

Legal Updates & News

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The Narrowing of Patentable Subject Matter by the Federal Circuit: *In re Nijiten* and *In re Comiskey*

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by [Richard C. Kim](#), [Katherine L. Parker](#)

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Since the eighteenth century, the scope of patentable subject matter under the Patent Act has encompassed four categories—“process, machine, manufacture, or composition of matter.”[1] Until recently, these categories were broadly construed to encompass “anything under the sun that is made by man.”[2] In the 1998 *State Street Bank* decision, the Federal Circuit made it clear that this broad scope of patentable subject matter also includes business methods.[3] In that case, the patented invention related to a method of allowing multiple mutual funds to pool their resources and take advantage of economies of scale.[4] The next year, the Federal Circuit held in *AT&T v. Excel* that any process that provides a “useful, concrete, tangible result” is patentable subject matter.[5] The Board of Patent Appeals and Interferences followed the *AT&T* holding in *Ex Parte Lundgren*, which rejected a separate “technological arts” requirement and found that an invention of a method of compensating a business manager based on comparative performance, which did not require the use of a computer or any specific machinery, was patentable subject matter.[6]

Recently, the Federal Circuit issued two opinions that substantially narrow what was previously thought to be within the purview of 35 U.S.C. § 101. The Federal Circuit held that a business method, when not combined with a machine such as a computer, is not patentable, and that a signal, on its own, is also not patentable. These two decisions create three new conditions for patentability not previously recognized in the case law: a “technological arts” requirement, a “non-transience” requirement, and a “tangibility” requirement.

In Re Comiskey: Not All Business Methods Are Patentable

In *In re Comiskey*,[7] the Federal Circuit took up the issue of “business method” patents, and in doing so reinvigorated the “technological arts” requirement for patentability that the Board of Patent Appeals had rejected in *Ex Parte Lundgren*. In *Comiskey*, the claims at issue covered a “method for mandatory arbitration” comprising multiple steps, including “enabling a person to enroll,” “providing arbitration language,” “conducting arbitration resolution,” and “determining an award or a decision that is final and binding.”

Although the U.S. Patent and Trademark Office (PTO) had not addressed statutory patentability in rejecting *Comiskey*'s claims, Judges Dyk, Michel, and Prost of the Federal Circuit raised the issue on their own, and held that most of the claims were not patentable. The court explained that although the Patent Act states that a “process” is patentable, this term should not be read literally. The court relied on the long-standing principle that abstract ideas or algorithms cannot be patented. In its holding, the Federal Circuit explained that an algorithm or abstract idea is patentable only if it “is embodied in, operates on, transforms, or otherwise involves another class of statutory subject matter, i.e., a machine, manufacture, or composition of matter.”[8] The panel made it clear that an abstract idea, standing alone, is not patentable even if it has practical application.[9] Because many of *Comiskey*'s claims encompassed only a mental arbitration process, with no tie to any machine, manufacture, or composition of matter, they could not be patented.

This holding—that *Comiskey*'s claims were not patentable because they encompass purely mental processes—contradicts the Federal Circuit's earlier holding in *AT&T*, as well as earlier cases such

as *In re Musgrave*, in which the Court of Customs and Patent Appeals held that a process was not unpatentable “merely because some or all the steps therein [could] also be carried out in or with the aid of the human mind or because it may be necessary for one performing the processes to think.”[10] In effect, the *Comiskey* opinion imposes the “technological arts” requirement that the Board of Patent Appeals had declined to recognize in *Ex Parte Lundgren*, thereby substantially narrowing what patent practitioners previously believed to be in the realm of patentable subject matter.

In addition to imposing a “technological arts” requirement, the Federal Circuit in *Comiskey* provided important guidance regarding the level of novelty that would be required for inventions that attempt to combine technology with what is otherwise a mental process. Some of *Comiskey*’s claims could have required the use of a computer, so they met the threshold requirement of patentability under Section 101. However, the Federal Circuit remanded for the PTO to consider whether these claims were obvious. In doing so, the Federal Circuit stated that the “routine addition of modern electronics to an otherwise unpatentable invention typically creates a *prima facie* case of obviousness.”[11] This language continues the shift in obviousness case law marked by the Supreme Court’s *KSR* decision[12] and Federal Circuit opinions applying its holding.[13] In *KSR*, the Supreme Court rejected the Federal Circuit’s “teaching-suggestion-motivation” (TSM) test for obviousness, under which separate prior art references could not be combined to show obviousness unless there was a teaching, suggestion, or motivation prompting one of skill in the art to make the combination.[14] After *KSR*, multiple prior art references may be combined to teach a claimed invention if it makes “common sense” to do so.[15] Thus, it may now be much easier to show claimed inventions are obvious in view of the prior art.

