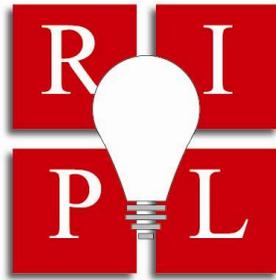


# THE JOHN MARSHALL REVIEW OF INTELLECTUAL PROPERTY LAW



ALICE-BACKED SECURITIZATION: START-UPS' NEW ALTERNATIVE TO VENTURE CAPITAL

ROBERT LAVERTY

## ABSTRACT

As of 2016, the United States software industry added \$1.07 trillion in total value to the U.S. economy alone. Today, it's no mystery that high-tech solutions are embedded in the fabric of our world. Venture Capital has been the dominant source of funding for startup and midsize high-tech firms for the last two decades. However, Venture Capital funding comes at a hefty cost. Young developing high-tech firms are often forced to bargain large shares of their ownership and managerial control to receive the funding they need to realize their potential. But, what if high-tech firms didn't have to make such a sacrifice? What if these firms could keep their ownership and receive the financing they need? A potential solution lies in their most valuable assets—business method patents. Business method patentability, as it pertains to software and high-tech patents, has been restrained by a high degree of uncertainty surrounding claim validity. In 2014, the United States Supreme Court finally set forth the legal framework to determine whether a software patent is valid under the U.S. patent laws in the case of *Alice Corp. Pty. Ltd. v. CLS Bank Int'l.* This case was the final piece needed to develop reliance on the validity of business method patents. This comment argues that the uncertainty surrounding business method patents' legality has settled and in turn unique opportunities are available to business method patent holders who seek alternative financing solutions.

Copyright © 2017 The John Marshall Law School



Cite as Robert Laverty, *Alice-Backed Securitization: Start-Ups' New Alternative to Venture Capital*, 16 J. MARSHALL REV. INTELL. PROP. L. 246 (2017).

ALICE-BACKED SECURITIZATION: START-UPS' NEW ALTERNATIVE TO  
VENTURE CAPITAL

ROBERT LAVERTY

I. INTRODUCTION.....	247
II. BACKGROUND.....	248
A. The Patent Securitization Process.....	248
B. Patent Securitization Benefits and Risks.....	250
C. Business Method Patentability Legal Foundation.....	252
D. Alice Corp.'s Progeny: The Analytical Framework for § 101's Abstract Idea Exception.....	254
E. Alice Corp.'s Securitization Opportunity.....	257
III. ANALYSIS.....	258
A. Whether the Claim is Attached to an "Abstract Idea".....	258
B. Whether the Claim Delivers an Inventive Concept.....	260
C. Summary: Consistent Alice Corp. Guideline Application.....	264
IV. PROPOSAL.....	265
A. District Court Decisions Using Guidelines Are Not Being Overturned.....	265
B. Important Jurisdictions for Business Method Patentability Are Consistently Applying Guidelines.....	267
C. Alice Corp.'s Test and The Guidelines Achieve Intellectual Property Policy Goals.....	269
V. CONCLUSION.....	270

ALICE-BACKED SECURITIZATION: START-UPS' NEW ALTERNATIVE TO  
VENTURE CAPITAL

ROBERT LAVERTY\*

## I. INTRODUCTION

In today's world, economies are perpetually more complex and reliant on highly technological innovation to spur growth.<sup>1</sup> With the increased interconnection of our world, more players, of all sizes, determine how technology disrupts. Most often, these players are of a smaller size than one might think.<sup>2</sup> A vast array of start-ups need unique methods of financing to facilitate the expensive research and development that is required to compete with conglomerates over high-tech innovation.<sup>3</sup> Due to their lack of assets, many high-tech start-ups cannot secure traditional lenders and turn to funding by venture capital.<sup>4</sup> However, venture capital is not exchanged without the hefty cost of managerial influence and ownership interest.<sup>5</sup> The question arises, what if start-ups had a way to gain the funding needed to develop highly innovative technology without sacrificing their ownership and control? Patent rights can be an incredible commercial solution in this regard.

A patent's establishment grants a party the exclusive right to use that patent and enforce it against infringers.<sup>6</sup> The value an inventor can derive from these rights can be lucrative dependent upon the rights' utility to the marketplace and its legal

---

\* © Robert Laverty 2017. Robert Edward Lawrence Laverty. J.D. Candidate, May 2017, The John Marshall Law School. M.B.A. Candidate, May 2017, The Brennan School of Business at Dominican University. B.A. Economics with an emphasis in Pre-Professional Studies & Minor in Finance, May 2013, San Diego State University. At this Comment's conclusion, the experience that astonished me was how a mere interest could grow into such a big idea with simply time and effort as its catalysts. I would first and foremost like to thank The John Marshall Review of Intellectual Property Law for the tremendous opportunity to take on a challenge of this caliber and their caring assistance throughout the process. Thank you Lisa A. Carroll for suggesting patent securitization as a possible field of interest for this Comment. A special thanks to my family and friends, especially my father, whose support and encouragement were vital throughout this process. Thank you to those who allowed me to explain my thoughts and theories to them even though, at times, they made absolutely no sense. And last but certainly not least, thank you to the late Clifford Pope for teaching me that there are only two things you can control in your life, your attitude and your effort.

<sup>1</sup> NICHOLAS D. EVANS, BUS. INNOVATION AND DISRUPTIVE TECH. 1 (2003) ("Underlying trends both within the business world and the software industry are driving us toward the need to extend the radar, to focus on emerging and disruptive technologies as the next source for growth and competitive advantage within the enterprise.").

<sup>2</sup> See Zoltan J. Acs, David B. Audretsch & Maryann P. Feldman, *R&D Spillovers and Recipient Firm Size*, 76 R. ECON. & STAT. 336, 336 (1994) (explaining the trend of zealous innovation by small firms in certain industries over large firms).

<sup>3</sup> See *id.*

<sup>4</sup> See discussion *infra* Part II.B.

<sup>5</sup> *Id.*

<sup>6</sup> See *What is IP Law? An Overview of Intellectual Property What is a Patent, a Trademark, and a Copyright?*, AM. INTELL. PROP. L. ASS'N (May 16, 2016, 11:30 AM), <http://www.aipla.org/about/iplaw/Pages/default.aspx#top>.

integrity.<sup>7</sup> Patent securitization allows inventors to raise capital early in their ventures by selling, to an investment bank, the rights to their patents' future anticipated proceeds in exchange for its present value.<sup>8</sup>

The United States Supreme Court's recognition of business methods as patentable expanded this financing opportunity for inventor-entrepreneurs.<sup>9</sup> The trail of business method patentability jurisprudence from *Bilski v. Kappos* to *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, and beyond, has been a long, criticized road that is now starting to show signs of clarity and consistency.<sup>10</sup>

This comment analyzes recent business method patent jurisprudence's effect on patent securitization and what this means for tech-entrepreneurs who wish to harvest the capital fruits of their unique business methods. Part I of this comment provides a brief instruction of how the patent securitization process works, the parties who can benefit, and the risks involved. This part will also discuss the legal foundation of business method patents and the jurisprudence that developed its validity. With a background in securitization and business method patentability established, Part II will present the direction that business method patent jurisprudence has taken since, and in favor of, *Alice Corp.* Part III will use *Alice Corp.*'s jurisprudence to demonstrate why the legal risks associated with business method patent validity have been mitigated. Finally, this comment will conclude in Part IV by arguing for the use of business method patent securitization as a viable financing opportunity.

## II. BACKGROUND

### A. The Patent Securitization Process

A security is essentially any investment of capital into a common enterprise with the expectation of profits to come solely from the efforts of others.<sup>11</sup> In its most basic form, under the U.S. securities laws, a security is an investment contract.<sup>12</sup> Securitization essentially is the development of receivables, predictable cash flows,

---

<sup>7</sup> Dominique Guellec & Bruno van Pottelsberghe de la Potterie, *Applications, grants and the value of patent*, 69 ECON. LETTERS 109, 110-111 (2000) (explaining patent valuation is based on the number of new patents that cite the patent as prior art [citations], "technological diversity embodied in the invention", probability of renewal, and the international scope of its protection.); see also Richard Gillbert & Carl Shapiro, *Optimal patent length and breadth*, 21 RAND J. ECON. 106, 106 (1990) ("In particular, we examine the socially optimal mix between patent length and patent breadth, for a given size of the patentee's prize."). See Malcolm S. Dorris, *The Securitization of Drug Royalties: A New Elixir?*, in GLOBAL SECURITIZATION AND STRUCTURED FIN. 2003 79 (White Page, 2003) ("In 1992, securitizations based on [patent] royalties generated US\$417 million in financings; in 1994, US\$757 million; in 1996, US\$996 million; and over US\$2.5 billion in the year 2000.").

<sup>8</sup> See 3-31 ROBERT S. BRAMSON & HOWARD RUDA, ASSET BASED FIN.: A TRANSACTIONAL GUIDE § 31.07 (2015).

<sup>9</sup> See *Bilski v. Kappos*, 561 U.S. 593, 594-95 (2010).

<sup>10</sup> See *Bilski*, 561 U.S. 593; see also *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347 (2014).

<sup>11</sup> E.g., *SEC v. W.J. Howey Co.*, 328 U.S. 293, 298-99 (1946).

<sup>12</sup> See *id.* at 297 (stating that § 2(a)(1) of the 1933 Securities Act defines the term "security" and leaves the term "investment contract" to be a catch-all interpretation of what is commonly known as a security).

pooled into instruments that can be marketed and sold to investors.<sup>13</sup> Companies use securities to raise money for various needs generally through debt or equity investment.<sup>14</sup> Ownership of equity securities means ownership of an interest in the business entity and entitlement to the entity's residual value while ownership of debt securities means merely a right to repayment of the debt obligation at a specific time and, in some instances, the right to collect and liquidate collateral to satisfy the debt obligation.<sup>15</sup>

One of the most popular securitization models is the asset-backed model.<sup>16</sup> Patent securitization utilizes the asset backed model because the contractual rights to a patent are considered business assets.<sup>17</sup> There are generally six participants in the asset-backed securitization process: an originator, special purpose entity ("SPE"), insurance company, underwriter, credit rating agency, and investors.<sup>18</sup>

The first step is for the originator (the entity that owns the patent) and the investment banker to establish a new business entity, labeled an SPE.<sup>19</sup> The originator then must transfer the patent to the SPE in the form of a "true sale"; in order to remove the patent from the reach of the originator's creditors if the originator were to fall into bankruptcy.<sup>20</sup> This also prevents investors in the securitized patent from becoming creditors of the originator's other assets.<sup>21</sup> Generally, the issues involved in determining whether a true sale occurs include: (1) whether the risk of loss is transferred to the SPE, (2) whether the transferor is permitted to service or collect the assets but must be removed if it defaults on those duties, (3) whether the transfer must be treated as a sale on the transferor's books, (4) whether the transaction was at arms-

---

<sup>13</sup> See, e.g., 1 JEROME F. FESTA, *in* SECURITIZATIONS: LEGAL & REGULATORY ISSUES 1-1 (2000); see also EUGENE F. BRIGHAM & MICHAEL C. EHRHARDT, *FIN. MGMT. THEORY AND PRAC.* 748-749 (14th ed. 2014) ("The asset securitization process involves the pooling and repackaging of loans secured by relatively homogenous, small-dollar assets into liquid securities."). There are generally two ways in which securitization can occur. *Id.* at 748. First, a debt instrument that was rarely traded on the secondary market becomes actively traded. *Id.* The first circumstance usually occurs due to a standardization of the terms of debt instrument or the market's size increases. *Id.* The second way securitization can occur, and is the method that this comment explores, is by pledging specific assets as collateral. *Id.* "The process of securitization lowers costs and increases the availability of funds to borrowers, with the risk being transferred to the investor." *Id.* at 749.

