

**PATENT ELIGIBILITY UNDER 35 U.S.C. 101 – THE FOUR STAGES OF
MESTASTATIC CANCER DESTROYING INVENTORS' RIGHTS © MARK A.
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THIS IS THE SECOND OF AT LEAST FOUR DOCUMENTS THAT WILL BE PUBLISHED
ON-LINE ADDRESSING THIS ISSUE WHICH IS CRITICAL TO INVENTORS' RIGHTS.

THIS SECOND ARTICLE MOVES TOWARDS ADDRESSING SPECIFIC
MISAPPLICATIONS OF THE 150-PLUS YEAR-OLD JUDICIAL DOCTRINE OF PATENT-
ELIGIBILITY UNDER 35 U.S.C. 101

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SUMMARY

The first article in this series left off with the conclusion that “...the doctrine of patent-eligibility is now too often applied in a generic manner to specific levels of technology that are incapable of blocking access to or monopolizing “basic tools of scientific and technological works.” Such specific targets of this stage one of the cancerous mutation of the doctrine are playing card gaming content, novel sets of playing cards/tiles and novel game content on electronic gaming machines. These fields of invention are incapable of blocking these basic tools, and to apply the 150-year old doctrine to them is contrary to the basic Constitutionally mandated “...[promoting] the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.”

This second article will specifically address one aspect of the spread of this cancerous interpretation into its devastating impact on the gaming industry. This article will also identify the extraordinary extent to which case law has been distorted to apply to this field of technology and business.

BACKGROUND OF THE ISSUE OF “BUSINESS METHODS” AND “FINANCIAL TRANSACTIONS”

Starting with *Bilski v. Kappos*, U.S. Commissioner of Patents, 130 S.Ct. 3218; 561 U.S. 593, 2010, USPTO policy and Courts’ objectives merged towards addressing a significant problem in the field of Patent Law, frivolous litigation, especially by so-called “patent trolls.” (e.g., *Brooks Furniture Mfg., Inc. v. Dutailier, Int’l, Inc.* 393 F. 3d 1378 (2005); *Highmark Inc. v. Allcare Health Management Sys.*, 572 U.S., (2014); and multiple “guidelines” and “guidances” issued by the USPTO (including “New Interim Patent Subject Matter Eligibility Instructions” and “Interim Examination Instructions for Evaluating Subject Matter Eligibility under 35 U.S.C. §101” in August 2009. The USPTO then issued the 2nd Interim Guidelines, published as Federal Register/Volume 75, No. 143/Tuesday July 27, 2010). The guidelines in particular were little more than a metastatic approach to spreading out the lethal reach of preventing patents from issuing, even where novel and unobvious, for numerous reasons discussed in later articles.

In particular, the Memoranda on “New Interim Subject Matter Eligibility Examination Instructions” and “Interim Examination Instructions” (under *Bilski*, *supra*) specifically identified seven (7) non-limiting examples of claims that were presumed to not be directed towards one of the statutory classes of invention under 35 U.S.C. § 101 (Memorandum) or four specific examples of claims that were not eligible (Interim Guidance for Determining Subject Matter Eligibility for Process Claims in View of *Bilski v. Kappos*). (First Interim Guidance Standards (published August 24, 2009), Off. Gaz. Pat. & Trademark Office, FROM: Andrew H. Hirshfeld, Deputy Commissioner For Patent Examination Policy, Effective Today: New Interim Patent Subject Matter Eligibility Examination Instructions”)

Those examples in the first Interim Guidelines were specifically identified as:

Memorandum – i) Transitory forms of signal transmission (for example, a propagating electrical or electromagnetic signal *per se*); ii) A naturally occurring organism; iii) A human *per se*; iv) A legal contractual agreement between two parties; v) A game defined as a set of rules; vi) **A computer program *per se***; vii) A company.

Interim Examination Instructions – Transitory signals *per se*, humans *per se*, a company *per se*, **or a set of instructions *per se*** **(such as a game or software *per se*)**. (**emphasis** added)

It is to be noted that the second and final Interim Guidelines (2nd Interim Guidelines, published as Federal Register/Volume 75, No. 143/Tuesday July 27, 2010) did not have any reference to game rules.

