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China Intellectual Property Quarterly Newsletter
中国知识产权季度通讯

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In this Issue

目录

Note from the Editors

These are trying times for many industries. The current global financial crisis has demonstrated the inter-dependence of the world's major economic players. In particular, the ability of China and United States to weather the current recession will have a significant impact on the entire world economy. As a global law firm with a major presence in China, Morrison & Foerster LLP is well positioned to provide information and counsel to Chinese companies operating internationally. We believe now it is more important than ever for Chinese companies to develop and protect their intellectual property as they develop technologies and compete at home and abroad.

Therefore, with this inaugural issue, we introduce our *China Intellectual Property Quarterly Newsletter*. With this and future editions, we hope to share with you trends and important court decisions that impact on companies like yours that have valuable IP. We hope that you will find it helpful information as you guide your own company's legal strategies.

We then discuss the impact of *Bilski* on software patents, including some new strategies in prosecuting software patents. We also discuss the impact of Bilski on biotech / life science patents, particularly on patenting diagnostic methods.

We are also happy to report two recent victories secured by Morrison & Foerster LLP before the ITC, and that Morrison & Foerster has strengthened its China litigation and IP practice by relocating two seasoned IP attorneys, Mike Vella (mvella@mofo.com) and Harris Gao (hgao@mofo.com), to the Shanghai Office.

We hope you find Morrison & Foerster's China IP Quarterly Newsletter informative, and we will continue to monitor the latest developments to keep you updated.

Best wishes for a wonderful Lunar New Year,

Morrison & Foerster LLP
China Litigation and Intellectual Property Departments

编者按

2008年全球金融危机表明，要想持续性地发展经济，中国必须改革其现行的经济结构。尤其值得一提的是，中国开始丧失其传统性的竞争优势，仅靠低成本的制造和出口业已不再可行。我们认为，对于中国公司而言，当前没有比开发技术上的竞争优势更为重要的了。中国公司必须集中资源开发对其未来发展至关重要的关键技术。

美富律师事务所中国知识产权季度通讯旨在帮助您了解知识产权领域的最新发展。我们希望该通讯能为您开发技术竞争优势助一臂之力。

在本期通讯中，我们首先将讨论美国联邦巡回上诉法院在*Bilski*一案中所做的重要判决。该判决对方法的专利适格性新设定了一项更为严格的标准:"机器或转变"。

随后我们讨论Bilski一案对软件专利的影响，包括软件专利申请过程中的一些新策略。我们还讨论了Bilski一案对生物技术/生命科学专利的影响，尤其是对诊断方法专利申请的影响。

同时，我们很高兴地就以下事项进行汇报：美富律师事务所最近在美国国际贸易委员会取得两次胜诉；另外，为加强中国诉讼及知识产权业务，美富向其上海办事处派遣了两名经验丰富的知识产权律师，即魏迈克（mvella@mofo.com）和高焕勇（hgao@mofo.com）。

我们希望美富律师事务所的中国知识产权季度通讯能为您提供有用信息。 我们将继续追踪知识产权领域的最新发展，为您提供最新资讯。

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In re Bilski: The Federal Circuit Defines New Rules for Patenting Business Methods

By Alex Chartove and Greg Reilly

INTRODUCTION

On Oct. 29, 2008, the Federal Circuit issued its long-awaited decision on the patent-eligibility of business methods under Section 101 of the Patent Act. In *In re Bilski*, 545 F.3d 943 (Fed. Cir. 2008), the *en banc* court held that any process, including a business method, is eligible for patent protection only if it is tied to a particular machine or apparatus or transforms a particular article into a different state or thing. In doing so, the court modified its decision in *State Street Bank & Trust Co. v. Signature Financial Group*, 149 F.3d 1368 (Fed. Cir. 1998), which suggested that any process that produced a useful, concrete, and tangible result was potentially patent-eligible. At the same time, the Federal Circuit refused to impose *per se* exclusions to patent-eligibility for business methods, software, non-technological processes, or other subject matter categories.

The court's *en banc* opinion in *Bilski* will have a significant impact on the ability to obtain patents, as well as to defend against a charge of patent infringement, in a wide variety of fields, from financial transactions to computer software to medical diagnostics. At the same time, the Federal Circuit provided relatively little guidance on how the newly defined "machine-or-transformation test" should be applied in practice, and explicitly declined to decide the important question of the patent-eligibility of computer-implemented processes. As a result, the impact of *Bilski* will depend in large measure on how later decisions apply this new "machine-or-transformation" test and, of course, whether the Supreme Court grants *certiorari*.

BACKGROUND

In recent years, the USPTO and the Federal Circuit have struggled with the proper standard for patent-eligibility of so-called "business method" inventions. Section 101 of the Patent Statute, 35 U.S.C. § 101, classifies "any new and useful process, machine, manufacture, or composition of matter" as patent-eligible subject matter. Despite this broad language, courts for much of the 20th century applied a "business method exception" to exclude any process applied in the realm of "business" from the reaches of Section 101.

The rise of the "Information Age," and the vast computer-implemented processes that it generated, forced courts to reconsider this *per se* exclusion to Section 101. In its 1998 *State Street* decision, the Federal Circuit laid the "ill-conceived [business method] exception to rest," holding business method inventions subject to the same requirements of patentability as any other method inventions. 149 F.3d at 1375. *State Street*, along with the subsequent decision in *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352 (Fed. Cir. 1999), suggested that a process, including a business method, satisfied Section 101 as long as it produced a "useful, concrete, and tangible result." *State Street,* 149 F.3d at 1375.

The *State Street* decision resulted in a flood of patents and patent applications in fields long thought beyond the reach of patent protection, creating a backlash against *State Street*'s broad standard for patent-eligibility. Last fall, the Federal Circuit appeared to constrain *State Street*, holding in *In re Comiskey*, 499 F.3d 1365 (Fed. Cir. 2007), that "the statute does not allow patents to be issued on particular business systems," such as the system of arbitration claimed by Comiskey, "that depend entirely on the use

*Bilski*案：联邦巡回上诉法院确定了新的商业方法专利授予规则

作者：Alex Chartove和Greg Reilly

前言

2008年10月29日，联邦巡回上诉法院发布了令人期待已久的Bilski一案的判决书。该案就“商业方法”在《专利法》第101条下的专利适格性做出裁定。在该案中，全院合议庭庭审认为，只要是与特定机器或设备搭配的方法，或可将某特定物品转变成其它状态或物体的方法，包括“商业方法”，均有资格获得专利保护（《联邦判例汇编》第三辑第545卷第943页）（联邦巡回上诉法院2008年）。在此过程中，法院修改了其在“道富银行和信托公司对签记金融集团案”（《联邦判例汇编》第三辑第149卷第1368页）（联邦巡回上诉法院2008年）中确立的案例法。道富银行一案提出任何能产生有用、具体且有形结果的方法均具有专利适格性。同时，联邦巡回上诉法院拒绝对商业方法、软件、非技术性方法或其它类似的标的物做出一概不可获得专利保护的硬性规定。

从金融交易、计算机软件到医学诊断，在Bilski案中法院全院庭审的意见将显著影响有关当事人在很多领域内取得专利的能力和对抗专利侵权指控的能力。同时，对于在实践中应如何运用新确定的“机器或转变”检验标准，联邦巡回上诉法院相对而言几乎未提供任何指导，还明确拒绝对用计算机实施的方法是否具有专利适格性这一重要问题做出决定。因此，Bilski案的影响在很大程度上将取决于以后的判决会如何运用该项新的“机器或转变”检验标准。当然，这还取决于最高法院是否批准当事人的再次复审申请。

背景

对于所谓“商业方法”发明专利适格性的适当标准问题，美国专利商标局和联邦巡回上诉法院近年来一直在苦苦思考。《美国法典》第35篇第101条，即《专利法》第101条将“无论任何新型、有用的方法、机器、产品或物质成分”均归类为具有专利适格性的标的物。尽管以上规定比较宽松，在20世纪多数时间里，法院一直采用“商业方法除外”的特例，将“商业”领域内的所有方法排除在第101条规定的适用范围之外。

“知识时代”的到来及随之产生的大量用计算机实施的方法迫使法院重新考虑对第101条采用的上述一概硬性除外做法。在1998年对道富银行案做出的判决中，联邦巡回上诉法院摒弃了“考虑欠周密的[商业方法]除外”做法，认为商业方法发明应和任何其它方法发明一样，应遵照相同的可专利性要求。（《联邦判例汇编》第三辑第149卷第1375页。）道富银行案以及后来对“美国电话电报公司对Excel通讯公司（*Excel Communications, Inc.*）案”（《联邦判例汇编》第三辑第172卷第1352页）（联邦巡回上诉法院1999年）做出的判决认为，只要某种方法（包括商业方法）可产生“有用、具体并且有形的结果”，则该方法即符合第101条的要求。（《联邦判例汇编》第三辑第149卷第1375页道富银行案。）

对道富银行案的判决致使长期以来一直认为属于专利保护范围之外的各个领域涌现出了大量专利和专利申请，同时也招致了对该判决采用的宽松专利适格性标准的激烈反对。去年秋天，联邦巡回上诉法院似乎对道富银行案的影响进行了限

of mental processes." *Id.* at 1378. Instead, it held that a process must be tied to a machine or create or involve a composition of matter or manufacture to satisfy Section 101.

