

**PROTECTING THE CROWN JEWELS:
PATENT SUBJECT MATTER AND POST-GRANT PROCEDURES**

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CHAPTER 9

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Education

- South Texas College of Law, J.D.
- Texas A&M University, Bachelors Chemistry; L-1: Corps of Cadets

Professional Affiliations and Awards

- Super Lawyers, Intellectual Property Litigation, 2014, 2015, 2016
- Houston's Top Lawyers 2013, 2014, 2015, 2016
- Houstonia Magazine Top Lawyers 2014, 2015, 2016
- Society of Petroleum Engineers (2005 to the present)
- State Bar of Texas Editor for the Texas Intellectual Property Law Journal (2013 to the present)
- State Bar of Texas Advanced In-House Counsel Planning Committee (2014 to the present)
- Texas Bar Patent Legislation/PTO Practice Committee, Chair (2009-2011)
- BioHouston Economic Development Advisory Counsel, Board Member (2010 to the present)
- AUTM Western Region, Planning Committee (2009-2012)
- BioHouston
- College of the State Bar

Admissions

- United States Patent and Trademark Office
- State Bar of Texas
- State Bar of Utah
- U.S. District Court for the Northern, Southern, Western and Eastern Districts of Texas
- U.S. District Court of Utah
- 5th Circuit Court of Appeals
- 6th Circuit Court of Appeals
- Federal Circuit Court of Appeals

Biography

William P. Ramey, III is the managing and founding partner of Ramey & Schwaller, LLP. Mr. Ramey's practice concentrates on commercial litigation and obtaining, enforcing and licensing intellectual property, including patents, trademarks, copyrights

and trade secrets. He also has extensive technical and patent prosecution/ preparation experience. Mr. Ramey has been involved in many patent, trade secret, trademark and copyright disputes, and he has successfully conducted over eighteen jury trials. He has prepared numerous opinions on intellectual property rights regarding validity, infringement and freedom to operate, and he has written more than 300 patents and prosecuted many more.

Prior to founding Ramey & Schwaller, LLP, Mr. Ramey was an associate chair of the litigation practice group at a 70 person intellectual property boutique. Mr. Ramey has substantial experience as a first chair lawyer litigating intellectual property, related trade secret disputes, administrative law, and municipal law, developing a specialty in complex business processes including software logical architecture such as ERP systems of SAP, MRO, Ariba, IBM, and Oracle components, including SAP R/3, SAP ECC(6.0), SAP EBP, SAP SRM 4.0 and 5.0, SAP SUS, SAP MDM, SAP BW, SAP XI, IBM Maximo in a Purchase-to Pay Environment, electronic procurement environment.

Mr. Ramey's experience further includes drafting and prosecuting patent applications, conducting prior art searches and drafting opinions, including patentability, non-infringement/ infringement, validity and freedom to practice.

Among the technologies with which Mr. Ramey has experience are biotechnology and pharmaceuticals, including biochemistry, cell immunology, small molecule and cell biology; mechanical, including oil field technology and service tools, medical devices and other complex mechanical applications related to downhole applications and methods; chemical, including applications related to the polymer arts and agricultural chemicals and equipment; and electrical, including computer programs and semiconductors.

Mr. Ramey also has experience working as a patent attorney for a Fortune 500 firm, where he worked on due diligence for assessing portfolios for acquisition of new technologies and assessing the patent positions of the entities for acquisition, negotiating and reviewing contracts, Abbreviated New Drug Application (ANDA) procedures, and conducting training.

Expertise

- Litigation
- Business Planning & Strategic Counseling
- Oil Field
- Life Sciences
- Mechanical
- Patent Prosecution/International
- Post Grant Review Proceedings
- Business Methods
- Trade Secrets
- Trademark

Representative Cases

Texas Children's Hospital, Inc. v. U.T. Physician's Group, LLC. (represent Petitioner) (Trademark cancellation procedure) (matter is currently pending In the Matter of Application Serial No. 85/431,881, Published in the Official Gazette on September 11, 2012; Opposition No. 91/207,428).

Vapor Point, LLC v. NanoVapor Fuels Group, Inc. et al. (represent counter-plaintiff in patent infringement action and correction of inventorship) SDTX, Judge Vanessa Gilmore, Civil Action No. 4:11-cv-04639.

KI Ventures LLC v. Fry's Electronics et al. (S.D. Tex. H-13-1407). Represent plaintiff against product manufacturer and retailer in a patent infringement action over US 6,569,019 ("the '019 patent"). The technology relates to game controllers.

Grand River Capital, LLC v. Xemplar Energy Corporation et al., represent plaintiff in a matter pending in Culberson County, Texas, No. 5049 in the 205th Judicial District Court, concerning theft of trade secrets and breach of contract.

Pension Advisory Group Inc et al v. Fidelity Security Life Insurance Co. et al, represent plaintiff in case pending in Aransas County, Texas, NO. A-12-0179-CV-C in the 343rd Judicial District Court, concerning business disparagement, fraud, breach of contract, and the like.

James Martinez v. Tim McGraw et al. (represent Plaintiff in appeal of copyright infringement case from the Middle District of Tennessee to the Sixth Circuit Court of Appeals).

Pension Advisory Group Inc et al v. Country Life Insurance Company (represented plaintiff) U.S. District Court (S.D. Tex 2:10-cv-00278); Trade secret misappropriation, defamation, tortious interference breach of contract concerning intellectual property. Defendant alleged inventorship of the patent application was incorrect. Technology: Intellectual property around a pension disability insurance product and methods of doing business. Settled without changing inventorship or ownership of the patent application and with the defendant dropping all counterclaims.

Spindletop Films et al v. Cesare Wright (represent plaintiff) U.S. District Court (S.D. Tex 4:10 cv 04551) and 270th Judicial District Court 2010-23415; Copyright related issued of the ownership of certain tapes and breach of contract action. Radio personality Chris Baker is a managing member of Spindletop Films. Case is currently pending.

