Patent Eligibility of Inventions Directed to Games and Entertainment

Presented by Malgorzata (Gosia) Kulczycka

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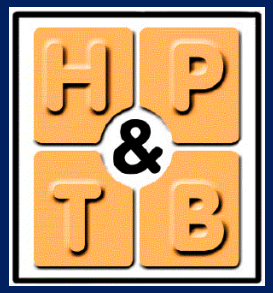


Patent Eligible Subject Matter

Alice/Mayo Analysis:

- Step 1 - a process, machine, manufacture, or a composition of matter?
- Step 2A - a judicial exception? (an abstract idea, natural phenomena, law of nature)
- Step 2B - the claim as a whole amounts to significantly more than the judicial exception?

Patent Eligible Subject Matter

2019 Revised Guidance on Patent Eligibility:

- Step 1 - a process, machine, manufacture, or a composition of matter?

- Step 2A - a judicial exception?
  - Prong One – the type of an abstract idea?
  - Prong Two – integrates to a practical application?

- Step 2B - the claim as a whole amounts to significantly more than the judicial exception?

Patent Eligible Subject Matter

Groupings of abstract ideas

Mathematical concepts

- Mathematical relationships
- Mathematical formulas or equations
- Mathematical calculations

Mental processes

- Concepts performed in the human mind (including an observation, evaluation, judgment, opinion)

Certain methods of organizing human activity

- Fundamental economic principles or practices (including hedging, insurance, mitigating risk)
- Commercial or legal interactions (including agreements in the form of contracts; legal obligations; advertising, marketing or sales activities or behaviors; business relations)
- Managing personal behavior or relationships or interactions between people (including social activities, teaching, and following rules or instructions)

NOTE: The recitation of generic computer components in a claim does not necessarily preclude that claim from reciting an abstract idea.

Patent Eligible Subject Matter

Prong Two considerations: Details

Limitations that are indicative of integration into a practical application:

- Improvements to the functioning of a computer, or to any other technology or technical field - see MPEP 2106.05(a)
- Applying or using a judicial exception to effect a particular treatment or prophylaxis for a disease or medical condition – see Vanda Memo
- Applying the judicial exception with, or by use of, a particular machine - see MPEP 2106.05(b)
- Effecting a transformation or reduction of a particular article to a different state or thing - see MPEP 2106.05(c)
- Applying or using the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception - see MPEP 2106.05(e) and Vanda Memo

Limitations that are not indicative of integration into a practical application:

- Adding the words "apply it" (or an equivalent) with the judicial exception, or mere instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea - see MPEP 2106.05(f)
- Adding insignificant extra-solution activity to the judicial exception - see MPEP 2106.05(g)
- Generally linking the use of the judicial exception to a particular technological environment or field of use – see MPEP 2106.05(h)

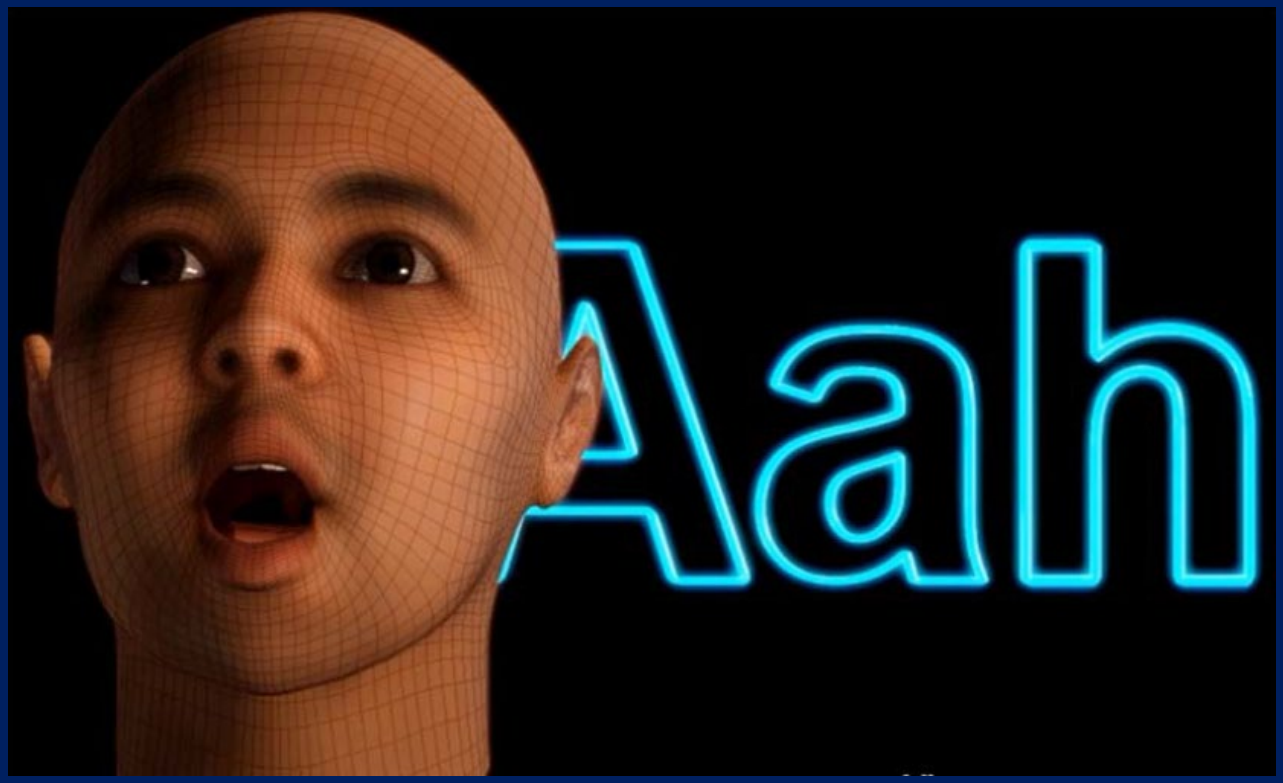
Whether claim elements represent only well-understood, routine, conventional activity is considered at Step 2B and is not a consideration at Step 2A.

