidance on construction provided by the Court in *Amazon FCA*. In particular, the Board is faced with the question of whether the computer-implementation is essential on a purposive construction.

Analysis - principles of construction

[24] The Applicant's submissions on construction give rise to two questions. First, does the inventor's intent necessarily override material effect of an element? Secondly, is an element essential if any conceivable variant has a material effect? The Applicant would have us answer both questions in the affirmative.

[25] To accept the Applicant's submissions on purposive construction in their entirety would raise form over substance, contrary to *Amazon FC* at para 41. Moreover, the mere recitation of

a computer in a claim would have the effect of transforming into patentable subject-matter what would, otherwise, be clearly not patentable,²⁶ contrary to *Schlumberger Canada Ltd v Canada (Commissioner of Patents)*, [1982] 1 FC 845 (CA).

Does the inventor=s intent necessarily override material effect of an element?

[26] When assessing essentiality, the Applicant submits that one must answer the questions set out in *Improver Corp v Remington Ltd*, [1990] FSR 181. The *Improver* questions²⁷ make the inventor=s intent determinative of essentiality through question 3 of the following structure [emphasis added]:

- (1) Does the variant have a material effect upon the way the invention works? If yes, the variant is outside the claim. If no: --
- (2) Would this (i.e.: that the variant had no material effect) have been obvious at the date of publication of the patent to a reader skilled in the art? If no, the variant is outside the claim. If yes: --
- (3) Would the reader skilled in the art nevertheless have understood from the language of the claim that the patentee intended that strict compliance with the primary meaning was an essential requirement of the invention? If yes, the variant is outside the claim.

[27] Question 3 of the *Improver* questions thus forces the inventor=s intent to become an overriding factor. That is, if it is clear from a reading of the claim that the intent of the inventor requires strict compliance with an element (e.g., the presence of a computer), then the element is essential irrespective of any material effect of the variant.

[28] The principles of purposive construction provide a flexible and informed framework within which to interpret the claims. For the reasons that follow, the Board considers that the rigid *Improver* questions are not a mandatory component of purposive construction.

[29] First, though the Supreme Court cites the *Improver* questions in *Free World Trust*, it does not appear to require their application in every case. Indeed, in cases following *Free World*

Trust, the *Improver* questions are almost never used; see Siebrasse, N., *The Essential Elements Doctrine in Patent Infringement: Free World and Whirlpool in Light of Kirin-Amgen* 22 IPJ 223, 2011 at pg.2.

[30] Second, to require the application of the *Improver* questions in construction would be contrary to the guidance in *Free World Trust* wherein the *material effect* and *intent* factors (see points (iii) and (iv) at para 18, above) are described in the alternative; see *Bauer Hockey Corp v Easton Sports Canada Inc*, 2011 FCA 83 at para. 33 and 40.

[31] Finally, the Applicant's interpretation of *Free World Trust* is inconsistent with the guidance in *Amazon FCA* and *Schlumberger*; the unpatentable could be rendered patentable simply because an inventor intends a computer to be essential. Indeed, that would be the result here: considering the specification as a whole and the fact that the Applicant amended its claims to introduce the electronic components, it would seem difficult to conclude that it did not intend to make these elements essential.

[32] It follows from the reasons above that we cannot agree with the Applicant's submission that to find an element non-essential, *it* must be shown from the wording of the patent that the inventor was well aware that the proposed change would not in any way affect the operation of the invention; see *Martinray Industries Ltd v Fabricants National Dagendor Manufacturing Ltd* (1991), 41 CPR (3d) 1 (FCTD).

[33] Given the nature of the present subject matter, guidance on essentiality will be derived from *Free World Trust* and *Amazon FCA*. Essentiality will be determined on the basis of *material effect*.

Is an element essential if any conceivable variant has a material effect?

[34] The Applicant submits that an element is essential if any variant is found to have a material effect. That is, all conceivable variants must be considered, not just the actual variant found in an

allegedly infringing device/process or disclosed in prior art alleged to invalidate the claim. The Applicant points to para 49(a) of *Whirlpool* in support of this proposition.

[35] This passage of *Whirlpool* cites *Catnic Components Ltd v Hill & Smith Ltd*, [1982] RPC 183, which used the expression "any variant" in the context of a determination of the patentee's intent as an overriding factor:

... whether persons with practical knowledge Y would understand that strict compliance with a particular descriptive word or phrase appearing in a claim was intended by the patentee to be an essential requirement of the invention so that any variant would fall outside the monopoly claimed, even though it could have no material effect upon the way the invention worked.