Wellogix v. BP America, Inc. (represented defendant) U.S. District Court (S.D. Tex); Trade secret misappropriation, tortious interference breach of contract concerning intellectual property; Technology: ERP software and related functionalities, specifically SAP R/3, SAP ECC(6.0), SAP EBP, SAP SRM 4.0 and 5.0, SAP SUS, SAP MDM, SAP

BW, SAP XI, IBM Maximo in a Purchase-to Pay Environment, electronic procurement (pending)

Wellogix v. BP America Inc, Accenture LLP, and SAP America, Inc. (represented plaintiff) U.S. District Court (S.D. Tex); (represented defendant) U.S. District Court (S.D. Tex); Trade secret misappropriation, conspiracy, tortious interference breach of contract concerning intellectual property; Technology: ERP software and related functionalities, specifically SAP R/3, SAP ECC(6.0), SAP EBP, SAP SRM 4.0 and 5.0, SAP SUS, SAP MDM, SAP BW, SAP XI, IBM Maximo in a Purchase-to Pay, electronic procurement Environment (severed case from other defendants, removed to arbitration, dismissed enhanced damages claims)

Microsoft Corporation v. Ames Holding Corporation (represented defendants) U.S. District Court (E.D. Tex) Schneider; (Copyright infringement, trademark infringement, unfair competition dispute); Technology: software reseller (settled favorably for defendant client)

SANDVIK MINING AND CONSTRUCTION USA, LLC v. WELLBORE ENERGY SOLUTIONS, LLC (represented respondent) (Trademark cancellation procedure for mark DRILL TECH) (Respondent's mark was upheld)

PM Realty Group v. PM Realty Capital (represented plaintiff) U.S. District Court (S.D. Tex); Trademark Infringement; Technology: 4 trademarks (settled favorably for plaintiff client)

Bee-Line Delivery Services v. Bee-Line Delivery (represented Petitioner) (Trademark cancellation procedure) (Petitioner's mark was upheld and the respondent's mark was cancelled)

James M. Taylor v. Microsoft Corp. (represented plaintiff) U.S. District Court (E.D. Tex); Schneider; Patent Infringement; Technology: Optimization Software (settled favorably for plaintiff client before Markman)

Foodie Partners v. Jamba Juice (represented plaintiff) U.S. District Court (E.D. Tex); Davis; Patent Infringement; Technology: Ice Beverage Preparation Apparatus (settled favorably for plaintiff client after Markman)

REEDHYCALOG UK, LTD., REEDHYCALOG, LP, GRANT PRIDECO v. BAKER HUGHES et al. (worked on team representing defendant ULTERRA DN CANADIAN); U.S. District Court (E.D. Tex); Davis; Patent Infringement; Technology: Diamond Drill Bits (settled favorably for client after Markman)

MERIAL LIMITED v. INTERVET INC., INTERVET INTERNATIONAL & AKZO NOBEL NV(in-house counsel at defendant) U.S. District Court (N.D. GA); Patent Infringement; Technology: swine vaccines (settled)

Suhm Spring v. Framatome (represented plaintiff) Harris County, Texas District Court; Trade secret misappropriation; Technology: leaf springs for nuclear reactors (settled favorably for plaintiff) (matter was removed to the USDC S.D. of Texas)

Babcock & Wilcox v. Oiltech Services (represented defendant) U.S. District Court (C.D. CA); Patent Infringement; Technology: Gettered oil tubular for enhancing oil production (Finding of no infringement on motion for summary judgment, pre-Markman, case involved 2 year Reexamination)

Frank's Casing Crew et al. v. PMR (represented 9 plaintiffs (defendants in a related patent infringement action) in Motion to correct inventorship on PMR's patent it was asserting against the firm's clients) U.S. District Court (W.D. LA); Patent Infringement/Motion to Correct Inventorship; Technology: Oil well logging (inventorship changed on patent, pre-Markman)

Workrite Ergonomic Accessories Inc. v. International Source for Ergonomics Inc. Represented ISE on allegations of patent infringement for an ergonomic keyboard (2000).

Publications and Speeches

"The Texas Uniform Trade Secret Act", Advanced in-House Counsel CLE, August 13-15, 2014.

Top IP Matters that all Life Science Professionals Should Know, Texas Life Science Conference, February 20, 2014.

North East Harris County Bar Association CLE, Top Ten Tips Every lawyer Should Know About IP, January 2014.

IP Legislative Update, the 2011 Patent Reform Bill, State Bar of Texas CLE, 2011.

"The Stem Cell Controversy: What to Fund After *Sherley v. Sebelius*." *State Bar of Texas Newsletter: Intellectual Property Law Section*. Spring, 2011.

Rice University presentation on July 25, 2009, "Easy Ways to Identify and protect Your Intellectual Property" for the 2009 commercialization workshop.

Biomedical Technology Club presentation on June 2, 2009, "Easy Ways to Secure your Intellectual Property."

National Space and Biomedical Research Institute Intellectual Property Primer for the Commercialization Workshop on May 28, 2009.

IP Legislative Update, the 2009 Patent Reform Bill, State Bar of Texas CLE, March 5, 2009.

Rice University presentation on "Intellectual Property as a Career" in April of 2009.

The Exponential Burden of McKesson, IP Today, Tamsen Valoir and William Ramey, March 2008.

BioHouston presentation, September 27, 2007, Patent Reform and Where we Stand Presentation, the Three-way Train Wreck, Small Times Nanotechnology Conference, Santa Clara, CA, November 2007

Panel Discussion on nanotechnology and University Practice, AUTM Regional, Austin, TX, July, 2007

Presentation to NC PMI on October 27, 2003 on Pharmaceuticals and Generics and the inter-relation of the Hatch-Waxman Act

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Steve Stein represents clients in corporate and intellectual property matters. He has been active in the development and licensing of intellectual property assets for more than 25 years. He also focuses his practice on technology acquisition, strategic alliances, outsourcing, electronic commerce, and privacy issues. Steve has extensive experience in outsourcing and services agreements for both buyers and sellers of information technology services. He serves as co-chair of Thompson & Knight's cross-practice Data Privacy and CyberSecurity initiative.

IAM Patent 1000 2016 praises Steve as “a transactional doyen with a knack for sealing big-ticket deals.”