McRO v. Bandai Namco Games Inc.

The claimed methods of automatic lip synchronization and facial expression animation using computer-implemented rules were **patent eligible** under 35 U.S.C. § 101, because "the ordered combination of claimed steps, using unconventional rules that relate sub-sequences of phonemes, timings, and morph weight sets, is not directed to an abstract idea and is therefore patent-eligible subject matter under § 101."

McRO, Inc. dba Planet Blue v. Bandai Namco Games America Inc., 120 USPQ2d 1091 (Fed. Cir., September 13, 2016)

McRO v. Bandai Namco Games Inc.



Defs.' Br. 8.1
The images in this opinion are drawn from *McRO's* claim construction tutorial presented to the district court, J.A. 3573, excerpts of which are used by both parties to explain the prior art method.

McRO, Inc. dba Planet Blue v. Bandai Namco Games America Inc., 120 USPQ2d 1091 (Fed. Cir. 2016)

McRO v. Bandai Namco Games Inc.

The claims were directed to an improvement in computer-related technology (allowing computers to produce "accurate and realistic lip synchronization and facial expressions in animated characters" that previously could only be produced by human animators), and thus did not recite a concept similar to previously identified abstract ideas.

McRO, Inc. dba Planet Blue v. Bandai Namco Games America Inc., 120 USPQ2d 1091 (Fed. Cir. 2016)

McRO v. Bandai Namco Games Inc.

The specification described the claimed invention as improving computer animation through the use of specific rules, rather than human artists, to set:

- morph weights (relating to facial expressions as an animated character speaks), and
- transition parameters between phonemes (relating to sounds made when speaking).

$$|\text{result}| = |\text{neutral}| + \sum_{x=1}^{n} |\text{delta set}_x| * \text{morph weight}_x$$

McRO, Inc. dba Planet Blue v. Bandai Namco Games America Inc., 120 USPQ2d 1091 (Fed. Cir. 2016)

McRO v. Bandai Namco Games Inc.

An "improvement in computer-related technology" is not limited to improvements in the operation of a computer or a computer network *per se,* but may also be claimed as a set of "rules" (basically mathematical relationships) that improve computer-related technology by allowing computer performance of a function not previously performable by a computer.

McRO, Inc. dba Planet Blue v. Bandai Namco Games America Inc., 120 USPQ2d 1091 (Fed. Cir. 2016)

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Whether claim elements represent only well-understood, routine, conventional activity is considered at Step 2B and is not a consideration at Step 2A.

In re Smith

Applicants filed the ’410 patent application, titled “Blackjack Variation.” According to the application, “[t]he present invention relates to a wagering game utilizing real or virtual standard playing cards.”