On October 1, 2007, ten days after *Comiskey* issued, a Federal Circuit panel heard oral argument in *Bilski*. Bilski claimed a method for hedging risk in the field of commodities trading by entering into contracts to purchase and sell commodities at fixed prices. Bilski admitted that his broadest claim did not require a computer or other specific apparatus, and the USPTO rejected his patent for failure to claim patent-eligible subject matter under Section 101.

In February 2008, before the Federal Circuit panel issued an opinion, the court took the unusual step of *sua sponte* ordering the case reheard *en banc*. The *en banc* briefing and oral argument, which occurred in May 2008, addressed five overlapping questions:

1. Whether the broadest claim of Bilski's patent application claimed patent-eligible subject matter under 35 U.S.C. § 101?
2. What standard should govern in determining whether a process is patent-eligible subject matter under Section 101?
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 a physical transformation of an article or be tied to a machine to be patent-eligible subject matter under Section 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?

THE *EN BANC* DECISION IN *BILSKI*

Writing for the *en banc* court, and joined by Judges Lourie, Schall, Bryson, Gajarsa, Linn, Dyk, Prost, and Moore, Chief Judge Michel's opinion focused on the second of the *en banc* questions—the proper standard for determining whether a process is patent-eligible subject matter under Section 101.

A Process Is Patent-Eligible Subject Matter If It Is Tied to a Particular Machine or Transforms a Particular Article into a Different State or Thing

The Federal Circuit began by noting that the Supreme Court has narrowed the term "process" in Section 101 by excluding laws of nature, natural phenomena, and abstract ideas from patent-eligibility. These "fundamental principles," as the Federal Circuit called them, are part of the "storehouse of knowledge" to which no person can claim an exclusive right. 545 F.3d at 950. As a result, process claims that pre-empt substantially all uses of a fundamental principle are not patent-eligible, but process claims that only foreclose particular applications of these fundamental principles are patent-eligible under Section 101.

In perhaps its clearest statement, the Federal Circuit held:

The Supreme Court, however, has enunciated a definitive test to determine whether a process claim is tailored narrowly enough to encompass only a particular application of a fundamental principle rather than to pre-empt the principle itself. A claimed process is surely patent-eligible under § 101 if: (1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing.

545 F.3d 954. The Federal Circuit rejected qualifying language in earlier Supreme Court decisions, which Judge Newman relied on in dissent, that would leave the door open for patent-eligibility for some processes that did not meet this test. Instead, the court, relying on the absence of such qualifiers in later Supreme Court opinions, held that the "machine-or-

制，它在*Comiskey*案（《联邦判例汇编》第三辑第499卷第1365页）（联邦巡回上诉法院2007年）中认为，“法律不允许对完全依靠在大脑中进行的方法，包括这样的特定商业系统”（如Comiskey主张的仲裁系统）“授予专利”。（同上第1378页）。鉴此，联邦巡回上诉法院认为，某种方法必须是在与某种机器搭配或可产生或包含某种物质或产品成分的情况下，才算符合第101条。

2007年10月1日，即在对Comiskey案做出判决10天后，联邦巡回上诉法院合议庭听取了对*Bilski*案的口头辩论。对通过按固定价格签署商品买卖合同，从而防范商品交易领域内存在的风险的方法，*Bilski*提出了专利主张。*Bilski*承认，其最大的专利主张范围并不依赖于计算机或其它专门设备。美国专利商标局以*Bilski*提出的标的物不具有第101条规定的专利适格性为由，拒绝了其专利申请。

2008年2月，在联邦巡回上诉法院合议庭发布判决意见书之前，法院异乎寻常地主动责令通过全院庭审对该案进行复审。2008年5月进行的全员庭审辩护和口头辩论讨论了五个相互重叠的问题：

1. Bilski专利申请的最大专利主张范围所主张的对象是否是《美国法典》第35篇第101条项下具有专利适格性的标的物？
2. 在确定某种方法是否是第101条项下具有专利适格性的标的物时，应适用什么标准？
3. 所主张的标的物是否会因其构成某种抽象概念或大脑思维方法而不具有专利适格性，以及既包含脑力又包含有形步骤的专利主张何时会产生具有专利适格性的标的物？
4. 一种方式或方法是否必须在可导致物品发生有形转变或与某种机器搭配的情况下，才可成为第101条项下具有专利适格性的标的物？
5. 在本案中重新审议“道富银行和信托公司对签记金融集团案”（《联邦判例汇编》第三辑第149卷第1368页）（联邦巡回上诉法院1998年）和“美国电话电报公司对*Excel*通讯公司（*Excel Communications, Inc.*）案”（《联邦判例汇编》第三辑第172卷第1352页）（联邦巡回上诉法院1999年）所确立的案例法是否适当，以及如果重新审议的话，这些案件确立的案例法是否会在任何方面被推翻？

全院庭审对Bilski案的判决

全员庭审法院审判长Michel连同Lourie、Schall、Bryson、Gajarsa、Linn、Dyk、Prost和Moore法官起草的法院判决意见书主要关注的是全员庭审的第二个问题——即在确定某种方法是否是第101条项下具有专利适格性的标的物时应采用的适当标准。

如果某种方法是与某特定机器搭配的，或可将某特定物品转变成不同形态或物体，则该方法即系具有专利适格性的标的物。

联邦巡回上诉法院首先指出，通过将自然规律、自然现象和抽象概念排除在具有专利适格性的标的物之外，最高法院缩小了第101条中“方法”一词的范围。联邦巡回上诉法院所称的“基本原理”是任何人不得主张专有权的“知识库”的一部分。（《联邦判例汇编》第三辑第545卷第950页。）因此，实际会涵盖某项基本原理全部用途的方法类专利主张不具有专利适格性，但仅对这些基本原则某些特定应用的方法类专利主张在第101条项下具有法律适格性。

在其做出的或许是最为明确的声明中，联邦巡回上诉法院认为：

不过，为确定所制定的方法类专利主张范围是否仅限于包含对某基本原理的特定应用而非涵盖该项原理本身，最高法院已阐明了明确的检验标准。在下列情况下，所主张的方法肯

transformation test" was the sole test for determining patent-eligibility of a process under Section 101, at least until the Supreme Court "decide[s] to alter or perhaps even set aside this test to accommodate emerging technologies." *Id.* at 955.

In limiting patent-eligibility to processes that satisfy the "machine-or-transformation test," the Federal Circuit overruled or rejected several other tests. Most importantly, the Federal Circuit held that the "useful, concrete, and tangible result" test, first identified in *In re Alappat*, 33 F.3d 1526 (Fed. Cir. 1994) and most closely associated with *State Street*, did not adequately restrict the patent-eligibility for processes under Section 101, even if the test was helpful in indicating whether a claim was drawn to a fundamental principle or practical application of such a principle.

Similarly, the Federal Circuit rejected restricting patent-eligibility to processes involving physical elements or steps, as was done by the Court of Customs and Patent Appeals and as *Comiskey* could be read to support. The court held that the proper question was whether the process satisfied the "machine-or-transformation test" regardless of whether or not it involved "physical steps."

