I. INTRODUCTION

During the last year, tax professionals have become increasingly concerned over the patenting of tax strategies. A number of professional groups including the American Institute of Certified Public Accountants (AICPA) have publicly opposed the patenting of tax strategies providing a plethora of arguments, including that tax patents: preempt Congress’s legislative control over tax policy; deny taxpayers equal and unfettered access to the provisions of the Internal Revenue Code (IRC) and its interpretations; make it difficult for tax advisors to render advice to clients; potentially increase the costs of tax advice to clients; and may mislead taxpayers into thinking that a patented tax strategy is valid in the eyes of the IRS.\(^1\)

In addition to the aforementioned policy reasons for not issuing patents due to process arguments, several tax advising professional organizations claim that a number of tax strategy patents (TSPs) fundamentally fail to satisfy two of the basic patent criteria: novelty and nonobviousness.\(^2\) Commentators writing for academic tax journals argue that many of the most notorious TSPs claim transactions, mainly accomplished through computers, were well-known to professional tax advisors at the time the patent was issued.\(^3\) In effect, the U. S. Patent and Trademark Office (PTO), by issuing patents for transactions that are known to qualify for favorable tax treatment, is awarding patents for business methods that diminish, rather than augment, the wealth of knowledge contained in the public domain. In some bizarre manifestations, tax-related patents have been issued that are only triggered by the passage of tax laws currently being contemplated by Congress.\(^4\) Such patents reward “inventors” who successfully wager about the outcome of proposed legislation. Furthermore, some TSPs are not limited to computer-implementation, but instead claim the underlying transaction that qualifies for favorable tax treatment.\(^5\) As we discuss later, these patents have the clear potential to reduce the public domain.\(^6\)

TSPs are one category of business method patents that are increasingly the target of criticism from businesses, professionals, academics, commentators, and the courts. Business method patents, including TSPs, owe their origin to a 1998 Court of Appeals for the Federal Circuit (CAFC) decision in State Street v. Signature Financial Group, Inc.\(^7\) In a number of recent patent cases, the Supreme Court has reversed the CAFC on cases dealing with the issue of patentability of certain business method patents and the requirement for nonobviousness.\(^8\) In another case, a Supreme Court justice was openly skeptical of the core concept of business method patents.\(^9\) In a dissent joined by Justice Stevens and Souter, Justice Stephen Breyer, opined that State Street stands for the proposition that a process is patentable if it produces a “useful, concrete and tangible result.”\(^10\) Justice Breyer went on to note, “But this court has never made such a statement, and, if taken literally, the statement would cover instances where this court has held the contrary.”\(^11\)

There are indications that the CAFC is reexamining key conceptual components of business method patents based upon signals from the Supreme Court, such as the aforementioned language from Justice Breyer. Other concerns about the effects of business method patents have surfaced in recent, non-tax cases involving nonobviousness. A relevant case on point that deals with business method patents, In re Comiskey, has been remanded by CAFC to the PTO.\(^12\) In its remand of Comiskey, the CAFC asked the PTO, “to determine in the first instance whether the addition of general purpose computers or modern communication devices to Comiskey’s otherwise unpatentable mental process would have been non-obvious to a person of ordinary skill in the art.”\(^13\) As we demonstrate infra, and as has been alleged by tax advising groups, this reasoning is directly applicable to TSPs and is a justification for invalidating such patents.\(^14\)

More generally, there are additional reasons to believe that many business method and TSPs have been issued imprudently. First, many of these patents are concerned with unpatentable mental steps coupled with computers. Consequently, the impact of the Comiskey decision could be far-reaching. Secondly, instead of adding to the public domain, these patents can be used to prevent other professionals, including tax advisors, from plying their trade. This issue first arose where applicants were able to secure patents for various medical procedures and then used these patents to sue medical practitioners for practicing their profession. Congress stepped in and changed patent law to protect medical doctors from patent infringement suits for practicing their profession.\(^15\) Today, tax advising and the practice of law appear to be the targets of the current wave of tax strategy and business method patents.\(^16\) Given these encroachments, the time may be ripe for a common law “learned profession” defense to the validity of improvidently issued patents.

This paper is organized as follows. In Part II we discuss some of the basics of patent law with a focus on the issue of patentable subject matter and the emergence of business method patents. In Part III we examine tax-related patents and TSPs by creating seven conceptual categories. These begin with the least objectionable, business method patents that do not mention taxes, and move on to the most objectionable, which we define as TSPs that purport to foreclose others from complying with portions of the tax code. In Part IV we discuss the wisdom of issuing the previously categorized tax-related patents, especially in relation to those implemented utilizing a computer. Policy discussions of TSPs necessarily stray into
discussion of business method patents, the foundation upon which tax-related patents and TSPs are based. This discussion will include an analysis of the CAFC’s remand of Comiskey, a business method patent suit viewed by many tax advisors as a potentially precedent-setting case that could undermine the conceptual foundation of tax-related patents and TSPs. In Part V, we build upon the Comiskey decision and offer two policy recommendations the courts could adopt to deal with tax-related patents and TSPs. Finally, a brief conclusion takes place in Part VI.

II. PATENT LAW BACKGROUND

Although patent law rivals tax law in its complexity, there are basic principles that are instructive. Ignoring caveats, “Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter…” is entitled to a patent. Patent law is as old as the United States government. The power of the federal government to enact legislation to protect inventors is enumerated in Article 1 Section 8 and the first Patent Act was passed by Congress in 1790. Fundamentally, a patent is a right granted by the federal government to an inventor enabling him to exclude others from making, using, selling, or importing the invention within the United States without the inventor’s consent. Patents are filed with the PTO and generally last for a term of twenty years from the date of filing. For an invention to receive patent protection it must be: 1) new, 2) useful, and 3) nonobvious. A patent holder may seek injunctive relief and monetary damages against an infringing party. Monetary damages consist of either the patentee’s lost profits or royalty-based damages. Additionally, the court has discretion to award up to three times the amount of actual damages if the infringement is determined to be willful.

Throughout the last two centuries there has been significant litigation over the issue of what constitutes patentable subject matter. In the last twenty-five years, the Supreme Court and the CAFC have issued a number of opinions that have radically expanded the scope of what constitutes patentable subject matter. Prior to 1981, a series of inventions that made use of software were denied patents in Supreme Court decisions. However, with the landmark Diamond v. Diehr decision, the Supreme Court began to issue a number of rulings that have effectively expanded the scope of patentable subject matter. Although a meticulous journey through the important Supreme Court and lower courts decisions regarding this issue is not appropriate here, there is little question that patentable subject matter has been substantially (some would say radically) expanded during the past 35 years.

A particularly contentious expansion occurred in an area that has often been referred to as “business method” software patents. Even after Diamond v. Diehr, the Supreme Court has maintained that a patent should not be issued for computer software that merely solves an equation or algorithm. On the other hand, in the State Street Case, the CAFC has ruled that the transformation of data through computer software that produces “a useful, concrete and tangible result” is a process that is potentially eligible to be patented. In State Street, the patentee owned software that solved various value, cost, and tax issues in connection with a web and spoke mutual fund. According to the court, “this investment configuration provides the administrator of a mutual fund with the advantageous combination of economies of scale in administering investments coupled with the tax advantages of a partnership.” It is interesting to note the similarity in subject matter between the patent in this case and those at the heart of current TSP filings.

In the wake of State Street, courts had to deal with the issue of whether a patented process implemented through software represented an abstract idea, such as merely solving an equation, or whether the software could be reduced to “a practical application,” that produced “a useful, concrete and tangible result.” Mathematical algorithms are not patentable because they are most accurately categorized as merely “abstract ideas constituting disembodied concepts or truths that are not useful.” In State Street the court held that the subject matter was patentable in part because the software produced figures that were available “so that aggregate year end income, expenses, and capital gain or loss can be determined for accounting and tax purposes…”

The seminal case of State Street Bank created a new category of patents, business method patents. State Street has been interpreted to define business method patents as patents for those methods of processing data and uniquely designed for or used in practicing, administrating, or managing an enterprise; techniques used in athletics, instruction, or personal skill; and any computer-assisted implementations of such methods and techniques. Court acceptance of business method patents has laid the foundation for and issuance of patents involving tax strategies.

In 2006, over 10,000 applications were filed for business method patents (categorized as Class 705) by the PTO. Presently, TSPs compose only a small fraction of business method patents. Most TSPs are published in subclass 36T of Class 705 that the PTO created and dedicated solely to TSPs. As of October 18, 2007, the PTO has issued 60 tax patents with 101 applications pending. Other tax-related patents can be found in subclass 36R (relating to portfolio selection, planning or analysis) and subclass 31 (related to computerized arrangements for determining or submitting a tax to a governmental entity).