Thus, "any variant" in *Catnic* applies to the intent factor, discussed above at para 18.

[36] As we have already determined that essentiality in the present case will be assessed based on material effect and not intent, the "any variant" point does not apply.

[37] It follows that in the present case the computer may be found non-essential if its omission would not have a material effect on the way the invention works.

Conclusion - principles of construction

[38] To summarize, essentiality in the present case is assessed by considering whether a particular variant of an element would have a material effect on the way the invention works.

[39] Having addressed the principles of construction, we consider the essentiality of the computer in the present claims.

ISSUE 2. IS THE COMPUTER ESSENTIAL IN THE PRESENT CLAIMS?

[40] Claim 1 of the application as originally filed read as follows:

1. A method of playing a card game comprising:
 - a) dealing a first hand of at least five cards all face up;
 - b) selecting none, one or more of the face up cards from the first hand as cards to be held;
 - c) duplicating the cards selected to be held from the first hand into a second hand;
 - d) duplicating the cards selected to be held from the first hand into a third hand;

- e) discarding from the first hand the face up cards that were not selected to be held and replacing each of those cards with a face up card;
- f) completing the second hand to have at least five cards by dealing additional face up cards;
- g) completing the third hand to have at least five cards by dealing additional face up cards;
- h) determining the poker hand ranking of the resulting cards of the first hand, the second hand and the third hand.

[41] The claim before us now reads as follows (with its Acomputer@ elements underlined):

1. A process for operating an electronic video poker machine having a video display device, the process comprising:
 - a) generating on the video display device a first hand of at least five cards all face up;
 - b) receiving input from a player selecting none, one or more of the face-up cards from the first hand as cards to be held;
 - c) duplicating the cards selected to be held from the first hand into a second hand on the video display device;
 - d) duplicating the cards selected to be held from the first hand into a third hand on the video display device;
 - e) discarding from the first hand the face-up cards that were not selected to be held and replacing each of those cards with a face-up card on the video display device;
 - f) completing the second hand to have at least five cards by dealing additional face-up cards on the video display device;
 - g) completing the third hand to have at least five cards by dealing 20 additional face-up cards on the video display device; and
 - h) determining the poker hand ranking of the resulting cards of the first hand, the second hand and the third hand.

[42] Central to this case, is whether the computer elements (as underlined above) are essential as this will be determinative in this case of whether the claimed subject matter is statutory.

[43] To answer this question, we will consider the problem the inventors sought to solve and the solution taught in the specification. However, it is important to first consider the person of ordinary skill in the art (POSITA) to whom the specification is addressed and the common general knowledge that they possess.

POSITA and the common general knowledge

[44] The Applicant and Examiner generally agreed that the notional Aperson skilled in the art@ to whom the application is addressed would be Aone who is skilled in the fields of casino table games and electronic video poker gaming machine games including their development, design, programming and testing.@

[45] The Applicant added that Adevelopment@ and Adesign@ do not suggest any degree of inventiveness, and that the person possesses generalized skills in relation to electronic gaming machines generally and is not specialized in electronic video poker machines. We accept the Applicant=s characterization.

Problem and solution

[46] Identification of the problem and the solution provided by the invention informs the purposive construction of the claims (see the Office=s position on this point in the above-noted practice notice).

[47] The Applicant addressed the problem solved by the present subject matter in its response to the Board, albeit in the context of discussing the Ainventive concept@ of the present claims. The Applicant submits that the problem addressed by the present application was to enable a player to wager upon more hands in a given time period in order to increase their Ahands per hour@ (HPH). Prior to the present application, players would resort to playing multiple poker machines concurrently in order to increase their HPH. However, each hand on each machine would require a hold/discard decision to be taken by the player, slowing the pace of the game.

[48] The solution to this problem is provided by the claimed subject matter, such as the process of operating an electronic video poker machine of claim 1. The Applicant submits that its Ainnovative use of a single video display device enables a player to play multiple hands that are related through common, duplicated cards selected by the player, on a single gaming machine.@

[49] The Applicant further submits that it is the duplication step in particular that permits multiple, concurrent hands to be played with only a single hold/discard decision. Faster game play is attributed to the single hold/discard decision.

[50] Having reviewed the specification as a whole, the Board finds no support for this characterization of the problem, nor do we agree that the POSITA would understand this to be the problem from a reading of the specification, in light of their common general knowledge.