<sup>14</sup> See *id.* at 13 (explaining the three types of financial security claims: debt, equity, and derivative).

<sup>15</sup> *Id.* at 15; see also Aleksandar Nikolic, *Securitization of Patents and Its Continued Viability in Light of the Current Economic Conditions*, 19 ALB. L.J. SCI. & TECH. 393, 398-402 (2009).

<sup>16</sup> See *supra* note 13 and accompanying text.

<sup>17</sup> See, e.g., Dov Solomon & Miriam Bitton, *Intellectual Property Securitization*, 33 CARDOZO ARTS & ENT. L.J. 125, 129 (2015) ("Contractual rights are assets that can serve as the object of different transactions. Like with traditional transactions of real or personal property, modern law recognizes the possibility of carrying out transactions in rights.").

<sup>18</sup> See *id.* at 135-43. The terms "special purpose entity", "special purpose vehicle", and "conduit" are used relatively in this form of transaction. Compare *id.*; with Viral V. Acharya, Philipp Schnabl, & Gustavo Suarez, *Securitization without risk of transfer*, 107 J. FIN. ECON. 515, 519 (2013) ("A conduit is a special purpose vehicle set up by a sponsoring financial institution. The sole purpose of a conduit is to purchase and hold financial assets from a variety of asset sellers.").

<sup>19</sup> Nikolic, *supra* note 15, at 401-02; see also Jayant Kumar, *Intellectual Property Securitization: How Far Possible and Effective*, 11 J. INTELL. PROP. RTS. 98, 99 (2006).

<sup>20</sup> See Nikolic, *supra* note 15, at 402-403; see also Jayant, *supra* note 19, at 99.

<sup>21</sup> See *id.*; see *id.*

length and adequate consideration was exchanged, and (5) whether the documents reflect the parties intent for sale.<sup>22</sup>

In exchange for the patent, the SPE will pay the originator a lump sum of the patent's assessed future value and grant the originator a license to use the patent.<sup>23</sup> The result is a series of cash flows to the SPE that attract investors.<sup>24</sup> The underwriter and the originator coordinate with an insurance company and a credit rating agency to (1) insure the SPE issued securities (make sure there is cash available for investors if originator defaults) and (2) issue a rating for the investment.<sup>25</sup> A patent license-backed security's investment rating depends on a host of factors which focus on the predictability of the potential licensing revenues from the originator (and third parties if allowed) and the freedom with which the security may be traded on the secondary market.<sup>26</sup> The underwriter then, finally, sells the SPE's securities to investors who receive pro-rata cash flows from licensing in relation to the size of their investment.<sup>27</sup>

### *B. Patent Securitization Benefits and Risks*

The benefit of patent securitization is two-fold. Patent securitization offers businesses a lump sum of capital in exchange for the transfer of ownership in their patent rights.<sup>28</sup> This capital payment can be used for various business goals such as bringing in new talent, investing in new projects, paying returns to company investors, etc.

In particular, small businesses and start-ups that face high fixed costs to develop their products could especially appreciate patent securitization.<sup>29</sup> In modern financial markets, young businesses most often rely on venture capital ("VC") investment to fund their start-up costs.<sup>30</sup> For instance medical devices, biotechnology, telecommunications, and aerospace are all patent intensive industries with players

---

<sup>22</sup> *E.g.*, *Paloian v. LaSalle Bank Nat'l Ass'n (In re Doctors Hosp. of Hyde Park)*, 507 B.R. 558, 709 (Bankr. N.D. Ill. 2013).

<sup>23</sup> *Nikolic*, *supra* note 15, at 404-405; *see also Jayant*, *supra* note 19, at 99.

<sup>24</sup> *Nikolic*, *supra* note 15, at 404-405; *see also Jayant*, *supra* note 19, at 99.

<sup>25</sup> *See Solomon & Bitton*, *supra* note 17, at 136-43.

<sup>26</sup> *See Nikolic*, *supra* note 15, at 404.

<sup>27</sup> *See Solomon & Bitton*, *supra* note 17, at 143.

<sup>28</sup> *See discussion supra* Part II.A ("In exchange for the patent, the SPE will pay the originator a lump sum of the patent's assessed future value and grant the originator a license to use the patent.").

<sup>29</sup> William R. Kerr & Ramanda Nanda, *Financing Constraints and Entrepreneurship*, in HANDBOOK OF RES. ON INNOVATION AND ENTREPRENEURSHIP 88, 88 (2009) ("Surveys of current and potential entrepreneurs suggest that obtaining adequate access to capital is one of the biggest hurdles to starting and growing a business.").

<sup>30</sup> *See* 28 Lawton R. Burns, Michael G. Housman & Charles A. Robinson, MARKET ENTRY AND EXIT BY BIOTECH AND DEVICE COMPANIES FUNDED BY VENTURE CAPITAL w77 (2008); *see also* Raquel Fonseca, Pierre-Carl Michaud & Thepthida Sopraseuth, *Entrepreneurship, Wealth, Liquidity Constraints and Start-up Costs*, 28 COMP. LAB. L. & POL'Y J. 637, \*19-20 (2007) (presenting evidence that countries with lower entrepreneurial start-up costs have a more modest individual wealth profile of individuals who are entrepreneurs versus countries with higher entrepreneurial start-up costs that require more individual wealth to combat start-up costs).

that face high costs at their inception in order to develop their products.<sup>31</sup> This funding is not offered without a catch. VC firms leverage the high value of their financial contribution to induce entrepreneurs to give up significant portions of their ownership and managerial influence—a big sacrifice.<sup>32</sup> Patent securitization allows a start-up to subvert this system through the gain of capital while retaining ownership and management control.

Many investors can also appreciate patent-securitization. Patent-backed securities offer a consistent payment scheme as opposed to stocks, where values and dividends can fluctuate.<sup>33</sup> Due to their preference for investments that are low risk with consistent smaller returns, institutional investors that serve pension funds and insurance funds are a large group of investors that would appreciate patent-backed securities.<sup>34</sup>

While the benefits of patent securitization seem lucrative, the numerous legal risks involved in the securitization of patents have inhibited the financing opportunity.<sup>35</sup> Those risks include patent invalidation, originator bankruptcy,

---

<sup>31</sup> Burns, *supra* note 30, at w77-78. “Venture capital firms play a major role in financing the start-up of new firms, especially in the biotech and medical device sectors. Venture capital-backed firms constitute 40 percent of employment in biotechnology and 83 percent of employment in the medical devices industry.” *Id.* at w77. “Industry data show that R&D spending as a percentage of sales is relatively high in both pharmaceuticals [13 percent] and medical devices [11-12 percent], and especially high in biotechnology [23+ percent], compared to telecommunications, automobiles, electronics, and aerospace.” *See id.* at w78 (discussing the utmost importance that entrepreneurs and chief executive officers [CEOs] of pharmaceutical, medical device, biotechnology, telecommunications, automobiles, electronics, and aerospace businesses place on raising the appropriate capital to fund their ventures).

<sup>32</sup> William A. Sahlman, *The Structure and Governance of Venture-Capital Organizations*, 27 J. OF FIN. ECON. 473, 473 (1990) (“Venture capitalists are actively involved in the management of the ventures they fund, typically becoming members of the board of directors and retaining important economic rights in addition to their ownership rights.”). The author states that:

[v]enture-capital partnerships enter into contracts with both the outside investors who supply their funds and the entrepreneurial ventures in which they invest. The contracts share certain characteristics, notably: (1) staging the commitment of capital and preserving the option to abandon, (2) using compensation systems directly linked to value creation, (3) preserving ways to force management to distribute investment proceeds. *See id.* at 472-73. “Capital is a scarce and expensive resource for individual ventures. Misuse of capital is very costly to venture capitalists but not necessarily to management.” *Id.* at 507.

<sup>33</sup> *See* Ravi Jagannathan & Narayana R. Kocherlakota, *Why Should Older People Invest Less In Stocks Than Younger People?*, 20 FED. RES. BANK OF MINN. Q. REV. 11, 12 (Summer 1996) (Recognizing the general opinion of many financial planners that investors should switch from stocks to bonds as they get older due to the investment risks and the investors’ needs).

<sup>34</sup> *See* Jayant, *supra* note 19, at 99 (“The SPV then issues securities to capital market investors. Usually the bonds are privately placed to institutional investors, such as pension funds or insurance companies, not to the general public.”); *see also* Jagannathan, *supra* note 33, at 12 (describing three reasons why retiree investors are recommended to switch from stocks to bonds by financial planners: (1) older individuals cannot adopt long-term ownership strategies that create less risk in stock investments because they do not have the remaining lifespan left as younger people, (2) older people need to meet larger financial obligations later in life [children, retirement, college, etc.], and (3) younger people have the prospect of future wages to mitigate increased investment risks).

<sup>35</sup> *See* Solomon & Bitton, *supra* note 17, at 160 (explaining securitization of patent rights lags behind the securitization of other intellectual property rights because of the complexity of the field and a lack of awareness of the economic benefits).

ineffective true sale, infringement litigation, and securities regulation violations.<sup>36</sup> Most of these legal risks can be accounted for via appropriate due diligence and contract drafting.<sup>37</sup> The two areas of risk that remain a burden to alleviate are patent invalidation and infringement litigation.<sup>38</sup> Infringement litigation is a risk that is simply inherent in the nature of the patent industry, while patent invalidation derives its risk predominantly from judicial interpretation of federal statutory law.<sup>39</sup> If a patent's validity is challenged in court, a denial can render the patent licensing agreements that underlie the securities useless and in effect dismantle the securities.<sup>40</sup> Currently, patent invalidation is the most significant threat to patent securitization with roughly half of all litigated patents being found invalid.<sup>41</sup>

### *C. Business Method Patentability Legal Foundation*

The right to patent an invention is identified in Section 101 of Title 35 of the United States Code.<sup>42</sup> The statute states, “[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.”<sup>43</sup> There are generally three types of U.S. patents: utility,

---

<sup>36</sup> *Id.* at 167-68; and Nikolic, *supra* note 15, at 403-06; and Jayant, *supra* note 19, at 100 (“The fourth point is concerned with how to balance disclosure to investors with confidentiality of technical information when issuing securities.”).

<sup>37</sup> See Solomon & Bitton, *supra* note 17, at 178 (explaining contract drafting tactics that can protect licensees from an originator’s bankruptcy. An IP licensing drafter may include clauses that allow for “a right to improvements, reduced royalty payments, liquidated damages, and other provisions.”); see also Nikolic, *supra* note 15, at 402-03 (explaining the effect of transacting a true sale will remove bankruptcy risk from the perspective of the originator and investors).

<sup>38</sup> See Solomon & Bitton, *supra* note 17, at 168 (“These factors significantly limit the viability of securitization as a means for raising capital by corporations and individuals, mainly small companies and individual creators or inventors.”).

<sup>39</sup> *Id.* at 168 (explaining that vagueness of patent law doctrine has led to the careless issuance of many invalid patents).

<sup>40</sup> See *id.*

<sup>41</sup> *Id.*; cited with approval in Lemley & Carl Shapiro, *Probabilistic Patents*, 19 J. ECON. PER. 75, 76 (2005).

