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8 **UNITED STATES DISTRICT COURT**  
9 **CENTRAL DISTRICT OF CALIFORNIA**  
10 **SOUTHERN DIVISION**

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12  
13 **POLARIS INNOVATIONS LIMITED,**  
14 **an Irish limited company,**

15 **Plaintiff,**

16 **v.**

17  
18 **KINGSTON TECHNOLOGY**  
19 **COMPANY, INC., a Delaware**  
20 **Corporation,**

21 **Defendant.**

} **Case No.: SACV 16-00300-CJC(RAOx)**

} **ORDER DENYING DEFENDANT'S**  
} **MOTION FOR JUDGMENT ON THE**  
} **PLEADINGS**

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23  
24 **I. INTRODUCTION AND BACKGROUND**

25  
26 Plaintiff Polaris Innovations Limited filed suit against defendant Kingston  
27 Technology Company, Inc. on the basis that a Kingston-produced computer memory  
28 card—model number KVR16R11D4/16—infringes on two Polaris patents, U.S. Patent

1 No. 6,850,414 (the 414 Patent) and U.S. Patent No. 7,315,454 (the 454 Patent). Count III  
2 of Polaris’s Complaint asserts infringement of the 414 Patent and Count V of the  
3 Complaint asserts infringement of the 454 Patent. (Dkt. 1.) Kingston has now moved for  
4 judgment on the pleadings, (Dkt. 79), pursuant to Rule 12(c), on Counts III and V of the  
5 Complaint, alleging that the asserted claims of the 414 Patent and 454 Patent are facially  
6 invalid, as they fail to claim patentable subject matter under 35 U.S.C. § 101.

7  
8 Section 101 indicates that machines are patentable subject matter, and a long line  
9 of caselaw makes it clear that “abstract ideas” are *not* patentable subject matter. Here,  
10 both the 414 Patent and the 454 Patent pertain to the arrangement of memory chips on a  
11 computer card that fits a standard dock: by rotating some or all of the memory chips on  
12 the card 90 degrees, (1) memory chips are able to be mounted on a card with a slimmer  
13 profile (in the case of the 414 Patent), or (2) a greater number of memory chips than  
14 would otherwise be possible fit on a particular card (in the case of the 454 Patent).

15  
16 The crux of the issue raised in Kingston’s motion is whether the 414 Patent and the  
17 454 Patent concern patent-eligible machines or patent-ineligible abstract ideas. Kingston  
18 argues that the patents are invalid because they merely involve the abstract idea of  
19 “adjusting the orientation of physical objects,” a practice that “is part of our everyday  
20 lives and has been for millennia.” Polaris counters that there is nothing at all abstract  
21 about these patents, as their claims concern particular, specific configurations of memory  
22 chips on memory cards. Having considered the parties’ respective positions, the court  
23 DENIES Kingston’s motion for judgment on the pleadings.<sup>1</sup>

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<sup>1</sup> The Court finds this matter appropriate for disposition without a hearing. *See* Fed. R. Civ. P. 78;  
Local Rule 7-15. Accordingly, the hearing set for July 25, 2016 at 1:30 p.m. is hereby vacated and off  
calendar.

1 **II. ANALYSIS**

2  
3 **A. Addressing § 101 Subject Matter Eligibility at the Pleading Stage**

4  
5 “After the pleadings are closed—but early enough not to delay trial—a party may  
6 move for judgment on the pleadings.” Fed. R. Civ. P. 12(c). A Rule 12(c) motion  
7 asserting failure to state a claim is governed by the same standard as a Rule 12(b)(6)  
8 motion to dismiss. *See United States ex rel. Cafasso v. Gen. Dynamics C4 Sys., Inc.*, 637  
9 F.3d 1047, 1054 n.4 (9th Cir. 2011). “Patent eligibility under § 101 is a question of law  
10 that may, in appropriate cases, be decided on the pleadings without the benefit of a claim  
11 construction hearing.” *Modern Telecom Sys. LLC v. Earthlink, Inc.*, No. CV 14–0347  
12 DOC, 2015 WL 1239992, at \*6 (C.D. Cal. Mar. 17, 2015) (citing *Content Extraction &*  
13 *Transmission LLC v. Wells Fargo Bank, Nat. Ass’n*, 776 F.3d 1343, 1349 (Fed. Cir.  
14 2014)).