In a July 2006 analysis of issues relating to the patenting of tax advice, the Joint Committee on Taxation noted that there were two general categories of tax-related patents. The first are computer based in that they focus on the use of a computer as an integral part of the business method, while the second grouping relies on the tax strategy itself. A good example of the former is Patent No. 5,806,042, discussed infra, which is a computer-implementation of a Bank Owned Life Insurance (BOLI) plan, while a good example of the latter is Patent No. 6,567,790 (the SOGRAT patent discussed infra). Although a
number of the computer-based business method patents appear to have little or no direct tax implications or do not appear to foreclose others from qualifying for favorable tax treatment using other methods, some are more troubling. In the next section, we examine currently issued tax patents in order to identify those patents that are true TSPs. We define TSPs as those where the creator claims to invent a financial structure or product that is used in a strategy or process to reduce taxes and which make claims with respect to the underlying tax strategies in addition to a computer based or mechanical process.

III. EMPIRICAL EXAMINATION OF ISSUED TAX-RELATED PATENTS

Many existing articles contain references to “tax-related” patents, which can be conceptually distinct from TSPs. In this paper tax-related patents include all the patents filed in the PTO’s “tax strategy” class as well as other patents where compliance with tax laws is part of the invention but the invention does not necessarily foreclose others who use different methods in order to comply with particular sections of the IRC mentioned in the patent. Alternatively, a TSP is a patent in which the creator claims to invent a financial structure or product that is used in a strategy or process to reduce taxes and the claims made in the patent are so broad that unrelated tax advisors and clients, trying to qualify for the favorable tax treatment, are vulnerable to infringement suits by owners of particular patents. In other words, the accused device of the defendant is a process of configuring a transaction that qualifies for the favorable tax treatment claimed in the TSP. In the classification used in this paper, all TSPs are tax-related patents, but the converse is not true.

Although concern about TSPs is a relatively recent phenomenon, misinformation is already part of the landscape. In several articles and reports about TSPs it is claimed that there are upwards of 60 TSPs and an even greater number are pending. Part of the confusion is due to the classification system used by PTO. Recently, subclass 36T in class 705 was established and dedicated to tax strategies. Class 705/36T patents are officially called Class 705 Data Processing: Financial, Business Practice, Management, Cost/Price Determination: 36T: Tax Strategies. As of October 18, 2007, there were 60 patents in this classification, but the vast majority were not TSPs pursuant to our definition. In fact, several patents in this classification do not even mention tax in the claims, background, or embodiment. On the other hand, Class705/36T does include the patents most likely to meet the definition of a TSP.

Although TSPs have inspired the ire of a number of professional groups representing tax advisors, their legality has not been litigated. A lawsuit was filed in January 2006 alleging infringement of a patented estate planning technique in which non-qualified stock options (SO) were used to fund a grantor retained annuity trust (GRAT). U.S. Patent No. 6,567,790 (commonly referred to as the “SOGRAT” patent) issued on May 20, 2003 describes an estate planning strategy for minimizing gift tax liability in connection with the transfer of nonqualified stock options to a family member. The method utilizes a GRAT, a technique for transferring property to members of the grantor’s family at a discounted value. In a typical GRAT, the grantor establishes an irrevocable trust and receives a payment of a fixed annuity amount for a specified number of years (which the grantor is expected to outlive). At the end of the term of years, the remaining trust assets pass to the named beneficiaries (typically family members). The key is that the grantor’s transfer of property to the GRAT is treated as a gift to the remainder beneficiaries and the value of the gift is discounted equal to the present value of the remainder interest as determined by using IRS valuation tables.

The SOGRATs lawsuit was particularly unwelcome because Stock Options and GRATs have been used by tax practitioners for many years for estate and gift tax planning purposes. Thoughtful practitioners reasoned that if standard, tax minimizing recommendations such as creation of a SOGRAT exposed them to patent infringement suits, there would be a serious issue as to whether tax practitioners could offer their best tax advice to clients. In the discussion infra we show that few tax-related patents have claims that foreclose others from using the entire transactions that qualify for favorable tax treatment, though some appear to do so. We create a scale to evaluate tax-related, business method patents that range from innocuous to objectionable. We view a tax-related patent as objectionable if the claims in the patent appear to make law-abiding taxpayers vulnerable to patent infringement suits because they engage in a lawful transaction that qualifies for favorable tax treatment. Additionally, we distinguish between lawful transactions and computer-implementations of lawful transactions.

The discussion immediately infra is based on examination of all 60 patents classified as Class 705/36T as well as one patent in class 705/35 (Patent No. 7,149,712) and one patent in class 36R (Patent No. 6,766,303). Each patent examined is listed in Table 1 with pertinent characteristics including whether the patent:

- does not mention taxes,
- mentions taxes, but taxes are not integral to the patent or are of secondary importance,
- is primarily a computer program designed to provide basic tax computations,
- is primarily a computer program designed to provide tax efficient portfolio management,
- includes a discussion of taxes and taxes are critical to the invention,
- is a strategy-oriented patent utilizing life insurance products to reduce taxes, or
- is a TSP in which the creator claims to invent a financial structure or product that is used in a strategy or process to reduce taxes.

In addition, we have classified the patents according to whether the patent includes a computer-implemented process: 49 of the 62 patents involve computer-implemented processes while only 13 do not. A significant issue related to computer-
implementation is whether a tax-related patent forecloses other tax advisors and clients from structuring transactions that qualify for favorable tax treatment due to the requirements of particular sections of the IRC or whether these patents merely foreclose a computer-implemented structuring of transactions that qualify for the favorable tax treatment. Another closely related issue is whether, using the doctrine of equivalents, a tax-related patent claims all computer-related structuring of transactions that qualify for favorable tax treatment or whether the tax-related patent claims a particular computer-implemented software program that structures transactions so that a client qualifies for favorable tax treatment. Finally, it should be noted that computers have become so integral to the practice of tax advising that the issue of whether the invention causes a transaction or taxpayer to qualify for favorable tax treatment through a computer-implemented structuring of a transaction may be redundant because nearly all tax advisors implement their advice with the aid of computers and software. In other words, generic computer-implementation of a tax-related business method patent may not be a significant limitation because nearly all tax advisors rely heavily on computers and computer-implemented methods. This issue is discussed later when we look at how the CAFC analyzes the issue of whether the addition of computer-implementation to unpatentable mental steps is patentable in the Comiskey case.

In the Table below, 62 tax-related patents, as described above are arranged according to categories:

Table 1: Tax-Related Patents Organized By Conceptual Category and Whether Non Computer-Implemented

<table>
<thead>
<tr>
<th>Categories</th>
<th>Total Number of Patents</th>
<th>Non Computer-Implemented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does not mention Taxes</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Taxes not Integral</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>Taxes are of Secondary Importance</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Tax Computational</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Tax Efficient Investment Portfolio Management</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>Taxes are Critical to the Invention</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Strategy Oriented Patents Utilizing Life Insurance Products to Reduce Taxes</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>Tax Strategy Patents</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>

As can be seen in Table 1, 23 of the 62 tax-related patents (37%) did not mention taxes, or only dealt with taxes in a secondary or non-integral fashion. Additionally, 15 of the 62 patents (24%) were inventions focusing on the tax efficient management of investment portfolios in which the creator did not appear to invent a product or structure used in a strategy or process to reduce taxes. Another 3 patents (5%) consisted primarily of computer software designed to provide basic tax computations. In 4 patents (7%), taxes were critical to the invention but the patentee still did appear to invent a product or structure used in a strategy or process to reduce taxes. Twelve of the patents (19%) used various types of existing life insurance products in strategies or processes to reduce taxes. While these patents are strategy oriented, the patentees did not create a new product or structure but rather used an existing product (life insurance) in a strategy which, among other claims, reduced taxes. Only five of the 62 patents (8%) rise to the level of a TSP as defined by the authors. In the next section, each of these five TSPs is described and discussed in more detail. In addition, examples are given of patents in the other eight categories in order to provide a more complete understanding of existing tax-related patents.

A. Taxes not Mentioned

Seven patents contain no mention of taxes, thus making them the least threatening category of tax-related patents for tax practitioners. For example, Patent No. 6,342,272 deals with multi-layer corrosion resistant coatings and Patent No. 6,772,128 deals with a nuclear decommissioning insurance financial product and method. Another example is Patent No. 6,041,304, a computerized method of managing a block of life insurance policies that can be varied according to time, value, and other variables. While there are certainly tax implications of holding life insurance policies, a computerized search of the patent does not find the term “tax” discussed in the document and tax implications do not appear to be part of the claims of the patent.