Experience

- Drafted contracts for IT services with outsourcing companies, including financial services covered GLB, FACTA, Red Flags rules, and others
- Represent software licensors to financial institutions and PCI-DSS, FACTA, GLB, and FTC compliance clauses and programs
- Represent a drug manufacturer in licensing its proprietary drug delivery technology and related manufacturing and distribution of a product
- Represent transportation and hospitality companies for reservations and scheduling systems
- Represent a start-up company in the commercialization of vision-related treatments
- Represent medical-related websites with respect to their intellectual property issues
- Represent a nonprofit research institute with respect to eye-related diseases and related research
- Represented a top five semiconductor company in global patent licensing program
- Represented biotechnology companies in licensing genetics patents
- Represented numerous telecommunications and software companies in the licensing and development of patents
- Represented client in formation of \$2 billion joint venture manufacturing

Related Practices

Intellectual Property
Outsourcing Transactions
Technology
Licensing
E-Commerce
Patents
Corporate and Securities
Data Privacy and Cybersecurity
Computer Hardware and Software
LNG/GTL

Related Industries

Technology/Semiconductors
Insurance
Telecommunications
Oil, Gas, and Energy

Related Global Experience

Latin America
Asia

Education

J.D., SMU Dedman School of Law
B.S., Economics, Southern Methodist University

Admissions

Texas
U.S. Ct. of App., Federal Circuit
U.S. Dist. Ct., N. Dist. Texas

Stephen E. Stein

plant in China

- Represented clients in electrical component, computer retailing, and other fields in outsourcing information technology, manufacturing, and financial services
- Represented a leading electronics distributor in outsourcing of information technology services, telecommunications services, and accounting services
- Represented a multibillion dollar pharmaceutical company in the outsourcing of information technology services
- Represented a leading funeral home management company in outsourcing of accounting services
- Represented a leading semiconductor company in in-sourcing of integrated circuit manufacturing
- Represented a leading alarm company in outsourcing of telecommunications services
- Represented a national realty management company in outsourcing of information technology services
- Represent clients in all fields of IT services including enterprise software agreements, service level agreements, technology development and licensing, software development and hosting, content development and licensing, and telecommunications and data services

Prior Experience

- STMicroelectronics, Inc.
 - Vice President – Business Development and Investor Relations, 1994–1996; principal U.S. representative with Wall Street analysts and public shareholders; responsible for all disclosure issues, road shows, and corporate presentations; identification, analysis, and negotiation of new business opportunities including acquisitions, partnerships, and strategic alliances
 - General Counsel, 1988–1991; responsible for all U.S. legal matters including litigation, trade disputes licensing, joint development agreements, technology transfers, transfer pricing, corporate matters, real property, insurance, antitrust, environment, labor and benefits, immigration, export control, and foreign trade matters
- W.R. Grace & Co.
 - Counsel to Natural Resources Group, 1978–1988; mergers and acquisitions of energy-producing and service companies (oil and gas, coal, drilling, and services companies), joint ventures, litigation management, natural gas contracting, and general corporate

Distinctions/Honors

Stephen E. Stein

- Best Lawyers in Dallas (Digital Information Law), *D Magazine*; 2016
- The World's Leading Patent Practitioners, *IAM Patent 1000*; 2013-16

Activities (Memberships/Affiliations)

- Council Member and Past Chair, State Bar of Texas Corporate Counsel Section
- Former Director, Metroplex Technology Business Council
- Board of Directors, Licensing Executive Society – Dallas Chapter
- Member, St. Thomas Moore Society

Publications

"The Social Media Economy"	May 27, 2016
"The Business of Social Media"	May 5, 2016
"The Business of Social Media"	April 7, 2016
"Cybersecurity in the New Year: Lessons Learned in 2015 and Expectations for 2016"	January 28, 2016
"Intellectual Property in M&A"	October 23, 2015
"Fireside Chat: Cybersecurity – Reasons That You Really, Honestly Should Care"	October 1, 2015
"Tips For Protecting Intellectual Property In The Oil Patch"	May 21, 2015
"Cyber Privacy"	April 17, 2015
"Are Your Vendor Agreements Really Working for You?"	February 5, 2015
"Considerations for Keeping Your Company Competitive Within the Law"	August 14, 2014
"What Every Executive Should Know About Cybersecurity"	May 19, 2014
Client Alert: SEC Tells Investment Advisers and Private Equity Firms to Prepare for Cyber Attacks	May 19, 2014
"Cybersecurity: Practical Tools to Deal with the Cybersecurity Issue"	April 2014
"Antitrust and Ethics Hot Topics"	April 10, 2014
"Are You Ready?"	February 27, 2014
Client Alert: Keyword Advertising: Trademark	February 10, 2014

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Infringement or Legitimate Marketing Tool?

Client Alert: Preparing for the Cybersecurity Challenges of 2014	January 21, 2014
Client Alert: Time to Tune-Up Your Privacy Policy? FTC, States Increase Enforcement of Privacy and Data Security Policies	August 13, 2013
"Cyber Security Round Table"	June 27, 2013
"Nuts and Bolts of IP Licensing"	April 22, 2013
"Lessons Learned: Drafting Complex License Agreements"	July 27, 2012
IP 101: Dallas Bar Association	September 2011
IP Update: Corporate Counsel Institute	April, 2011
Client Alert: False Patent Marking	September 23, 2010
"IP Licensing"	October 2005
"Fundamentals of Software Licensing"	August 2005
"Complex IP Licensing"	April 2005
"Good/Bad Practice for Web Sites"	April 2005
"Website Best Practices"	February 2005
"Ethical Considerations for In-House Counsel"	2000 and various annual presentations
"Intellectual Property Issues for Human Resource Managers"	2000
"Privacy and Electronic Signatures"	2000
"Privacy and the Internet"	2000 and various annual presentations

News

T&K Ranked as Top Patent Firm for Fourth Year Press Release	June 07, 2016
T&K Attorneys Named 2016 "Best Lawyers in Dallas" by <i>D Magazine</i> Press Release	April 25, 2016
T&K Ranked as Top Patent Firm for Third Consecutive Year Press Release	June 23, 2015

Stephen E. Stein

T&K Names New Industry Group Leaders Press Release	April 01, 2015
Steve Stein Quoted in <i>Law360</i> on Real Estate Cyber Threats In the News	October 10, 2014
T&K Ranked as Top Patent Firm for Third Consecutive Year Press Release	June 16, 2014
T&K Names New Industry Group Leaders Press Release	May 22, 2014
Steve Stein Quoted in <i>The Main Street</i> on Chip-and- Pin Cards In the News	March 26, 2014
Steve Stein Quoted in <i>Law360</i> on Supreme Court's Gene Patent Ruling In the News	June 14, 2013
T&K Ranked as Top Patent Firm Press Release	June 06, 2013
Steve Stein Mentioned in <i>Texas Lawyer</i> on Board Position In the News	August 01, 2011
T&K Partner Named Chair of Texas State Bar's Corporate Counsel Section Press Release	July 28, 2011
Steve Stein Quoted in <i>D CEO</i> on Cloud Computing In the News	January 04, 2011
T&K Assists in Development Deal for <i>Project Runway</i> Video Game Press Release	October 15, 2009
Steve Stein Mentioned in <i>The Metropolitan Corporate Counsel</i> on UT In-House Counsel Institute In the News	April 01, 2007
T&K 2003 Technopolis Award Winner Press Release	August 28, 2003

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PROTECTING THE CROWN JEWELS: PATENT SUBJECT MATTER AND POST-GRANT PROCEDURES

By:

William P. Ramey, III, Partner, Ramey & Schwaller, LLP

Stephen E. Stein, Partner, Thompson & Knight, LLP

In today's fast-paced, technology-driven world, the strength of a company's intellectual property can determine the value of that company. What are the issues today that all corporate attorneys should have basic knowledge when it comes to the company's most valuable technology? And when is it time to call in a specialist? Is it true that all software patents are invalid? How does the patent trial and appeal board challenge the validity of a patent?