Note that the First Guidelines identified a field of patent-ineligible subject matter as “a set of instructions...such as a game or software *per se*.” This particular limitation should be harshly viewed in light of the 150 years of precedent still quoted in these guidelines that patent-eligibility under 35 U.S.C. 101 does not extend to claimed subject matter that would block public access to or monopolize:

“Phenomena of nature, though just discovered, mental processes, and abstract intellectual concepts are not patentable, **as they are the basic tools of scientific and technological work.**” *LeRoy v. Tatham*, 14 How. 156, 55 U.S. 175 (1852). (**emphasis** added)

There is no reasonable basis for holding that certain types of gaming content or gaming systems would be held by a reasonable person or knowledgeable scientist to violate that public policy which is the foundation of the doctrine of patent-eligibility under 35 U.S.C. 101.

Looking at the original cases where the doctrine morphed away from the original concept (e.g., *Bilski v. Kappos*, *supra*) it can be seen that the doctrine was not needed in the actual fact situation and that the expansion of the doctrine was the use of a thermonuclear device where a fly-swatter would have sufficed.

The process recited in the claims of the *Bilski* application were directed towards **standard** procedures and judgements traditionally exercised by people, with the claims having the exact same steps executed by a generic computer executing software. *Bilski, supra* states:

“In light of these precedents, it is clear that petitioners’ application is not a patentable “process.” Claims 1 and 4 in petitioners’ application explain the basic concept of hedging, or protecting against risk: “Hedging is a fundamental economic practice long prevalent in our system of commerce and taught in any introductory finance class.” 545 F.3d, at 1013. (Rader, J., dissenting); see, e.g., D. Chorafas, *Introduction to Derivative Financial Instruments* 75–94 (2008); C. Stickney, R. Weil, K. Schipper, & J. Francis, *Financial Accounting: An Introduction to Concepts, Methods, and Uses* 581–582 (13th ed. 2010); S. Ross, R. Westerfield, & B. Jordan, *Fundamentals of Corporate Finance* 743–744 (8th ed. 2008). The concept of hedging, described in claim 1 and reduced to a mathematical formula in claim 4, is an unpatentable abstract idea, just like the algorithms at issue in *Benson* and *Flook*. Allowing petitioners to patent risk hedging would preempt use of this approach in all fields, and would effectively grant a monopoly over an abstract idea.”

That method is a fundamental financial activity, but yet it is a specific fundamental activity. This is as opposed to a highly specific fundamental activity (e.g., a bonus side bet wagering event on all four aces being in a single blackjack hand) within the generic scope of “wagering.” A patent should not (and could not because of 35 U.S.C. 102 and 35 U.S.C. 103) issue on the generic event, possibly under the 35 U.S.C. 101 guideline because of its extraordinarily broad scope rendering it “a basic tool of ...[something, although barely within scientific and technological works].” But more importantly, the generic term lacks novelty and is obvious over centuries of prior art. Allowing the patent-eligibility concept to have metastasized for this exclusionary practice for this field adversely impacts traditional inventors’ rights.

The factor central to this tragic error in application of the doctrine of patent-eligibility is the lack of differentiation between a claimed generic concept that encompasses “...**the basic tools of scientific and technological work**...” and a

specific activity somewhere within that generic concept. As a specific example, we will consider the patent-ineligible general concept of “wagering on a random outcome” versus the specific gaming event in the 2015 decision of *In re Smith*, (CAFC 2016), 815 F.3d 816. That claimed invention (Claim 1) was recited as follows, with limitations in the claim specifically identified by the Examiner as novel and unobvious being highlighted:

A method of conducting a wagering game comprising:

- a) a dealer providing at least one deck of i) physical playing cards and shuffling the physical playing cards to form a random set of physical playing cards;
- b) the dealer accepting at least one first wager from each participating player on a player game hand against a banker's/dealer's hand;
- c) the dealer dealing only two cards from the random set of physical playing cards to each designated player and two cards to the banker/dealer such that the designated player and the banker/dealer receive the same number of exactly two random physical playing cards;
- d) **the dealer examining respective hands to determine in any hand has a Natural 0 count from totaling count from cards, defined as the first two random physical playing cards in a hand being a pair of 5's, 10's, jacks, queens or kings;**
- e) **the dealer resolving any player versus dealer wagers between each individual player hand that has a Natural 0 count and between the dealer hand and all player hands where a Natural 0 is present in the dealer hand, while the dealer exposes only a single card to the players;**
- f) **as between each player and the dealer where neither hand has a Natural 0, the dealer allowing each player to elect to take a maximum of one additional card or standing pat on the initial two card player hand, while still having seen only one dealer card;**
- g) the dealer/banker remaining pat within a first certain predetermined total counts and being required to take a single hit within a second predetermined total counts, where the first total counts range does not overlap the second total counts range;

- h) after all possible additional random physical playing cards have been dealt, the dealer comparing a value of each designated player's hand to a final value of the banker's//dealer's hand wherein said value of the designated player's hand and the banker's/dealer's hand is in a range of zero to nine points based on a pre-established scoring system wherein aces count as one point, tens and face cards count as zero points and all other cards count as their face value and wherein a two-digit hand total is deemed to have a value corresponding to the one's digit of the two-digit total;
- i) the dealer resolving the wagers based on whether the designated player's hand or the banker's/dealer's hand is nearest to a value of 0.

The preamble of the claim, which under U.S. Patent Law rules of claim interpretation has minimal weight in defining the scope of the claims, would be a generic description of a financial event, “A method of conducting a wagering game...” The issue in applying patent-eligibility to this claimed subject matter is that once the generic preamble has been considered, further limitations have been used to no avail (being dismissed on multiple bases) by the USPTO and CAFC as evidence of patent-eligibility. This dismissal of further limitations is a major deviation from the underlying philosophy of the original doctrine of patent-eligibility with respect to a claimed generic concept that encompasses “...the basic tools of scientific and technological work...” Further limitations exclude the scope of the subject matter as a “basic tool” deserving of patent-ineligibility, and should remove the claimed subject matter from the prohibited realm of excluded subject matter.

Part of the underlying problem is the fact that so much technology is being labeled as generically abstract, and specificity within that genus is not being reasonably evaluated under the doctrine. This, and previous issues discussed, are evident in the decision by the CAFC in the case of *In re Marco Guldenaar Holding B.V.*, 911 F.3d 1578; No. 17-2465 (Fed. Cir. 2018). In that case, a game method

was described in which rather than using a die with 1, 2, 3, 4, 5 and 6 value pips, the die had asymmetric pips, such as 1, 2, 2, 3, 4, and 5 value pips. Without specifically acknowledging novelty or unobviousness, the limitations imposed on the die were dismissed as another form of abstract idea, printed matter which did not alter the function of the surface of the die. At this point the cancerous insidiousness of patent-eligibility can be seen to have clearly spread to subject matter far beyond the original intent of the doctrine.

The doctrine was here again used on subject matter that in the grand scheme of scientific and technological works is basically trivial, as well as lacking novelty and at least being obvious in view of prior art. (See the die in the strategic board game, *Marrakesh*, in which the die has six faces with values of 1, 2, 2, 3, 3 and 4 and differing polyhedral die with differing values on faces in *Dungeons and Dragons* and other role-playing games). In both cases, a reasonable level of knowledge of the prior art (by the inventors and their attorneys, and by Examiners in the USPTO, where both types of evidence could have been easily found by a five minute Boolean search) would have identified substantive prior art. Instead, in spite of repeated statements by the Guidelines in the USPTO announcement stating that examination under other statutory requirements (35 U.S.C. 102, 103 and 112) must also be performed, (See First Interim Guidance Standards (published August 24, 2009), Off. Gaz. Pat. & Trademark Office, FROM: Andrew H. Hirshfeld, Deputy Commissioner For Patent Examination Policy, Effective Today: New Interim Patent Subject Matter Eligibility Examination Instructions” and 2nd Interim Guidelines, published as Federal Register/Volume 75, No. 143/Tuesday July 27, 2010).