15  
16 In cases where claim construction is necessary to understand the subject matter of  
17 a given patent, it is proper to resolve claim construction prior to § 101 analysis. *See*  
18 *Bancorp Services, L.L.C v. Sun Life Assurance Co. of Canada*, 687 F.3d 1266, 1273-74  
19 (Fed. Cir. 2012). But in cases where the issues can be understood prior to claim  
20 construction, courts have regularly decided patent eligibility under § 101 prior to claim  
21 construction. *See, e.g., Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343,  
22 1348 (Fed. Cir. 2015); *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1360-62  
23 (Fed. Cir. 2015). Here, neither party has argued that it is necessary to defer this decision  
24 on eligibility under § 101 until after claim construction, and given the parties’ framing of  
25 the issues, it is possible to proceed with the § 101 analysis without first addressing claim  
26 construction.

1           **B. The § 101 Analysis the Supreme Court Set Forth in *Alice* and *Mayo***

2  
3           Section 101 “defines the subject matter that may be patented under the Patent  
4 Act.” *Bilski v. Kappos*, 561 U.S. 593, 601 (2010). It states: “Whoever invents or  
5 discovers any new and useful process, machine, manufacture, or composition of matter,  
6 or any new and useful improvement thereof, may obtain a patent therefor, subject to the  
7 conditions and requirements of this title.” 35 U.S.C. § 101. “Section 101 thus specifies  
8 four independent categories of inventions or discoveries that are eligible for patent  
9 protection: processes, machines, manufactures, and compositions of matter.” *Bilski*, 561  
10 U.S. at 601.

11  
12           The Supreme Court found that “[i]n choosing such expansive terms . . . Congress  
13 plainly contemplated that the patent laws would be given wide scope,” but  
14 notwithstanding this scope, the Supreme Court also identified three exceptions to § 101’s  
15 broad categories of patent-eligible subject matter: “laws of nature, physical phenomena,  
16 and abstract ideas.” *Diamond v. Chakrabarty*, 447 U.S. 303, 308-09 (1980). These  
17 exceptions are not mentioned in the statutory text, but they are consistent with the idea  
18 that certain discoveries “are part of the storehouse of knowledge of all men” and are “free  
19 to all men and reserved exclusively to none.” *Bilski*, 561 U.S. at 602 (quoting *Funk Bros.*  
20 *Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 130 (1948)).

21  
22           In *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347 (2014), the Supreme  
23 Court further explained a two-step approach for resolving § 101 issues that it had earlier  
24 articulated in *Mayo Collaborative Servs. v. Prometheus Laboratories, Inc.*, 132 S. Ct.  
25 1289, 1296-97 (2012). First, a court must “determine whether the claims at issue are  
26 directed to one of those patent-ineligible concepts.” *Alice*, 134 S. Ct. at 2355 (citing  
27 *Mayo*, 132 S. Ct. at 1296-97). For example, in *Bilski*, the Supreme Court rejected as  
28 patent-ineligible two claims in the petitioner’s application because the claims merely

1 “explain[ed] the basic concept of hedging, or protecting against risk,” which it found to  
2 be “an unpatentable abstract idea.” *Bilski*, 561 U.S. at 611; *Alice*, 134 S. Ct. at 2355-56.