Finally, the Federal Circuit rejected various categorical restrictions on patent-eligibility for processes. The court refused to adopt the position advocated by Judge Mayer in dissent that would limit patent eligibility to processes representing "technology" or the "technological arts," concluding that these terms were too ambiguous and ever-changing. 545 F.3d at 966. (Mayer, J., dissenting). Similarly, the court refused to adopt *per se* rules advocated by various *amici* that would exclude software, business methods, and other categories of processes from patent-eligibility.

The Scope and Application of the Machine-or-Transformation Test Remains Unclear

The *Bilski* decision clarifies the patent-eligibility of processes under Section 101 by adopting a single test and explicitly rejecting a variety of other tests. However, as Judge Rader noted in dissent, it also raises many questions about how this test should be applied in practice.

The opinion makes clear that a process that is tied to a machine or that transforms an article into a different state or thing is patent-eligible under Section 101. However, the court proceeded to further limit patent-eligibility by noting that "the use of a specific machine or transformation of an article must impose meaningful limits on the claim's scope" and "must not merely be insignificant extra-solution activity." 545 F.3d at 969. The court failed to explain what it meant by imposing "meaningful limits" or "insignificant extra-solution activity." Similarly, the court held that a process invention is not made patent-eligible merely by limiting the process to a certain field of use, such as Bilski's limitation to commodities hedging.

Moreover, because Bilski admitted that his claim did not require any specific machine or apparatus, the court left "to future cases the elaboration of the precise contours of machine implementation," including "whether or when recitation of a computer suffices to tie a process claim to a particular machine." *Id.* This open question is particularly significant, since most "business methods" of any value are computer-implemented.

Even though the court provided extensive comment on the "transformation" prong of the "machine-or-transformation test," its discussion still left many open questions. The court first noted that the "transformation must be central to the purpose of the claimed process," though it did not explain what it meant to be "central" to the process. *Id.* The court also held that processes that transform physical objects or substances, as well as electronic data that represent physical and tangible objects, are patent-eligible. By contrast, the court held that processes that transform "abstract constructs such as legal obligations, organizational relationships, and business risks" are not patent-

定具有第101条项下的专利适格性：(1) 该方法是与某特定机器或设备搭配的，或(2) 该方法可将某特定物品转变为其它形态或物体。

（《联邦判例汇编》第三辑第545卷第954页。）联邦巡回上诉法院否定了最高法院在早些时候做出的判决中使用的限制性用语。这些用语会使某些不符合该检验标准的方法具有专利适格性，而Newman法官正是根据此类用语提出异议的。鉴于最高法院后来做出的判决意见书中没有该等限定条件，联邦巡回上述法院认为，至少在最高法院“为适应新兴技术而决定修改或甚至可能取消该检验标准”之前，“机器或转变检验标准”是确定某方法在第101条项下是否具有专利适格性的唯一检验标准。（同上第955页。）

在将专利适格性限于满足“机器或转变检验标准”的方法过程中，联邦巡回上诉法院驳回或否定了若干其它检验标准。最重要的是，联邦巡回上诉法院认为，要求“有用、具体且有形的结果”的检验标准未充分限制第101条项下方法的专利适格性，即使该检验标准有助于说明某专利主张涉及的是某项基本原则还是该项原则的实际应用。上述检验标准是在Alappat案（《联邦判例汇编》第三辑第33卷第1526页）（联邦巡回上诉法院1994年）中首次确定的，并且与道富银行案最为接近。

同样，联邦巡回上诉法院拒绝将专利适格性限于包含有形成分或步骤的做法。关税和专利上诉法院就是这样限制的，并且可将Comiskey案理解为支持这种做法。法院认为，正确的问题应该是方法是否符合“机器或转变检验标准”，无论其是否包含“有形步骤”。

最后，联邦巡回上诉法院否定了对各种方法专利适格性的各种明确限制。Mayer法官在提出异议时主张将专利适格性限于代表“技术”或“科技”的方法，但法院拒绝采纳Mayer法官的立场，断定这些用词太过模糊且变幻不定。（《联邦判例汇编》第三辑第545卷第966页。）（Mayer法官提出的异议）。同样，法院拒绝采用各法官顾问主张的不允许软件、商业方法以及其它各类方法具有专利适格性的硬性排除规则。

“机器或转变检验标准”的范围及其应用仍不明确。

通过采用单一检验标准并明确拒绝各种其它检验标准，对*Bilski*案的判决阐明了第101条项下方法的专利适格性。不过，Rader法官在提出异议时指出，对于在实践中如何应用该检验标准，该项判决也引起了许多问题。

法院的判决意见书表明，与某机器搭配或可将某项物品转变为其它形态或其它物体的方法在第101条项下具有法律适格性。但是，通过指出“对某特定机器的使用或对某项物品的转变必须对专利主张的范围施加有意义的限制”，并且“不得仅为无关紧要的，与解决困难无关的额外活动”，法院进而对专利适格性做了进一步限制。（《联邦判例汇编》第三辑第545卷第969页。）法院没有解释其提出的“有意义的限制”或“无关紧要的，与解决困难无关的额外活动”究竟是什么意思。同样，法院认为，仅通过将方法限于某特定使用领域（如Bilski将其方法限于商品套期保值）并不会使该方法发明具有专利适格性。

另外，因为Bilski承认其专利主张不需要任何具体机器或设备，法院将“机器实施的精确范围”留待“在以后案件中详加说明”，包括“对计算机的叙述是否以及如何足以满足将对某项方法的专利主张与某特定机器搭配的要求”。（同上。）这个尚待解决的问题尤为重要，因为多数无论具有任何价值的“商业方法”均是通过计算机实施的。

eligible. 545 F.3d at 970. The court did not address where the line fell between these two categories of transformations.

The court concluded that Bilski's process only involved "ineligible transformations," such as the transformation of legal obligations. Since the process did not result in "the transformation of any physical object or substance, or an electronic signal representative of any physical object or substance," it was not patent-eligible under Section 101. 545 F.3d at 973.

THE IMPACT OF *BILSKI*

Bilski clearly restricts the patent-eligibility of processes generally, and business methods in particular. The decision rejects the post-*State Street* view that *any* useful series of steps could, potentially, be eligible for patent protection. As a result, it will now be more difficult to obtain patents protecting "pure" business methods that are unassociated with any specific implementation mechanism, such as Comiskey's method of arbitration or Bilski's method of hedging risk in commodities transactions. Following *Bilski*, such methods are ineligible for patent protection because they are not tied to a *particular* machine and merely transform "abstract constructs such as legal obligations, organizational relationships, and business risks," rather than physical objects or data representing physical objects. 545 F.3d at 970.

The dissents suggest that all "information-based and computer-managed processes" (Judge Newman) and "software" (Judge Rader) are now ineligible for patent protection under the majority's "machine-or-transformation test." *See* slip op. (Newman, J., dissenting) at 30; slip op. (Rader, J., dissenting), at 9-10. The *Bilski* majority, however, expressly declined to comment on the patent-eligibility of business method inventions that are explicitly required to be computer-implemented. Consequently, the impact of *Bilski* on the vast field of computer-implemented processes must await later Federal Circuit decisions applying the requirements that the process must be "tied" to a "particular" machine and that the machine must "impose meaningful limits on the claim's scope" rather than "merely be insignificant extra-solution activity." 545 F.3d at 969.

The court noted repeatedly that the *Bilski* decision is directed to *process* claims, distinguishing these from both the *machine* claims at issue in *State Street* and the *manufacture* claims at issue in *In re Nuijten*, 500 F.3d 1346 (Fed. Cir. 2007). Consequently, the impact of *Bilski* on the patent-eligibility of a particular invention will depend in large measure on how that invention is claimed. For example,

The decision rejects the post-*State Street* view that *any* useful series of steps could, potentially, be eligible for patent protection.

if a business method invention can be claimed as a "system" or "device" rather than as a "process" or "method," some of the more significant consequences of *Bilski* may be reduced or avoided with respect to the non-process claims.