This paper will attempt to discuss current Hot IP Issues for 2016, with special emphasis on patent able subject matter and new procedures available at the Patent Trial and Appeal Board.

A. PATENTABLE SUBJECT MATTER

Remember the good old days? Patentable subject matter was commonly understood to be anything under the sun created by man.ⁱ While there are a lot of questions concerning what subject matter is now patentable, it is clear that this old standard is no longer applicable.ⁱⁱ

1. Then, what is the proper test for determining patentable subject matter?

We start by determining what is not patentable "[l]aws of nature, natural phenomena, and abstract ideas," i.e. whether the claim claims patent ineligible subject matterⁱⁱⁱ It seems odd to define something by what it is not, but the Supreme Court offered some reassurance by stating that section 101 should not be interpreted to impede innovation, particularly in the realm of computer technology, "we tread carefully in construing this exclusionary principle lest it swallow all of patent law. At some level, "all inventions . . . embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas."^{iv}

In applying the § 101 exceptions, courts must distinguish claim language that encompasses the building blocks of human ingenuity which are ineligible for patent protection, from those that integrate the building blocks into something more. Using this framework, a patent eligibility determination involves a determination whether the claims at issue are directed to a patent-ineligible concept. If so, the Court then asks whether the claim's elements, considered both

individually and/or in combination transform the nature of the claim into a patent-eligible application.

But what does this mean? A look at the recent developments in case law may help answer this question....

2. The recent evolution of the test for patentable subject matter

How to define patent able subject matter has undergone quite a transition in the last few years. In 2010, in the *Bilski* decision, the United States Supreme Court affirmed the Federal Circuit in a decision finding that a method of optimizing a fixed bill system for energy markets was an unpatentable abstract idea.^v The claim at issue was as follows:

1. A method for managing the consumption risk costs of a commodity sold by a commodity provider at a fixed price comprising the steps of:
 - (a) initiating a series of transactions between said commodity provider and consumers of said commodity wherein said consumers purchase said commodity at a fixed rate based upon historical averages, said fixed rate corresponding to a risk position of said consumer;
 - (b) identifying market participants for said commodity having a counter-risk position to said consumers; and
 - (c) initiating a series of transactions between said commodity provider and said market participants at a second fixed rate such that said series of market participant transactions balances the risk position of said series of consumer transactions.

The Federal Circuit had set forth a 'machine or transformation test' for determining patentable subject matter.^{vi} However, the Supreme Court shot down this test by specifying that the 'machine or transformation' test is not the sole test and that the determination for what is patentable subject matter need not be so rigid.^{vii}

The Supreme Court's decision in *Bilski* was followed up shortly with the *Mayo* case where the Supreme Court reversed the Federal Circuit's decision and found unpatentable claims directed to administering pharmaceutical agents.^{viii} The claim at issue was as follows:

A method of optimizing therapeutic efficacy for treatment of an immune-mediated gastrointestinal disorder, comprising:

- (a) administering a drug providing 6-thioguanine to a subject having said immune-mediated gastrointestinal disorder; and
- (b) determining the level of 6-thioguanine in said subject having said immune-mediated gastrointestinal disorder, wherein the level of 6-thioguanine less than about 230 pmol per 8×10^8 red blood cells indicates a need to increase the amount of said drug subsequently administered to said subject and wherein the level of 6-thioguanine greater than about 400 pmol per 8×10^8 red blood cells indicates a need to decrease the amount of said drug subsequently administered to said subject.

In making its determination the Supreme Court stated that while the “administering,” “determining,” and “wherein” steps are not themselves natural laws, they are not sufficient to transform the nature of the claim. “Beyond picking out the relevant audience, namely those who administer doses of thiopurine drugs, the claim simply tells doctors to: (1) measure (somehow) the current level of the relevant metabolite, (2) use the particular (unpatentable) laws of nature (which the claim sets forth) to calculate the current toxicity/inefficacy limits, and (3) reconsider the drug dosage in light of the law.”^{ix} The Court concluded the claims provide “instructions” that “add nothing specific to the laws of nature other than what is well-understood, routine, conventional activity, previously engaged in by those in the field.”^x

But the worst was yet to come. In *Alice* the Supreme Court found the following representative claim unpatentable:

A method of exchanging obligations as between parties, each party holding a credit record and a debit record with an exchange institution, the credit records and debit records for exchange of predetermined obligations, the method comprising the steps of:

- (a) creating a shadow credit record and a shadow debit record for each stakeholder party to be held independently by a supervisory institution from the exchange institutions;
- (b) obtaining from each exchange institution a start-of-day balance for each shadow credit record and shadow debit record;
- (c) for every transaction resulting in an exchange obligation, the supervisory institution adjusting each respective party's shadow credit record or shadow debit record, allowing only these transactions that do not result in the value of the shadow debit record

being less than the value of the shadow credit record at any time, each said adjustment taking place in chronological order, and

- (d) at the end-of-day, the supervisory institution instructing on[e] of the exchange institutions to exchange credits or debits to the credit record and debit record of the respective parties in accordance with the adjustments of the said permitted transactions, the credits and debits being irrevocable, time invariant obligations placed on the exchange institutions.

The Court specifically stated that merely applying a fundamental economic practice of risk intermediation through third party settlement, with the presence of generic computing elements or steps is not sufficient to provide an inventive concept. The Court reiterated a two-step test set forth in *Mayo* to determine whether the claim recites a judicial exception to patentable subject matter and if so, determine whether the claim recites an “inventive concept,” something “significantly more” than the exception and “enough” to transform the claim into eligible subject matter.^{xi}

Apparently, the Supreme Court did not see the *Alice* case as defining an *abstract idea* or as a software patent case.^{xii} As such the Court likely did not think the case would have wide applicability. However, *Alice* has been used to deny patentability to vast numbers of applications and to invalidate vast numbers of patents and lower the grant rate on business method patents to the single digits.