There are also some major specific challenges to securitization of patents stemming from the quality of patents issued by the U.S. Patent and Trademark Office that raise great concerns pertaining to the validity of issued patents. These quality concerns point to many flaws with the patent system, the vagueness of patent law doctrines, and other factors, which result in the Office issuing vague patents whose scope cannot necessarily be determined in advance, thus affecting the feasibility of securitization.

Solomon & Bitton, *supra* note 17, at 167-68.

<sup>42</sup> 35 U.S.C. § 101 (1952).

<sup>43</sup> *Id.*

design, and plant.<sup>44</sup> In addition to falling within one of the statutory categories described in § 101, the patented invention must be novel, nonobvious, and useful.<sup>45</sup>

As expressed in the statute, “processes” are identified as patent acceptable.<sup>46</sup> Section 100(b) of Title 35 of the United States Code defines the term “process” to mean, “[a] process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material.”<sup>47</sup> “Business Method” patents, for many years, were treated as categorically excluded from § 101 validity by the United States Patent and Trademark Office but rarely, if at all, by courts.<sup>48</sup> The United States Supreme Court made it clear in *Bilski* that the “Business Method” exception was not a valid legal doctrine and a business method is simply a type of process that can be eligible under § 101.<sup>49</sup> Because the term “method” is included in the statutory definition of “process”, the terms method and process are interchangeable under the § 100(b) statutory definition and receive the same validity analysis under § 101.<sup>50</sup> In fact, the term business method patent is now used within the intellectual property industry as a blanket term for algorithms, software, methods, and processes that are not associated with a specific machine or process.<sup>51</sup> *Bilski* created a tremendous prospect for software entrepreneurs and financiers to use their software patents to

---

<sup>44</sup> Josephine Johnston & Angela A. Wasunna, *A History of Patents*, in 37 A HASTINGS CENTER SPECIAL REP.: PAT., BIOMEDICAL RES., AND TREATMENTS: EXAMINING CONCERNS CANVASSING SOLUTIONS pS4-S5 (2007) (“Today, the U.S. Patent and Trademark Office issues three types of patent: 1) utility patents for inventions or discoveries of new and useful processes, machines, articles of manufacture, or compositions of matter, or any new and useful improvements; 2) design patents for designs for an article of manufacture; and 3) plant patents for distinct and new varieties of plant.”); see also BRINKS GILSON & LIONE, *THE BASIC PRINCIPLES OF INTELL. PROP. L.* 18 (3rd ed. 2013).

<sup>45</sup> 35 U.S.C. § 102 (novelty); 35 U.S.C. § 103 (nonobvious); 35 U.S.C. § 101 (useful); *Bilski*, 561 U.S. at 602.

<sup>46</sup> *Bilski*, 561 U.S. at 602-03. The Supreme Court has often cautioned that courts need to interpret patent laws strictly by way of which the legislature has expressed them. *Id.*; see also *Diamond v. Diehr*, 450 U.S. 175, 182 (1981) (quoting *Diamond v. Chakrabarty*, 447 U.S. 303, 308 (1980)); see also *United States v. Dubillier Condenser Corp.*, 289 U.S. 178, 199 (1933) (“should not read into the patent laws limitations and conditions which the legislature has not expressed.”).

<sup>47</sup> 35 U.S.C. § 100(b) (1952).

<sup>48</sup> *State St. Bank & Trust Co. v. Signature Fin. Grp.*, 149 F.3d 1368, 1375 (Fed. Cir. 1998) (“The business method exception has never been invoked by this court, or the CCPA, to deem an invention un-patentable. Application of this particular exception has always been preceded by a ruling based on some clearer concept of Title 35 or, more commonly, application of the abstract idea exception based on finding a mathematical algorithm.”); *id.* (“since its inception, the ‘business method’ exception has merely represented the application of some general, but no longer applicable legal principle.”); see also BRINKS GILSON & LIONE, *supra* note 44, at 16. The *State St.* Court identified *Hotel Security Checking Co. v. Lorraine Co.*, 160 F. 467 (2d Cir. 1908), as the case that had been most frequently cited as establishing the business method exception. *State St.*, 149 F.3d at 1376. The Court notes that the patent in *Hotel Security* was determined invalid due to the lack of novelty and invention rather than improper subject matter. *Id.*

<sup>49</sup> *Bilski*, 561 U.S. at 606-07.

<sup>50</sup> *Bilski*, 561 U.S. at 606-08 (deciding that the statutory interpretation of § 101 does not categorically exclude business method patents from validity).

<sup>51</sup> 1-5 MORGAN D. ROSENBERG & RICHARD J. APLEY, *PATENTABILITY OF BUS. METHODS, SOFTWARE AND OTHER METHODS* § 5.01 (2015).

Although a ‘business method’ can simply mean a method of doing business, in the normal sense of the term, ‘business method’ is really used as a sort of catch-all term for algorithms, software, methods, and processes which are not directly tied to a particular machine or ‘process’ in the typical patent sense of the word. *Id.*

grow and protect financing opportunities.<sup>52</sup> With that said, validity does not stop with the mere categorization of an invention as a business method or process.

According to years of judicial precedent there is an important implicit exception to § 101: laws of nature, natural phenomena, and abstract ideas cannot be patented.<sup>53</sup> The Supreme Court finds these laws to be “the basic tools of scientific and technological work.”<sup>54</sup> If an individual were allowed to patent these basic concepts, other market participants’ exclusion from its use would surely hurt the marketplace and inhibit innovation.<sup>55</sup> While patents that have attempted to monopolize laws of nature and natural phenomena have been invalidated with relative ease, the abstract exception’s application has not been as clear until recently with the decision of *Alice Corp.*<sup>56</sup>

#### *D. Alice Corp.’s Progeny: The Analytical Framework for § 101’s Abstract Idea Exception*

In the case of *Alice Corp.*, the Supreme Court took the opportunity to apply its new framework laid out in *Mayo* to a computer-implemented method (software patent) that came within the notion of an abstract idea.<sup>57</sup> *Bilski*, the prior Supreme Court case

<sup>52</sup> See *Bilski*, 561 U.S. at 606-08 (deciding that the statutory interpretation of § 101 does not categorically exclude business method patents from validity).

<sup>53</sup> See, e.g., *Alice Corp.*, 134 S. Ct. at 2354 (quoting *Association for Molecular Pathology v. Myriad Genetics, Inc.*, 136 S. Ct. 2137, 2146 (2013)); *Mayo Collaborative Servs. V. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1293 (2012) (“The Court has long held that this provision [§ 101] contains an important implicit exception”); *Diamond v. Diehr*, 450 U.S. at 185. According to the Supreme Court’s interpretation of § 101 in *Alice Corp.*, §101 has been viewed “in light of this exception for more than 150 years.” *Alice Corp.*, 134 S. Ct. at 2354.

<sup>54</sup> *Alice Corp.*, 134 S. Ct. at 2354; see also *Mayo*, 132 S. Ct. at 1293; see also *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972) (“Phenomena of nature, though not just discovered, mental processes, and abstract concepts are not patentable, as they are the basic tools of scientific and technological work.”); see also 1-1 DONALD S. CHISUM, CHISUM ON PATENTS § 1.03[2][f][vi] (2016).

<sup>55</sup> *Mayo*, 132 S. Ct. at 1293; see also *Alice Corp.*, 134 S. Ct. at 2354; see also CHISUM, *supra* note 54, § 1.03.

<sup>56</sup> *Diamond v. Chakrabarty*, 447 U.S. 303, 309 (1980).

A new mineral discovered in the earth or a new plant found in the wild is not patentable subject matter. Likewise, Einstein could not patent his celebrated law that  $E = mc^2$ ; nor could Newton have patented the law of gravity. Such discoveries are ‘manifestations of . . . nature, free to all men and reserved exclusively to none.

*Id.* (quoting *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 130 (1948)). See generally *Mayo*, 132 S. Ct. at 1295 (determining whether a process that identified the relationship between the concentration of certain thiopurine metabolites in the blood and the probability that the thiopurine treatment would be effective is a valid patentable method. The Supreme Court held, with a unanimous decision, the method merely re-stated natural laws already known to the medical field, did not further a scientific truth with a novel addition of a useful structure, and would inhibit future discovery if allowed.); see also CHISUM, *supra* note 54 § 1.03[6][n][ii][A]. See *Bilski*, 130 S. Ct. at 3230 (interpreting and relying on the opinions of *Gottschalk v. Benson*, 409 U.S. 63, 64-67 (1972), *Parker v. Flook*, 437 U.S. 584, 585-586 (1978), and *Diehr*, 450 U.S. at 192-193); see also *Alice Corp.*, 134 S. Ct. at 2356 (explaining the most recent United States Supreme Court jurisprudence [2014] regarding how to evaluate patents that fall within the § 101 abstract exception).

<sup>57</sup> See *Mayo*, 132 S. Ct. at 1297 (“If a law of nature is not patentable, then neither is a process reciting a law of nature, unless that process has additional features that provide practical assurance that the process is more than a drafting effort designed to monopolize the law of nature itself.”); see also 1-1 DONALD S. CHISUM, CHISUM ON PATENTS § 1.03[6][o][ii][D] (2016). The patents in *Alice Corp.* claimed the method by which the owner mitigated settlement risk, (2) a computer system used to

dealing with computer software patents was not controlling over *Alice Corp.*, because Alice Corp.'s patent claims were method claims limited to computer implementation, system claims, and computer media claims, while *Bilski*'s method claims were not limited to computer implementation.<sup>58</sup>

The patents at issue in Alice Corp. mitigated "settlement risk" via a computerized scheme.<sup>59</sup> The patents under scrutiny were (1) the method for mitigating settlement risk, (2) a computer system that carried out the mitigation method, and (3) a computer-readable medium containing program code for performing the mitigation method.<sup>60</sup> The parties stipulated that all method claims at issue here required a computer.<sup>61</sup>

To determine whether the patent claims were invalid, the Court first analyzed whether a claim was within the scope of one of the three exceptions to § 101 eligibility.<sup>62</sup> The Court found the patent method definitively related to the concept of "intermediated settlement."<sup>63</sup> As a long standing economic practice, the Court determined that intermediated settlement is an abstract idea, leaving this method outside of § 101's reach.<sup>64</sup>

---

apply the method, and (3) a computer-readable medium that contained program code (software) to perform the method. *Alice Corp.*, 134 S. Ct. at 2352-53.

<sup>58</sup> Compare *id.*; with *Bilski*, 130 S. Ct. at 3230 (analyzing two patents at issue that described a method for sellers of commodities in energy markets to hedge against the risk of price fluctuation. The first patent claim described specific steps to hedge against risk while the second claim articulated claim one in a mathematical formula.). See CHISUM, *supra* note 54, § 1.03[6][m][ii][A].

<sup>59</sup> *Alice Corp.*, 134 S. Ct. at 2352. "Settlement risk"—i.e., the risk that only one party to an agreed upon financial exchange will satisfy its obligation." *Id.*; see also PU SHEN, *Settlement Risk in Large-Value Payment Systems*. 82 ECON. REV. – FED. RES. BANK OF KANSAS CITY 45 (1997) ("The tremendous growth of payments system use throughout the world has increased both the possibility of settlement failures and the potential impact of such failures."). There are three types of settlement risk: (1) credit risk, (2) unwinding risk, and (3) liquidity risk. *Id.* at 45. The settlement risk mitigated in *Alice Corp.* was credit risk. Compare *id.* at 48-49, with *Alice Corp.*, 134 S. Ct. at 2352.