B. Taxes not Integral
Patents listed under this category include a discussion of taxes; however, taxes are not integral to the patent. For example, Patent No. 6,470,321 is a “system for providing an investor with financial protection against a loss in value in an investment in a limited liability entity arising from an event against which the entity is inadequately insured or has no insurance.”44 While limited liability companies may have tax advantages (compared with other companies), taxes are not specifically discussed in the claims of this patent. Another example is Patent No. 5,806,042 that purports to design and administer a Bank Owned Life Insurance (BOLI) plan that conforms to federal and state guidelines. This invention is a means of efficiently organizing benefits that banks offer to employees, and provides a method for complying with the requirements of the Office of the Comptroller of the Currency. Another patent in this category (Patent No. 5,819,230) is a computer and communications system that facilitates the administration of a mortgage and life insurance combination program in which all, or most, of the money that is typically used as a down payment is used to purchase a life insurance policy.

C. Taxes of Secondary Importance

Two of these patents deal substantially with employer-provided pension plans and mention Section 401(k) of the IRC. However, taxes do not appear to be of primary importance to these patents. An example is Patent No. 5,903,879, which is a system for the computerized management of loans in which an “employee eligible to participate in a pension plan is loaned up to the full employee contribution to the plan.”45 This is intended to encourage participation in the plan. The plan can be any type of pension plan including 401(k) and 403(b) plans and the loan can be secured by the assets in the plan in some embodiments of the invention. None of these patents appear to make an attempt to foreclose others from taking advantage of the benefits of 401(k) and other pension plans but potentially could be used to prevent taxpayers from engaging in specific strategies like that proposed in Patent No. 5,903,879.

D. Tax Computational

We classify three of the patents as tax computational. These patents employ software to perform basic tax computations and simulations. One example is Patent No. 6,058,376 that deals with the conversion of a traditional Individual Retirement Account (IRA) to a Roth IRA. This invention is computer-implemented and makes use of personal data from a client as well as federal and state tax information. The invention also requires projections in the form of educated guesses as to how well certain investments will perform in the near and distant future. The information that is the product of this IRA conversion patent is likely the same information that a tax advisor would render to a client even though the tax advisor may not be armed with this invention.

The fact that this process is computer-implemented may or may not be significant. It is difficult to imagine a tax advisor presenting the costs and benefits of converting from a traditional IRA to a Roth IRA without making use of a computer, but the patentee of Patent No. 6,058,376 could undoubtedly claim infringement if the defendant used the same exact computer program for evaluating the two alternatives. The real issue is the scope of protection Patent No. 6,058,376 provides under the doctrine of equivalents that prohibits use of a device that takes the benefit of the invention by, making insubstantial changes that avoid the literal scope of the claims.”46 Most likely a court will need to determine whether a tax advisor using a different computer program to evaluate the costs and benefits of converting from a standard IRA to a Roth IRA would infringe Patent No. 6,058,376.

Another example is Patent No. 6,064,983 that is a software system for providing tax computations for the administration of insurance and annuity products. In this case, it is clear that the primary benefit of the invention is the automated compliance with certain provisions of state tax laws and Federal tax law found in IRC Sections 72(e), 7702 and 7702A.

E. Tax Efficient Investment Portfolio Management

A large number of patents we examined deal with computer-implemented systems and software for tax efficient investment portfolio management. These patents are similar to the patent discussed in State Street, where the patent was an invention that managed a portfolio of financial assets. While these patents are similar to the three tax computational patents discussed above in that they all are based on computer software, the fifteen patents in this category generally provide software that helps clients and their advisors manage investment portfolios to accomplish a variety of tasks including optimal harvesting of tax losses, avoiding wash sales, and keeping track of tax lots to facilitate record-keeping and minimize income tax implications.47 Many of the patents in this category are directed towards small investors and minimizing the burden of tax compliance and record keeping. Patents Nos. 6,687,681 and 7,031,937 are examples of such patents that provide systems for the automatic harvesting of tax losses. Patent No. 6,161,098 claims a “method and apparatus for enabling small investors to manage taxable events within a portfolio,” and provides investors a system for identifying specific lots of stock sold instead of relying on the often less tax efficient First-In-First-Out (FIFO) rules required under Reg. Section 1.1012-1(c). 48

It is difficult to imagine managing a portfolio of assets without considering tax consequences and it is likely that tax advisors frequently use Excel spreadsheets and other computerized software programs to manage investment portfolios. Accordingly, it is potentially problematic that such computerized systems and processes have been routinely patented. Under
the newly articulated standards from KSR, patents should not be issued for combining known elements that do not produce unexpected or synergistic results.49

F. Taxes are Critical to the Invention

In four patents, the tax implications are critical to the invention but nevertheless do not rise to the level of a TSP. These patents are explicitly designed to take advantage of favorable tax treatment or to avoid some unfavorable tax result, not create a financial structure that is used in a strategy to reduce taxes. For example, among other claims, Patent No. 6,611,808 claims a “method for determining additional death benefits and costs related to tax payments with respect to the death benefit of an annuity contract.”49 The method comprises generating data corresponding to an annuity contract, including whether an additional beneficiary rider has been selected and then calculating an additional death benefit to be added to the payments to be provided by the annuity contract. The patent application notes “a major problem of the heirs or beneficiaries of the annuity after the death of the owner of the annuity is the payment of income taxes.”51 Among other things, the patent provides a “method and apparatus for determining additional benefits and costs related to tax payments with respect to the death benefit of an annuity contract.”52 As with the other patents in this category, income taxes are a critical component of the invention. However, the patentee does not appear to invent a new product or structure used in a strategy or process to reduce taxes.

G. Strategy Oriented Patents Utilizing Life Insurance Products

Twelve of the remaining patents use life insurance products in what the inventors claim to be novel strategies for funding deferred compensation plans, future health care costs of retirees, executive compensation plans, and wealth accumulation plans. These patents deal broadly with a method of obtaining information from employees, selecting target death benefits and calculating cash value amounts based on gender, age, and other risk factors.

An example is Patent No. 6,963,852 designed to create a defined benefit pension plan (qualified under IRC Section 412(i)) that is funded using variable life insurance contracts. The patent provides a mechanism to avoid violation of the IRS’s “incidental benefit rule” which typically denies favorable tax treatment to a defined benefit plan that provides life insurance in other than incidental amounts. Again, while the patent utilizes a computer-implemented data processing method for creating the defined benefit pension plan, the issue is whether this patent enables the holder to claim the transaction and strategy itself or whether the scope of the patent is limited to a particular computer-implementation of the strategy.

Two of the patents (Patent Nos. 5,136,502 and 5,590,037) were apparently prompted by the issuance of FAS 106 by the Financial Accounting Standards Board (FASB) in 1990. FAS 106 provided that future health care costs of retirees and other postretirement employee benefits (OPEBs) should be treated like deferred compensation and reflected in the corporate balance sheet and income statements.53 According to the discussion in the patents, corporations could fund plans to provide for these future health care costs using tax-exempt voluntary employee beneficiary association (VEBA) trusts, 401(h) accounts or corporate owned life insurance. However, all these had drawbacks including tax limitations. The patents provide various strategies for using life insurance products to avoid some of these adverse limitations.54

In these strategy oriented patents utilizing life insurance, the creators often give their inventions names, perhaps for marketing purposes. For example, in Patent No. 5,991,744, the creator calls his invention a managed equity secured opportunity plan or MESOP. The invention focuses on contributions to an account being used to invest in a life insurance policy that will ultimately provide tax-free growth of assets.

In a similar fashion, Patent No. 6,161,096 creates a Deferred Award Stock Option Plan (DASO) that “permits employees to benefit from their stock options, or their deferred income programs, while minimizing tax consequences and negative impact to the company.”55 This patent allows for what-if options to guide employee/recipients of stock options. The use of stock options as deferred compensation is a familiar transaction to tax advisors and there appears to be no claim in Patent No. 6,161,096 that prevents other employers, employees, or tax advisors from making use of this tax strategy as long as the transaction and planning are implemented with other software. Accordingly, we do not classify this patent as a TSP.

Patent No. 5,907,828 creates a product called a Mortgage Customer Protection Plan (MCPP) that is a system for analyzing and managing a lender owned life insurance policy on behalf of a lender to improve profitability and prevent losses as a result of adverse tax law changes. The system reacts to adverse tax changes by adjusting the form of the insurance policy to a term policy with an increased value. In this invention, as the life insurance policy builds, it is tax deductible, but the build-up of the cash values of the policy is not taxable, nor is the payment of the death benefits. This patent clearly relies on a computer system to administer the MCPP plan and the life insurance policy.