Luckily, clarification of *Alice* was found on May 12, 2016, when the Federal Circuit issued its *Enfish* decision finding patentable claims to non-abstract improvements to computer technology.^{xiii} A representative Claim 17 was as follows:

A data storage and retrieval system for a computer memory, comprising:

means for configuring said memory according to a logical table, said logical table including:

a plurality of logical rows, each said logical row including an object identification number (OID) to identify each said logical row, each said logical row corresponding to a record of information;

a plurality of logical columns intersecting said plurality of logical rows to define a plurality of logical cells, each said logical column including an OID to identify each said logical column; and

means for indexing data stored in said table.

In finding the subject matter patentable, the court identified how the self-referential table functions differently than conventional database structures, and concluded that the district court oversimplified the self-referential component of the claims when it found the claims were directed simply to the concept of organizing information using tabular formats.^{xiv} The Court indicated that reading the exclusion more broadly would allow the exceptions to swallow the rule.

In a piece of good news for the software industry, the Federal Circuit's holding reiterates that software claims are not necessarily abstract, and thus, "the invention's ability to run on a general-purpose computer does not doom the claim."^{xv} It explained that software can make non-abstract improvements to computer technology, and therefore, it can be sufficient to define improvements by logical structures and processes without any reference to "physical components."

3. Steps to take to Avoid Abstract Claims

While it is widely known that software is patentable, what are some steps that can be taken to avoid having your patent claims found to be Abstract?

- a. Draft claims to cover the technical improvements over the prior art and not the abstract idea, i.e. the something new is the improved technical aspects;
- b. Provide greater disclosure in the specification to explain your invention and differentiate it over the prior art; and,
- c. Describe in detail how your invention is a solution to a prior art problem.

Primarily, greater disclosure and an explanation of the technical improvement associated with the invention will help achieve patentability.

B. POST GRANT REVIEW PROCEDURES

Background: The America Invents Act (or "AIA")^{xvi} modified both existing procedures and established certain new procedures for post-grant challenges to issued patents. Since becoming effective practitioners have begun utilizing the new provisions to challenge patents as discussed herein.

1. Ex parte Reexamination:

Procedures have been in place for years to permit ex parte reexamination where the requester (or "challenger") cites prior art patents and printed publications, which raise a substantial new question of patentability with regard to at least one claim. The downside of this procedure has always been that the

hearing was conducted between the examiner and the patentee – the challenging party was not invited. Therefore there has been an historic reluctance on the part of challengers to start a reexamination proceeding where they were essentially limited to "one shot" at the patent. The patent owner could amend claims and make arguments, but only the examiner could address those amendments and/or arguments.

Under the new AIA procedures, the requester may now cite statements made by the patent owner in Federal Court or in the USPTO, in which the patent owner took a position regarding the scope of a particular claim.^{xvii} These statements, however, can only be used by the USPTO to determine the meaning of a particular claim term.^{xviii} Additionally, no legal estoppel is created by an ex parte reexamination because the challenger is not involved in the substantive portions of the challenge. But challenges to the validity of a patent may be more difficult if a party waits for district court litigation.

2. Post Grant Review:

A significant addition to patent challenge options under the AIA is the Post Grant Review ("PGR"). A PGR allows a challenger to file a petition to cancel at least one patent claim on *any ground* of invalidity.^{xix} Grounds can therefore include non-patentable subject matter, lack of enablement, failure to provide a sufficient written description, indefiniteness, anticipation, and obviousness.^{xx} For anticipation and obviousness purposes, evidence of prior public use, prior public disclosure, or an on-sale bar can be used. Of greatest significance is the allowance of *full participation* by the patent owner and the petitioner in front of the Patent Trial and Appeals Board (PTAB).^{xxi} While no guarantee of success, the challenger is now in the room and able to make his or her case.

A PGR petition must be filed within nine (9) months of the date of the grant of the patent or the issuance of a reissue patent.^{xxii} Therefore, timely monitoring of issued patents may be a useful tool to companies with an eye on competitors, and of course many service providers are happy to provide that service.^{xxiii} This has gained popularity in a number of industries.

To be successful in a PGR, the petitioner must establish that it is *more likely than not* that the information presented in the petition, if not rebutted, would invalidate at least one challenged claim.^{xxiv} This is a change from the prior standard of "whether a substantial new question of patentability affecting any claim of the patent concerned is raised by the request." There are other procedural aspects worth noting, including (1) limited discovery^{xxv}, (2) the ability of the PTAB to sanction parties for discovery abuse, improper use of proceedings, delays, and unnecessarily increasing costs^{xxvi}, (3) the right of the parties to

settle^{xxvii}, an automatic stay on civil actions with respect to the patent (until the patentee moves court to lift the stay; counterclaims for infringement; or files a motion to dismiss the civil action).^{xxviii} After a final written decision by the PTAB on any claim, the petitioner may not request or maintain a proceeding in the USPTO or in a civil action or in the ITC that the claim is invalid on any ground that could have been raised in the PGR.

As of January 31, 2016, 15 PGR petitions have been filed,^{xxix} substantially fewer than petitions filed for other types of review. There are many possible reasons for this, but perhaps the most likely of those is that the window for filing a PGR petition is relatively narrow. As a result, a would-be petitioner must act quickly to identify newly issued patents, identify one or more bases for invalidity, and file the PGR petition, all in the relatively short, nine-month window. But when used appropriately, PGR can be a useful and powerful tool for avoiding costly district court litigation.

3. Inter Partes Review:

Inter partes review (“IPR”) is a procedure introduced under the AIA and became effective September 16, 2012^{xxx}. As of January 31, 2016 a total of 2447 IPR petitions have been filed^{xxxi} representing 91% of all AIA petitions filed between September 16, 2012 and January 31, 2016. Of the 2447 IPR petitions filed, in 1243 cases trial was *not* instituted^{xxxii}. Of those where trial was instituted 742 cases were terminated (either by dismissal or settlement) leaving 732 cases in which trial was granted and a written opinion issued.

An IPR is worth considering as an option (1) as an alternative to litigation or to stay a pending litigation proceeding or (2) to challenge a competitor's patent even when there is not a pending case or controversy before the patent is “validated” by third party licenses or settlements. The limitations on an IPR is that (1) a patent can only be challenged based on prior art patents and printed publications^{xxxiii} (2) a challenging petition must be filed either nine (9) months after patent grant or, if a PGR has been instituted, the termination of the PGR^{xxxiv} and (3) an IPR cannot be instituted on a petition filed more than one (1) year after the petitioner is served with a complaint for infringement.^{xxxv} In other material respects (i.e. stay of civil actions and estoppel provisions) as well as the procedural aspects of an IPR are much the same as for a PGR.