<sup>60</sup> *Alice Corp.*, 134 S. Ct. at 2353. In *Alice Corp.*, an intermediary was established to permit and record financial transactions between two parties. *Id.* The intermediary updated the permitted transactions between the parties in real time. *Id.* At the end of the day, the intermediary would contact the parties' financial institutions and request "settlement" of the transactions in accordance with the intermediary's ledger. *Id.* In effect, this process allowed parties to conduct transactions at faster speeds while mitigating the risk that one party could not perform the transaction. *Id.*

<sup>61</sup> *Id.*

<sup>62</sup> *Id.* at 2355-56. The three exceptions to § 101 patentability are laws of nature, natural phenomena, and abstract ideas. *Id.* at 2354.

<sup>63</sup> *Id.* at 2356-57 ("On their face, the claims before us are drawn to the concept of intermediated settlement, i.e., the use of a third party to mitigate settlement risk."). The Alice Corp. Court compared the concept of intermediary settlement to a "clearing house." *Id.* Barron's Law Dictionary defines the term "clearing house" as, "[a]n association, usually formed voluntarily by banks, to exchange checks, drafts, or other forms of indebtedness held by one member and owed by another. The object of such an association is to effect at one time and place the daily settlement of balances between the banks of a city or region with a minimum of inconvenience and labor." Steven H. Gifis, LAW DICTIONARY 82 (5th ed. 2003).

<sup>64</sup> *Alice Corp.*, 134 S. Ct. at 2356. "Like risk hedging in *Bilski*, the concept of intermediated settlement is 'a fundamental economic practice long prevalent in our system of commerce.' The use of a third-party intermediary is also a building block of the modern economy." *Id.* (quoting *Bilski*, 561 U.S. at 611).

Under *Mayo*'s framework, even though a patent may fall within an exception it still may survive § 101 ineligibility.<sup>65</sup> The *Alice Corp.* Supreme Court, in its second and final part of its analysis, asked whether the claims amounted to an "inventive concept."<sup>66</sup> The claims could be determined eligible via analysis at an individual elemental level or as an ordered combination.<sup>67</sup>

With the method already identified as an abstract idea, the technological components (the computer-readable medium and computer system) of the patent claims needed to transform or improve an existing technological process to merit § 101 eligibility.<sup>68</sup> Analyzed separately, the patent owner had agreed that the merit of the computer-readable medium claim directly related to the method's validity, rendering the medium invalid.<sup>69</sup> As for the computer system, the cited "hardware" was nothing new or inventive.<sup>70</sup> The claimed "unique components" were in actuality found to be commonly part of nearly every computer system;<sup>71</sup> as a result, the computer system claim was rendered ineligible on its own.<sup>72</sup>

The Court's final task, under part two of its framework, was to seek an inventive concept in the claims as a whole.<sup>73</sup> Here, the technological aspect of the patent essentially computerized simple recordkeeping of participants' transactions.<sup>74</sup> The

<sup>65</sup> See *Mayo*, 132 S. Ct. at 1297; see also *Alice Corp.*, 134 S. Ct. at 2355; see also *Diehr*, 450 U.S. at 187 ("It is now commonplace that an application of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection."); see also CHISUM, *supra* note 54 § 1.03[6][o][i].

<sup>66</sup> *Alice Corp.*, 134 S. Ct. at 2357 (explained an "inventive concept" as, "A claim that recites an abstract idea must include 'additional features' to ensure 'that the claim is more than a drafting effort designed to monopolize the [abstract idea].").

<sup>67</sup> *Id.* at 2355.

<sup>68</sup> *Id.* at 2357 ("Because the claims at issue are directed to the abstract idea of intermediated settlement, we turn to the second step in *Mayo*'s framework."). *Id.* at 2359 (explaining the issue with an abstract idea's mere application through generic computer functions) ("The relevant question is whether the claims here do more than simply instruct the practitioner to implement the abstract idea of intermediated settlement on a generic computer."); see also *Benson*, 409 U.S. at 71-72 (holding that the basic implementation of a mathematical equation in a computer was not patent eligible); see also *Mackay Radio & Telegraph Co. v. Radio Corp. of Am.*, 306 U.S. 86, 94 (1939) ("While scientific truth, or the mathematical expression of it, is not a patentable invention, a novel and useful structure created with the aid of knowledge of scientific truth may be.").

<sup>69</sup> *Alice Corp.*, 134 S. Ct. at 2359-2361. Because the method had already been proven to be an abstract idea and § 101 ineligible in step one, the computer-readable medium was ineligible as well. *Id.*

<sup>70</sup> *Id.* at 2360 ("What petitioner characterizes as specific hardware—a 'data processing system' with a 'communications controller' and 'data storage unit.'").

<sup>71</sup> *Id.* ("Nearly every computer will include a 'communications controller' and 'data storage unit' capable of performing the basic calculation, storage, and transmission functions required by the method claims.").

<sup>72</sup> *Id.* "None of the hardware recited by the system claims 'offers a meaningful limitation beyond generally linking the use of the [method] to a particular technological environment,' that is, implementation via computers." *Id.* (quoting *Bilski*, 561 U.S. at 610-11) (alteration in *Alice Corp.*).

<sup>73</sup> *Id.* at 2359-2360; see also CHISUM, *supra* note 54, § 1.03[6][o][ii][H].

<sup>74</sup> *Alice Corp.*, 134 S. Ct. at 2359 ("Using a computer to create and maintain "shadow" accounts amounts to electronic recordkeeping—one of the most basic functions of a computer."). Circles in the accounting profession view "shadow accounting" as, "A technology that measures, creates, makes visible, represents, and communicates evidence in contested arenas characterized by multiple (often contradictory) reports, prepared according to different institutional and ideological rules." AMANDA BALL & STEPHEN P. OSBORNE, SOC. ACCT. AND PUB. MGMT. § 6 (2011).

Court determined that, “[v]iewed as a whole, petitioner’s method claims simply recite the concept of intermediated settlement as performed by a generic computer.”<sup>75</sup> Therefore, the patent claims as a whole failed § 101 patent eligibility.<sup>76</sup>

### *E. Alice Corp.’s Securitization Opportunity*

The advancement of business method patent jurisprudence begs the question whether there is an opportunity here to seize. As it stands, *Alice Corp.* has a tremendous influence on the U.S. software industry. As of 2016, the U.S. software industry has an estimated \$1.07 trillion total dollar value-added to the U.S.’s GDP alone.<sup>77</sup> The economic footprint of *Alice Corp.* will be felt.

The software industry has long been characterized as lacking concentration, meaning small firms play a large role.<sup>78</sup> More importantly, venture capital remains the investment fuel to the software innovation engine.<sup>79</sup> As discussed earlier in this comment, industries that are subject to VC leverage are inclined to find patent securitization to be an attractive option.<sup>80</sup> With the software industry’s heavy reliance on VC investment, *Alice Corp.*’s recent clarity of software business method patentability could spark a securitization movement. A movement that could bring financial freedom to young yet innovative software companies.

That being said, business method patent validity jurisprudence has been the subject of much controversy in the intellectual property world for over a decade.<sup>81</sup> Not to mention, securitization on a general level has been under scrutiny since mortgage-backed securities lead to the 2008 financial crisis.<sup>82</sup> It comes as no surprise that the uncertainty of risk in these fields renders business method patent securitizations unattractive. However, as jurisprudence becomes more consistent and the great recession becomes further removed, confidence will increase. Sizable financial players will likely be willing to once again experiment with new financing tools.<sup>83</sup> In fact, there

<sup>75</sup> *Alice Corp.*, 134 S. Ct. at 2360.

<sup>76</sup> *Id.* at 2359-60.

<sup>77</sup> *The \$1 Trillion Economic Impact of Software*, BSA | THE SOFTWARE ALLIANCE [13] (2016), [http://softwareimpact.bsa.org/pdf/Economic\\_Impact\\_of\\_Software\\_Report.pdf](http://softwareimpact.bsa.org/pdf/Economic_Impact_of_Software_Report.pdf) (explaining that, as of 2016, the U.S. software industry’s direct U.S. GDP contribution is \$475 billion and total investment in software R&D is \$52 billion).

<sup>78</sup> See Ronald J. Mann & Thomas W. Sager, *Patents, Venture Capital, and Software Start-Ups*, 36 RES. POL’Y 193, 194 (2007) (“The lack of concentration in the [software] industry, for one thing, suggests that smaller firms play a significant role. Moreover, some data suggest that small firms in our economy contribute disproportionately to R&D investment and innovative activity.”).

<sup>79</sup> *Id.* at 193 (explaining that venture capital investment has been the prime financial resource for the software industry due to the industry’s nature of many firms entering and exiting at a great pace); see also *id.* (“The availability of venture capital likely has contributed both to the rapid pace of innovation and to the fragmented structure of the software industry.”).

<sup>80</sup> See discussion *supra* Part II.B.

<sup>81</sup> Megan M. La Belle & Heidi M. Schooner, *Big Banks and Business Method Patents*, 16 U. PA. J. BUS. L. 431, 443 (2014).

<sup>82</sup> Nikolic, *supra* note 15, at 407.

<sup>83</sup> La Belle, et al., *supra* note 81, at 470-71 (explains the importance of “Big Banks” in the patent world). G-SIFIs are banks that have been specially identified by the Financial Stability Board as needing special regulation due to their relationship with the world’s financial system. *Id.* Once G-

are already intellectual property exchanges that specialize in the international trading of intellectual property rights, a novel concept indeed.<sup>84</sup>

### III. ANALYSIS

The risk of patent subject matter ineligibility is the most lethal, yet controllable, restraint to business method patent securitization.<sup>85</sup> *Alice Corp.*'s application of *Mayo*'s two part § 101 eligibility test on a software patent was a huge step toward mitigating this risk.<sup>86</sup> Since *Alice Corp.*'s decision in 2014, the circuit courts have applied this two part test and clarified circumstantial issues to improve its navigation.<sup>87</sup> As a result, a fairly consistent body of jurisprudence has developed under its direction. This section will use *Alice Corp.* to point out the guidelines that business method patent drafters will need to address in order to ensure § 101 subject matter eligibility.<sup>88</sup> These guidelines will be explained using examples of recently litigated business method patents.

#### A. Whether the Claim is Attached to an "Abstract Idea"

Finding a business method patent that does not encroach upon an abstract idea is a difficult task. Several courts applying *Alice Corp.* have explicitly lamented this step's lack of specificity.<sup>89</sup> Nevertheless, business method patents are an area of intellectual property that, simply by their natural ties to economic behavior and scientific law, are ripe for overreaching exclusion.<sup>90</sup> The circuit courts and the United

---

SIFIs, "Big Banks", begin participating in patentability their political and economic power will provide the much needed influence to impact policy to reduce legal risks. *Id.* at 479-80.

<sup>84</sup> See *Intellectual Property Exchange*, (May 13, 2016 8:00 PM), <https://www.ipexchange.global>.

<sup>85</sup> See discussion *supra* Part II.B ("Infringement litigation is a risk that is simply inherent in the nature of the patent industry, while patent invalidation derives its risk predominantly from judicial interpretation of federal statutory law.")

<sup>86</sup> See *Alice Corp.*, 134 S. Ct. at 2355; see also *Mayo*, 132 S. Ct. at 1297; see also CHISUM, *supra* note 54, § 1.03[6][o][i] ("The two-step framework, which the Court [U.S. Supreme Court] adopted in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.* (2012) for medical diagnosis claims challenged as directed to a "law of nature," applied to computer-implemented inventions challenged as "abstract ideas.")

<sup>87</sup> See CHISUM, *supra* note 54, § 1.03[6][o][iii]-§1.03[6][o][iv] (discussing all note-able federal circuit court cases that applied *Mayo*, 132 S. Ct. at 1296-1300 to patent claims from 2014 through 2015).