3  
4 Second, if the court finds that claims at issue are directed to patent-ineligible  
5 concepts, the court must ask “[w]hat else is there in the claims,” which requires  
6 consideration of “the elements of each claim both individually and ‘as an ordered  
7 combination’ to determine whether the additional elements ‘transform the nature of the  
8 claim’ into a patent-eligible application.” *Alice*, 134 S. Ct. at 2355 (citing *Mayo*, 132 S.  
9 Ct. at 1297-98). A court applies this second step of the *Mayo/Alice* analysis only if it  
10 finds in the first step that the claims are directed to a law of nature, natural phenomenon,  
11 or abstract idea. *Alice*, 134 S. Ct. at 2355. The second step requires the court to  
12 determine if the elements of the claim individually, or as an ordered combination,  
13 “transform the nature of the claim” into a patent-eligible application. *Id.* A claim may  
14 become patent-eligible when the “claimed process include[s] not only a law of nature but  
15 also several unconventional steps . . . that confine[] the claims to a particular, useful  
16 application of the principle.” *Mayo*, 132 S. Ct. at 1300.

## 17 18 **C. The Language of the Patents**

19  
20 The 414 Patent and 454 Patent claim purportedly novel layouts for computer  
21 memory cards. Polaris alleges that a particular Kingston memory module, model number  
22 KVR16R11D4/16, infringes on both patents. (Compl. ¶¶ 54, 55, 80.)

### 23 24 **1. The 414 Patent**

25  
26 The 414 Patent, (Dkt. 1, Ex. 3), is titled “Electronic Circuit Board Having a  
27 Plurality of Identically Designed, Housing-Encapsulated Semiconductor Memories.” It  
28 claims a particular type of computer memory card, and indicates that it solves the

1 problem of reducing the height of the card while not diminishing the amount of storage  
2 available. As the 414 Patent explains, reducing the height of the cards is desirable  
3 because the cards are intended to be inserted into network computers with a slim profile.  
4 (414 Patent at 1.) The 414 Patent asserts that conventional memory cards have multiple  
5 rectangular chips mounted on them, with the long side of the rectangle perpendicular to  
6 the long edge of the card, and notes that:

7  
8 In the case of this conventional arrangement, in which the edges of the  
9 memory housings lined up along the contact strip are aligned, there is no  
10 more leeway for a further reduction of the circuit board height (the height of  
the printed circuit board perpendicular to the contact strip).

11 (414 Patent at 1-2.)

12  
13 The inventors of the 414 Patent realized that the memory board height could be  
14 reduced if the memory chips on the board were oriented on the memory card horizontally  
15 rather than vertically. This horizontal orientation pertains to all chips on the board with  
16 the exception of the error correction memory chip—which must remain oriented  
17 vertically but apparently has a shorter vertical height than the other chips. It is an object  
18 of the invention to reduce the height of the printed circuit board while using standard  
19 memory housings. (414 Patent at 2.) The 414 Patent explains that this horizontal  
20 arrangement of the chips on the memory card “results in a certain, albeit small, narrowing  
21 of the printed circuit board” and that in many cases “this suffices to actually enable the  
22 incorporation into network computers.” (*Id.* at 3.)

23  
24 The 414 Patent’s claims describe the physical structure of the circuit board.  
25 Independent Claim 1 recites:

- 26  
27 1. An electronic printed circuit board configuration, comprising:  
28 an electronic printed circuit board having a contact strip for insertion  
into another electronic unit; and

1 a memory module having at least nine identically designed integrated  
2 semiconductor memories;  
3 each one of said semiconductor memories being encapsulated in a  
4 rectangular housing having a shorter dimension and a longer  
5 dimension;  
6 said housing of each one of said semiconductor memories being  
7 identically designed and being individually connected to said printed  
8 circuit board;  
9 one of said semiconductor memories being connected as an error  
10 correction chip;  
11 said longer dimension of said housing of said error correction chip  
12 being oriented perpendicular to said contact strip; and  
13 said longer dimension of said housing of each one of said  
14 semiconductor memories, other than said error correction chip, being  
15 oriented parallel with said contact strip.

16 (414 Patent at 7-8.) Dependent Claims 4 and 8 add additional requirements concerning  
17 the dimensions of the circuit board:

18 4. The printed circuit board according to claim 1, wherein: said  
19 printed circuit board has a height of 1 to 1.2 inches perpendicular to said  
20 contact strip.