It may be suggested that in an examination system where personal performance reviews are significantly focused on “numbers” (First Actions, Final Rejections, abandonments and allowances), the generic ability to kill cases based on a cancer diagnosis of “abstract” has lead to the progression of the cancer as a diagnosis of convenience to advance rejections incapable of being overcome. This is not merely a hypothetical projection. The author has had claims to physical card-delivering structures with operative mechanical and electronic elements providing unique functions (which were stated to be novel and unobvious) rejected as patent-ineligible because the claims recited the presence of the abstract idea of physical playing cards (to be present in the shoes). (*cf*, U.S. Patent No. 9,895,599, Delivery Shoe with Masking Capability for Card Backs).

It should be noted that a small window of evidence had been offered in *In re Smith, supra* for patent-eligibility of wagering events using playing cards as random event generators. There it was stated that the USPTO could envision patent-eligibility with sufficiently “new and unique” playing cards. *In re Guldenaar, supra* emphatically slammed that door with its holding that (misinterpreting the technological effect of printed matter in *In re Miller*, 418 F.2d 1392 (CCPA 1969)) the printed matter must alter the function of the “surface” onto which it was applied. As implied above, this is a mentally gymnastic consideration of *In re Miller, supra* and devastating to the concept of “new and unique” playing cards (*In re Smith, supra*) where the physical limitations on modification of playing cards is highly restricted without consideration of printed material. (smart chips, RFID, proximally printed cards, and other purely technical modifications have =been known for decades).

Looking at what the CAFC determined in *Guldenaar, supra*, to be a modification of the “function of the surface” in *Miller, supra*, it will be seen where the weakness of this metastasis in evidentiary value of printed value is a misdiagnosis and harmful to inventors’ rights to obtain U.S. Patent protection on their inventions. The “printed matter” in *Miller, supra* included markings on a measuring cup that indicated partial recipe proportions. That is numerical or volumetric alphanumeric indications were on the surface of the cup for the cook to read so that different volumetric amounts of ingredients could be selected to make a partial recipe (i.e., enabling a cook to modify the amounts in a recipe for 6 to a recipe for 2). The function of the markings on the cup were purely interpretative alphanumeric markings to enable a cook to modify the size of a recipe, using the cup to determine proportions. In absolutely no way was the “function of the surface” of the cup modified except in enabling a user to determine a mathematical conversion. The Court in *Guldenaar, supra* had to misinterpret *Miller, supra* to avoid having to overrule *Miller* in determining that printed matter must modify the function of the surface of an element, its holding in *Guldenaar*. The problem is that the markings on the cup modified the function of the cup, not its surface. This is more than semantics as this tortured interpretation was the apparent basis of a decision in another playing card gaming patent application intended to test the scope of patent-eligibility in playing card gaming events with “novel and unique” playing card sets.

U.S. Patent Application Serial No. 14/805,863, filed 20 July 2015, titled **“SIDE BETS FOR BLACKJACK OR BACCARAT WITH OPTIONAL PROGRESSIVE EVENT”** (Mark A. Litman, inventor) was filed as a Non-Provisional Application on 20 July 2015. After a Final Office Action in which all claims directed towards a method of performing a wagering event with novel,

unobvious and original physical game objects (no 35 USC 102 or 35 USC 103 rejections remained at the time of Appeal) were rejected under 35 U.S.C. 101 as patent ineligible subject matter, Appellant filed a Notice of Appeal and Brief on Appeal on 14 June 2018.

A Decision by the USPTO Board of Patent Trials and Appeals was issued on 02 May 2019 affirming the rejection under 35 USC 101, relying on the then recently decided in *Alice Corporation Pty. Ltd. v. CLS Bank International, et al.*, 134 S. Ct. 2347 (2014) and *In re Marco Guldenaar Holding B.V.*, No. 17-2465 (Fed. Cir. 2018), and denying any exception under *In re Smith*, (CAFC 2016), 815 F.3d 816. Illustrative claims in the application included (with salient limitations **highlighted**):

It is to be noted that the special markings on specific individual playing cards in the set of playing cards modified the function of the playing card set 9not the individual playing cards that were marked), with that functional modification of the effects of the use of those cards showing a 400% to 50,000% alteration of available jackpots by that functional alteration in the effects of the special markings. Again, the Board considered only the effect of printing on the surface of an individual playing card, not the effect on the function of the random event generator, the complete set of playing cards.