<sup>88</sup> See *Alice Corp.*, 134 S. Ct. at 2355; see also CHISUM, *supra* note 54, § 1.03[6][o][iii]-[iv].

<sup>89</sup> See *Alice Corp.*, 134 S. Ct. at 2355. See *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1255 (Fed. Cir. 2014) ("Distinguishing between claims that recite a patent-eligible invention and claims that add too little to a patent-ineligible abstract concept can be difficult, as the line of separating the two is not always clear."); see also *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1345 (Fed. Cir. 2015) ("Recently, the courts have focused on the patent eligibility of 'abstract ideas,' for precision has been elusive in defining an all-purpose boundary between the abstract and the concrete, leaving innovators and competitors uncertain as to their legal rights.")

<sup>90</sup> See *Benson*, 409 U.S. at 67 ("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.")

States Court of Appeals for the Federal Circuit (“CAFC”) have put forth essentially four guidelines to steer step one of *Alice Corp.*’s analysis.<sup>91</sup>

The first guideline asks, what is the scope and meaning of the claim?<sup>92</sup> This question directly addresses which ideas a patent will be allowed to preempt.<sup>93</sup> Since business methods were determined patent eligible, every court dealing with business method patent § 101 eligibility has addressed this question in some shape or form.<sup>94</sup>

The second guideline asks, is there a basic conceptual framework that this claim relates to?<sup>95</sup> This question is essentially asking, is this a fundamental practice long prevalent in our system?<sup>96</sup> This was the key question that drew a connection between *Alice Corp.*’s business method patent and the abstract idea of intermediated settlement.<sup>97</sup> Other courts have used this question to find several business method patents to be abstract; this includes the ideas of third party guarantees of online sales transactions, data storage and manipulation, offer-based pricing, etc.<sup>98</sup>

The second two guidelines operate more as warnings than analytical questions. The third guideline instructs courts that “claims directed to the mere formation and manipulation of economic relations may involve an abstract idea.”<sup>99</sup> The *Alice Corp.* Court articulated this guideline to ensure that other courts invalidate business method patent claims that recite basic economic relationships and behaviors.<sup>100</sup> Such basic

---

<sup>91</sup> See *Alice Corp.*, 134 S. Ct. at 2355.

<sup>92</sup> See, e.g., *Internet Patents Corp.*, 790 F.3d at 1348 (“However, the threshold of § 101 must be crossed; an event often dependent on the scope and meaning of the claims. Applying the guidance of *Bilski*, *Mayo*, and *Alice* to the present appeal, we start by ascertaining the basic character of the subject matter.”).

<sup>93</sup> *Alice Corp.*, 134 S. Ct. at 2354 (“We have long held that this provision [§ 101] contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable . . . We have described the concern that drives this exclusionary principle as one of pre-emption.”).

<sup>94</sup> See *Bilski*, 561 U.S. at 606-09 (determining, for the first time, that business method patents are not categorically excluded from § 101 eligibility); see also *buySAFE, Inc. v. Google Inc.*, 765 F.3d 1350, 1353-54 (2014); see also *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 714 (2014) (“We first examine the claims because claims are the definition of what a patent is intended to cover.”); see also *Internet Patents Corp.*, 790 F.3d at 1346 (“Under step one of *Mayo/Alice*, the claims are considered in their entirety to ascertain whether their character as a whole is directed to excluded subject matter.”).

<sup>95</sup> E.g., *Versata Dev. Group, Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1333-34 (2015) (deciding that the patent claims were directed to the abstract idea of determining a price based on “organizational and product group hierarchies”).

<sup>96</sup> See, e.g., *Le Roy v. Tatham*, 55 U.S. 156, 174-75 (1852) (“A principle, in the abstract, is a fundamental truth; original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right.”); see also *Bilski*, 561 U.S. at 609-10 (quoting *Le Roy v. Tatham*, 55 U.S. at 174-75). “Hedging is a fundamental economic practice long prevalent in our system of commerce and taught in any introductory finance class.” *Id.* at 611 (quoting *In re Bilski*, 545 F.3d 943, 1013 (2008)).

<sup>97</sup> See *Alice Corp.*, 134 S. Ct. at 2356.

<sup>98</sup> See *buySAFE, Inc.*, 765 F.3d at 1354-55 (ruling that a 3<sup>rd</sup> party guaranty for online transactions was directed towards the abstract idea of a “transaction performance guaranty”); see also *Content Extraction & Transmission LLC v. Wells Fargo Bank, N.A.*, 776 F.3d 1343, 1347 (2014) (finding the concept of data collection, recognition, and storage to be well-established practice); see also *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362 (2015) (“The concept of ‘offer based pricing’ is similar to other ‘fundamental economic concepts’ found to be abstract ideas by the Supreme Court and this court.”).

<sup>99</sup> *Content Extraction & Transmission LLC*, 776 F.3d at 1347.

<sup>100</sup> See *Alice Corp.*, 134 S. Ct. at 2356-57.

concepts revolve around commerce and trade, including intermediated settlement, advertising as a currency, financial budgeting, etc.<sup>101</sup>

The fourth and final guideline for determining whether a business method patent claim is directed toward an abstract idea instructs that simply because a business method patent includes an additional machine, beyond a computer, this does not render the business method non-abstract.<sup>102</sup> This guideline was created in relation to the patent owner argument that if the business method described in the patent would not be possible without the technology, or in other words the process is something a human cannot do, then the patent can't be related to an abstract idea.<sup>103</sup> This argument has been unavailing.<sup>104</sup>

For example, *Content Extraction & Transmission LLC v. Wells Fargo Bank, N.A.* articulated this guideline, an important case for banking deposit institutions.<sup>105</sup> The CAFC found that a method of using a scanner and computer to extract data from hard copy documents, identify specific information, and store that information was § 101 ineligible.<sup>106</sup> Regardless of the process's function beyond human capability and requirement of multiple technological devices, the aforementioned process was an "undisputedly well known" abstract idea.<sup>107</sup>

### *B. Whether the Claim Delivers an Inventive Concept*

As explained in the prior subsection, finding an abstract idea to relate to a business method patent can be a fairly easy task due to the purposefully broad scope

---

<sup>101</sup> See *id.* at 2356 (finding that the concept of intermediated settlement was a basic economic concept that mirrored that of a clearinghouse); see also *Ultramercial, Inc.*, 772 F.3d at 715 (determining that the concept of showing an advertisement in exchange for delivering free content was directed toward the abstract idea of constructive currency); see also *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1367 (2015) (finding that a claimed method related to the simple abstract economic concept of budgeting).

<sup>102</sup> See *Content Extraction & Transmission LLC*, 776 F.3d at 1347 (addressing the patent owner's argument that its claimed method requires multiple technologies [computer & scanner] to perform a function that a human cannot perform and therefore it cannot be directed toward an abstract idea).

<sup>103</sup> *Id.* In the case of *CyberSource v. Retail Decisions, Inc.*, the United States Appellate Court for the Federal Circuit opined that,

Methods which can be performed entirely in the human mind are unpatentable not because there is anything wrong with claiming method steps as part of a process containing non-mental steps, but rather because computational methods which can be performed entirely in the human mind are the types of methods that embody the "basic tools of scientific and technological work" that are free to all men and reserved exclusively to none.

*CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1373 (2011).

The patent owner in *Content Extraction & Transmission LLC* misconstrued the Court's position on invalidating patent processes that can be performed in the human mind to be applicable to the validation of his patent that could not be performed in the human mind. Compare *Content Extraction & Transmission LLC*, 776 F.3d at 1347; with *CyberSource Corp.*, 654 F.3d at 1373.

<sup>104</sup> *Content Extraction & Transmission LLC*, 776 F.3d. at 1347-48.

<sup>105</sup> See *id.*

<sup>106</sup> See *id.* at 1346-49.

<sup>107</sup> *Id.* at 1347-48.

of *Alice Corp.*'s step one analysis;<sup>108</sup> thus, rendering the majority of challenged business method patents § 101 ineligible in the beginning of the test.<sup>109</sup> However, the second step of *Alice Corp.*'s test, in most cases, is the portion of the analysis that returns or validates a business method patent's § 101 eligibility.<sup>110</sup> Whether the claim delivers an inventive concept has been evaluated generally via the following four guidelines.

The first guideline asks, does the process address a problem in the nature of a field or technology that does not arise in the "brick and mortar" world?<sup>111</sup> This guideline, historically, is the most important of the four. The case of *DDR Holdings, LLC v. Hotels.com, L.P.*, decided in December 2014, was the first case after *Alice Corp.*, to hold a challenged business method patent § 101 eligible.<sup>112</sup> The case involved a method where viewers would visit a host website, click on a link to engage in a third-party merchant transaction, and the new linked page would be a composite page that mixed themes of the host website and the third-party merchant's site.<sup>113</sup> The court found there was no satisfactory abstract idea.<sup>114</sup> In addition, it found the method was an inventive concept for essentially the same reason as the abstract analysis: This method solved a problem that was purely unique to the internet and did not exist in the "brick and mortar world."<sup>115</sup> The problem was once visitors clicked on a third-party link they would be instantly transferred to another "store" so to speak; rendering the host website's influence/captivation over that visitor terminated.<sup>116</sup>

In comparison to the method analyzed in *Alice Corp.*, the settlement risk of not getting paid at the end of the day after parties exchanged many transactions was not a problem that was strictly inherent in the field of finance or the technology that the

<sup>108</sup> See *supra* notes 89-90 and accompanying text.

<sup>109</sup> See CHISUM, *supra* note 54, § 1.03[o][ii][C] (describing the *Alice Corp.*, 134 S. Ct. at 2354 Court's acknowledgement that the exclusionary principle of § 101 could "swallow all of patent law" if not applied carefully).

<sup>110</sup> See generally *DDR Holdings, LLC*, 773 F.3d at 1257-59 (finding business method internet patent was not directed to an abstract idea yet was §101 eligible because it was an inventive concept); see also *ART+COM Innovationpool GmbH v. Google Inc.*, 14-217-RGA, 2016 U.S. Dist. LEXIS 56498, at \*9-10, \*15-17 (2016) (ruling that a business method patent involving mapping software was directed to an abstract idea yet it was §101 eligible because it was an inventive concept).

<sup>111</sup> See *DDR Holdings, LLC*, 773 F.3d at 1258 (discussing how the patent claim "introduces a problem that does not arise in the brick and mortar context." Thus, it should be classified as an inventive concept and granted § 101 eligibility.).

<sup>112</sup> *Id.* at 1259.

<sup>113</sup> *Id.* at 1248.

<sup>114</sup> *Id.* at 1256-57. The court in *DDR Holdings* recognized that identifying an abstract idea against the patent claims was not as straight forward as *Alice Corp.* *Id.* Yet, the court was able to recognize that the patent claim did not "recite a mathematical algorithm . . . Nor do they recite a fundamental economic or longstanding commercial practice." *Id.* The court admitted that it did not articulate its own abstract concept and merely addresses the challenging party's suggestions because it already recognized that the claim could satisfy the second step of *Alice Corp.*'s test. *Id.*; see also *Alice Corp.*, 134 S. Ct. at 2355.

<sup>115</sup> *DDR Holdings, LLC*, 773 F.3d at 1257.

But these claims stand apart because they do not merely recite the performance of some business practice known from the pre-internet world along with the requirement to perform it on the internet. Instead, the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.