Finally, the Supreme Court may still weigh in on this subject by granting *certiorari*. Perhaps cognizant of this possibility and the Court's recent string of reversals in patent cases, the Federal Circuit emphasized Supreme Court precedent even at the cost of eschewing its own precedent, as it also did in its last *en banc* decision in *In re Seagate Technology, LLC*, 497 F.3d 1360 (Fed. Cir. 2007). At the same time, the Federal Circuit in *Bilski* appeared to almost invite Supreme Court review, noting that "the Supreme Court may ultimately decide to alter or perhaps even set aside this test to accommodate emerging technologies." 545 F.3d at 960. ■

即使法院就“机器或转变检验标准”的“转变”方面提供了大量意见，其讨论结果仍留下了许多尚待解决的问题。法院首先指出，“对于所主张的方法而言，转变必须是该方法之目的的根本”，但其并未解释方法的“根本”究竟指什么。（同上。）法院还认为，可转变有形物体或物质的方法以及代表有形物体的电子数据具有专利适格性。反之，法院认为用于转变“法律义务、组织关系和商业风险等抽象概念”的方法不具有专利适格性。（《联邦判例汇编》第三辑第545卷第970页。）法院没有说明两类转变之间的明确界限。

法院的结论认为，Bilski的方法仅包含“无适格性的转变”，如对法律义务的转变。因为该方法没有导致“任何有形物体或物质的转变，或代表任何有形物体或物质的电子信号”，所以该方法在第101条项下不具有专利适格性。

*Bilski*案的影响

*Bilski*案明确限制了一般方法，特别是商业方法的专利适格性。判决否定了在道夫银行案后形成的认为任何一系列有用的步骤均可能有资格获得专利保护的观点。因此，现在将更加难以对与任何特定实施机制均无关的“纯”商业方法取得专利保护，例如Comiskey的仲裁方法或*Bilski*的商品交易风险防范方法。在*Bilski*案之后，此类方法无资格取得专利保护，因为它们并非是与某“特定”机器搭配的，只是用于转变“法律义务、组织关系和商业风险等抽象概念”，而不是有形物体或代表有形物体的数据。（《联邦判例汇编》第三辑第545卷第970页。）

少数法官的不同意见认为，按照或多数法官支持的“机器或转变检验标准”，所有“基于信息并用计算机管理的方法”（Newman法官）和“软件”（Rader法官）现在均无资格获得专利保护。参见判决意见书单行本（Newman法官提出的异议）第30页，以及判决意见书单行本（Rader法官提出的异议）第9-10页。不过，参加*Bilski*案审理的多数法官明确拒绝对显然需要利用电脑实施的商业方法发明的可专利性发表意见。因此，在广大的用计算机实施的方法领域，Bilski案的影响必须等以后联邦巡回上诉法院运用下列要求做出判决之后才能确定：即方法必须与“特定”机器“搭配”，同时该机器必须“对专利主张的范围施加有意义的限制”，而非“仅是无关紧要的额外活动”。（《联邦判例汇编》第三辑第545卷第969页。）

法院反复指出对*Bilski*案的判决针对的是“方法”类专利主张，以此将此类专利主张与道富银行案涉及的“机器”类专利主张以及Nuijten案（《联邦判例汇编》第500卷第1346页）（联邦巡回上诉法院2007年）涉及的“产品”类专利主张区别开来。因此，*Bilski*案对特定发明专利适格性的影响将在很大程度上取决于如何对该项发明提出专利主张。例如，如果可将某种商业方法发明作为“系统”或“设备”而非“方法”或“方式”提出专利主张，则可以减少或避免*Bilski*案某些对非方法类专利主张更为严重的后果。

最后，最高法院可能还要通过签发再次复审令对这个再加以斟酌。可能认识到这个可能性以及最高法院最近采取的一系列撤判行为，联邦巡回上诉法院仍强调了最高法院的判例，即使以避开其自己的判例为代价。在对希捷科技公司案（《联邦判例汇编》第三辑第497卷第1360页）（联邦巡回上诉法院2007年）的最终全院庭审判决中，联邦巡回上诉法院也是这样做的。同时，在*Bilski*案中，联邦巡回上诉法院显得几乎是在邀请最高法院进行再次复审，指出“最高法院可能会为适应新兴技术而最终决定修改或可能甚至取消该检验标准。”（《联邦判例汇编》第三辑第545卷第960页。）■

The Impact of *In re Bilski* on Software Patents

By Harris Gao

INTRODUCTION

In *In re Bilski*, 545 F.3d 943 (Fed. Cir. 2008), the Federal Circuit provided little guidance on how the newly defined "machine-or-transformation test" should be applied to software patents. In particular, the court left open the question of "whether or when recitation of a computer suffices to tie a process claim to a particular machine." *Id.*

In less than two months after the *Bilski* decision, the Board of Patent Appeals and Interferences (the "Board") has relied on *Bilski* to reject claims in four software patent applications. Thus, it is now fairly clear that the *Bilski* decision will have a significant impact on the prosecution of software patents. This article discusses how the Board has been applying the *Bilski* decision, and outlines several strategies in prosecuting software patents in light of the *Bilski* decision.

The Board's Application of *Bilski* on Software Patents

Merely reciting a computer in a method claim is not sufficient.

In *Ex parte Halligan*, 2008 WL 4998543 (Bd. Pat. App. & Int., Nov. 24, 2008), the Board addressed the issue that was left open in *Bilski*: whether "recitation of a computer suffices to tie a process claim to a particular machine."

The Board held that the mere recitation of a computer in a method claim is not sufficient to render the claim patentable, and affirmed the rejection of claims directed to "a method performed on a programmed computer." The Board reasoned:

"Were the recitation of a 'programmed computer' in combination with purely functional recitations of method steps, where the functions are implemented using an unspecified algorithm, sufficient to transform otherwise unpatentable method steps into a patent eligible process, this would exalt form over substance and would allow pre-emption of the fundamental principle present in the non-machine implemented method by the addition of the mere recitation of a 'programmed computer.'"

Id. at *13. The Board also characterized the recitation of a computer as merely a field-of-use limitation insufficient to render a process claim patent eligible. *Id.*

Software per se or pure software components is not patentable subject matter.

In several cases, the Board held that software per se or "purely software components" is not patentable subject matter. *Ex part Godwin*, 2008 WL 4898213 (Bd. Pat. App. & Interf., Nov. 13, 2008); *Ex parte Uceda-Sosa*, 2008 WL 4950944 (Bd. Pat. App. & Interf., Nov. 18, 2008); *Ex parte Noguchi*, 2008 WL 4968270 (Bd. Pat. App. & Interf., Nov. 20, 2008).

For example, in *Uceda-Sosa*, the Board affirmed the rejection of claim 5, which recites "[a] middleware module to represent and store information for a user application." In *Noguchi*, the Board affirmed the rejection of claim 18, which recites "[a] program for causing a computer connected to an external network."

On the other hand, the Board strongly suggested that software would be patentable subject matter if it is "tangibly embodied on a computer-readable medium." *Uceda-Sosa* at 11. *See also Noguchi* at *6.

Transformation of data representing an abstract concept is not patentable subject matter.

All software processes data. Thus, the issue of whether or when the transformation of data is sufficient to render software patent eligible is of significant importance.

Bilski 案对软件专利的影响

作者：高焕勇

介绍

在*Bilski*案中（《联邦判例汇编》第3辑第545卷第943页）（美国联邦巡回上诉法院，2008年），美国联邦巡回上诉法院对新定义的“机器或转变检验标准”将如何应用到软件专利中几乎未提供指导。而且法院对“对计算机的叙述是否以及何时足以将对方法的权利要求与特定机器相搭配”这一问题并未予以解决（同上）。

在*Bilski* 案裁决后的不到2个月中，专利上诉暨冲突委员会（“委员会”）根据*Bilski*案驳回了四项软件专利申请的权利要求。因此，目前而言，*Bilski*一案的裁决将对软件专利的申请产生巨大影响这一事实已经相当明了。本文探讨委员会是如何应用*Bilski*案裁决的，以及概述了鉴于对*Bilski*一案的裁决，在申请软件专利中可采用的几个策略 。

委员会将对*Bilski*一案的判决应用到软件专利中

在方法权利要求中仅叙述计算机并不够

在*Ex parte Halligan*案中（2008年Westlaw 第4998543号）（专利上诉暨冲突委员会，2008年11月24日），委员会解决了*Bilski*一案中遗留的问题，即：“对计算机的叙述是否足以将对方法的权利要求与特定的机器相搭配。”