21 8. The printed circuit board according to claim 1, wherein: said  
22 printed circuit board has a width of 5.25 inches.

## 23 **2. The 454 Patent**

24 The 454 Patent (Dkt. 1, Ex. 5) is titled "Semiconductor Memory Module." Like  
25 the 414 Patent, it concerns alterations to prior art memory cards:

26 Due to the rising demand for memory performance, it is desired to  
27 mount an increasing number of semiconductor memory chips on an  
28 individual semiconductor memory module without increasing the area of the  
module or of the electronic printed circuit board in the process. Moreover,  
the line tracks are desired to be as short as possible to keep the signal  
propagation times as short as possible.

\* \* \*

1 The problem arises that the electronic printed circuit boards for  
2 semiconductor memory modules in industrial series production have a  
3 standard size, in the case of rectangular memory chips with a large storage  
4 capacity, e.g., DDR3-DRAM memory chips, can no longer be arranged in  
5 two rows, lying one above another. (sic)

6 Moreover, when arranging the memory chips, care must be taken to  
7 ensure that an arrangement is found which exhibits the occurrence of signal  
8 propagation times that are as uniform as possible to all of the semiconductor  
9 memory chips in conjunction with conductor track lengths that are, to the  
10 greatest extent possible, identical in length. Meanwhile, the conductor track  
11 lengths are also desired to be as short as possible to keep the signal  
12 propagation times as short as possible.

13 (454 Patent at 1-2.) The 454 Patent specification explains that by arranging the memory  
14 chips in two rows, with adjacent chips having opposite orientations, more memory chips  
15 can be fit on a memory card of fixed dimensions. The 454 Patent's asserted claims  
16 include the following:

- 17 1. A semiconductor memory module, comprising:  
18 an electronic printed circuit board including a contact strip that extends at a  
19 first edge of the printed circuit board along a first lateral direction and a  
20 plurality of electrical contacts disposed along the first lateral direction  
21 between two second edges that extend in a second lateral direction that is  
22 perpendicular to the first lateral direction; and  
23 a plurality of semiconductor memory chips of substantially identical type  
24 mounted on at least one external area of the printed circuit board and  
25 having a rectangular form with a shorter dimension and a longer  
26 dimension in a direction perpendicular to the shorter dimension, the  
27 memory chips being arranged in at least two rows, each row extending, in  
28 the first lateral direction, between a center of the printed circuit board and  
a respective second edge, wherein the memory chips in each row are  
arranged in an alternating sequence of opposite orientations with the  
longer dimension of each memory chip being parallel with the shorter  
dimension of adjacent memory chips in the same row, and wherein  
memory chips aligned in the second lateral direction and lying in  
respective adjacent rows have opposite orientations.



1 (454 Patent at 8-9.) Asserted Dependent Claims 2, 3, 4, and 7 add further structural  
2 limitations. (454 Patent at 9-10.)  
3

#### 4 **D. Whether the Claims are Patent-Eligible under § 101**

5

6 The stated purpose of the 414 Patent is to “make[] it possible to reduce the height  
7 of the printed circuit board while enabling the [memory chips] to keep the same physical  
8 form.” (414 Patent at Abstract, and at 2.) The 454 Patent states that “the arrangement  
9 chosen for the semiconductor memory chips makes it possible to achieve an optimum  
10 space utilization of the entire usable area of the electronic printed circuit board.” (454  
11 Patent at 1, 3.) These patents pertain to the physical structure and layout of computer  
12 hardware. Claims that other courts have invalidated because they were “abstract ideas”  
13 under § 101 and related caselaw have instead generally focused on mental processes  
14 themselves, or software implementing those processes that is connected to generic  
15 hardware.  
16