1. (ON APPEAL) A method of performing a side bet wagering event during a playing card wagering event using a non-standard set of playing cards comprising at least two sets of fifty-two playing cards in which exactly three playing cards or exactly four playing cards are exposed without any game play strategy or additional cards being provided during play of the playing card wagering event comprising:

- a) a player position providing a side bet wager to be determined by playing cards provided to at least one of the dealer hand position and the player hand position as a hand on which the side bet wager was provided;
- b) providing two random playing cards to a dealer hand position, and providing two random playing cards to a player hand position, wherein if only one dealer card is initially provided face-up, exactly three playing cards are used in determining outcomes in the playing card wagering event, and if both dealer hand playing cards are dealt face-up, then three or four playing cards provided are used in determining outcomes in the playing card wagering event;
- c) determining the spread between the two random playing cards in a hand on which the side bet wager has been placed;
- d) determining whether the side bet has been lost because of a spread of zero between the two random playing cards in the hand on which the side bet wager has been placed;
- e) upon determining that there is a spread in excess of zero between the two random playing cards in a hand on which the side bet wager has been placed, when the player position hand and uses a third playing card which appears in a position selected from the group consisting of a dealer position card, a player position third playing card, a community card, and a randomly displayed image of a card;
- f) determining if the third playing card is within or not within the spread; and
- g) resolving the side bet wager against a payable which identifies odds dependent on the spread determined in e) based upon the determination whether the third playing card is within or not within the spread;

wherein at least a portion of the side bet wager, but less than all of the side bet wager is contributed to a progressive jackpot, the amount of which is stored, incremented and decremented in a processor, decrementing being based in-part upon resolution of the side bet for outcomes where percentages of a total in the progressive jackpot are awarded for defined random event outcomes when the third playing card is within the spread, and the processor sends a signal to a display screen available for view at the player position indicating status of the jackpot amount; and

further wherein at least 5% of the progressive jackpot is specifically awarded only when at least one of the three cards consisting of the two random physical playing cards in the hand on which the side bet has been provided **and at least the third random physical playing card has a bonus indicator distinct from standard rank and suit indicators on standard playing cards in addition to rank and suit of the playing cards, and which indicators are also necessary on more than the at least one of the three or four cards for the side bet wager to win 100% of the jackpot, and wherein there are at least three playing cards of consecutive rank and of the same suit in the non-standard set of playing cards having the bonus indicators thereon and wherein only one occurrence of the non-standard set of playing cards having the at least three consecutive ranks of the same indicators thereon.**

19. (ON APPEAL) The method of claim 16 wherein the progressive jackpot server is used on a casino table with **four to eight sets of fifty-two physical playing cards** configured to identify and compare amounts of the side bet wagers to a base side bet wager of 1 unit, the progressive jackpot server awarding winning outcomes in the progressive jackpot proportionately based on the compared

amount of the side bet wager to the base side bet wager of 1 unit, with no side bet award from the progressive jackpot can be paid at an amount greater than that for a side bet wager of 1 unit wherein **only one occurrence of the non-standard set of playing cards having the at least three and no more than four consecutive ranks of the same suit occur in the at least four to eight sets of fifty-two playing cards.**

The impact of these limitations is more than a little extraordinary, as shown by the following mathematical analysis (included with the Brief on Appeal): As noted above and in later arguments, specific claims recite the integration of a progressive jackpot using physical gaming tables and cards and electronic gaming tables. See Claims 16, 20 and 23, in particular.

That recited physical or image structure (in a virtual event) is critical to control and enablement of elevated size jackpots. As described in the specification, by controlling the number of specially marked cards (which are required in the above-identified 12 claims), the average frequency of a jackpot (e.g., in a Blackjack event) can be increased from about 1:3200 to as much as 1:3.5 million. That difference, which has not been evidenced as anticipated or obvious in the present prosecution history, evidences an unexpected ability to increase jackpots by the corresponding reduction in frequency (e.g., about 1000X), and therefore provide sizes of jackpots in blackjack (and even a greater increase in baccarat up to frequencies of 1:15,000,000) that were heretofore unattainable in wagering events on a single hand of play. Therefore, the recitation of those twelve claims (Claims 3, 4, 5, and 6 (Claims 7-10 are dependent therefrom), and claims 26, 27, 32 and 33) establish a basis of patent-eligibility that has been previously identified by the

USPTO Solicitor's Office as an exception to the generic onus that has been placed against playing card wagering events as "abstract ideas" that are not patentable.