Other patents in this category have been issued to inventors of computer-implemented algorithms that deal substantially with employer provision of life insurance policies to employees. Such a process is described in the claims of Patent No. 5,752,236. An object of this invention is to provide an insurance plan having at least two separate but related life insurance policies that individually meet the legal requirements of a life insurance contract as defined by IRC Section 7702. The patent claims to “achieve the advantages of split dollar or reverse split dollar plans … without the drawbacks of those single policy
While this patent utilizes a computer-implemented method for forming the life insurance plan, it appears that the claims extend beyond the use of the computerized method and apply to the insurance plan itself.

### H. Tax Strategy Patents

The remaining five patents are classified as TSPs in which the creator claims to invent a financial structure or product that is used in a strategy or process to reduce taxes. For example, the inventors of Patent No. 7,096,195 claim it is a “Method of enhancing the equity of a business entity” by issuing a debt instrument (called a share bond) to equity shareholders. The inventors claim that distributions to shareholders then qualify as interest rather than dividends and thus are able to avoid double taxation. This invention thus, allegedly, enhances the value of equity shares. In this patent, the creator invents a new product called a share bond that is then used in a strategy to reduce taxes. Accordingly, the use of share bonds in similar transactions by other taxpayers would appear to infringe the patent.

Similarly, Patent No. 7,149,712 described as a “Method for financing future needs” relates to a method and system for investing long-term assets of private and public foundations and nonprofit organizations such as 501(c)(3) tax exempt charities. The allowed claims in the patent include the use of the method for charitable trusts, pooled income funds, charitable gift annuities, charitable lead trusts, permanent endowment funds and other entities. The patent also claims a method for financing the future needs of an individual through the use of variable annuities and parties such as funeral homes, cemeteries and funeral trusts.

A press release issued by the inventor claims that the patent uses variable annuities in a process that “enables endowment funds to be invested in mutual funds for maximum growth potential, create a 5% annual cash flow and have the original principal insured against market loss.” As a result of this strategy, the charity will be entitled to an annual cash withdrawal (of at least 5%) and at the death of the annuitant, the contract will pay a lump sum of either the guaranteed death benefit or the cash value of the mutual funds (whichever is higher) to the charity. The inventor of this patent is claiming the creation of a new financial structure that is used in tax-related strategies such as the creation of charitable trusts. As such, the inventor appears to be claiming the underlying transaction as well as the particular software described by the patentee in the best mode or embodiments.

The inventors of Patent No. 7,219,079 claim methods and the creation of a convertible debt instrument that “through their provisions … brings about successful market transactions that would otherwise not be possible,” as well as methods and systems for offering and servicing the same. The financial instrument would allow issuers the ability to “deduct an amount for tax purposes that more closely resembles the true economic cost of the financial instrument,” and “may tend to provide some holders with incentives that may tend to make such holder more likely to keep the instrument outstanding.” Other embodiments would provide issuers with “an increased amount of flexibility and control over the period of time the instrument remains outstanding, while potentially minimizing the normal interest due or paid to the holder.” This invention purportedly creates a new financial product that allows issuers of debt instruments to deduct interest payments at rates higher than are typical with traditional contingent debt instruments.

The three aforementioned TSPs utilize a computer in their implementation. However, two of the TSPs do not appear to rely on computer-implementation. Patent No. 6,292,788, which is described as, “Methods and investment instruments for performing tax-deferred real estate exchanges”, makes use of real estate investment instruments adapted for performing tax-deferred real estate exchanges. The patent describes a portfolio of real estate investments that are divided into tenant-in-common deeds that are subject to a master agreement and master lease to form “deedshares.” Holders of deedshares receive a guaranteed income stream from the master lease and yearly depreciation without having to maintain or manage real estate and are eligible for tax-deferred treatment under Section 1031 of the IRC.

According to its inventors, Patent No. 6,292,788 is superior to Real Estate Investment Trusts (REITs) in terms of control, risk, and qualifying for favorable tax treatment through Section 1031 of the IRC. As noted earlier, there is no mention of computer-implementation of Patent 6,292,788. Thus, in contrast to the vast bulk of the Class 705/36T patents, the inventors of this patent are claiming the underlying transaction. In other words, other taxpayers and tax advisors who create an identical or similar transaction are vulnerable to an infringement suit.

Similarly, Patent No. 6,567,790 (the SOGRAT patent discussed earlier) purports to create a new financial structure (the use of stock options to fund a GRAT) that is used in a strategy to reduce taxes. This TSP was used by the owner in a patent infringement suit against John Rowe, a wealthy taxpayer who followed advice of a law firm. In the SOGRAT patent, the inventor claims that the patentable method maximizes the transfer of wealth from the grantor of a GRAT to a family member by minimizing the amount of estate and gift taxes paid. It seems clear that the patentee (Wealth Transfer Group) is intent on claiming the underlying transaction, i.e., funding a GRAT with non-qualified stock options. There is no mention of computer-implementation of this invention until the best mode embodiment is discussed. In the suit filed by the owner of the SOGRAT patent, the defendant/taxpayer was not sued for computer-implementation of the SOGRAT transaction, but rather for the SOGRAT transaction itself. Of course, since the SOGRAT case was voluntarily settled without adjudication of the validity of the patent, the SOGRAT patent has not been court-tested.

Having categorized the existing tax-related patents, we now turn to an examination of the role computers play in these various entities.
The use of computers in a tax-related patent and TSP application raises two issues that need to be addressed. As has been mentioned earlier, one argument to be made is that but for the addition of computers, many tax-related patents and TSPs are simply a series of unpatentable mental steps. This view encompasses the first issue, whether one who attempts to patent a tax strategy combined with a computer should be able to pass the patentable subject matter hurdle. The second issue is whether the aforementioned configuration (tax strategy plus computer-implementation), while sufficient to pass the subject matter hurdle, is nevertheless insufficient to pass the nonobviousness test required of all patents.

A. Patentable Subject Matter

Whether or not the subject of a patent is patentable subject matter is the first threshold that must be crossed when determining patent validity. Pursuant to § 101, “Whoever 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 therefore, subject to the conditions and requirements of this title.” Thus, there are four statutory categories of invention that qualify for patent protection: process, machine, manufacture, or composition of matter. But:

The question of whether a claim encompasses statutory subject matter should not focus on which of the four categories of subject matter a claim is directed to—process, machine, manufacture, or composition of matter—but rather on the essential characteristics of the subject matter, in particular, its practical utility. However, there are three categories of judicial exceptions to patentable subject matter that do not receive patent protection, unless they are directed toward a practical application: abstract ideas (such as mathematical algorithms), natural phenomena, and laws of nature. TSPs are generally considered to fall into the process category (along with business method patents); alternatively, some could arguably be classified as abstract ideas.

The Supreme Court in Diamond v. Diehr has noted that, “transformation and reduction of an article to a different state or thing is the clue to the patentability of a process claim that does not include particular machines.” This two-prong requirement of Diehr may be problematic for TSPs and some tax-related patents. As with the later discussed legal strategy employed in Comiskey, tax strategies do not appear to have the aforementioned quality of “transformation and reduction of an article to a different state or thing.” It could be argued that what is being “transformed” in the case of TSPs that utilize computers is simply the allocation of memory on the computer’s hard drive. An analogy can be made to using a pencil to “transform” what is written on a notepad. The Supreme Court has found such processes to be unpatentable in Gottschalk v. Benson. There the court noted, “The mathematical procedures can be carried out in existing computers long in use, no new machinery being necessary. And, as noted, they can also be performed without a computer.” In describing the unpatentable procedure utilized in Flook, the court noted, “The computations can be made by pencil and paper calculations.”

The second prong of the Diehr court appears to require that the machine utilized in process patents be a “particular” machine. To mirror the language found in Benson, tax strategies, “can be carried out in existing computers long in use, no new machinery being necessary.” As our previous analysis of tax-related patents demonstrates, most tax strategies will utilize a computer in their implementation. Consequently, allowing one to obtain a patent on these would arguably have the same effect as allowing one to patent mental processes alone.

B. Nonobviousness

It should be noted that, “the nonobvious requirement…is the most significant obstacle that a patent applicant faces.” Additionally, it is a determination that involves a high level of ambiguity. As the Supreme Court has noted, “What is obvious is not a question upon which there is likely to be uniformity of thought in every given factual context.” To analyze the amorphous animal that is nonobviousness, one must first turn to 35 U.S.C. § 103, that notes in pertinent part:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Pursuant to this determination of nonobviousness, the Supreme Court has enunciated four factual inquiries that must be addressed: (1) determining the scope and content of the prior art; (2) ascertaining the differences between the prior art and the claims in issue; (3) resolving the level of ordinary skill in the pertinent art; and (4) evaluating evidence of secondary considerations. As the name implies, the secondary considerations are taken into account only after the first three are fully examined and include factors such as commercial success, long felt but unsolved needs, and failure of others. Later cases illustrate the application of these inquiries.