*Id.*

<sup>116</sup> *Id.* at 1257-58.

method was operating on.<sup>117</sup> Thus, *DDR Holdings* was decided consistently with the *Alice Corp.* opinion using the first guideline.

The second guideline asks, is the technology involved or the method already well-known at the time of filing?<sup>118</sup> This is a very logical consideration in determining whether a business method is inventive. By definition, something that is inventive tends to be newer because once it is invented it has been produced originally into existence.<sup>119</sup> If the business method is newer in existence, the probability that it is already well-known at the time of its patent filing is slim to none.

The application of this guideline is best illustrated by *Internet Patents Corp. v. Active Network, Inc.*<sup>120</sup> This case dealt with a business method patent that claimed a web browser's back and forward navigational panel functionality that retained the data of an application on the previous page.<sup>121</sup> The court determined the patent was tied to the abstract idea of retaining information while navigating online forms.<sup>122</sup> Due to the unique problem internet browsers faced in retaining filled out data in prior pages, it seemed that this case was headed for § 101 eligibility as an inventive concept.<sup>123</sup> But, the patent drafters made a fatal error in their drafting of the claim.<sup>124</sup> The claim did not provide any details of how the data retention was accomplished even though it was cited as the "essential innovation."<sup>125</sup> This forced the court to turn its focus toward the conventional use of back and forward web browser navigation rather than the internet-unique problem that was being solved. As a result, this business method patent was found § 101 ineligible.<sup>126</sup>

The last two guidelines, delineating inventive concept analysis, are considered strictly when assessing business method patents that involve computer technology. The third guideline asks, did the claims effect an improvement in the computer itself

<sup>117</sup> See *Alice Corp.*, 134 S. Ct. at 2356 (opining that the abstract concept of intermediated settlement was used not only in the field of finance but was also a fundamental economic practice); see also *id.* at 2359-60 (finding the patent claim did not improve any technology or technical field).

<sup>118</sup> *Content Extraction & Transmission LLC*, 776 F.3d at 1348 (discussing the claim's technology [use of scanner and computer] was already well-known when the claim was filed); see also *Mayo*, 132 S. Ct. 1299 (discussing the deficiency of claims that draft "what is well-understood, routine, conventional activity, previously engaged in by those in the field.").

<sup>119</sup> MICHAEL AGNES & CHARLTON LAIRD, WEBSTER'S NEW WORLD DICTIONARY AND THESAURUS 328 (1996). *Webster's New World Dictionary* defines the word "invent" as, "1 to think up, 2 to think out or produce (a new device, process, etc.); originate." *Id.*

<sup>120</sup> See generally *Internet Patents Corp.*, 790 F.3d at 1348 (discussing that back and forward navigational functions in a web browser was a well-known and conventional technological function at the time of the challenged patent's filing).

<sup>121</sup> *Id.* at 1344.

<sup>122</sup> *Id.* at 1348.

<sup>123</sup> Compare *id.*; with *DDR Holdings, LLC*, 773 F.3d at 1257 ("[T]he claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.").

<sup>124</sup> See *Internet Patents Corp.*, 790 F.3d at 1348 ("As the district court observed, claim 1 contains no restriction on how the result is accomplished. The mechanism for maintaining the state is not described, although this is stated to be the essential innovation.").

<sup>125</sup> *Id.*

<sup>126</sup> *Id.* (turning the analysis immediately from why the drafting of the claim is deficient to identifying the claim as merely an abstraction with no inventive concept creates a clue as to the court's desire to have decided differently).

or any other technology?<sup>127</sup> If the claims improve the technology itself to function faster or more efficiently, such improvement fosters the novelty aspect of the original § 101 eligibility requirements.<sup>128</sup>

The third inventive concept guideline, originally established in the case of *Diamond v. Diehr*, was also used in *Alice Corp.* to remove the settlement risk technology's § 101 eligibility.<sup>129</sup> This guideline has also been successfully used to find business method patents § 101 eligible in the Federal District Court of Delaware.<sup>130</sup> In *ART+COM Innovationpool GmbH v. Google Inc.*, a business method patent software program enabled a way to present pictures and space related data of geographic objects in order to give the observer the impression of continuous movement.<sup>131</sup> This patent essentially claimed virtual mapping.<sup>132</sup> The claim was found to derive from the abstract idea of "storing image data, then repeatedly requesting specific data, which is then stored and displayed."<sup>133</sup> Nevertheless, the claim's § 101 eligibility was saved by *Alice Corp.*'s inventive concept test.<sup>134</sup> The court found that the claim's improved method allowed the hardware to generate the image with such ease that a change in a high resolution image could take place at a rapid pace.<sup>135</sup> This process created a virtual experience that had not yet been accomplished.<sup>136</sup>

The court had no problem recognizing the vast and unique improvement over the prior technology (CD-ROMs and simulators) that earned this patent § 101 eligibility as an innovative concept.<sup>137</sup> Unlike the § 101 ineligible patent found in *Internet Patents Corp.*,<sup>138</sup> the patent drafters clearly laid out the technological method's steps that allowed such a unique improvement to occur.<sup>139</sup> Had the drafters not done this, the Court likely would have taken *Internet Patents Corp.*'s instruction and focused on the

---

<sup>127</sup> *Alice Corp.*, 134 S. Ct. at 2351 ("The method claims do not, for example, purport to improve the functioning of the computer itself. Nor do they effect an improvement in any other technology or technical field."); see also *OIP Techs., Inc.*, 788 F.3d at 1364 (reasoning that OIP's claims related to the abstract concept of price optimization were not inventive because they did not affect an improvement in any technology).

<sup>128</sup> See *Internet Patents Corp.*, 790 F.3d at 1347 ("Other precedent illustrates that pragmatic analysis of § 101 is facilitated by considerations analogous to those of §§ 102 and 103 as applied to the particular case."); see also *supra* notes 44-45 and accompanying text (setting forth the original elements needed to have any valid patent claim).

<sup>129</sup> *E.g., Diehr*, 450 U.S. at 187 (reasoning that the patent claims did effect an improvement in the technical field of curing rubber); see also *Alice Corp.*, 134 S. Ct. 2359-60.

<sup>130</sup> See generally *ART+COM Innovationpool GmbH v. Google Inc.*, 14-217-RGA, 2016 U.S. Dist. LEXIS 56498, at \*1 (2016) (ruling that a business method patent involving mapping software was directed to an abstract idea, yet it was an inventive concept and therefore was § 101 eligible).

<sup>131</sup> *Id.* at \*5-7.

<sup>132</sup> See *id.* at \*15-17 (discussing the process's unique result of giving the map viewer an impression of continuous movement).

<sup>133</sup> *Id.* at \*11.

<sup>134</sup> *Id.* at \*15-18; see also *Alice Corp.*, 134 S. Ct. at 2357.

<sup>135</sup> *ART+COM Innovationpool GmbH v. Google Inc.*, 14-217-RGA, 2016 U.S. Dist. LEXIS 56498, at \*17 (2016).

<sup>136</sup> *Id.* at \*15-17.

<sup>137</sup> See *id.*

<sup>138</sup> See *supra* notes 123-126 and accompanying text.

<sup>139</sup> *ART+COM Innovationpool GmbH*, 2016 U.S. Dist. LEXIS 56498, at \*18 ("Claim 1 recites a *specific way* of overcoming a problem which plagued prior art systems.") (emphasis added).

generic mapping component and not the technological improvement that made this claim so special.<sup>140</sup>

The final inventive concept guideline to consider asks, does the claim merely add generic computer functionality to increase speed or efficiency?<sup>141</sup> This guideline provided heavy weight in the determination of *Alice Corp.*<sup>142</sup> In addition, the CAFC has utilized its direction on many occasions.<sup>143</sup> One of which determined that an internet method of tracking a database user's transactions and analyzing those transactions in accordance with the user's pre-set limitations was § 101 ineligible.<sup>144</sup> This claim, in the case of *Intellectual Ventures I LLC v. Capital One Bank (USA)*, was found to relate to the abstract idea of financial budgeting.<sup>145</sup> As for whether this claim was directed toward an inventive concept, plain and simple, the court used a popular line of inventive concept reasoning to find that the method described in the claim could still be done with a pencil and paper.<sup>146</sup> The claim only added generic computer functions such as "a data base" and "a profile keyed to the user identity."<sup>147</sup> As a result, with the use of this inventive concept guideline, the claim was found § 101 ineligible consistently with prior jurisprudence.<sup>148</sup>

### C. Summary: Consistent Alice Corp. Guideline Application

In order for business method patent securitization to be a viable form of financing for entrepreneurs, the risk of patent subject matter ineligibility must be reduced.<sup>149</sup> This section has presented eight guidelines, based on the United States Supreme Court's § 101 instructions in *Mayo*, *Bilski*, and *Alice Corp.*, that courts have consistently utilized to determine business method patent § 101 eligibility.<sup>150</sup> These

---

<sup>140</sup> Compare *id.*; with *supra* notes 123-126 and accompanying text.

<sup>141</sup> See *Alice Corp.*, 134 S. Ct. at 2358 ("The mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention."); see also *Intellectual Ventures I LLC*, 792 F.3d at 1368 ("Instructing one to 'apply' an abstract idea and reciting no more than generic computer elements performing generic computer tasks does not make an abstract idea patent-eligible.");

<sup>142</sup> See *Alice Corp.*, 134 S. Ct. at 2359-60.

<sup>143</sup> See *OIP Techs., Inc.*, 788 F.3d at 1364 (reasoning patent owner's claims were directed to the abstract idea of price optimization that was merely implemented on a generic computer); see also *Intellectual Ventures I LLC*, 792 F.3d at 1368 (finding that the claim's method consisted of applying an abstract process through "generic computer elements").

<sup>144</sup> See generally *Intellectual Ventures I LLC*, 792 F.3d at 1366-69.

<sup>145</sup> *Id.* at 1367 ("Here, the patent claims are directed to an abstract idea: tracking financial transactions to determine whether they exceed a pre-set spending limit [i.e., budgeting].").

<sup>146</sup> *Id.* at 1368-69. "Indeed the budgeting calculations at issue here are unpatentable because 'they could still be made using a pencil and paper' with a simple notification device even in real time as expenditures were being made." *Id.* (quoting *Cybersource*, 654 F.3d at 1371 in turn quoting *Parker*, 437 U.S. at 586).

<sup>147</sup> *Id.* at 1368.

<sup>148</sup> *Id.* at 1373.

<sup>149</sup> See discussion *supra* Part II.B.II.B ("Infringement litigation is a risk that is simply inherent in the nature of the patent industry, while patent invalidation derives its risk predominantly from judicial interpretation of federal statutory law.")

<sup>150</sup> See generally *Mayo*, 132 S. Ct. at 1293-1294; see also *Bilski*, 561 U.S. at 609-612; see also *Alice Corp.*, 134 S. Ct. at 2355.

guidelines take heed of the original §101 requirements, address complex technological issues of circumstance, and confront claim drafting error.<sup>151</sup>

#### IV. PROPOSAL

With these eight guidelines in mind,<sup>152</sup> the question remains what actual evidence has the legal system demonstrated that manifests a level of consistency by which patent attorneys, financiers, and entrepreneurs can rely on when assessing securitization of business method patents. This section proposes three pillars of evidence that argue for a new found legal integrity in business method patentability; paving the way to increase securitization in this field.

##### *A. District Court Decisions Using Guidelines Are Not Being Overturned*

First and foremost, every appellate court decision mentioned in the prior section of this article affirmed the district court or Patent Trial and Appeal Board's Decision.<sup>153</sup> This is an incredible precedent for business method patent law considering *Alice Corp.* was fairly new law that dealt heavy ramifications for software patentability at the time

---

<sup>151</sup> See *supra* notes 111-117, 120-126, 126-127 and accompanying text.