Jackpots based on the first three up cards (two player cards, one dealer card) and baccarat (two bankers cards and two players cards) are structurally limited to the frequency of the three or four cards in sets of 1-8 decks of playing cards. Large jackpots based solely on these first three or four cards have therefore been limited to relatively low (<15,000:1) jackpots. The present invention enabled (by physical markings on the playing cards) jackpots over 50,000% greater in size:

MATHEMATICAL PROOFS

As stated in claim 1, there are at least two fifty-two card playing decks, with only 3 consecutive cards marked with the specialty card-marking notation. The math for non-marked cards in a two-deck set generically for a specific three cards with (as in blackjack) two SPREAD cards at the player position and one SPLIT card at the dealer positions would be:

First two player cards at player position (first card) 4/104 and second card 2/103.

Dealer up-card 2/102 (assuming that card was not one of the first two player cards, which would make the probability zero.)

Maximum Probability would therefore be $4/104 \times 2/103 \times 2/102 = 1/68,306$

With only a single set of the 3 sequential cards being marked with specialty notification, the probability for the same event becomes:

$2/104 \times 1/103 \times 1/103$ or 1/546,448. That represents an at least 800% decrease in probability of the event, which enables

the progressive jackpot for that specific event to be increased by as much as 800%, with the casino retaining an identical proportion of the side bet wagers.

With respect to the numbers of sets of cards recited in claim 11 (at least four up to eight sets of fifty-two cards, again with no three sequential cards having a specialty mark, the probabilities remain essentially the same for the unmarked occurrence ($8/208 \times 4/207 \times 4/206 = 1/69,293$).

With exactly and only three consecutive cards having the specialty mark, the probability becomes (for an eight-deck set) $2/416 \times 1/415 \times 1/414 = 1 / 36,595,530$ or a 535 times multiple of the maximum possible jackpot or 53,500% allowable increase in that jackpot. In any other field of technology, such an increase in beneficial objective results would be overwhelming evidence of at least non-obviousness. Here it should be equally impressive evidence of a functional result from “new and unique” playing card sets establishing patent-eligibility.

This remarkable advance, duly and specifically stated by the USPTO to be novel and unobvious (therefore inherently “novel and unique: with the latter term absent from Title 35) was held to be patent-ineligible as a financial transaction in a playing card gaming event and therefore an abstract idea.

The Board 9 and later the CAFC in a slip opinion failing to even rule on these substantive issues, said that *Guldenaar, supra* excluded consideration of the effects of the printed matter in the set of playing cards as it did not alter the “function of the surface” of the cards. Therefore, the misinterpretation of *In re Miller, supra* which was erroneously adopted by the CAFC in *Guldenaar, supra* prevented a patent issuing on a claimed technology advance that did not block public access to a “basic tool of scientific and technological work” while it extraordinarily address a long-felt need of providing larger jackpots without

altering underlying play of the game, and did so by a minimum of 400% up to over 50,000%. In any other field of technology, such an advance would be worthy of industry-wide recognition. To the USPTO, it was just another “financial transaction” and a patent-ineligible abstract idea.

It took a cancerous spread of application of a 150 year-old doctrine too broadly, and then distortion of at least one decision (*In re Miller, supra*) to enable refusal of the patent.

This is further evidence of the spread of cancerous destructive and focused intent in decisions to deny gaming content patents to issue in the U.S. under the guise of protecting the “basic tools of scientific and technological works” from control by a patent.

CONCLUSION

This second writing evidences the focused impact of a rapidly metastasized cancerous intellectual doctrine onto a narrow field of technology. The extreme effort used to deny gaming content patents based on a principle that the individual, narrow and highly limited claims block public access to “basic tools of scientific and technological works” can easily be described as absurd on its face and unworthy of the efforts of the Courts and the USPTO.

The next and third article will address facts evidencing that the spreading interpretation of this concept in the medical field has denied public the benefit of protection for narrow technological methods that can advance medical benefits for the public, but which could not be financed in a start-up without intellectual property protection.