In United States v. Adams, the Supreme Court recognized that when a patent claims a structure already known in the prior art that is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a predictable result. If a person of ordinary skill in the art can implement a predictable variation and would see the
benefit of doing so, Section 103 likely bars its patentability. In *Sakraida v. AG Pro, Inc.*, the Supreme Court concluded that when a patent simply arranges old elements with each performing the same function it had been known to perform and yields no more than one would expect from such an arrangement, the combination is obvious. The clear application to tax-related patents and TSPs is that computerization of transactions that yield tax savings hardly produces an unexpected result.

1. Scope and Content of the Prior Art

When analyzing the scope and content of the prior art, the following tenets of patent law must be adhered to: (1) the claimed invention must be considered as a whole; (2) the references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination; (3) the references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and (4) reasonable expectation of success is the standard with which obviousness is determined.

2. Differences Between the Prior Art and the Claims in Issue

The second factual inquiry concerns a determination of the differences between the prior art and the claims in issue. The basis of this examination is, “whether the subject matter sought to be patented, as a whole, would have been obvious at the time the invention was made to a person having ordinary skill in the art.” It is difficult but necessary that the decision maker forget what he or she has been taught . . . about the claimed invention and cast the mind back to the time the invention was made (often as here many years), to occupy the mind of one skilled in the art who is presented only with the references, and who is normally guided by the then-accepted wisdom in the art. The inquiry is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. The claim is made by tax advisors that if the only difference between prior art and the claims in issue is computerization, that difference fails the nonobviousness test.

3. A Person of Ordinary Skill in the Art

This theoretical person of ordinary skill is described by the CAFC as “a hypothetical person who is presumed to be aware of all the pertinent prior art.” While this all-knowing person may be a bit difficult to find, the Court also notes that the person of ordinary skill “thinks along the line of conventional wisdom in the art and is not one who undertakes to innovate, whether by patient, and often systematic research or by extraordinary insights.” In tax, such a person or ordinary skill would presumably be a CPA or lawyer with an average education, who is knowledgeable of the conventional wisdom in income tax planning, estate planning, sales and use tax planning or other tax area and the of planning strategies to reduce or defer taxes or change the nature of the tax paid.

4. The Level of Ordinary Skill in the Pertinent Art

The third factual inquiry analyzes the level of ordinary skill in the pertinent art. “Factors that may be considered in determining level of ordinary skill in the art include (1) the educational level of the inventor; (2) type of problems encountered in the art; (3) prior art solutions to those problems; (4) rapidity with which innovations are made; (5) sophistication of the technology; and (6) educational level of active workers in the field.”

As the legal analysis indicates, analyzing a patent application for nonobviousness is not a simple, straightforward process. There are a number of critical determinations that need to be made, none of which are mechanistic in their application. However, it is this very lack of mechanistic rules that require patent examiners to have a thorough understanding of tax practice and the use of sophisticated tax planning strategies by persons of “ordinary skill.” The flexibility inherent in the analysis, the ability to combine references and to use references that post-date the patent application to demonstrate that a patent’s claims would have been obvious to a person skilled in the art would appear to require a level of tax knowledge that most patent examiners simply do not possess.

C. Reading the Tea Leaves: Current Trends in Patentable Subject Matter and Nonobviousness Impacting Tax-Related Patents

Having examined the background law regarding patentable subject matter and nonobviousness in relation to tax-related patents and TSPs, it is important to look at how the Supreme Court, the CAFC, and Board of Patent Appeals and Interferences (BPAI) have handled the issues in current cases. In performing this analysis it is impossible not to make some comments about the validity of business method patents generally. Proponents of invalidating TSPs frequently cite key cases that have implications as to the validity of business method patents. This is because TSPs are a subset of business method
patents, both descendants of the *State Street* decision. Thus, the vulnerabilities of business method patents are vulnerabilities of TSPs. As the following cases indicate, there is some recent evidence that these decision-making bodies are retrenching the scope of patentable subject matter and are expanding invalidation of patents for patentability and obviousness.\(^9\)

1. Metabolite

The current impetus for examining the aforementioned issues came in 2006 from the Supreme Court when it granted certiorari on the issue of subject matter patentability in *Metabolite v. LabCorp*.\(^9\) The patent world prepared for a potentially dramatic alteration of the patent landscape. Unsettling to many; however, the court dismissed the case without a decision, stating that certiorari was improvidently granted. But the three justice dissent, authored by Breyer, notes:

Neither does the Federal Circuit’s decision in *State Street* help respondents. That case does say that a process is patentable if it produces a useful, concrete, and tangible result. But this court has never made such a statement and, if taken literally, the statement would cover instances where this Court has held to the contrary. The Court, for example, has invalidated a claim to the use of electromagnetic current for transmitting messages over long distances even though it produces a result that seems useful, concrete, and tangible. Similarly, the Court has invalidated a patent setting forth a system for triggering alarm limits in connection with catalytic conversion despite a similar utility, concreteness, and tangibility. And the Court has invalidated a patent setting forth a process that transforms, for computer-programming purposes, decimal figures into binary figures—even though the result would seem useful, concrete, and at least arguably (within the computer’s wiring system) tangible.\(^9\)

Such strong language is arguably indicative of the Supreme Court’s desire to rule on the issues of patentability and/or nonobviousness as it relates to business method patents. At a minimum, the triumvirate’s language constitutes a message being sent to the CAFC regarding the proper scope of these patents.

2. Nuijten

The *Nuijten*\(^9\) case was decided by the CAFC in September of 2007, and it dealt with the analysis of proper patentable subject matter. In *Nuijten*, the applicant sought a patent on the technique of improving existing watermark technology by modifying watermarked signals in a way that partially compensated for the distortion introduced by the watermark.\(^9\) The CAFC affirmed the decision of the patent examiner to disallow the applicant’s claims seeking a patent on the encoded signals because it found that encoded signals did not qualify as patentable subject matter.\(^9\) The court concluded that a transitory, propagating signal does not fall within one of the four statutory categories: process, machine, manufacture, or composition.\(^9\)

Regarding the most pertinent of these areas for business method patents, the court noted that, “A process is a mode of treatment of certain materials to produce a given result. It is an act, or series of acts, performed upon the subject matter to be transformed and reduced to a different state or thing.”\(^9\)

The importance of this ruling for tax-related patents and TSPs lies in the fact that the CAFC is looking more closely at the patentability requirements found in § 101, potentially limiting the scope of business method patents. *State Street*’s holding that: “The question of whether a claim encompasses statutory subject matter must be decided on the basis of the particular technology or machine.”\(^9\) Further cementing this view is the fact that the CAFC denied an en banc hearing of the case earlier this year.\(^9\) Accordingly, Nuijten has asked the Supreme Court for certiorari regarding the issue:

- Whether the U.S. Court of Appeals for the Federal Circuit erred by adding new requirements to 35 U.S.C. 101 that patentable manufactures must be tangible articles that are nontransitory and perceivable without special equipment, thereby denying patent protection to all signals and other important advances in technology that do not meet these new requirements, no matter how innovative, unique, or useful they are.\(^9\)

Of course, in its petition for certiorari, the plaintiff in *Nuijten* seems to inflate what is at stake. It is very conceivable that the Supreme Court could uphold the CAFC’s decision in *Nuijten* and not overrule its decision in *State Street*.

3. Bilski

Originally decided by the Board of Patent Appeals & Interferences (BPAI) in 2006, the BPAI rejected a claim for a method practiced by a commodity provider for managing the consumption of risks associated with a commodity sold at a fixed price, stating that it is not directly related to a statutory process under § 101.\(^10\) The BPAI states that, “‘Business methods’ have long been considered statutory subject matter when performed by a machine,”\(^10\) yet it notes that this appeal involves a “non-machine-implemented” method because the claims are broad enough to perform the steps without any machine or apparatus.\(^10\) The Board goes on to lament:

Many questions remain about statutory subject matter and what the tests are for determining statutory subject matter...Perhaps encouraged by certain general language in [*State Street* and *AT&T*], however, a wide range of other general claims to ‘processes’ come before the Office. Many...are not limited to implementation via any particular technology or machine. Are such ‘processes’ patentable because they are ‘useful’? Other ‘process
claims’ involve what seem to be insubstantial or incidental manipulations of physical subject matter—e.g., the mere recording of a datum: are these patentable processes?"\textsuperscript{103}

These two queries vexing the BPAI were obviously on the mind of the CAFC as they decided to hear the case en banc on May 8 of this year and received over 20 amici briefs regarding the aforementioned issues.\textsuperscript{104} Among the questions the Court plans to address are:

3. Whether the claimed subject matter is not patent-eligible because it constitutes an abstract idea or mental process; when does a claim that contains both mental and physical steps create patent eligible subject matter?