[51] On the other hand, the specification emphasizes a multitude of variations on the rules of poker, such as ASuper Poker I,@ ASuper Poker II@ (including versions 2A-J with various wagering schemes), wagering schemes for known poker games such as ALet it Ride@ and ATexas

Hold'em, and A Combined Twenty-One Game and Stud Poker Game. No reference is made to avoiding the use of multiple machines, or of increasing HPH.

[52] Among all the variations of poker and optional features presented in the specification, a description of the claimed games first appears on pg.12 in the game referred to as Aversion #2G, as depicted in Figs. 12 and 13 of the application. As noted above, a second game corresponding to the claimed subject matter is Aversion #2H, depicted in Figs. 14-16. The variations described before #2G and #2H do not appear to have any relationship to the claimed subject matter.

[53] Having reviewed the specification as whole, in light of the common general knowledge of the POSITA, the problem appears to be to provide variations on the game of poker. The solution is the set of rules that define the game, and in particular, the incorporation of a single hold/discard decision that is shared across multiple hands, as recited in the claims.

The Acomputer is non-essential in claim 1

[54] The Applicant submits that the computer, in this case an electronic video poker machine with a video display, is essential because the step of duplicating cards Acould not be performed in any practical way by a hypothetical variant lacking the electronic components.

[55] According to the Applicant, if one were to play the game instead with a deck of cards, a dealer could not Athrough the power of his or her mind alone, spontaneously create new duplicates of existing physical playing cards.

[56] The Board agrees that a poker machine would more easily perform the duplication function, however it is not necessary to play the game on a computer. In the Board=s view, the POSITA would appreciate, given their common general knowledge and reading of the present application, that at least a couple of ways exist to play the game without a computer.

Variant I: using multiple decks of cards

[57] In one variant, the game might be played using multiple decks of cards. Where a card is to be duplicated, the dealer would search out one or more copies of the same card from the other decks and place these copies in the one or more additional hands. The additional decks might be sorted so as to facilitate locating the desired cards.

[58] Admittedly, carrying out the game in this way would be considerably slower compared to playing on an electronic poker machine. However, the convenience and speed imparted to the game by the computer does not automatically render the computer essential to the working of the poker game.

[59] In *Schlumberger*, no doubt it was faster and more convenient to carry out the computations on a computer. Nonetheless, *Amazon FCA* explained that the Court [in *Schlumberger*] did not appear to consider the computer an "essential element" in the invention; see *Amazon FC* at para. 44.

Variant II: common community cards

[60] Alternatively, a second variant might draw from the concept of "common" or "community cards", as used in games such as Texas Hold'em and Let it Ride, both of which would have been common general knowledge possessed by the skilled person; see description at pg. 20.

[61] In such a variant, a player would select cards to discard from a first hand dealt face up. Discarded cards could be removed so as to indicate their non-selection. One or more hands, vertically aligned with the held cards would be dealt on the "draw", filling in the vertically aligned positions corresponding to the positions of discarded cards. Cards held from the first deal would be duplicated by mental visualization into each of the vertically aligned hands. In this way, the claimed games could be played conveniently with a single deck of cards without the need for any searching through additional decks to find copies of cards held in from the first deal.

[62] The requirement to mentally visualize the duplicate cards is a skill that is commonly employed in games such as Texas Hold'em wherein a player and observers mentally visualize the player's best hand formed from the two cards held by the player and five "community" cards shared by all. This skill is routinely required in variations of poker such as Texas Hold'em.

Conclusion: variant I and II

[63] As repeated by the Applicant several times in its submissions to the Board, the key here is to permit multiple hands to be played with only a single hold/discard decision. Duplicating held cards on a computer is one way of achieving this, but it is not the only way; searching through additional deck(s) for additional copies of cards or mentally visualizing duplicates of common cards achieve the same result without materially affecting the working of the invention.

Way/Function/Result

[64] In considering the material effect of a variant on the invention, the Applicant submits that "work in the same way" in principle (iii) means "perform substantially the same function in

substantially the same way to obtain substantially the same result.® Though this standard was applied in *Free World Trust*, it is unnecessary to consider whether its application is a requirement in law as the outcome in the present case would be unchanged.

[65] The invention B the poker game B satisfies this standard in that the game is unchanged, whether carried out on a computer or by applying variant I or II. Irrespective of how the game is carried out, a first hand is still dealt, a single hold/discard decision is made, and cards are *somehow* duplicated into one or more additional hands, thereby enabling a player to concurrently play multiple hands with a single hold/discard decision.