17 An idea is abstract if it has “no particular concrete or tangible form.”  
18 *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014). In contrast, a  
19 “machine,” which is patent-eligible under § 101, is a “concrete thing, consisting of parts,  
20 or of certain devices and combination of devices.” *Digitech Image Techs., LLC v. Elecs.*  
21 *for Imaging, Inc.*, 758 F.3d 1344, 1348-49 (Fed. Cir. 2014) (quoting *Burr v. Duryee*, 68  
22 U.S. 531, 570 (1863)). Though generic computers running code that implements abstract  
23 concepts have regularly been found to be patent-ineligible, non-generic computers are  
24 patent eligible as machines. *CLS Bank Int’l v. Alice Corp. Pty.*, 717 F.3d 1269, 1291-92  
25 (Fed. Cir. 2013).  
26

27 The parties sharply dispute whether the 414 Patent and the 454 Patent concern a  
28 machine or merely the “abstract idea” of “physically arranging objects in a confined

1 space” dressed up through the recitation of “generic, well-known components of a  
2 semiconductor memory module.” (Def.’s Br. at 5.) According to Kingston, “[p]ut  
3 simply, space optimization—the sole purported improvement claimed in the [414 Patent  
4 and the 454 Patent]—is a fundamental concept and is not patentable as a matter of law.”  
5 (Def.’s Br. at 14.) The Court, however, believes that Kingston frames the issue too  
6 generally—the patents at issue here concern physical layouts for particular memory cards  
7 that enable the card to either have a slimmer profile or have more memory chips on it  
8 than it otherwise would have had.

9  
10       Though Courts in recent years have invalidated multiple computer-related patents  
11 though the application of § 101, Kingston’s cited caselaw does not indicate that the  
12 Supreme Court and Federal Circuit have taken comparable action under § 101 to  
13 invalidate patents claiming ostensibly novel computer hardware designs. As the Federal  
14 Circuit explained in the context of a patent concerning a software process,

15  
16       [we] have before us not the patent eligibility of specific types of computers  
17 or computer components, but computers that have routinely been adapted by  
18 software consisting of abstract ideas, and claimed as such, to do all sorts of  
19 tasks that formerly were performed by humans. And the Supreme Court has  
20 told us that, while avoiding confusion between § 101 and §§ 102 and 103,  
21 merely adding existing computer technology to abstract ideas—mental  
22 steps—does not as a matter of substance convert an abstract idea into a  
23 machine.

24  
25       *CLS Bank*, 717 F.3d at 1291-92. The Federal Circuit has additionally noted that “some  
26 improvements in computer-related technology when appropriately claimed are  
27 undoubtedly not abstract, such as chip architecture, an LED display, and the like.”  
28       *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016).

29  
30       When determining whether a given idea is abstract, both the Supreme Court and  
31 the Federal Circuit “have found it sufficient to compare claims at issue to those claims

1 already found to be directed to an abstract idea in previous cases.” *Enfish, LLC v.*  
2 *Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016) (citing *Alice*, 134 S. Ct. at 2357).  
3 Here, Kingston heavily relies on *Synopsys, Inc. v. Mentor Graphics Corp.*, 78 F. Supp. 3d  
4 958 (N.D. Cal. 2015). That case concerns a claim for a method for logic synthesis, which  
5 is the process of taking a human user’s description of the design of a circuit and  
6 converting that description into a design for circuit hardware that will be used in a given  
7 chip. The *Synopsys* court explained that the claims at issue there were directed to a  
8 mental process, not a physical thing, and were therefore not patent-eligible:

9  
10 The claimed methods here at issue do not entail anything physical. Rather,  
11 as discussed above, the asserted claims are directed to the process of  
12 inference, which is fundamental to IC design and can be performed  
13 mentally. The claims describe, in essence, various algorithms for  
14 determining the hardware components and layout of an IC from a user’s  
15 description of what the user needs the chip to do, i.e., the “specified signals  
16 and circumstances under which the signals are produced.” . . . In other  
17 words, the claims are directed to a mental process. A “mental process [is] a  
18 subcategory of unpatentable abstract ideas.” *CyberSource Corporation v.*  
19 *Retail Decisions, Inc.*, 654 F.3d 1366, 1371 (Fed. Cir. 2011).

20  
21 *Synopsys*, 78 F. Supp. 3d at 963. But the contested claims in the instant case claim the  
22 card itself and the memory chips attached to it, not the process of arranging memory  
23 chips on a memory card in a general sense.