4. Whether a method or process must result in physical transformation of an article or be tied to a machine to be patent eligible subject matter under § 101?

5. Whether it is appropriate to reconsider State Street Bank & Trust Co. v. Signature Financial Group, Inc., 149 F.3d 1368 (Fed. Cir. 1998) and AT&T Corp. v. Excel Communications, Inc., 172 F.3d 1352 (Fed. Cir. 1999), in this case and, if so, whether those cases should be overruled in any respect?\textsuperscript{105}

Thus, it is evident that at all levels from the Supreme Court (Metabolite), to the CAFC (Nuijten), to the BPAI (Bilski), the decision-making bodies are examining the issues of patentable subject matter and nonobviousness in relation to business method patents. As evidenced by the numerous amici briefs filed in the case, many have focused on Bilski as an agent of change for business method patents in general. But there is a better vehicle for modifying patentable subject matter and/or nonobviousness for tax-related patents and TSPs: the Comiskey case.

D. Using Comiskey as a Vehicle to Modify Subject Matter Patentability and Nonobviousness Analysis of Tax-Related Patents

The subject matter at the heart of the Comiskey\textsuperscript{106} case is indicative of the post-State Street expansion in the area of business method patents. In the first place, an “invention” that is a process for resolving disputes is hardly new. The main substance of Comiskey is a set of mental steps that have been used in innumerable contexts to arbitrate and obtain a decision that is usually not appealable. It is an ideal vessel for considering the scope of patentability because it contains many of the most egregiously objectionable features of business method patents and TSPs. The Comiskey case presents a different kind of business method patent that could be viewed as an attempt to patent a portion of the practice of law. The inventor, Stephen Comiskey, is a general practice attorney in Washington D.C. and filed his patent application in 1999, one year after the State Street Bank decision.

1. Patentable Subject Matter

Decided by the CAFC in 2007, Comiskey dealt with both the issues of patentable subject matter and nonobviousness. The patentable subject matter issue played a prominent role in the CAFC’s ruling in the Comiskey case. In terms of the current approach the CAFC is taking with business method patents, it is important to note that the Court raised the issue of subject matter patentability \textit{sua sponte} during oral arguments.\textsuperscript{107} The court notes, “Only if the requirements of § 101 are satisfied is the inventor allowed to pass through to the other requirements for patentability, such as novelty under § 102 and, of pertinence to this case, non-obviousness under § 103.”\textsuperscript{108}

The court notes that process claims reciting abstract ideas are patentable only if it involves one of the other categories of statutory subject matter, i.e. machine, manufacture, or composition of matter.\textsuperscript{109} Furthermore, in regards to process patents, those reciting algorithms or abstract ideas may qualify for patent protection under § 101 if it “1) was tied to a particular apparatus or 2) operated to change materials to a different state or thing.”\textsuperscript{110} Thus, “mental processes—or processes of human thinking—standing alone are not patentable even if they have practical application.”\textsuperscript{111} As the CAFC in Comiskey goes on to note:

It is thus clear that the present statute does not allow patents to be issued on particular business systems—such as a particular type of arbitration—that depend entirely on the use of mental processes. In other words, the patent statute does not allow patents on particular systems that depend for their operation on human intelligence alone, a field of endeavor that both the framers and Congress intended to be beyond the reach of patentable subject matter. Thus, it is established that the application of human intelligence to the solution of practical problems is not in and of itself patentable.\textsuperscript{112}

The court then examined claims 1 and 32 which “do not require a machine”, and found the claims unpatentable because they, “seek to patent the use of human intelligence in and of itself.”\textsuperscript{113} Applying this analysis to the TSPs we examined that do not require computer-implementation, would appear to arguably quantify them as unpatentable subject matter.

2. Nonobviousness

The court also examined in detail the issue of nonobviousness. Regarding the patentability of some of the patent’s claims, the court notes that despite a reference to “an automated system and method for requiring resolution through binding arbitration” and “a mandatory arbitration system through a computer on a network,” the parties agree that the claims in this patent do not require use of a mechanical device such as a computer.\textsuperscript{114} In claim 17 the invention recites a “system for
mandatory arbitration resolution regarding one or more unilateral documents.”\textsuperscript{115} Claim 46 refers to contractual documents rather than unilateral documents, but otherwise is nearly identical to claim 17.\textsuperscript{116} Both claims refer to the following limitations: (1) a registration module to register the documents; (2) an arbitration database to store and provide arbitration language that requires challenges be presented to the system; (3) “an arbitration resolution module” that enables the complainant to submit a request for arbitration resolution, and (4) a means for selecting an arbitrator from an arbitrator database and providing support to the arbitrator...where the arbitrator determines an award or a decision that is final and binding.\textsuperscript{117} The court then goes on to analyze nonobviousness in terms of adding a computer to a series of mental steps. Reviewing independent claims 17 and 46 the court notes that they “could require the use of a computer.”\textsuperscript{118} The court then proceeds to note, “When an unpatentable mental process is combined with a machine, the combination may produce patentable subject matter.”\textsuperscript{119} Thus, the addition of a computer may be sufficient to pass the patentable subject matter hurdle.

But, importantly, the CAFC states: “the routine addition of modern electronics to an otherwise unpatentable invention typically creates a prima facie case of obviousness.”\textsuperscript{120} The court notes that the machines utilized in Comiskey’s patent were, “general purpose computers or modern communication devices.”\textsuperscript{121} The court’s “general purpose computer” language used by the CAFC in Comiskey is arguably a reference to the “particular machines” language found in Diamond v. Diehr. Thus, the obviousness analysis may now require input from the patentable subject matter stage.\textsuperscript{122} This new rule of thumb for nonobviousness analysis has been coined by one author as “the presumptive obviousness of electronification.”\textsuperscript{123} The court appears to be holding that during nonobviousness analysis, any portion of an invention that constitutes nonstatutory subject matter will be considered de facto obvious.\textsuperscript{124} Such a position, if fully supported by the CAFC, would have a significant impact on TSPs in particular and tax-related patents in general.

To bolster this position, the court cites three prior decisions, two of which originated from the Supreme Court. First, the court notes that, “Accommodating a prior art…device…to modern electronics would have been reasonably obvious to one of ordinary skill in [the art]” because “[a]pplying modern electronics to older…devices has been commonplace in recent years.”\textsuperscript{125} The court goes on to note that the “addition of a well-known electronic sensor to a well-known mechanical adjustable pedal would have been obvious.”\textsuperscript{126} Finally, they state that, “it is obvious to combine the modern computer program described in the patent ‘with existing machine systems in the banking industry.’”\textsuperscript{127} After remarking that, “it may be that these claims are patentable as obvious under § 103,” the court remarks the issue to the PTO to determine, “whether the addition of general purpose computers or modern communication devices to Comiskey’s otherwise unpatentable mental process would have been non-obvious to a person of ordinary skill in the art.”\textsuperscript{128} Clearly, the scope of many tax-related patents and TSPs could be diminished if this language were enforced.

As discussed earlier, secondary considerations such as commercial success, long felt but unsolved needs, and failure of others, are taken into account in the nonobviousness analysis only after the first three factors are fully examined.\textsuperscript{129} Comiskey argued that long-felt needs demonstrated that the claims were nonobvious.\textsuperscript{130} But the CAFC made a point to state, “There is no pertinent evidence of secondary considerations because the only evidence offered is of long-felt need for the unpatentable mental process itself, not long-felt need for the combination of the mental process and a modern communication device or computer.”\textsuperscript{131} The implicit holdings the court appears to be making is that evidence of secondary considerations do not apply to portions of an invention that are not considered to be patentable subject matter.\textsuperscript{132} Once again, such an interpretation would further erode the scope of tax-related patents and TSPs.