委员会判决在方法权利要求中仅叙述计算机不足以确定权利要求的可专利性，并维持原判，驳回了对“运行在程序计算机上的一种方法”的权利要求。委员会的理由如下：

“如果对‘程序计算机’的叙述结合对方法步骤的纯功能性叙述，而其中功能是使用未指定的算法执行的，足以将不可取得专利的方法步骤转变成一种专利适格性方法，那么这将是形式优先与本质，并且破坏非机器执行的方法不可取得专利的基本原则。”

（同上*13）。委员会还将对计算机的叙述定性为仅是不足以确定方法权利要求专利适格性的使用领域限制（同上）。

软件本身或纯软件组件不是可专利性标的物

在几个案件中，委员会判决软件本身或“纯软件组件”不是可专利性标的物。 *Ex part Godwin*案 （2008年*Westlaw*第4898213号）（专利上诉暨冲突委员会，2008年11月13日）；*Ex parte Uceda-Sosa*案 （2008年Westlaw 第4950944号）（专利上诉暨冲突委员会，2008年11月18日）；*Ex parte Noguchi*案 （2008年Westlaw 第4968270号）（专利上诉暨冲突委员会， 2008年11月20日） 。

例如，在*Uceda-Sosa*案中，委员会维持了对权利要求5的驳回判决，权利要求5陈述了“为用户应用呈现并存储信息的[一种]中间件模块。”在 *Noguchi*案中，委员会维持了对权利要求18的驳回判决，权利要求18陈述了“[一种]使计算机连接到外网的程序。”

另一方面，委员会极力建议软件是可专利性标的物，但前提是 “有形地体现在计算机可读介质上。”*Uceda-Sosa*案第11页。亦可参见*Noguchi*案 *6。

代表抽象概念的数据转变不是可专利性标的物

In *Bilski*, the Federal Circuit noted that transformation of data is insufficient to render a process patent-eligible if the data "does not specify any particular type or nature of data and does not specify how or where the data was obtained or what the data represented." 545 F.3d at 962.

The Board quickly followed the court's direction. In *Ex parte Halligan*, 2008 WL 4998543 (Bd. Pat. App. & Int., Nov. 24, 2008), two of the claims at issue transform data representing a trade secret. The Board affirmed the rejection of these two claims, reasoning that "the data represents information about a trade secret, which is an intangible asset." *Id.* at *13.

Similarly, in *Ex parte Uceda-Sosa*, 2008 WL 4950944 (Bd. Pat.App. & Interf., Nov. 18, 2008), the Board affirmed the rejection of a claim reciting "[a] method of representing information, said method comprising: generating a first software object comprising a first node . . . ." *Id.* at *1.

In sum, the Board has been ruling that the transformation of data representing an abstract concept, including a software object, is not patent eligible under *Bilski*.

On the other hand, the Federal Circuit also stated in *Bilski* that "transformation of data is sufficient to render a process patent-eligible if the data represents physical and tangible objects, *i.e.*, transformation of such raw data into a particular visual depiction of a physical object on a display." The language of "visual depiction of a physical object on a display" appears to be directed to a user interface. Thus, a software claim having user interface components is likely to be patentable subject matter under *Bilski*.

Claim Drafting Strategies After *Bilski*

The Board's recent decisions offer some guidance on how to draft claims for software patents. Three claim drafting strategies may help applicants obtain favorable rulings on patent eligibility from the Patent Office.

Link software claims to the specific hardware it runs on.

A general purpose computer is not a "machine" within the meaning of *Bilski*. Thus, patent practitioners should always link software claims to the specific hardware it runs on, such as "a program for causing *a base station having a wireless transmitter* to transmit a broadcast message to a mobile station."

Link software claims to a computer-readable medium.

The Board has held that software per se or pure software components is not patentable subject matter, but suggested that software "tangibly embodied on a computer-readable medium" would be patent eligible. Thus, patent practitioners should consider linking software claims to computer – readable medium, such as "a program for causing a computer connected to an external network *tangibly embodied on a computer-readable medium*."

If possible, link software claims to the user interface.

The Board has held that the transformation of data representing abstract concept is not sufficient to render a claim patent eligible. On the other hand, a claim reciting user interface components related to "visual depiction of a physical object on a display" is likely to be patent eligible. Thus, patent practitioners should consider incorporating user interface components into software claims, such as in "a method of representing information, said method comprising: generating a first software object *for generating an alert message on a computer display*."

CONCLUSION

The *Bilski* decision has already had a major impact on software patents. The Federal Circuit, the Board, and possibly the Supreme Court, will continue to shape the law on patentable subject matter. To better serve their clients, patent practitioners should closely monitor the latest development, and employ optimal claim drafting strategies accordingly. ■

软件处理数据。数据转变是否或何时满足软件专利适格性这一问题是至关重要的。

在*Bilski*案中，美国联邦巡回上诉法院表示：如果数据“未明确表明数据的类型或性质并且未明确表明数据是如何以及在何处获得的或者数据代表的是什么样的信息”，则数据转变不足以满足方法专利适格性。《联邦判例汇编》第3辑第545卷第962页。

委员会很快就采纳了法院的指示。在*Ex parte Halligan*案中（2008年Westlaw 第4998543号）（专利上诉暨冲突委员会，2008年11月24日），所涉两项权利要求转变了代表商业秘密的数据。委员会维持了对上述两项权利要求的驳回判决，理由是“数据代表的是关于商业秘密的信息。”（同上 *13）。

同样的，在*Ex parte Uceda-Sosa*案中（2008年Westlaw 第4950944号）（专利上诉暨冲突委员会， 2008年11月18日），委员会维持了对一项权利要求的驳回判决，该权利要求叙述了“代表信息的[一种]方法，该方法包括：产生包含首个节点的首个软件对象……” （同上 *1）。

总之，委员会已经裁决：根据*Bilski*案判例，代表抽象概念的数据转变（包括软件对象）不具有专利适格性。

另一方面，美国联邦巡回上述法院在*Bilski*案中还表示“如果数据代表了有形的物体，则数据转变足以满足方法专利适格性。例如：将原始数据转变成可在显示器上显示的对有形物体的可视化描述。”“显示器上显示的对有形物体的可视化描述”与用户界面有关。因此，拥有用户界面组件的软件权利要求根据*Bilski*案判例很可能是可专利性标的物。

在*Bilski*一案后起草权利要求之策略

委员会最近做出的裁决为如何起草软件专利权利要求提供了某些指导。以下三个权利要求起草策略将帮助申请者获得专利局对专利适格性做出的有利决定。

将软件权利要求与其所运行的具体硬件相联合

根据*Biliski*案，通用计算机不是一种“机器”。因此，专利执业者应将软件权利要求与其运行的具体硬件相联合，例如“可使拥有无线发射器的基站通知信息发射给移动台的程序。”

将软件权利要求与计算机可读介质相联合

委员会还判定软件本身或纯软件组件不是可专利性标的物，但表示“有形地表现在计算机可读介质上的”软件具有专利适格性。因此，专利执业者应考虑将软件权利要求与计算机可读介质联合起来，例如“一种可使计算机连接到外网上的，有形地表现在计算机可读介质上的程序。”

如有可能，将软件权利要求与用户界面相联合

委员会还裁决代表抽象概念的数据转变不具有权利要求专利适格性。另一方面，与“显示器上显示的对有形物体的可视化描述”相关的用户界面组件的权利要求很可能具有专利适格性。因此，专利执业者应考虑将用户界面组件纳入到软件权利要求中，例如“代表信息的方法，上述方法包括：实现可在计算机显示器上生成警示信息的首个软件对象。”

总结

Bilski 一案的判决已经对软件专利产生了重要影响。美国联邦巡回上诉法院、委员会或者是最高法院将继续完善关于可专利性标的物的法律。为了更好服务客户，专利执业者应密切关注最新发展并相应的采用最佳的权利要求起草策略 。■

Patenting Diagnostic Methods in the Wake of *In re Bilski*

By Janet Xiao

In re Bilski, 545 F.3d 943 (Fed. Cir. 2008) will have a tremendous impact on business method and software patents. In the meantime, the decision also significantly affects patentability of medical diagnostic methods, which frequently involve processes largely performed inside a physician's head, namely, the mental process of correlating a symptom or characteristics of a patient with a specific disease or condition.