In re Smith, 815 F.3d 816 (Fed. Cir., March 10, 2016)

In re Smith

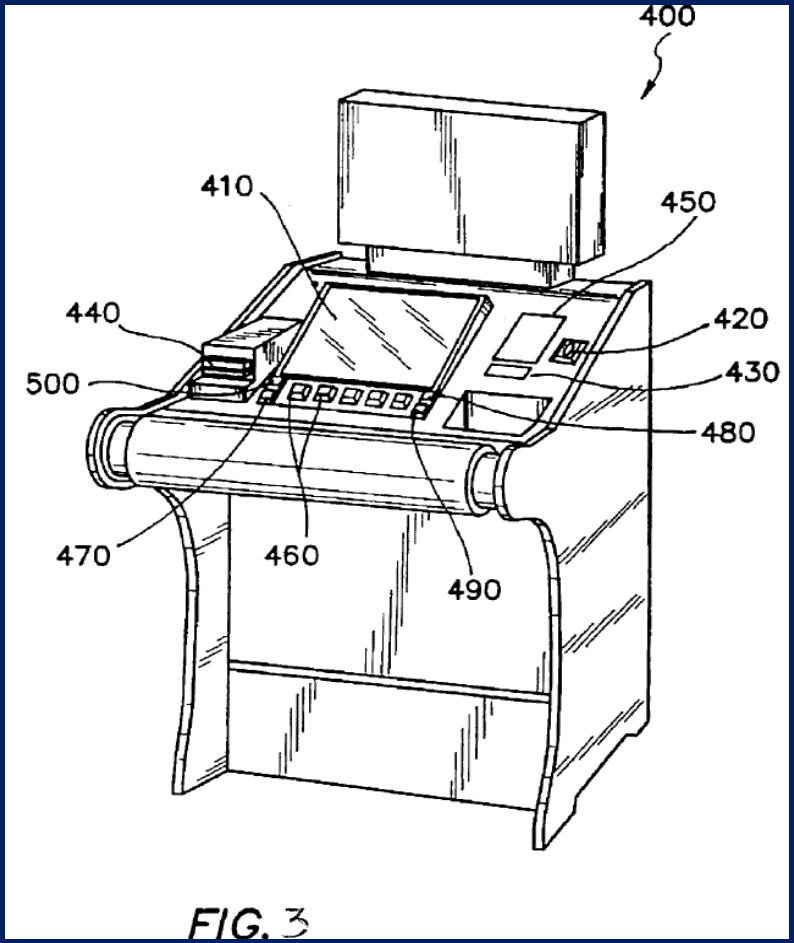

FIG. 3

In re Smith, 815 F.3d 816 (Fed. Cir. 2016)

In re Smith

Applicants' claims, directed to rules for conducting a wagering game, compare to other "fundamental economic practice[s]" found abstract by the Supreme Court. *See id*. As the Board reasoned here, "[a] wagering game is, effectively, a method of exchanging and resolving financial obligations based on probabilities created during the distribution of the cards." J.A. 15.

In re Smith, 815 F.3d 816 (Fed. Cir. 2016)

In re Smith

Abstract ideas, including a set of rules for a game, may be patent eligible if they contain an "'inventive concept' sufficient to 'transform' the claimed abstract idea into a patent-eligible application." *Alice*, 134 S. Ct. at 2357 (quoting *Mayo*, 132 S. Ct. at 1294, 1298). But appending purely conventional steps to an abstract idea does not supply a sufficiently inventive concept.

In re Smith, 815 F.3d 816 (Fed. Cir. 2016)

In re Smith

Just as the recitation of computer implementation fell short in *Alice*, shuffling and dealing a standard deck of cards are "purely conventional" activities. *See Alice*, 134 S. Ct. at 2358–59. We therefore hold that the rejected claims do not have an "inventive concept" sufficient to "transform" the claimed subject matter into a patent-eligible application of the abstract idea.

In re Smith, 815 F.3d 816 (Fed. Cir. 2016)

In re Smith

Because the rejected claims are drawn to the abstract idea of rules for a wagering game and lack an "inventive concept" sufficient to "transform" the claimed subject matter into a patent-eligible application of that idea – patent ineligible.

In re Smith, 815 F.3d 816 (Fed. Cir. 2016)

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Whether claim elements represent only well-understood, routine, conventional activity is considered at Step 2B and is not a consideration at Step 2A.

In re Marco Guldenaar Holding B.V.

The claimed invention is related to "dice games intended to be played in gambling casinos, in which a participant attempts to achieve a particular winning combination of subsets of the dice."

In re Marco Guldenaar Holding B.V. (Fed. Cir. December 28, 2018)

In re Marco Guldenaar Holding B.V.