The addition of IPR has spurred significant activity at the USPTO. Individuals and entities alike have begun taking a new approach to post-grant proceedings. The parties are using IPRs both offensively and defensively, taking an active role in the proceedings.

4. Covered Business Methods Procedures:

Another procedure available under the AIA is the Covered Business Method (“CBM”) Review.^{xxxvi} A petition under this proceeding is limited to a person who is sued *or charged with*^{xxxvii} infringement of a covered business method patent. If a party is charged with infringement of a CBM patent it may find this procedure a cost effective alternative to a court proceeding when defending against non-practicing entities. As explained by the USPTO, the definition of “covered business method patent” was drafted to encompass patents “claiming activities that are financial in nature, incidental to a financial activity or complementary to a financial activity.”^{xxxviii} If instituted, a CBM Review must be completed within twelve months, which may be good or bad depending on the challenger’s budget. If there are multiple challenges to a specific CBM patent, “the Board may enter any appropriate order regarding the additional matter including providing for the stay, transfer, consolidation, or termination of any such matter. Joinder may be requested by a patent owner or petitioner.”^{xxxix} It may well be a situation where multiple parties charged with infringement of a CBM patent wish to coordinate their actions. Advantages to a challenger are (1) while generally not available during the nine (9) month PGR period, they are correspondingly not limited to that period. Therefore if sued on a CBM patent, a defendant may elect in appropriate circumstances to initiate a CBM review.

A total of 280 CBM review petitions have been filed as of January 31, 2016. Of these, trial was denied institution in 142 of the cases. In 53 cases, trial was instituted but subsequently terminated (dismissed or settled), leaving 85 cases in which a trial was granted resulting in a written opinion.^{xl} Originally intended to deal with problems with “business method” patents, those accused of infringement have occasionally used the CBM review process more broadly in an attempt to invalidate patents only related to business methods, with varying degrees of success. So while patents clearly directed towards a method of doing business are within the scope of CBM review, the precise limits of CBM review are still being sorted out through litigation.

5. Statistics:

	Total Petitions	Trial Not Instituted	Trial Instituted – Terminated (Dismissed, Settled)	Trial Granted – Written Opinions
IPR	2447	1243	472	732
CM B	280	142	53	85
PG R	2	2	0	0

6. Representative IPR Decisions

As noted above there have been a number of post grant review petitions and subsequent decisions. Of particular note are:

a. Shaw Industries v. Automated Creel Systems^{xli}

In February of 2012, Automated Creel Systems (“ACS”) sued Shaw for infringement of U.S. Patent No. 7,806,360.^{xlii} ACS later dismissed the suit without prejudice, and within a year of service of the original complaint, Shaw filed an IPR petition of all twenty-one claims in the ’360 Patent. The Patent Trial and Appeal Board (“the Board”) instituted IPR on all claims except claim 4 on two of the fifteen grounds proposed by Shaw. The Board notably denied Shaw’s petition on at least one ground as “redundant in light of [its] determination that there is a reasonable likelihood that the challenged claims are unpatentable based on the grounds of unpatentability on which [it] instituted” IPR.^{xliii}

In September 2013, over a year after service of ACS’s original complaint, Shaw filed a second petition, requesting IPR of claim 4. The Board instituted IPR, rejecting ACS’s argument that 35 U.S.C. § 315(b) precluded it from instituting IPR.^{xliv} The Board reasoned that, because ACS had voluntarily dismissed its suit without prejudice, it nullified the effect of the alleged service of the complaint on Shaw.^{xlv} The Board issued a final written decision in July 2014, invalidating several of the ’360 Patent’s claims, including claim 4, but finding other claims not invalid.^{xlvi}

Shaw appealed the decision, arguing that the Federal Circuit has jurisdiction to review the Board’s final written decision, including a decision not to consider certain grounds for invalidity in an IPR petition as redundant. Shaw was concerned that IPR

estoppel rules would keep it from making any of the arguments from its IPR petition—including those not instituted or considered by the Board—in future district court litigation. While the Federal Circuit seemed to agree with Shaw that the Board’s refusal to institute on the “Payne-based ground” was improper, the Court ultimately held that it has “no authority...to review the Board’s decision to institute IPR on some but not all grounds.”^{xlvii} Importantly, the Court held that estoppel would only apply to the arguments raised *during* the IPR, and would not apply to those refused institution.^{xlviii}

b. Merck & Cie v. Gnosis S.P.A et. al^{xlix}

Merck owns U.S. Patent No. 6,011,040, directed to a method of using folates to lower levels of homocysteine in the human body. Based on an IPR petition filed by Gnosis, the Board reviewed the patentability of various dependent claims of the ’040 Patent.¹ The Board considered three prior art references, concluding that all of the contested claims are obvious.^{li} Because of the “close similarity of purpose and disclosure” between the prior art references, the Board found that “a person of ordinary skill in the art would have been motivated to combine the references to arrive at the [patented] method.”^{lii} In addition, the Board found Merck’s proffered evidence of commercial success, copying, industry praise, and long-felt need to be unpersuasive.

The Federal Circuit reviewed the Board’s obviousness finding, whether a person of ordinary skill in the art would have a motivation to combine the cited references, and Merck’s objective indicia of non-obviousness.^{liii}

In *Merck* the Federal Circuit took the opportunity to address the standard of review to be used by the Federal Circuit with respect to decisions of the PTAB. The majority found that the findings of the PTAB were supported by substantial evidence.^{liv} In dissent, Justice Newman argued that “...it is incorrect for this court, as the only reviewing tribunal, to review the PTAB decision under the highly deferential “substantial evidence” standard”.^{lv} Because the Federal Circuit is the only review body for these new agency proceedings, Newman argued that the *preponderance of the evidence* standard was the appropriate standard of review.^{lvi}

While the Court’s review provides a helpful overview of the appropriate standards to be used by the Board in evaluating IPR petitions, the Court agreed with all of the Board’s findings. As a result, no new tests or further clarification is provided by the *Merck* case and the Federal Circuit reaffirmed the substantial evidence standard in *Black & Decker, Inc. v. Positec USA, Inc.*, in May of 2016.^{lvii}

c. Cuozzo Speed Technologies, LLC v. Lee^{lxviii}

Cuozzo owns U.S. Patent No. 6,778,074 which claims a speedometer that shows a driver when he or she is driving above the speed limit. In 2012, Garmin sought review of claim 17 of the '074 Patent.^{lix} The Board instituted the IPR as to claim 17, and additionally decided to reexamine claims 10 and 14 because it determined those claims were “logically linked to the obviousness challenge of claim 17.”^{lx} The Board found that each of the three claims it reviewed were invalid as obvious. Cuozzo appealed to the Federal Circuit, claiming that the Board improperly instituted IPR with respect to claims 10 and 14 and that the ‘broadest reasonable construction’ standard was inappropriate in IPR proceedings. After careful consideration, the Federal Circuit affirmed the Board.^{lxi}