The Supreme Court came close to addressing the patentability of a medical diagnostic method in *Laboratory Corp. of America Holdings v. Metabolite Laboratories, Inc.*, 548 U.S. 124 (2006). The claim at issue was directed to "[a] method for detecting a deficiency of cobalamin or folate in warm-blooded animals" comprising the steps of "assaying a body fluid for an elevated level of total homocysteine" and "correlating an elevated level of total homocysteine in said body fluid with a deficiency of cobalamin or folate." Although methods of assaying a body fluid for homocysteine level were known in the art, the correlation between homocysteine level and a deficiency of cobalamin or folate was new. The Supreme Court almost took the time to reject this claim under Section 101, but decided that the issue had not been properly raised on appeal. In a dissent from the dismissal of certiorari joined by two other Justices, Justice Breyer stated that he would have found the claim unpatentable. He reasoned that the claim only embodies the correlation between homocysteine level and cobalamin or folate deficiency that researchers uncovered, which is a natural phenomenon. He did not believe that the assaying step, which is generally phrased and known in the art, should confer patentability to the claim.

The *Bilski* court notes that its holding would be consistent with Justice Breyer's dissent in *Lab Corp. Bilski,* 545 F.3d 943 n.27. Indeed, under the test articulated in *Bilski*, the claim at issue in *Lab Corp.* would likely be found invalid. The correlating step could be performed in a human's mind and consequently cannot serve as the basis for finding patentable subject matter. As set forth in *Bilski*, "a claimed process wherein all of the process steps may be performed entirely in a human's mind is obviously not tied to any machine and does not transform any article into a different state or thing." *Id.* at n.26. The assaying step, on the other hand, arguably could be considered as being transformative because it involves the alteration of the body fluid. However, because the assaying step is generally phrased and not tied to any specific assay, it likely will be considered as not imposing any "meaningful limit" on the claim or simply considered as a data-gathering insignificant extra solution.

The *Bilski* decision poses several important questions on how to draft diagnostic method claims, including: (1) Would tying the claim to a specific machine or specific assay method help? (2) What about an additional "transformative" step, such as plotting assay results, communicating assay results to a physician, communicating diagnosis results to a patient, or treating a patient diagnosed with a disease? (3) What if the claim is framed as a "treatment method" rather than a diagnostic method?

In one recent case, *Classen Immunotherapies, Inc. v. Biogen IDEC*, No. 2006-1634, (Fed. Cir. December 19, 2008) (nonprecedential opinion), the Federal Circuit was presented with an opportunity to address these questions and refine patentability standards for medical diagnostic methods, but unfortunately chose not to do so. In *Classen*, the claim at issue was directed to a method of determining whether an immunization schedule affects the incidence or severity of a chronic immune-mediated

Bilski 案后医疗诊断方法的可专利性

作者：肖荐

*Bilski*案（《联邦判例汇编》第*3*辑第*545*卷第*943*页）（联邦巡回上诉法院*2008*年）的判决将对商业方法专利及软件专利带来重大影响。同时，该判决也实质性地影响到医疗诊断方法的可专利性。医疗诊断方法通常涉及主要在医生大脑里运行的方法，即将某个病人的症状或特点与的某种具体疾病或具体状态相联系的思维过程。

美国最高法院在“*Laboratory Corp. of America Holdings* 对*Metabolite Laboratories, Inc.*”一案（《美国判例汇编》第548卷第124页）（2006年）中涉及了解决医疗诊断方法的可专利性问题。该案争议权利要求为“检定恒温动物体内钴胺素或叶酸含量不足的方法”，包括“检验体液中高半胱氨酸的整体水平的提高”，和“将上述体液的高半胱氨酸的整体水平的提高与钴胺素或叶酸含量不足相联系”两个步骤。尽管化验体液以获取高半胱氨酸水平属于已知技术，但将高半胱氨酸水平与钴胺素或叶酸含量不足相联系尚属新技术。美国最高法院几乎认定了该权利要求应根据第101条被驳回，但最终决定以该争议未能以合适的方式在上诉时提出为由而拒绝受理。法官Breyer在对另外两名法官联合对调卷令做出的拒绝受理裁定提出异议时声称，他认为上述权利要求不应取得专利，理由是该权利要求仅体现研究人员所揭示的高半胱氨酸水平与钴胺素或叶酸含量不足相关这一自然现象。Breyer不认为上述化验步骤（该步骤已普遍为人所知，属已知技术）能赋予该权利要求可专利性。

审判*Bilski*案的法院指出，其做出的裁决与法官Breyer提出的异议相一致（见《联邦判例汇编》第3辑第545卷第943页第27条注释）。的确，根据*Bilski*案设立的检验标准，*Lab. Corp.*案中所涉权利要求可能被判为无效。关联步骤可以在人类大脑里完成，因此不应作为专利标准的裁决的依据。如*Bilski*案中所述，“一项其所有方法步骤可完全在人类大脑里完成的方法显然无须依赖任何机器，也不能将任何物品转变为其他形态或物体”（同上第26条注释）。而另一方面，化验步骤可被论证为具有转变性，因为其涉及体液的改变。但是，由于化验步骤已普遍为人所知且未和任何具体的化验相搭配，因此很可能会被认为未对权利要求设置任何“有意义的限制”或仅仅被视作无关紧要的诸如数据搜集的额外解决方案。

*Bilski*案的裁决对如何起草与诊断方法相关的权利要求提出了若干重要问题，包括：（1）是否将权利要求与某特定机器或特定化验方法相搭配就能使权利要求具可专利性？（2）如果添加其他“转变性”步骤又会怎样？例如，对化验结果进行描述、将化验结果告知医生、将诊断结果告知病人，或对被诊断患有某疾病的病人进行治疗？（3）如果将权利要求描述为“治疗方法”而不是诊断方法，结果又会怎样？

在最近的“*Classen Immunotherapies, Inc.*对*Biogen IDEC*”（备案号2006-1634）（联邦巡回上诉法院2008年12月19日）案中（非先例性判决），联邦巡回上诉法院本有机会解决上述问题并改进医疗诊断方法的可专利性标准，遗憾的是其并没有选择这么做。*Classen*案中所涉权利要求

disorder by first immunizing a group of patients with vaccines and then comparing the incidence or severity of the disorder in the treated group with a control group. Even though the claim specifically included the active step of immunizing patients with vaccines, the claim was held invalid under 35 U.S.C. §101 by the district court. The district court reasoned that the immunization step was insignificant extra-solution activity and that the claims were "an indirect attempt to patent the idea that there is a relationship between vaccine schedules and chronic immune mediated disorders [and]…an attempt to patent an unpatentable natural phenomenon." *Id.* at 12. The Federal Circuit affirmed. In its one paragraph nonprecedential decision, the Federal Circuit states,

"In light of our decision in *In re Bilski*, 545 F.3d 943 (Fed. Cir. 2008)(en banc), we affirm the district court's grant of summary judgment that these claims are invalid under 35 U.S.C. §101. Dr. Classen's claims are neither 'tied to a particular machine or apparatus' nor do they 'transform a particular article into a different state or thing.' *Bilski*, 545 F.3d at 954. Therefore, we affirm."

There is one other case currently pending in the Federal Circuit that involves a similar fact pattern: *Prometheus Laboratories, Inc. v. Mayo Collaborative Services*, 2008 U.S. Dist. LEXIS 25062 (S. D. Cal. 1008). In *Prometheus*, the claims were directed to correlating the level of a metabolite with toxic side effects of a drug on a patient. The district court granted summary judgment on invalidity under Section 101, holding that the correlation of metabolite level and toxicity was an unpatentable natural phenomenon.

Notably, the claim in *Prometheus* was framed as a "treatment method." Specifically, the claim at issue was directed to a method of optimizing therapeutic efficacy for treatment of a disease comprising: 1) administering a drug to a subject, 2) determining the level of a metabolite of the drug, wherein a low level of the metabolite indicates the need for an increase in the amount of the drug administered and a high level indicates the need for a decrease in the amount of the drug administered. The district court found the fact that the claim was framed as a treatment method did not help patentability. The court reasoned that a careful review of the claim revealed that the steps embody only a correlation between the metabolite level and drug toxicity, and that the "administering" and "determining" steps were merely necessary data-gathering steps for any use of the correlation. *Id.* at *17. The court also found a dependent claim reciting a machine capable of performing high pressure liquid chromatography invalid. The court stated that the recitation of a machine in that claim was merely "incidental" to the claim and thus insufficient to "save" the claim from being invalidated. *Id.* at *44.