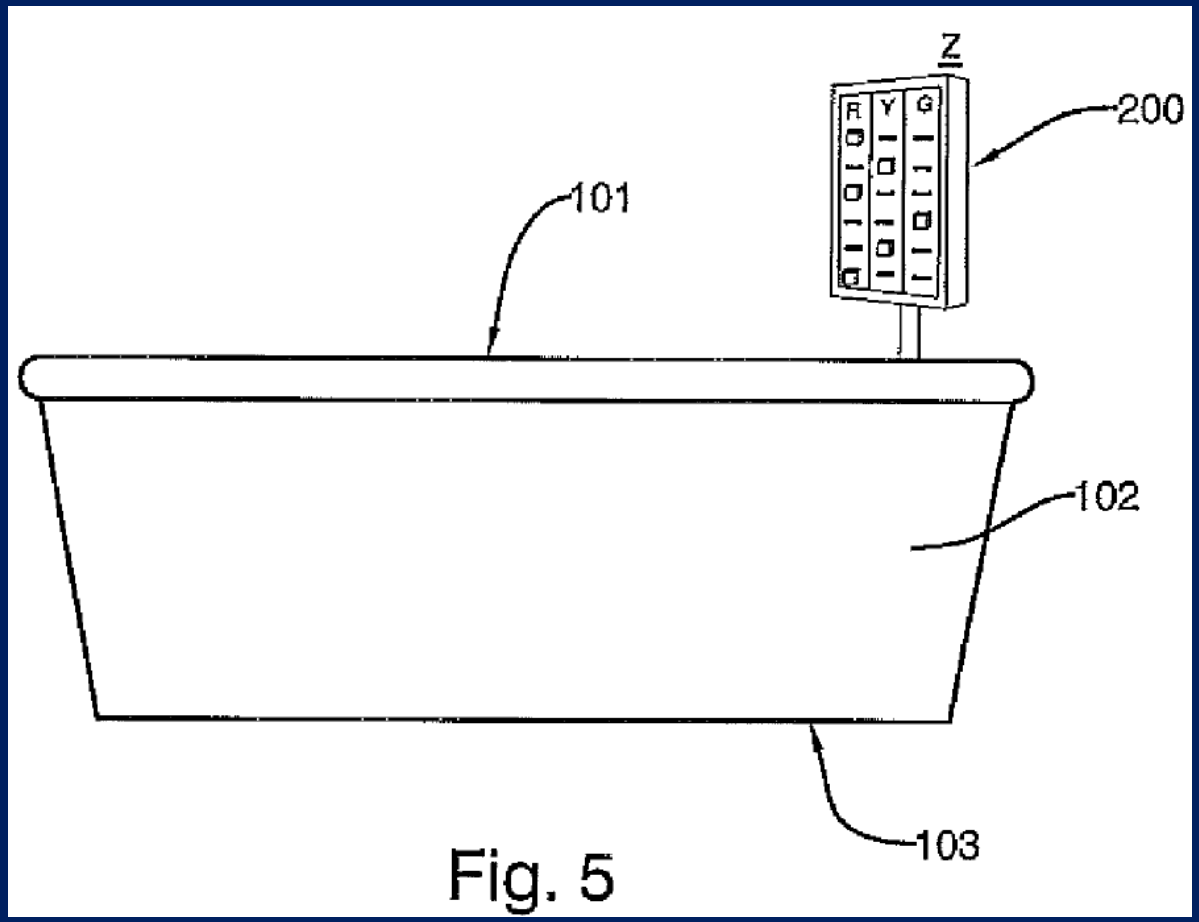

Fig. 5

In re Marco Guldenaar Holding B.V. (Fed. Cir. 2018)

In re Marco Guldenaar Holding B.V.

In its analysis, the Court leaned heavily on its holding from 2016's *In re Smith*. In that case, the Court found that claims directed to a method of playing a card game failed to meet the § 101 requirements. The Court's rationale for this decision was that the claimed invention was a method of conducting a wagering game, and thus tantamount to the methods of exchanging financial obligations found ineligible in *Alice* and *Bilski v. Kappos*.

In re Marco Guldenaar Holding B.V. (Fed. Cir. 2018)

In re Marco Guldenaar Holding B.V.

In his final substantive argument, Guldenaar contended that "playing a dice game cannot be an abstract idea because it recites a physical game with physical steps."

In re Marco Guldenaar Holding B.V. (Fed. Cir. 2018)

In re Marco Guldenaar Holding B.V.

The Court disagreed, noting that "the abstract idea exception does not turn solely on whether the claimed invention comprises physical versus mental steps" and that the ineligible inventions of *Alice* and *Bilski* both required actions in the physical world. Still, the Court reiterated that "inventions in the gaming arts are not necessarily foreclosed from patent protection under § 101" while ultimately finding the claims unpatentable under § 101.

In re Marco Guldenaar Holding B.V. (Fed. Cir. 2018)

In re Marco Guldenaar Holding B.V.

A majority of the Court's judges accept that, in practice, many § 101 inquiries require at least some baseline factual analysis. The reason why the Court concluded so was to address the conundrum of having to determine whether elements of a claim were well-understood, routine, and conventional as a matter of law. Making this determination almost always involves some amount of comparison of claim language to what would ordinarily be called "prior art."

(Following the *Berkheimer* Memo April 19, 2018)

In re Marco Guldenaar Holding B.V. (Fed. Cir. 2018)

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