Conclusion - construction of claim 1

[66] Accordingly, for the purposes of the present review, claim 1 as purposively construed is effectively claim 1 as was originally filed with the application as the electronic components (the Acomputer®) are non-essential. It is unnecessary to further construe the claims as nothing turns on their remaining elements.

Finding applies to all other claims

[67] This finding applies equally to all other process claims, each of which requires at least one duplication step.

[68] As for the machine and manufacture claims on file, these claims also relate to methods of playing poker. As was stated in *Amazon FCA* at para 44: Awhat appears on its face to be a claim for an >art= or a >process= may, on a proper construction, be a claim for a mathematical formula.® Likewise in this case, what first appear to be machine and manufacture claims, on a purposive construction, are claims to a method. In this case, references to machines and manufactures appear in the claims in order to provide the operating environment of one practical manner of carrying out the invention. However, they do not materially effect the working of the invention.

[69] Having construed the claims, we consider whether the subject matter of the so-construed claims is statutory.

ISSUE 3. ARE THE CONSTRUED CLAIMS DIRECTED TO ABSTRACT MATTER OR DO THEY MEET THE PHYSICALITY REQUIREMENT?

Statutory subject matter: principles

[70] Certain subject matter B irrespective of whether it is new, useful, and inventive B is excluded from patentability; that is, the subject matter is Anon-statutory.®

[71] To be considered statutory, subject matter must fit within one of the five categories of invention defined by section 2 of the *Patent Act*: art, process, composition of matter, machine, or manufacture.

[72] Moreover, to satisfy the definition of Ainvention® under section 2, a Aphysicality requirement® must be met A...because a patent cannot be granted for an abstract idea, it is implicit in the definition of Ainvention® that patentable subject matter must be something with physical existence, or something that manifests a discernible effect or change®; *Amazon FCA* at para 66. Abstract ideas are not patentable because subsection 27(8) of the Act excludes from patentability Aany mere scientific principles or abstract theorems.®

[73] Thus if the claims, as purposively construed, are directed to an abstract idea, they are not patentable. On the other hand, if they satisfy the Aphysicality requirement,® they may be patentable. The Aphysicality requirement® is not met simply because subject matter has a practical application. Where the invention is an abstract idea, carrying it out on a computer, though practical, is insufficient on its own to satisfy the requirement; see *Amazon FCA* at paras 61 and 69.

Do the present claims meet the physicality requirement?

[74] The Applicant points out that the claims are not abstract as they meet the physicality requirement by either producing a discernable effect or by including something with physical existence.

[75] To illustrate the discernable effect, the Applicant points to the discernable changes on the video display as cards are dealt, discarded, and duplicated. As for satisfying the physicality

requirement by way of physical existence, the Applicant points to the presence of the electronic video poker machine and its display.

[76] However, the Applicant=s submissions do not assist in evaluating compliance of the construed claims with the physicality requirement as the Board=s construction of the claims finds the computer to be non-essential.

[77] The claims as construed are directed to methods of playing cards (poker). Each claim sets out a number of steps, or rules. These rules dictate, e.g., the number of cards to be dealt, how many hands will be played concurrently, when and upon what to wager, which and how many hands to duplicate the selected cards into, awarding bonuses.

[78] Such rules are abstract in nature. As abstract ideas do not meet the physicality requirement, the claimed subject matter does not qualify as an Aart@ under section 2 of the Act. Moreover, given the abstract nature, the claims are unpatentable under section 27(8) of the Act.

[79] The present claims are comparable to the situation discussed in *Amazon FCA* at para 61 where the Court stated that an abstract business method that is implemented by programming into a computer would lack the necessary physicality for patentability. Similarly, an abstract idea, such as a set of rules governing a method of playing poker, programmed into a computer using an algorithm, which is also an abstract idea, lacks the necessary physicality to qualify for patentability.

CONCLUSION

[80] In light of the above reasons, the Board finds that the claims of the present application, as purposively construed, are directed to abstract subject matter and do not comply with section 2 and subsection 27(8) of the Act.

RECOMMENDATION OF THE BOARD

[81] The Board finds that none of the claims in application 2,237,438 defines statutory subject matter. Therefore, the Board recommends that the application be refused.

Mark Couture
Member

Ed MacLaurin
Member

Stephen MacNeil
Member

DECISION OF THE COMMISSIONER

[82] I concur with the Patent Appeal Board's findings and their recommendation that the application be refused on the basis of non-compliance with section 2 and section 27(8) for claiming abstract subject matter.

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

Sylvain Laporte

Commissioner of Patents

Dated at Gatineau, Quebec,

this 20th day of June 2013