While the Federal Circuit may provide some meaningful guidance when deciding on *Prometheus*, it is unlikely that there will be a uniform solution that will help medical diagnostic patents pass the *Bilski* test. For example, a transformative step may be considered as being sufficient to render one claim patentable yet found to be merely "insignificant extra-solution" for another claim. Similarly, recitation of a machine may be sufficient to confer patentability to one claim yet considered as not imposing meaningful limitation to another claim. Whether or not a recited machine or transformation confers patentability to the claim will likely entail careful analysis of the nature of the invention and the interrelationship among the different claimed steps.

In the post-*Bilski* era, there is a greater possibility for accused infringers to assert Section 101 defenses and for licensees to bring Section 101 challenges. Faced with these new potential challenges, patent owners in the diagnostic field should review their patent portfolio and reevaluate the strength of their patents. Looking forward, to obtain strong patents that withstand patentability challenges, it is critical that innovators work closely with patent practitioners to help understand the invention and to ensure that claims are carefully drafted so that they are patentable under *Bilski* yet broad enough to serve the purpose of effectively blocking competitors. ■

为通过首先利用疫苗对一组病人进行免疫接种，然后对接受治疗病人组与受控制病人组的慢性免疫调节功能紊乱的发病率或严重性进行比较，从而确定免疫程序是否影响紊乱的发病率或严重性。尽管具体权利要求包括利用疫苗对病人进行免疫接种这一主动性步骤，地区法院仍根据《美国法典》第35篇第101条判定该权利要求无效。地区法院推断，免疫接种步骤属于无关紧要的额外解决行为，且该权利要求为"间接地试图就疫苗程序与慢性免疫调节功能紊乱之间的关系申请专利[和]....试图为一种不可专利的自然现象申请专利"（同上第12页）。联邦巡回上诉法院维持地区法院的判决。联邦巡回上诉法院在其仅含一段内容的非先例性判决里表示：

"根据本院就*Bilski*案（《联邦判例汇编》第3辑第545卷第943页）（联邦巡回上诉法院2008年）所做裁决，本院维持地区法院授予的简易判决，即根据《美国法典》第35篇第101条，该等权利要求应为无效。*Classen*博士的权利要求既'没有和某特定机器或设备相搭配'，也'不能将某特定物品转变为其他形态或物体'（《联邦判例汇编》第3辑第543卷第954页*Bilski*案）。因此，本院维持原判。"

目前，联邦巡回上诉法院审理的另一起未决案例，即"*Prometheus Laboratories, Inc.*对*Mayo Collaborative Services*"案涉及类似的案例事实。在*Prometheus*案（2008年美国地区法院，LEXIS25062（加里福利亚南部地区法院，2008年））中，权利要求为将药物代谢物水平与药物给病人造成的毒副作用相关联。地区法院根据第101条做出了权利要求无效的简易判决，判定代谢物水平与毒性相关联属于一种不可授予专利的自然现象。

值得注意的是，*Prometheus*案中的权利要求被描述为"治疗方法"。具体而言，该案所涉权利要求是一种优化疾病治疗功效的方法，包括：1）给主体使用药物，2）确定药物的代谢物水平，低水平代谢物表示需要增加用药剂量，而高水平代谢物表示需要减少用药剂量。地区法院判定，将权利要求限定为治疗方法不会提高可专利性。据法院推断，对权利要求进行的严格审核表明，其步骤仅涵盖代谢物水平与药物毒性之间的关联性，而"使用"和"确定"步骤仅仅是运用该等关联性所需的数据收集步骤（同上第*17页）。法院还判定一项引用能执行高压液相色谱法的机器的附属性权利要求无效。法院表示，在该权利主张中引用某机器仅仅是对权利要求的附属，因此不足以使权利要求免于被判无效的命运（同上第*44页）。

尽管联邦巡回上诉法院在对*Prometheus*案进行判定时可能提供了一些有意义的指导，但要有一个恒定的模式来帮助医疗诊断专利通过*Bilski*检验标准是不大可能的。例如，某个转变步骤可能被认为足以使一项权利要求获得专利，但对另一项权利要求而言，其可能被判定仅仅是"无关紧要的额外解决方案"。同样，引用某机器可能足以使某项权利要求获得可专利性，但对另一项权利要求而言，其也可能被视为未设定有意义的限制。要想确定被引用的机器或转变步骤是否能授予权利要求可专利性，我们须对发明的本质及所提出的不同步骤之间的相互关系进行严谨的分析。

在*Bilski*案后，以下事件发生的可能性将增大，即被指控的侵权人将根据第101条规定进行抗辩，而专利被许可人亦将根据第101条规定提出异议。面对上述可能出现的新的挑战，诊断领域的专利权人应仔细审查其拥有的专利，并对其专利的价值重新进行评估。要想获得能抵挡就可专利性提出的异议的专利，关键在于发明人应与专利代理人紧密合作，帮助专利代理人了解其发明，并确保谨慎起草权利要求，从而保证权利要求既能根据*Bilski*检验标准获得专利，又涵盖面足够广泛，从而能有效地阻挡竞争者。■

Intellectual Property Practice News

BACK SECTION

Awards and Accolades

Morrison & Foerster's Intellectual Property practice continues to win prestigious awards and top rankings. In the most recent **Managing Intellectual Property** rankings of IP groups, Morrison & Foerster was ranked as having the fourth largest IP practice in the U.S. with 249 lawyers devoting at least 75% of their time to IP work.

FROM THE DOCKET

Our IP trial lawyers racked up resounding plaintiff and defense wins for several technology clients in recent months. Some of our biggest victories came in key venues, such as the Eastern District of Texas and the International Trade Commission.

Morrison & Foerster Defends Chinese Start-up

In October 2007, Applied Materials filed suit for misappropriation of trade secrets against Shanghai-based start-up **AMEC**. The case alleges that certain former employees of Applied Materials misappropriated trade secrets when they formed AMEC upon returning to China. AMEC is a newcomer to the semiconductor manufacturing equipment space, and its first product is an etch system used to build chips. The firm twice successfully defended AMEC against Applied's motions for emergency orders at the outset of the case seeking expedited discovery. The defense team on this matter consists of **Harold McElhinny** (San Francisco office), **Marc Peters** (Palo Alto office), **Ken Kuwayti** (Palo Alto office), **Mark Danis** (Tokyo office), **Amir Weinberg** (Tokyo office), and **Matt Ahn** (San Francisco office).

Respondents Beat Tessera's Patent Infringement Claims in the ITC

Morrison & Foerster represents respondent Flash memory companies Spansion, Inc. and its affiliate in a closely watched ITC patent suit filed by Tessera Technology, Inc. On December 1, 2008, after a full trial on the merits, the Administrative Law Judge presiding over the case issued an initial determination that Spansion and the other respondents did not violate Section 337 of the Tariff Act because Tessera's patents were not infringed. This tremendous victory for the respondents is the first decision that we know of that has been adverse to Tessera and the patents it has widely licensed and asserted against the semiconductor industry.

The Washington, D.C. team was led by partners **Alexander Hadjis** and **Kristen Yohannan,** with assistance from Of Counsel **Chip Terrill** and **Michael Maas**, and associates **Matthew Vlissides**, **Robert Giles**, **Yan Wang**, **Paul Kletzly**, **Nabila Isa-Odidi**, and **Alex Haliasos**.

East Texas Jury Awards Pioneer $60 Million

Morrison & Foerster secured a major victory in October for Pioneer Corporation in a patent infringement suit against Samsung Electronics Co., Ltd. and its affiliates. After an eight-day trial, and only four hours of deliberation, a jury in the Eastern District of Texas decided three Samsung entities had willfully infringed the patents in suit and awarded $59.3 million in compensatory damages to Pioneer. We are now seeking enhanced damages due to the jury's conclusion that the infringement was willful. Filed in the fall of 2006, the suit asserted that plasma televisions manufactured by Samsung infringed two plasma display technology patents held by Pioneer.

In a press release announcing the outcome of the trial, Pioneer stated: "This significant decision in favor of Pioneer represents recognition of the strength of Pioneer's intellectual property rights in the field of plasma displays."