<sup>152</sup> See discussion *supra* Part II.A (Identifying the guidelines that instruct whether a business method patent claim encroaches upon an abstract idea as first, "what is the scope and meaning of the claim?" Second, "is there a basic conceptual framework that this claim relates to?" Third, "claims directed to the mere formation and manipulation of economic relations may involve an abstract idea." Fourth and finally, "simply because a business method patent includes an additional machine, beyond a computer, this does not render the business method non-abstract."); see also discussion *supra* Part II.B (Identifying the guidelines that determine whether a business method patent claim is directed toward an inventive concept as first, "does the process address a problem in the nature of a field or technology that does not arise in the 'brick and mortar' world?" Second, "is the technology involved or the method already well-known at the time of filing?" Third, "did the claims effect an improvement in the computer itself or any other technology?" Fourth and finally, "does the claim merely add generic computer functionality to increase speed or efficiency?").

<sup>153</sup> *BuySAFE, Inc.*, 765 F.3d at 1355 (affirming the district court's decision in *BuySAFE, Inc. v. Google Inc.*, 964 F. Supp. 2d 331, 337 (D. Del. 2013)); *Content Extraction & Transmission LLC*, 776 F.3d at 1351 (affirming the district court's decision in *Content Extraction & Transmission LLC v. Wells Fargo Bank*, No. 12-2501, 2013 U.S. Dist. LEXIS 107184, at \*40 (D. N.J. July 31, 2013)); *OIP Techs., Inc.*, 788 F.3d at 1364 (affirming the district court's decision in *Oip Techs., Inc. v. Amazon.com, Inc.*, No. C-12-1233 EMC, 2012 U.S. Dist. LEXIS 129396, at \*68-69 (N.D. Cal. Sept. 11, 2012)); *Ultramercial, Inc.*, 772 F.3d at 717 (affirming the district court's decision in *Ultramercial, LLC v. Hulu, LLC*, CV 09-06918, 2010 U.S. Dist. LEXIS 93453, \*20 (C.D. Cal. Aug. 13, 2010)); *Intellectual Ventures I LLC*, 792 F.3d at 1373 (affirming the district court's decision in *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 1:13-cv-00740, 2014 U.S. Dist. LEXIS 53001, at \*24-26 (E.D. Va. April 16, 2014)); *DDR Holdings, LLC*, 773 F.3d at 1263 (affirming the district court's decision in *DDR Holdings, LLC v. Hotels.com, L.P.*, 954 F. Supp. 2d 509, 530-531 (E.D. Tex. 2013)); *Internet Patents Corp.*, 790 F.3d at 1349 (affirming the district court's decision in *Internet Patents Corp. v. General Auto. Ins. Servs.*, 29 F. Supp. 3d 1264, 1270 (N.D. Cal. 2013)); *Versata Dev. Group, Inc.*, 793 F.3d at 1336 (affirming the district court's decision in *SAP America, Inc. v. Versata Development Group, Inc.*, No. CBM2012-00001, 2013 Pat. App. LEXIS 3788, at \*54 (Bd. Pat. App. & Interferences, June 11, 2013)).

of its decision.<sup>154</sup> When the Supreme Court's decision came down in 2014, *Alice Corp.*'s two part test was not available for most of those lower level decisions.<sup>155</sup> Yet, *Alice Corp.*'s test was available for the appellate courts' decisions.<sup>156</sup> Despite the unavailability of *Alice Corp.*, all of the referred to lower court decisions in some shape or form utilized the abstract idea concept to decide § 101 eligibility and a significant amount of inventive concept guideline language from this article's prior section is present.<sup>157</sup> In fact, two already discussed district court opinions exemplify this point perfectly.<sup>158</sup>

*Internet Patents Corp. v. General Auto. Ins. Servs.* was the district court case to *Internet Patent Corp. v. Active Network, Inc.*<sup>159</sup> Similar to the appellate court, the district court found the business method patent § 101 to be ineligible.<sup>160</sup> The district court reasoned that the claim, although it may have addressed a concept that was specific to internet browsers, did not provide a description of how it solved the problem.<sup>161</sup> The district court used abstract idea guidelines one and two as well as inventive concept guidelines two and three to support its ruling to deny § 101 eligibility.<sup>162</sup>

---

<sup>154</sup> See discussion *supra* Part II.D (“In the case of *Alice Corp.*, the Supreme Court took the opportunity to apply its new framework laid out in *Mayo* to a computer-implemented method (software patent) that came within the notion of an abstract idea. The prior Supreme Court case dealing with computer software patents, *Bilski*, was not controlling over *Alice Corp.* because *Alice Corp.*'s patent claims were method claims limited to computer implementation, system claims, and computer media claims, while *Bilski*'s method claims were not limited to computer implementation.”).

<sup>155</sup> *Alice Corp.*, 134 S. Ct. at 2347 (citing the decision was made on June 19, 2014); see also *supra* note 151 and accompanying text (illustrating all district court cases cited in this endnote were decided before June of 2014).

<sup>156</sup> See *supra* note 2 and accompanying text (illustrating all appellate court cases cited in this endnote were decided after June of 2014).

<sup>157</sup> See *BuySAFE, Inc.*, 964 F. Supp. 2d at 337; see also *Content Extraction & Transmission LLC v. Wells Fargo Bank*, No. 12-2501, 2013 U.S. Dist. LEXIS 107184, at \*37-40 (D. N.J. July 31, 2013); *Oip Techs., Inc. v. Amazon.com, Inc.*, No. C-12-1233 EMC, 2012 U.S. Dist. LEXIS 129396, at \*54-69 (N.D. Cal. Sept. 11, 2012); *Ultramercial, LLC v. Hulu, LLC*, CV 09-06918, 2010 U.S. Dist. LEXIS 93453, \*16-20 (C.D. Cal. Aug. 13, 2010); *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 1:13-cv-00740, 2014 U.S. Dist. LEXIS 53001, at \*4-13 (E.D. Va. April 16, 2014); *DDR Holdings, LLC*, 954 F. Supp. 2d at 525-528; *Internet Patents Corp.*, 29 F. Supp. 3d at 1267-68 (N.D. Cal. 2013); *SAP America, Inc. v. Versata Development Group, Inc.*, No. CBM2012-00001, 2013 Pat. App. LEXIS 3788, at \*37-54 (Bd. Pat. App. & Interferences, June 11, 2013).

<sup>158</sup> See *supra* Part II.B; see also *id.*

<sup>159</sup> *Internet Patents Corp.*, 29 F. Supp. 3d at 1264. Again, this case revolved around the business method patentability of a web browser function that could retain data from the prior page as a viewer moved forward and backward through internet pages. *Id.* at 1269.

<sup>160</sup> *Id.* at 1270.

<sup>161</sup> *Id.*

On its face, the '505 Patent purports to propose a solution to a well-known problem regarding user navigation in online multi-page application forms. However, the Patent does not actually disclose or recite an example of the solution to this problem. The mere abstract idea that an invention could address the challenges of retaining information lost in the navigation of online forms fails to satisfy the requirements of patentability and renders the Patent ineligible under § 101.

*Id.*

<sup>162</sup> Compare *id.* (invalidating patent due to the description of the claim, being a well-known problem, and no technical description of the solution to the problem); with discussion *supra* Part II.A (“The first guideline asks, what is the scope and meaning of the claim?”); and *id.* (“The second guideline asks, is there a basic conceptual framework that this claim relates to?”); and discussion

The case of *DDR Holdings, LLC v. Hotels.com* illustrates a similar guideline analysis between district and appellate levels.<sup>163</sup> The appellate court affirmed the district court's finding that the business method patent claim was § 101 eligible because the patent claim, "represents an improvement to computer technologies in the marketplace."<sup>164</sup> This language mirrors inventive concept guidelines one and three.<sup>165</sup> These guidelines were utilized by the appellate court to affirm as well.<sup>166</sup>

These examples illustrate how two district court opinions over the last three years employed the guidelines set forth in this article's prior section to address business method patentability.<sup>167</sup> The cases each presented unique circumstances that achieved different results; both § 101 validation and invalidation.<sup>168</sup> Each result was affirmed on appeal.<sup>169</sup> This jurisprudence is a message to intellectual property litigators and their clients that business method patents are being analyzed with consistent principles. In turn, the costs of evaluating the § 101 eligibility of these claims prior to securitization will begin to lower.

### *B. Important Jurisdictions for Business Method Patentability Are Consistently Applying Guidelines*

Another measure of strength and consistency in business method patent jurisprudence is whether district courts in business method patent intensive jurisdictions are implementing *Alice Corp.* guidelines consistently. If so, the implications would suggest that entrepreneurs and financiers alike can count on well-developed law at the outset when making their business method patent securitization decisions and consequently gain confidence in the opportunity's long-term viability. The findings of this comment suggest that, in addition to consistent appellate court affirmance of *Alice Corp.* guidelines, the same guidelines are now being used by district courts in technology and financial services epicenters across the United States.

---

*supra* Part II.B ("The second guideline asks, is the technology involved or the method already well-known at the time of filing?"); *and id.* ("The third guideline asks, did the claims effect an improvement in the computer itself or any other technology?").

<sup>163</sup> Compare generally *DDR Holdings, LLC*, 773 F.3d at 1255-1259; *with DDR Holdings, LLC*, 954 F. Supp. 2d at 524-28.

<sup>164</sup> *DDR Holdings, LLC*, 954 F. Supp. 2d at 527.

<sup>165</sup> Compare *id.* (validating patent due to the claim's unique problem related to the internet and improvement in technology); *with* discussion *supra* Part II.B ("The first guideline asks, does the process address a problem in the nature of a field or technology that does not arise in the 'brick and mortar' world?"); *and id.* ("The third guideline asks, did the claims effect an improvement in the computer itself or any other technology?").

<sup>166</sup> Compare *DDR Holdings, LLC*, 954 F.3d at 1257 (validating patent due to the claim's unique problem related to the internet and improvement in internet technology); *with* discussion *supra* Part II.B ("The first guideline asks, does the process address a problem in the nature of a field or technology that does not arise in the 'brick and mortar' world?"); *and id.* ("The third guideline asks, did the claims effect an improvement in the computer itself or any other technology?").

<sup>167</sup> See *supra* notes 159, 162-164 and accompanying text.

<sup>168</sup> *DDR Holdings, LLC*, 954 F. Supp. 2d at 530-31; *Internet Patents Corp.*, 29 F. Supp. 3d at 1270.

<sup>169</sup> *DDR Holdings, LLC*, 773 F.3d at 1263 (affirming the district court's decision in *DDR Holdings, LLC*, 954 F. Supp. 2d at 530-531); *Internet Patents Corp.*, 790 F.3d at 1349 (affirming the district court's decision in *Internet Patents Corp.*, 29 F. Supp. 3d at 1270).

A comparison of the guidelines used in two recent district court cases, one in the Northern District of California and one in the New York Southern District, illustrate this argument.<sup>170</sup> The Northern California District Court’s jurisdiction encompasses major metropolitan areas that are seen as a few of the most influential technological innovation centers in the world.<sup>171</sup> Such areas include San Francisco and Silicon Valley.<sup>172</sup> The New York Southern District Court’s jurisdiction encompasses the city of New York; one of the major financial centers and venture capital hubs in the world.<sup>173</sup> With the level of software development and financing that goes on in these regions,<sup>174</sup> it follows logic that business method patentability jurisprudence would be an important body of law to get right in these districts despite their vast geographic separation.