24  
25 Kingston also focuses on *Kinglite Holdings Inc. v. Micro-Star Int’l Co. Ltd.*, No.  
26 14-3009-JVS, Dkt. 226 (C.D. Cal. May 26, 2014), arguing that *Kinglite* stands for the  
27 general principle that claims that are merely tied to computer technology but that do not  
28 recite new “functions” for the technology, are abstract. (Def.’s Br. at 11.) But the cited  
portion of *Kinglite* makes a more specific point: it cites *In re TLI Communications Patent*  
*Litigation* for the proposition that a patent is “directed to [an] abstract concept when  
claims are not directed to a specific improvement to computer functionality, but rather the  
computer unit is ‘merely a conduit for the abstract idea’ of classifying images and storing

1 images based on classification.” *Kinglite*, No. 14-3009-JVS, Dkt. 226 at \*9 (citing *TLI*,  
2 \_\_ F.3d \_\_, 2016 WL 2865693, at \*3-4 (Fed. Cir. May 17, 2016)).

3  
4 Here, however, the benefit of the 414 Patent is the slimming of the physical device  
5 itself, which enables the memory cards to be used in narrower places, and the benefit of  
6 the 454 Patent is the ability to fit more memory chips on a card. This is not a case where  
7 an inventor is trying to get around the prohibition of patenting abstract processes by tying  
8 an abstract process such as multitasking (*Kinglite*), a computer hardware design process  
9 (*Synopsys*), or a bingo game (*Planet Bingo*, see n.2 below) to a generic computer setup  
10 that executes that abstract idea. Rather, the hardware configuration itself is the unique  
11 focus of the patent. This fact distinguishes this case from the many cases Kingston cites  
12 in which claims were found to be patent-ineligible under § 101: those cases concerned  
13 mathematical formulas, general economic principles, business practices, and other mental  
14 processes—either themselves or as performed on a generic computer—not the design of  
15 the hardware itself.<sup>2</sup> Kingston has not, however, cited any case where a court found that  
16

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17 <sup>2</sup> See, e.g., *Bancorp Services*, 687 F.3d 1266 (Fed. Cir. 2012) (administering and tracking life insurance  
18 policies); *Bilski*, 561 U.S. 593 (2010) (price hedging); *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350  
19 (Fed. Cir. 2014) (guaranteeing performance of an online transaction); *Clear with Computers, LLC v.*  
20 *Altec Indus.*, No. 14-89, 2015 WL 993392 (E.D. Tex., Mar. 3, 2015) (creating a sales proposal); *Content*  
21 *Extraction & Transmission LLC v. Wells Fargo Bank, N.A.*, 776 F.3d 1343 (Fed. Cir. 2014) (method of  
22 extracting and storing information from hard copy documents); *CyberSource Corp. v. Retail Decisions,*  
23 *Inc.*, 654 F.3d 1366 (Fed. Cir. 2011) (method and system for detecting fraud in an online credit card  
24 transaction); *Dealertrack, Inc. v. Huber*, 674 F.3d 1315 (Fed. Cir. 2012) (managing a credit  
25 application); *Digitech*, 758 F.3d 1344 (organizing information through “mathematical correlations . . .  
26 not tied to a specific structure or machine”); *In re Brown*, \_\_ F. App’x \_\_, 2016 WL 1612776 (Fed.  
27 Cir. Apr. 22, 2016) (hair cutting); *In re Comiskey*, 554 F.3d 967 (Fed. Cir. 2009) (arbitration); *In re TLI*  
28 *Comm’ns LLC Patent Litig.*, \_\_ F.3d \_\_, 2016 WL 2865693 (Fed. Cir. May 17, 2016) (classifying,  
organizing, and storing digital images using generic computer hardware); *Intellectual Ventures I, LLC v.*  
*Motorola Mobility LLC*, 81 F. Supp. 3d 356 (D. Del. 2015) (distributing software updates to a  
computer); *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343 (Fed. Cir. 2015) (retaining  
information lost in the navigation of online forms); *Joao Control & Monitoring Sys., LLC v. Telular*  
*Corp.*, \_\_ F. Supp. 3d \_\_, 2016 WL 1161287, at \*7 (N.D. Ill. Mar. 23, 2016) (“monitoring and  
controlling property and communicating this information through generic computer functions”); *OIP*  
*Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359 (Fed. Cir. 2015) (price optimization); *Planet Bingo,*  
*LLC v. VKGS LLC*, 576 F. App’x 1005 (Fed. Cir. 2014) (bingo game management); *Thales Visionix,*  
*Inc. v. United States*, 122 Fed. Cl. 245 (2015) (mathematical equations for determining the relative