V. BEYOND TROLLING: PATENTS AS BLACK HOLES IN THE PUBLIC DOMAIN

A. General Considerations

As industry experts note, “There’s a perception in the Supreme Court, Congress and IT industry particularly—although in other industries as well—that the pendulum has swung too far in the direction of [protecting] patents in case law, and we are seeing a reaction to that.”\textsuperscript{133} A glaring example of the business method patent expansion is a patent application being pursued by IBM. Through two of its employees, the IBM is applying for a patent on the process of aligning business practices (BPA) when two firms merge.\textsuperscript{134} According to IBM, BPA has four primary steps that enable business to align effectively which begin with the assumption that both merging companies make use of business practices that are efficient and best.\textsuperscript{135} These four primary steps include: (1) Reconciling the right versus right business practice alternatives (2) Apply business practices that were established in Step (1) to realistic problem situations to develop narratives… (3) Identify gaps between the way you want things done and the current state, and (4) Used the defined expectations to evaluate progress toward alignment.\textsuperscript{136} According to one of the inventors, “We hope this new methodology will convince clients that there is a tangible, objective way to approach culture change efforts.”\textsuperscript{137} As with TSPs, it is difficult not to label the aforementioned invention as a series of mental steps. In fact, the IBM patent appears to be very similar to the invention in Bilski\textsuperscript{138} that deals with the mental steps associated with hedging.

Congress could intervene and change the Patent Act, as took place in 1996 when it passed the Medical Procedures Amendment to the Patent Act.\textsuperscript{139} Both Houses of Congress are considering bills that would facilitate patent challenges through a new administrative process, but at the time of this writing neither bill addresses the scope of patentability or nonobviousness.\textsuperscript{140} Regardless of the mechanism used, “the Supreme Court, Congress, and the patent office are moving in a
direction that is unfavorable toward patentees. That is a big change.” For the past 25 years, patent law had been moving in
the direction of expanding the rights of inventors, primarily through decisions of the CAFC. The common law decisions of
the CAFC and the Supreme Court that have expanded rights of patentees have appeared in biotech, software and business
methods, including TSPs.

The courts have apparently begun to realize that patents have been granted too liberally and their scope too profligate, as
evidenced by the cases discussed earlier. Not only are the courts rendering decisions that are contrary to the inventors and
patentees, but the PTO is also tightening the reins on issuing patents. The approval rates of patent applications have dropped
from 72 percent in 2000 to 51 percent in 2007. In addition, competitors asking for reexamination of existing patents are
increasingly successful. Bolstered by the Supreme Court decision in KSR v. Teleflex, the PTO is aggressively rejecting
combinations of known elements that do not produce unexpected results on the grounds of obviousness. There are many in
the patent community who believe that the Supreme Court is waiting for the right case to establish a significant precedent
in the area of business method patents and TSPs in particular. The Supreme Court may proceed cautiously and restrict
patentability via myriad decisions, or it may act decisively. We posit two methods the courts may use Comiskey to rein in
tax-related patents and TSPs. Mirroring our earlier discussion, the first of these approaches the issue from a nonobviousness
perspective and the second deals with patentable subject matter.

B. Specific Recommendations

1. The Nonobvious Solution: Computers plus Mental Steps Are Obvious

The aforementioned discussion strongly indicates that during the past 25 years the pendulum in patent law has swung too
far in favor of patentees. Unless bright lines are articulated by the Supreme Court or Congress, there will be no end to
astounding case by case litigation of computerized mental steps that are claimed in patents approved by PTO examiners with
training primarily in engineering or software. As discussed earlier, the CAFC remanded the Comiskey case to the PTO to
determine whether an otherwise unpatentable mental process to which was added a communication device such as a
computer, would have been obvious to a person of ordinary skill in the art. The courts could take this language and apply
it toward the tax-related patents and TSPs. This holding could be utilized to find many tax-related patents to be a series of
unpatentable mental steps, to which the addition of a computer is obvious to a person of ordinary skill in the art.

2. The “Learned Profession Defense”: Portions of a Profession Should Not Be Patentable Subject Matter

Certainly it would be a landmark precedent if the PTO were to conclude generally that the addition of general purpose
computers or modern communication devices to an otherwise unpatentable mental process would be obvious to a person with
ordinary skill in the art. On the other hand, it is possible that the courts believes now is the time to deal more directly with
the intrusion of business method patents into the practice of various professions. Some business method patents elicit an
intuitive reaction among the groups most threatened by the accretion of grounds for patentability that has occurred during the
past 25 years. In particular, some business method inventors are attempting to patent bits and chunks of various professions.
In cases involving the medical profession, tax advising, or the practice of law, inventors submitted their applications to the
scrutiny of examiners at the PTO whose prior training was often in engineering or the hard sciences and not in the three
professions listed above. Certainly in the case of TSPs, the predominant reaction of the tax advising profession was that
these inventors were seeking to interfere with transactions that were standard advice to clients. Much of what was claimed in
these patents was not new, except to some PTO examiners who were arguably ignorant of various nuances found in the IRC.

A “profession” is defined as a “vocation or occupation requiring advanced education and training, involving intellectual
skills, as medicine, law, theology, engineering, teaching, etc.” This definition is not limited to traditional licensed
professions such as law and medicine, but instead includes any vocation or occupation that requires advanced education and
training, including, presumably, tax advising, hedging, and mergers and acquisition specialists (professionals). If tax
strategies and arbitration techniques can be patented by adding computers to intellectual skills, there is effectively no limit to
the scope of patents. It is possible to imagine patented, computerized theology in which a patentee claims the right to license
beliefs about God, made available through DVDs, encrypted to prevent unsanctioned duplications with paying royalties.

It is time to implement a “learned profession” defense to the validity of computer-implemented patents that claim
portions of any vocation or occupation that falls within this definition of a profession. Being in a profession can be
considered as having a “license to experiment”—and the post-State Street trend in business method patents runs counter to
this notion. There should be a clear delineation between development of intellectual skills known by those in a profession,
and inventions of a new process, machine, manufacture, or composition of matter. Computerization of portions of a
profession is not an invention, it is the rightful development of intellectual skills or mental steps. As such, they should not
qualify as patentable subject matter.

VI. CONCLUSION
While there are over 60 tax-related patents, in over one-third of them tax issues do not appear to be integral to the patent, but are of secondary importance. Of the remaining tax-related patents, there are several where computer-implementation is tangential to the claims and appears only in the “best mode” or “preferred embodiment” portion of the patent. TSPs and other tax-related patents that are particularly troublesome are those that appear to make claims to the underlying tax strategy and accordingly might foreclose others from effecting certain transactions that qualify for favorable tax treatment. Most of these would appear to be confined to the patents that we identify as strategy-oriented patents utilizing life insurance products and TSPs. This is particularly true of TSPs that appear to make claims to the underlying transaction or strategy itself, rather than focusing on the computer as an integral part of the business method. In particular, the SOGRAT and deedshare patents we classify as TSPs are not limited to computer-implemented transactions and appear to claim the underlying transaction that qualifies for favorable tax treatment, thus making some taxpayers who are complying with tax law vulnerable to an infringement suit. But it has been argued that the validity of these non-computer-implemented TSPs are susceptible to challenge under the current legal regime.148

The majority of the tax-related patents relies upon computer-implementation and may not foreclose others from qualifying for the same tax favorable treatment using another method. However, under current law, it is not clear whether a tax-related patent based on a computer-implemented business process also grants rights to the underlying strategy separate from the computer application.149 In addition, these patents may still prove problematic under the doctrine of equivalents. Accordingly, the fifteen patents we classify as dealing with tax efficient investment portfolio management and the three tax-computational patents could subject tax practitioners and others to lawsuits if spreadsheets and other computerized applications used by tax practitioners perform substantially the same function in substantially the same way to obtain the same result. Of particular concern in this respect is Patent No. 6,058,376 that deals with the conversion of a traditional Individual Retirement Account (IRA) to a Roth IRA, a common transaction impacting tens of thousands of taxpayers and their advisers. It is for these computer-implemented tax-related patents that the two aforementioned policy recommendations have been posited.

Recent decisions in key business method patent cases seem to signal a reassessment of these patents at all levels from the Patent and Trademark Office to the Supreme Court. As the prior discussion indicates, the courts appear to be focusing on two methods for limiting the issuance of business method patents, and, necessarily, tax-related patents and TSPs: 1) limiting the subject matter patentability pursuant to §101; and 2) construing the language of §103 in order to clarify what qualifies as being nonobvious. Tax-related patents and TSPs are vulnerable to challenges based on these two fundamental patent principles and the policy recommendations based thereupon. Not every tax-related patent is objectionable on these grounds, but many are. A number of recent cases before the Supreme Court, CAFC and the PTO provide the foundation for a substantial reassessment of the scope of what can be patented. It seems clear that complying with the IRC should not be an occasion for a patent infringement suit. TSPs, and many tax-related patents, do not add to the public domain. Business method patents that computerize mental steps that are part of well-recognized professions suffer from the same infirmaries. Lawyers and tax advisors are not the inventors the framers had in mind Article 1 Section of the Constitution when they delegated powers to the federal government to protect inventors. Consequently, the courts should adopt one or both of the strategies discussed herein to reduce the scope of tax-related patents and TSPs.