Cuozzo then filed a writ of certiorari, and the Supreme Court agreed to review the case in January of 2016. Before the Supreme Court were two issues: (1) whether the Board’s decision whether to institute an IPR proceeding is judicially reviewable; and (2) whether the Board may, in IPR proceedings, construe claims in an issued patent under their broadest reasonable interpretation. As to question one, the Supreme Court acknowledged the “strong presumption in favor of judicial review,” but such a presumption “may be overcome by clear and convincing indications, drawn from specific language that Congress intended to bar review.”^{lxii} Looking to the language of the Patent Act, the Court held that 35 U.S.C. § 314(d) clearly states that the Patent Office’s determinations whether to institute IPR “shall be final and nonappealable.”^{lxiii} As to question two, Cuozzo argued that the Patent Office should, like the courts, interpret claim language by looking to the ‘ordinary meaning’ as understood by a person of skill in the art.^{lxiv} The Court noted that the purpose of the IPR is not the same as district court litigation, and that “neither the statutory language, its purpose, or its history suggest that Congress considered what standard the agency should apply when reviewing a patent claim in inter partes review.”^{lxv} Accordingly, the Court held that the regulation “represents a reasonable exercise of the rulemaking authority that Congress delegated to the Patent Office,” and therefore it was within the Board’s discretion to determine the appropriate claim construction standard in IPR proceedings.^{lxvi}

7. Representative CBM Decisions

a. Unwired Planet v. Google^{lxvii} (CBM decision)

Unwired Planet LLC sued Google alleging infringement of 10 mobile web patents. In response, Google filed several petitions with the USPTO requesting, among other things, that two of the patents asserted by Unwired Planet be reviewed under the Transitional Program for Covered Business Method (CBM) patents.^{lxviii} The patents are U.S. Patent Nos.

7,024,205 and 7,203,752 and relate to managing and delivering location-based services for wireless communication devices.

The PTAB granted Google’s petitions, eventually finding the patents invalid for failing to comply with the written description requirements of 35 U.S.C. § 112.^{lxix} Unwired Planet then appealed the PTAB’s decisions to the Federal Circuit. The Federal Circuit questioned the invalidity of the two patents, indicating that they had trouble agreeing with the USPTO’s decision to review the mobile phone patents under the CBM standard.^{lxx} In particular, the Federal Circuit questioned whether the PTAB decision to institute the CBM reviews stepped beyond its intended bounds because such reviews were intended to cover non-technological patents directly to financial products and services.^{lxxi}

During oral arguments, Judge Hughes said “I don’t think that any patent that references a financial institution or finding an ATM could be subjected to CBM review.”^{lxxii} To drive his point home, Judge Hughes remarked that the “board has this arbitrary definition of incidental that includes anything related to a bank—that could include a lightbulb you put in a lobby.”^{lxxiii} While the Federal Circuit decisions on the two patents have not been released, it seems probable that the court will help to more clearly define the appropriate scope of CBM review.

b. Liberty Mutual Insurance Co. v. Progressive Casualty Insurance Co.^{lxxiv} (CBM Decision)

On September 16, 2012, Liberty Mutual Insurance filed a petition for CBM review against Progressive Casualty Insurance’s 8,140,358 patent. In its petition, Liberty Mutual asserted 422 grounds of unpatentability.^{lxxv} In a written order, the PTAB required petitioner to select one of the two groups of obviousness grounds on which to go forward.^{lxxvi} In doing so, the PTAB declined to grant a CBM petition on grounds it deemed redundant, setting forth a framework for its analysis, and stating that:

“We take this opportunity to note that multiple grounds, which are presented in a redundant manner by a petitioner who makes no meaningful distinction between them, are contrary to the regulatory and statutory mandates, and therefore are not all entitled to consideration.”^{lxxvii}

The PTAB went on to describe two types of redundancy in obviousness arguments: horizontal and vertical redundancy.^{lxxviii} The former involves multiple references applied as distinct and separate alternatives where the petitioner fails to explain how the references differ.^{lxxix} The latter involves the application of both partial and full combinations of references to allegedly

render obvious the same claim without a bi-directional explanation as to why one assertion might be stronger than the other in certain instances.^{lxxx} The takeaway from this case is that a petitioner should provide a clear explanation for each of its grounds of unpatentability asserted in the petition, and that the PTAB resolves ambiguity in a petition against the petitioner.

c. Versata Development Group, Inc. v. SAP^{lxxxii}
(CBM Decision)

On September 16, 2012, SAP filed a petition seeking CBM review of Versata's 6,553,350 patent. In

its very first decision under CBM review, the PTAB held that several claims in the '350 Patent were unpatentable under 35 U.S.C. § 101.^{lxxxii} Versata then appealed the decision to the Federal Circuit. The Federal Circuit attempted to define the term "technological invention" as it is relevant to CBM proceedings, indicating that such an invention solves a technical problem using a technical solution.^{lxxxiii} In addition, the court directly ruled that CBM review proceedings can include challenged under 35 U.S.C. § 101.^{lxxxiv}

ⁱ *Diamond v. Chakrabarty*, 447 U.S. 303 (1980).

ⁱⁱ *Bilski v. Kappos*, 130 S.Ct. 3218, 3255 (2010).

ⁱⁱⁱ *Association for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S.Ct. 2107, 2116, 186 L.Ed.2d 124.

^{iv} *Alice Corp. v. CLS Bank Int'l*, 134 S. Ct. 2347 (2014).

^v *See id.* at 3223.

^{vi} *Bilski*, 130 S.Ct. at 3255.

^{vii} *See id.*

^{viii} *MAYO COLLABORATIVE SERVS. V. PROMETHEUS LABS., INC.*, 132 S. Ct. 1289 (2012).

^{ix} *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289 (2012).

^x *See id.*

^{xi} *Mayo*, 134 S. Ct. at 2355.

^{xii} *Id.* at 2357-60.

^{xiii} *Enfish, LLC v. Microsoft Corp.*, 2016 U.S. App. LEXIS 8699 (Fed. Cir. May 12, 2016).