The N.D. Cal. denied § 101 eligibility to a business method patent in the case of *Opentv, Inc. v. Apple Inc.*<sup>175</sup> The business method patent consisted of the, “[u]se of Digital Rights management and authentication” in order to “to secure the transmission of digital content directly to a user’s television; personal computer, or mobile device.”<sup>176</sup> The N.Y.S.D. denied § 101 eligibility to a business method patent in the case of *TNS Media Research, LLC v. Tivo Research & Analytics, Inc.*<sup>177</sup> The business method patent claim correlated advertisements shown to consumers with data collected from those consumers’ specific purchasing behavior.<sup>178</sup>

Both courts used essentially the same guidelines to determine § 101 invalidity.<sup>179</sup> Each court proceeded in its first step of *Alice Corp.*’s test by using abstract idea

<sup>170</sup> See *Opentv, Inc. v. Apple Inc.*, No. 5:15-cv-02008, 2016 U.S. Dist. LEXIS 10445, at \*11-21 (N.D. Cal. Jan. 28, 2016); see also *TNS Media Research, LLC v. Tivo Research & Analytics, Inc.*, No. 11 Civ. 4039, 2016 U.S. Dist. LEXIS 21218, at \*32-37 (S.D.N.Y. Feb. 22, 2016).

<sup>171</sup> *Jurisdiction Map*, UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF CALIFORNIA, <http://www.cand.uscourts.gov/jurisdictionmap> (last visited Dec. 20, 2016); see Richard Florida & Martin Kenney, *Venture Capital And High Technology Entrepreneurship*, 3 J. OF BUS. VENTURING 301, 302 (1988).

<sup>172</sup> *Id.*

<sup>173</sup> See *Welcome to the Southern District of New York*, UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK, <http://www.nysd.uscourts.gov/> (last visited Dec. 20, 2016) (“The Court hears cases in Manhattan, White Plains, and Poughkeepsie, New York.”); see also Richard Florida & Martin Kenney, *Venture Capital And High Technology Entrepreneurship*, 3 J. OF BUS. VENTURING 301, 302 (1988).

<sup>174</sup> BSA | THE SOFTWARE ALLIANCE [13] (2016), [http://softwareimpact.bsa.org/pdf/Economic\\_Impact\\_of\\_Software\\_Report.pdf](http://softwareimpact.bsa.org/pdf/Economic_Impact_of_Software_Report.pdf) (illustrating the direct state economic impact on California from the U.S. software industry is roughly \$90 billion [much higher than any other state] and the direct state economic impact on New York from the U.S. software industry is roughly \$37 billion [second only to California] as of 2016).

<sup>175</sup> *Opentv, Inc. v. Apple Inc.*, 2016 U.S. Dist. LEXIS 10445, at \*20-21 (N.D. Cal. Jan. 28, 2016).

<sup>176</sup> *Id.* at \*2-3.

<sup>177</sup> *TNS Media Research, LLC v. Tivo Research & Analytics, Inc.*, 11 Civ. 4039, 2016 U.S. Dist. LEXIS 21218, at \*37 (S.D.N.Y. Feb. 22, 2016).

<sup>178</sup> *Id.* at \*4-5.

<sup>179</sup> Compare *id.*; with *Opentv, Inc. v. Apple Inc.*, 2016 U.S. Dist. LEXIS 10445, at \*13-15, \*21-23 (N.D. Cal. Jan. 28, 2016) (finding patent was abstract due to the claim’s recitation of generic computer components that performed routine functions); and *TNS Media Research, LLC v. Tivo Research & Analytics, Inc.*, 11 Civ. 4039, 2016 U.S. Dist. LEXIS 21218, at \*33-36 (S.D.N.Y. Feb. 22, 2016) (finding patent was abstract due to the claim’s generic use of data gathering and description of a process that a human could perform).

guidelines one and two.<sup>180</sup> Both courts were able to determine clear abstract ideas associated with the patent claims by determining the scope and meaning of the claims and whether the claims were tied to a basic conceptual framework.<sup>181</sup> Moving to the second step of *Alice Corp.*'s test, both courts used inventive concept guidelines two, three, and four to determine the claims failure to put forth inventive concepts.<sup>182</sup>

Two district courts in the major technology and financial services regions of the United States using the same guidelines to determine § 101 eligibility is an encouraging demonstration of consistent jurisprudence in the field of business method patentability. With consistent jurisprudence in this field, entrepreneurs and financiers in these regions will gain confidence in the securitization of their patents. While confidence in § 101 validation will increase, the costs to securitize will decrease resulting in more business method patent securitization in years to come.

### *C. Alice Corp.'s Test and The Guidelines Achieve Intellectual Property Policy Goals*

As discussed earlier in this article, business method patents are, simply by their natural ties to economic behavior and scientific laws, ripe for overreaching exclusion.<sup>183</sup> Congress enacted the federal patent system via 35 U.S.C. § 101 for several reasons; one of which includes the promotion of inventions and protection of free ideas in the public domain.<sup>184</sup> The United States Supreme Court proceeded carefully in *Mayo* and *Alice Corp.* to develop a § 101 business method patent eligibility test.<sup>185</sup> The Supreme

---

<sup>180</sup> See discussion *supra* Part II.A (“The first guideline asks, what is the scope and meaning of the claim?”); see *id.* (“The second guideline asks, is there a basic conceptual framework that this claim relates to?”).

<sup>181</sup> See *supra* note 9 and accompanying text.

<sup>182</sup> See discussion *supra* Part II.B (“The second guideline asks, is the technology involved or the method already well-known at the time of filing?”); see also *id.* (“The third guideline asks, did the claims effect an improvement in the computer itself or any other technology?”); see also *id.* (“The final inventive concept guideline to consider asks, does the claim merely add generic computer functionality to increase speed or efficiency?”). Compare *id.*; with *Opentv, Inc. v. Apple Inc.*, 2016 U.S. Dist. LEXIS 10445, at \*16-21, \*24-26 (N.D. Cal. Jan. 28, 2016) (finding patent claim was not an inventive concept due to its use of well-known generic technology and lack of technological improvement); with *TNS Media Research, LLC v. Tivo Research & Analytics, Inc.*, 11 Civ. 4039, 2016 U.S. Dist. LEXIS 21218, at \*36-37 (S.D.N.Y. Feb. 22, 2016) (finding patent was not an inventive concept due to its use of well-known generic data gathering technology and lack of technological improvement).

<sup>183</sup> See discussion *supra* Part II.A.

<sup>184</sup> *Aronson v. Quick Point Pencil Co.*, 440 U.S. 257, 262 (1979). The United States Supreme Court has interpreted the purposes of the federal patent system under 35 U.S.C. § 101 to be, “first, to foster and reward invention; second, to promote disclosure of inventions, to stimulate further innovation, and to permit the public to practice the invention once the patent expires; and third, to assure that ideas in the public domain remain there for the free use of the public.” *Id.*

<sup>185</sup> See *Alice Corp.*, 134 S. Ct. at 2354-55 (“In applying the 35 U.S.C. § 101 exception, the court must distinguish between patents that claim the building blocks of human ingenuity and those that integrate the building blocks into something more, thereby transforming them into a patent-eligible invention. The former would risk disproportionately tying up the use of the underlying ideas, and are therefore ineligible for patent protection. The latter pose no comparable risk of pre-emption, and therefore remain eligible for the monopoly granted under federal patent laws.”); see also *Mayo*, 132 S. Ct. at 1293-94.

Court recognized that it walked a fine line between retaining abstract ideas for the public's use while supporting the patent eligibility of new and useful ideas.<sup>186</sup>

In addition to this balance of policy, one of the major influences of the *Alice Corp.* test was a desire to keep up with the rapid advancement of technology in modern society.<sup>187</sup> As illustrated by the guidelines presented in the prior section, the *Alice Corp.* test is meant to ensure that the addition of generic computer functioning to an abstract idea does not legitimate a claim's patentability, nor does it allow claimed processes that are already well known.<sup>188</sup>

It stands to reason that this test is meant to produce a very limited number of valid § 101 business method patents. So far, this overarching policy goal has been achieved. The number of business method patents that have been found § 101 eligible is relatively small in comparison to the hundreds of cases across the country.<sup>189</sup>

## V. CONCLUSION

In conclusion, the patent invalidation risk involved in business method patent § 101 eligibility has been a plague on the viability of its securitization.<sup>190</sup> But, *Alice Corp.* and its jurisprudence have produced a maturity of case law that should alleviate the legal community's concerns. The affirmation of *Alice Corp.*'s guidelines in district and appellate courts, consistent jurisprudence in heavy tech-invention and financial services jurisdictions, and qualitative and quantitative policy achievement all point to consistent application of the law that is here to stay.<sup>191</sup> Consequently, these issues will become more predictable when drafting and litigating, legal costs will lower substantially to handle these matters, and entrepreneurs and financiers alike will react by securitizing more patents.

---

<sup>186</sup> *Id.*

<sup>187</sup> *Alice Corp.*, 134 S. Ct. at 2358 ("Given the ubiquity of computers, wholly generic computer implementation is not generally the sort of 'additional featur[e]' that provides any 'practical assurance that the process is more than a drafting effort designed to monopolize the abstract idea itself.'") (Quoting in parts *Mayo*, 132 S. Ct. at 1297).

<sup>188</sup> See discussion *supra* Part II.B ("The second guideline asks, is the technology involved or the method already well-known at the time of filing?"); see also *id.* ("The final inventive concept guideline to consider asks, does the claim merely add generic computer functionality to increase speed or efficiency?").

<sup>189</sup> Limited research in the production of this comment indicated a relatively small number of cases that have validated business method patents using the *Alice Corp.* test. Those cases include *DDR Holdings*, 773 F.3d at 1263; *SRI Int'l, Inc. v. Cisco Sys.*, Civ. No. 13-1534-SLR, 2016 U.S. Dist. LEXIS 48092, \*61 (D. Del. Apr. 11, 2016); *ART+COM Innovationpool GmbH v. Google Inc.*, 2016 U.S. Dist. LEXIS 56498, \*18 (D. Del. Apr. 28, 2016); *Veracode, Inc. v. Appthority, Inc.*, 137 F. Supp. 3d 17, 103-104 (D. Mass. 2015); *Communique Lab., Inc. v. Citrix Sys.*, 1:06-cv-253, 2015 U.S. Dist. LEXIS 170195, \*77-78 (N.D. Ohio Dec. 21, 2015); *Smartflash LLC v. Apple, Inc.*, 6:13-CV-447-JRG-KNM, 2015 U.S. Dist. LEXIS 18419, \*46-47 (E.D. Tex. Jan. 2015); *Messaging Gateway Solutions, LLC v. Amdocs, Inc.*, Civil Action No. 14-732-RGA, 2015 U.S. Dist. LEXIS 49408, \*17 (D. Del. Apr. 15, 2015); *DataTern, Inc. v. MicroStrategy, Inc.*, Civil Action Nos. 11-11970-FDS, 2015 U.S. Dist. LEXIS 118530, \*28 (D. Mass. Sept. 4, 2015).

<sup>190</sup> See *supra* notes 37-40 and accompanying text.

<sup>191</sup> See discussion *supra* Part III.

Although the effect of § 101 policy and *Alice Corp.* restrain the scope of what is considered a valid business method patent, the opportunity of securitizing one's valid business method patent(s) is an incredibly lucrative prospect. A prospect that can aid a developing business in its achievement of significant financing at a much earlier stage; all while retaining ownership of its business and use of its intellectual property.