In Re Nuijten: A Signal on Its Own Is Not Patentable

In the second patentability opinion issued on September 20, a divided Federal Circuit panel consisting of Judges Gajarsa, Linn, and Moore held that a signal, standing alone, is not patentable subject matter.[16] *Nuijten*’s application disclosed a new method for “watermarking” a signal with additional data that would be imperceptible to a listener but susceptible of analysis with software designed for that purpose. The PTO allowed claims directed to the method of watermarking the signal, the device for doing so, and a storage medium containing the watermarked signal, but rejected claims directed to the signal itself, which the majority described as “transitory electrical and electromagnetic signals propagating through some medium.”[17]

In reviewing the PTO’s decision, Judge Gajarsa wrote for the court and held that a signal on its own is not patentable subject matter. Judge Linn dissented. The majority addressed each of the potential categories of patentability—process, machine, manufacture, and composition of matter—and held that a signal did not fall into any of the four categories, focusing most closely on the meaning of “manufacture.” Judge Gajarsa reviewed Federal Circuit and Supreme Court precedent, and found that a signal is not a “manufacture.”

In so doing, the Federal Circuit in *Nuijten* created two new requirements for patentability not previously recognized in any precedent. First, the majority stated that “manufacture” refers to “tangible articles and commodities.”[18] As pointed out by Judge Linn in dissent, none of the authorities cited by the majority in fact support this “tangibility” requirement.[19] Indeed, even if tangibility is a valid condition for patentability, it is questionable whether this rejection is even applicable to a signal, which is “tangible” to a signal processor that can sense and read the signal. Additionally, no precedent or rationale requires an invention to be tangible to a human being as opposed to a machine. Second, the majority held that inventions that are “transient” or “ fleeting” are not patentable, and observed that “energy embodying the claimed signal is fleeting and is devoid of any semblance of permanence during transmission.”[20] Judge Linn noted that this requirement, like the tangibility requirement, is not supported by any of the authorities cited by the majority. Judge Linn further pointed out that the Federal Circuit has previously found “fleeting” inventions patentable, particularly in the chemical arts, where transitory, non-isolatable compounds are nevertheless patentable.[21]

Summary and Practice Tips

The *Comiskey* and *Nuijten* decisions significantly narrow the scope of patentable subject matter under 35 U.S.C. § 101. En banc or Supreme Court review could alter the outcome of one or both cases, and Judge Linn’s dissent highlights that *Nuijten* in particular could be a likely candidate for further activity.

For the time being, however, claims directed to "business methods" or processes should always be linked to some technology or machine, and the applicant should be prepared to set forth why the combination of a mental process and technology overcomes the "prima facie case of obviousness" discussed in *Comiskey*. Moreover, pure signal claims should be avoided. Rather, claims should be directed to methods and apparatuses for generating or processing such signals.

Footnotes:

[1] 35 U.S.C. § 101.

[2] *Diamond v. Chakrabarty*, 447 U.S. 303, 309 (1980) (citing S. Rep. No. 1979, 82d Cong., 2d Sess., 5 (1952)).

[3] *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d 1368 (Fed. Cir. 1998).

[4] *Id.* at 1370.

[5] *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 1358 (Fed. Cir. 1999).

[6] *Ex Parte Lundgren*, Appeal No. 2003-2088, 2005 Pat. App. LEXIS 34 (B.P.A.I. 2005).

[7] *In re Comiskey*, 499 F.3d 1365 (Fed. Cir. 2007).

[8] *Id.* at 1376.

[9] *Id.* at 1377.

[10] *In re Musgrave*, 57 C.C.P.A. 1352, 1367 (C.C.P.A. 1970).

[11] *In re Comiskey*, 499 F.3d at 1380.

[12] *KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727 (2007).

[13] See, e.g., *Leapfrog Enters v. Fisher-Price, Inc.*, 485 F.3d 1157 (Fed. Cir. 2007).

[14] *KSR*, 127 S. Ct. at 1741.

[15] *Id.* at 1742.

[16] *In re Nijiten*, 500 F.3d 1346 (Fed. Cir. 2007).

[17] *Id.* at 1352.

[18] *Id.* at 1356 (emphasis added).

[19] *Id.* at 1358 (Linn, J., dissenting).

[20] *Id.* at 1356.

[21] *Id.* at 1359 (Linn, J., dissenting) (citing *In re Breslow*, 616 F.2d 516, 519, 521-22 (C.C.P.A. 1980), and *Zenith Lab. v. Bristol-Myers Squibb Co.*, 19 F.3d 1418, 1422 (Fed. Cir. 1994)).