^{xiv} *Enfish, LLC v. Microsoft Corp.*, 2016 U.S. App. LEXIS 8699 *7 (Fed. Cir. May 12, 2016).

^{xv} *Enfish, LLC v. Microsoft Corp.*, 2016 U.S. App. LEXIS 8699 *8 (Fed. Cir. May 12, 2016).

^{xvi} The law was signed into effect on September 16, 2011, effectively replacing 35 U.S.C., and was fully implemented as of March 16, 2013. Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011).

^{xvii} 35 U.S.C. § 301(a)(2).

^{xviii} *Id.* at §301(d).

^{xix} *Id.* at §321(b).

^{xx} *Id.*; *see also* 35 U.S.C. §282(b).

^{xxi} In contrast, the proceeding which post-grant review replaced, inter partes reexamination, did not allow such involvement by the petitioner.

^{xxii} 35 U.S.C. § 321(c).

^{xxiii} Patent monitoring and search providers include, for example, Thomson Reuters, Stellarix Consultancy Services Pvt. Ltd., and CPA Global Ltd.

^{xxiv} 35 U.S.C. § 324(a).

^{xxv} *See Id.* at § 326(5).

^{xxvi} *See Id.*

^{xxvii} *Id.* at § 327.

^{xxviii} *Id.* at § 325(d).

^{xxix} Patent Trial and Appeal Board Statistics, <http://www.uspto.gov/sites/default/files/documents/2016-01-31%20PTAB.pdf>.

^{xxx} 35 U.S.C. § 311.

^{xxxii} Patent Trial and Appeal Board Statistics, <http://www.uspto.gov/sites/default/files/documents/2016-01-31%20PTAB.pdf>.

^{xxxiii} *Id.*

^{xxxiii} 35 U.S.C. § 311(b).

^{xxxiv} *Id.* at § 311(c).

^{xxxv} *Id.* at § 315(b).

^{xxxvi} Originally enacted as 35 U.S.C. § 18 and titled "Transitional program for covered business method patents."

^{xxxvii} "Charged with infringement" means a real and substantial controversy regarding infringement of a covered business method patent exists such that the petitioner would have standing to bring a declaratory judgment action in Federal court. 37 CFR § 42.302.

^{xxxviii} 157 Cong. Rec. S5432 (daily ed. Sept. 8, 2011) (statement of Senator Schumer).

^{xxxix} 37 CFR 42.122.

^{xl} Patent Trial and Appeal Board Statistics, <http://www.uspto.gov/sites/default/files/documents/2016-01-31%20PTAB.pdf>.

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^{xlii} *Automated Creel Systems, Inc. v. Shaw Indus. Grp., Inc.*, No. 1:12-cv-00424-RWS (N.D. Ga. 2012).

^{xliii} *Shaw Indus. Grp., Inc. v. Automated Creel Sys., Inc.*, No. IPR2013-00132, 2013 WL 8563792, at *20 (P.T.A.B. July 25, 2013).

^{xliv} *Shaw Indus. Grp., Inc. v. Automated Creel Sys., Inc.*, No. 2015-1116, slip op. at *5 (Fed. Cir. 2016).

^{xlv} *Id.*

^{xlvi} *Shaw Indus. Grp., Inc. v. Automated Creel Sys., Inc.*, Nos. IPR2013-00132, IPR2013-00584, 2014 WL 3725531 (P.T.A.B. July 24, 2014) ("Final Decision").

^{xlvii} *Shaw Indus. Grp., Inc. v. Automated Creel Sys., Inc.*, No. 2015-1116, slip op. at *9 (Fed. Cir. 2016).

^{xlviii} *Id.*, slip op. at *11.

^{xlix} *Merck & Cie v. Gnosis S.P.A. et. al*, No. 2014-1779, slip op. at *2 (Fed. Cir. 2015).

^l *Id.*, slip op. at *2.

^{li} *Id.*, slip op. at *4.

^{lii} *Id.*, slip op. at *5.

^{liii} *See generally Merck v. Gnosis*, No. 2014-1779 (Fed. Cir. 2015).

^{liiv} *Merck* at 837.

^{liv} *Merck* at 840.

^{lvi} *Merck* at 841.

^{lvii} *Black & Decker, Inc. v. Positec USA, Inc.*, No. 2015-1646, 2016 WL 2898012, at *5 (Fed. Cir. May 18, 2016)

^{lviii} No. 15-446, 2016 WL 3369425 (U.S. June 20, 2016)

^{lix} IPR Pet. of U.S. Patent No. 6,778,074, Sept. 16, 2012.

^{lx} Cite Board's decision instituting IPR.

^{lxi} See *In re Cuozzo Speed Techs, LLC.*, No. 2014-1301 (Fed. Cir. 2015).

^{lxii} *Cuozzo Speed Techs, LLC. v. Lee*, No. 15-446, slip op. at 9-10 (U.S. 2016) (internal quotes omitted).

^{lxiii} *Id.*, slip op. at *7; see also 35 U.S.C. § 314(d).

^{lxiv} *Id.*, slip op. at *12.

^{lxv} *Id.*, slip op. at *16.

^{lxvi} *Id.*, slip op. at 17.

^{lxvii} See *Unwired Planet LLC v. Google Inc.*, Case No. 3:12-cv-00504 (D. Nev. Sept. 19, 2012).

^{lxviii} The two CBM petitions are CBM2014-00005 and CBM2014-00006.

^{lxix} See CBM2014-00005, Final Written Decision (May 9, 2014); see also CBM2014-00006, Final Written Decision (Apr. 6, 2015).

^{lxx} See *Unwired Planet, LLC v. Google Inc.*, No. 2015-1812, Oral Argument (Jun. 7, 2016), available at <http://www.cafc.uscourts.gov/node/20587>.

^{lxxi} *Id.*

^{lxxii} *Id.*

^{lxxiii} *Id.*

^{lxxiv} See CBM2012-00003, Petition (Sept. 16, 2012).

^{lxxv} *Id.*

^{lxxvi} See CBM2012-00003, Order (Oct. 25, 2012).

^{lxxvii} *Id.*

^{lxxviii} *Id.*

^{lxxix} *Id.*

^{lxxx} *Id.*

^{lxxxi} See CBM2012-000001, Final Written Decision (June 11, 2013).

^{lxxxii} *Id.*

^{lxxxiii} *Versata Development Group, Inc. v. SAP America, Inc.*, No. 2014-1194, slip op. at *39 (Fed. Cir. 2015).

^{lxxxiv} *Id.*, slip op. at *41-45.