1 a claim for a purportedly novel physical configuration of a piece of computer hardware  
2 was deemed patent-ineligible because it was merely the embodiment of an abstract  
3 process.

4  
5 Kingston argues that the 414 Patent and the 454 Patent do not modify any of the  
6 conventional computer memory chips and connecting hardware recited in the asserted  
7 claims. This appears to be correct—the patents at issue here assert ways to more  
8 efficiently lay out those components in order to minimize the height of the memory card  
9 (414 Patent) or maximize the number of memory chips on the card (454 Patent).  
10 Kingston further asserts that because the patents do not modify any of the conventional  
11 computer components themselves, they “do not describe or claim any technical  
12 improvement to the functioning of memory modules, memory chips, or error correction  
13 chips—the claimed memory modules function just as the admitted conventional memory  
14 modules did.” (Def.’s Reply Br. at 7.) But though these individual components  
15 themselves function as they otherwise would, the two Polaris patents document  
16 performance improvements of the assembled devices insofar as the 414 Patent enables a  
17 memory card to maintain the same functionality in a slightly smaller space and the 454  
18 Patent enables more of those components to fit into the same space. The patents thus  
19 claim the enhanced performance of the memory cards themselves—their performance  
20 relative to the size of their footprint is enhanced.

21  
22 In contrast, the cases Kingston cites as examples of patent-ineligible claims  
23 involving computer hardware all involve patented *processes* running on what the courts  
24 found to be generic hardware. This Court concludes that the distinction is a significant  
25 one, and that it is dispositive on the issue raised in Kingston’s motion. Because the 414

26  
27 position of moving objects); *Ultramercial*, 772 F.3d 709 (Fed. Cir. 2014) (distributing copyrighted  
28 media over the internet to viewers in exchange for watching advertisements); *Wireless Media  
Innovations, LLC v. Maher Terminals, LLC*, 100 F. Supp. 3d 405 (D.N.J. 2015) (monitoring and  
recording location and load status of shipping containers using generic computer equipment).

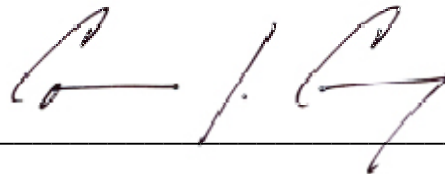
1 Patent and the 454 Patent pertain to machines as opposed to abstract processes, there is  
2 no need to proceed to the second step of the *Alice/Munro* analysis—they describe  
3 patentable subject matter under § 101.

4  
5 It may later be determined that the claims in Polaris’s 414 Patent and 454 Patent  
6 are unfit for patent protection because they fail to satisfy the statutory conditions of  
7 novelty under § 102 or non-obviousness under § 103. But a rejection of the patents on  
8 either of these grounds is of course premature here, and would not affect the  
9 determination that Polaris’s patents do indeed recite subject matter that is eligible for  
10 patent protection under § 101.

11  
12 **III. CONCLUSION**

13  
14 For the foregoing reasons, Kingston’s motion for judgment on the pleadings is  
15 DENIED.

16  
17  
18 DATED: July 21, 2016

19  
20 

21 \_\_\_\_\_  
22 CORMAC J. CARNEY  
23 UNITED STATES DISTRICT JUDGE  
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27  
28