Footnotes

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*** Professor of Accounting, North Carolina State University, Raleigh, NC
4 See U.S. Patent No. 5,907,828 (filed Dec. 26, 1995) which reacts to adverse changes in tax laws by adjusting the form of the insurance policy to a term policy with an increased value and terminating the policy.
5 See U.S. Patent No. 6,567,790 (filed Dec. 1, 1999) commonly referred to as the “SOGRA” patent, combines non-qualified stock options (SO) with a grantor retained annuity trust (GRAT).
6 The plaintiff in the SOGRAT case, discussed infra, sued a tax payer for following the advice of a tax advisor, see Wealth Transfer Group L.L.C. v. John W. Rowe, Docket No. 3:06-cv-00024-AWT (D-Conn.) (March 9, 2007). Although the case was settled without adjudication of the validity of Patent No. 6,567,790, the cause of action was that the defendant/taxpayer infringed the plaintiff’s patent by complying with a portion of the tax code, thus, in effect reducing the public domain for tax payers who fear patent infringement lawsuits.
District Court approved a confidential settlement between the parties.

Determination investments for a single entity.”

dealing with "a computerized arrangement for planning the disposition or use of funds or securities, or extension of credit,”

6,342,272 dealing with multi

6,625,582 and 6,415,270) i

6,041,304) that do not mention tax. In our review, the authors identified three other patents (Patent Nos. 6,772,128, 6,903,873, and 6,470,321) filed in Class 705 for Busi


4 Id., at 2929.

4 Id.

499 F.3d 1365 (Fed. Cir. 2006).

4 Id. at 1380.

14 AICPA, The Impact of In Re Comiskey on the AICPA’s Proposed Legislative Solutions for the Tax Strategy Patents (undated manuscript on file with author).


18 U.S. Const, art. 1 § 8, which reads in pertinent part, “To promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries.”


28 Id. at 1370.

29 In Re Alappat, 33 F.3d 1526, at 1544 (Fed. Cir. 1994).

30 State Street, 149 F.3d at 1373

31 Id. at 1371.

32 Id. at 1368.


34 Business method patent filings have been rapidly proliferating. In every year after 2000, there have been over 7,500 patents filed in Class 705 for Business Method Patents. See Patenting Tax Advice: Hearing Before the Subcomm. On Select Revenue Measures of the H. Comm. on Ways and Means, 109th Cong. 77 (2006).

35 Joint Committee on Taxation, Background and Issues Relating to the Patenting of Tax Advice (JCX-31-06), July 12, 2006.


39 A search for “tax” within the patent documents finds four patents (U.S. Patent Nos. 7,197,484, 7,016,871, 6,342,272 and 6,041,304) that do not mention tax. In our review, the authors identified three other patents (Patent Nos. 6,772,128, 6,625,582 and 6,415,270) in which taxes were not fundamentally related to the patent. At least one of these (Patent Nos. 6,342,272 dealing with multi-layer corrosion resistant coatings) appears to be misclassified by the USPTO.

40 Although the majority of tax strategy patents are found in subclass 36T, tax-related patents are also found in subclass 35 dealing with “a computerized arrangement for planning the disposition or use of funds or securities, or extension of credit,” or subclass 36R, dealing with “a computerized arrangement for planning the selection or evaluation of securities or other investments for a single entity.” See USPTO, Data Processing: Financial, Business Practice, Management, or Cost/Price Determination (2008). http://www.uspto.gov/go/classification/uspc705/def705.htm#C7055540000.


42 Joint Committee on Taxation, Background and Issues Relating to the Patenting of Tax Advice (JCX-31-06), July 12, 2006.

43 For interested readers, we have compiled summaries of mainly US Patent Classification 705/36T patents.


Wash sale rules as provided in IRC Section 1091(a) and Reg. Section 1.1091-1 prevent a taxpayer who realizes a loss on the sale or other disposition of stock or securities from taking a deduction for the loss if the taxpayer has acquired or will acquire substantially identical stock or securities within a time period beginning 30 days before the date of the sale or disposition and ending 30 days after that date.


U.S. Patent No. 6,611,808 (filed July 2, 1999).


A third patent, U.S. Patent No. 5,802,500 also deals with FAS 106 but appears to deal with taxes only on the periphery and is categorized elsewhere.


Jasper L. Cummings, Jr., Tax Strategy Patents, 115 TAX NOTES 263 (April 16, 2007). Cummings notes that there are serious questions concerning how the IRS would view the share bond described in the patent and that the promised benefits of the strategy are far from certain.


Section 1031 of the IRC provides for the tax deferral of gains on the exchange of property held for productive use or investment.

Wealth Transfer Group L.L.C. v. John W. Rowe, Docket No. 3:06-cv-00024-AWT (D-Conn). Rowe took nonqualified stock options and placed them in grantor retained annuity trusts to shield these assets from gift taxes.


Diehr, 450 U.S. at 184 (citations and internal quotation omitted).

Id.


Id. at 67.


Benson 409 U.S. at 67.

DONALD S. CHISUM, PRINCIPLES OF PATENT LAW at 532 (3rd ed. 2004).


Graham, 383 U.S. at 17.

Id. at 17-18.


Hodosh v. Block Drug Co., Inc., 786 F.2d 1136, note 5 at 1143 (Fed. Cir. 1986).


Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc., 807 F.2d 955 at 962 (Fed. Cir. 1986).


See In Re Stephen W. Comiskey, 499 F.3d 1365 (Fed. Cir. 2007); See also KSR International Co v. Teleflex Inc., 127 S. Ct. 1727 (2007), in which the Supreme Court emphasized, “the need for caution in granting a patent based on the combination of elements found in the prior art.” The Court also reiterated that “A patent for a combination which only united old elements with no change in their respective functions obviously withdraws what is already known into the field of its monopoly and diminishes the resources available to skillful men.” Id.; See also Examination Guidelines for Determining Obviousness

91 Id. at 136-137 (citations and internal quotation omitted).
92 In Re Petrus A.C.M. Nuijten, 500 F.3d. 1346 (Fed. Cir. 2007).
93 Id.
94 Id.
95 Id. at 1357.
96 Id. at 1355, quoting Cochrane v. Deener, 94 U.S. 780 at (1876).
100 Ex Parte Bernard L. Bilski, Appeal No. 2002-2257 at 5 (March 8, 2006)
101 Id. at 7.
102 Id. at 6.
103 Id. at 8.
106 See In Re Stephen W. Comiskey, 499 F.3d 1365 (Fed. Cir. 2007).
107 Id. at 1372.
108 Id. at 1371.
109 Id. at 1376.
111 Comiskey 499 F.3d at 1377.
112 Id. at 1378-1379.
113 Id. at 1379.
114 Id. at 1369.
115 Id.
116 Id.
117 Id.
118 Id. at 1379.
119 Id.
120 Id. at 1380.
121 Id.
124 Id.
125 Leapfrog Enters., Inc. v. Fisher-Price, Inc., 485 F.3d 1157 at 1161 (Fed. Cir. 2007).
128 In Re Stephen W. Comiskey, 499 F.3d 1365 at 1381 (Fed. Cir. 2007).
130 Comiskey, 499 F.3d at 1380.
131 Id.
135 Richard Silberman, Right versus right, (2008)
136 Id.


See KSR International Co v. Teleflex Inc., 127 S. Ct. 1727 at 1740 (2007), “A patent for a combination which only unites old elements with no change in their respective functions obviously withdraws what is already known into the field of its monopoly and diminishes the resources available to skillful men. This is a principal reason for declining to allow patents for what is obvious. The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.”

Some would go further and contend that recent legislation and court decisions have favored IP owners generally and that retrenchment is desirable. Certainly, the Digital Millennium Copyright Act has been viewed by many as being too one-sided toward the interests of record, movie, and video game companies. There is other recent legislation and precedents in trademark law that reinforce the rights of trademark owners, who are generally companies.

See In Re Stephen W. Comiskey, 499 F.3d 1365 (Fed. Cir. 2007).

“profession” WEBSTER’S NEW WORLD DICTIONARY, Second College Edition (1980).


The Joint Committee on Taxation notes that “it is not always clear whether a tax or other business method patent based on the computerization of a particular planning technique might also grant rights to the underlying strategy separate from the computer application,” Joint Committee on Taxation, Background and Issues Relating to the Patenting of Tax Advice (JCX-31-06), July 12, 2006.