The winning team was led by **Harold McElhinny** (San Francisco office), **Karen Hagberg** (New York office), and **Andrew Monach** (San Francisco

知识产权业务新闻

奖励和荣誉

美富知识产权业务不断荣获嘉奖及顶级排名。在英国IP杂志MIP（**Managing Intellectual Property**）最近对知识产权团队进行的排名中，美富被誉为美国第四大知识产权业务的律师事务所。 249名美富律师将其至少75%的时间贡献于知识产权工作。

摘要

在最近几个月里，我们的知识产权诉讼律师为若干技术客户赢得了诉讼，其中有些重大胜诉是在德克萨斯东部地区法院及美国国际贸易委员会等重要的审判地取得的。

美富为中国新兴公司进行抗辩

2007年10月，应用材料公司(**Applied Materials**)起诉上海新兴公司中微半导体公司非法使用其商业秘密。该案声称，应用材料公司的某些前雇员在回到中国成立中微半导体公司时不当使用了原告的商业秘密。中微半导体公司是半导体制造设备行业的新秀，其首项产品是用于制造芯片的蚀刻系统。应用材料公司曾两度于案件之始为寻求加快证据开释提出紧急令申请，本所均成功地就此为中微半导体公司进行了抗辩。为该案组成的抗辩团队包括**Harold McElhinny**（旧金山办事处）、**Marc Peters**（帕洛阿尔托办事处）、**Ken Kuwayti**（帕洛阿尔托办事处）、**Mark Danis**（东京办事处）、**Amir Weinberg**（东京办事处）及**Matt Ahn**（旧金山办事处）。

为被告赢得了Tessera在美国国际贸易委员会提起的专利侵权索赔案

在备受关注的由Tessera技术有限公司在美国国际贸易委员会提起的专利诉讼案中，美富代理被告闪存技术公司(Spansion)及其关联公司。2008年12月1日，在全面审判后，主管该案的行政法法官发布初步判决，认定闪存技术公司及其他被告未违反《关税法》第337条，理由是Tessera的专利并未受到侵犯。据我们所知，我所本次为被告赢得的胜诉是首次不利于Tessera及其专利的判决。Tessera用其专利对整个半导体行业进行了广泛的许可要求和诉讼。

我所华盛顿哥伦比亚特区团队由合伙人**Alexander Hadjis**及**Kristen Yohannan**领导，由法律顾问**Chip Terrill**及**Michael Maas**，律师**Matthew Vlissides, Robert Giles, Yan Wang, Paul Kletzly, Nabila Isa-Odidi**及**Alex Haliasos**提供协助。

德克萨斯州东区法院陪审团裁决先锋公司获得6000万美元赔偿

在向三星电子及其关联公司提起的专利侵权诉讼中，美富律师事务所在10月为先锋公司赢得了巨大胜利。经过8天的审判，以及仅仅4个小时的商议，德克萨斯州东区法院的陪审团判决3家三星实体曾故意侵犯诉讼专利，并裁决向先锋公司支付5930万美元作为损失赔偿金。鉴于陪审团的结论是故意侵权，本所目前正在寻求更多的赔偿金。该诉讼是在2006年秋季提起的，诉讼指控三星公司生产的等离子电视侵犯了先锋公司持有的两项等离子显示器技术专利。

在宣布审判结果的一篇新闻稿中，先锋公司表示：“本次有利于先锋公司的重大判决的认可了先锋公司在等离子显示器领域拥有的知识产权实力。”

取得案件胜利的团队由**Harold McElhinny**（旧金山办事处）、**Karen Hagberg**（纽约办事处）和 **Andrew Monach**（旧金山办事处）领导，并由合伙人**Peter Stern**（东京办事处）和 **Taro Isshiki**（东京办事处）、法律顾

office) with assistance from partners **Peter Stern** (Tokyo office) and **Taro Isshiki** (Tokyo office), Of Counsel **Sherman Kahn** (New York office), and associate **Kyle Mooney** (New York office).

Victory for Funai in the ITC

In November, Morrison & Foerster secured a victory for Funai Electric Co., Ltd., and its affiliate, Funai Corporation, Inc. (collectively "Funai"), in a patent infringement case against 14 manufacturers and importers of digital televisions and other related products. An Administrative Law Judge of the ITC issued an Initial Determination concluding that the accused digital televisions of Vizio, TPV, Amtran, Proview, Syntax-Brillian, and other respondents infringe asserted claims of one of Funai Electric's U.S. patents. The Administrative Law Judge has recommended the full ITC grant a limited exclusion order barring importation of the infringing products into the United States, as well as a cease-and-desist order to prevent sale or distribution of such infringing products in the United States.

The Morrison & Foerster winning team was led by partner **Karl Kramer** (Palo Alto office), with assistance from partners **Harold McElhinny** (San Francisco office), **Hector Gallegos** (Los Angeles office), **Brian Busey** (Washington, D.C. office), **Louise Stoupe** (Tokyo office), **Moto Araki** (Tokyo office), **Nicole Smith**, **Mark Danis** (Tokyo office), and **Anthony Press** (Los Angeles office). ■

问**Sherman Kahn**（纽约办事处）、以及律师**Kyle Mooney**（纽约办事处）提供协助。

在国际贸易委员会为船井公司赢得了胜利

在向14家数字电视和其他相关产品的制造商和进口商提起的专利侵权案中，美富律师事务所在11月为船井电机株式会社及其关联公司船井有限公司（统称"船井公司"）赢得了胜利。国际贸易委员会的行政法法官宣布了最初判决，判决结果是Vizio、TPV、Amtran、Proview、Syntax-Brillian以及其他被告被控诉的数字电视侵犯了船井电机拥有的一项美国专利的权利要求。行政法法官建议国际贸易委员会全面授予有限排除令（禁止将侵权产品进口到美国）以及禁止令（阻止在美国出售或分销上述侵权产品）。

美富律师事务所取得案件胜利的团队由合伙人**Karl Kramer**（帕罗奥多办事处）领导，由合伙人**Harold McElhinny**（旧金山办事处）、**Hector Gallegos**（洛杉矶办事处）、**Brian Busey**（华盛顿办事处）、**Louise Stoupe**（东京办事处）、**Moto Araki**（东京办事处），**Nicole Smith**（洛杉矶）、**Mark Danis**（东京办事处）和**Anthony Press**（洛杉矶办事处）提供协助。■

Morrison & Foerster Strengthens its China Litigation and IP Practice

Morrison & Foerster has recently enhanced its Litigation and IP practice in China by relocating two seasoned IP attorneys to its Shanghai Office. The firm now offers comprehensive IP services on the ground to its clients in China, including patent litigation, patent prosecution, licensing, and IP due diligence.

Mr. Mike Vella moved from the United States to Shanghai in August 2008, and now leads the firm's litigation practice in China. Mr. Vella has 20 years experience representing clients in international intellectual property disputes, including patent, copyright and trademark litigation. Contact Mr. Vella in Shanghai at mvella@mofo.com or +86 21 2322-5200.

Mr. Harris Gao moved from the United States to Shanghai in January 2009. Mr. Gao is experienced in both patent litigation and prosecution, and knowledgeable about IP issues facing high-tech companies. Contact Mr. Gao in Shanghai at hgao@mofo.com or +86 21 2322-5200.

美富律师事务所增强其中国诉讼和知识产权业务

美富律师事务所将两位资深知识产权律师调到上海办事处工作，增强了其中国诉讼和知识产权业务。本所目前在中国本土为其客户提供全面的知识产权服务，包括专利诉讼、专利申请、许可以及知识产权尽职调查。

魏迈克（Michael Vella）先生已于2008年8月从美国调往上海工作，目前领导本所的中国诉讼业务。魏先生在代理客户处理国际知识产权争议，包括专利、版权和商标诉讼等方面有着20年的经验。请通过电子邮件mvella@mofo.com或电话 +86 21 2322-5200与魏迈克律师联系。

高焕勇（Harris Gao）先生将于2009年1月从美国调往上海工作。高先生在专利诉讼和申请上有着丰富的经验，并精通与高技术公司有关的知识产权问题。请通过电子邮件hgao@mofo.com或电话 +86 21 2322-5200与高焕勇律师联系。