

THE WIDENING POND: USPTO DECISION BROADENS SCOPE OF BUSINESS METHOD PATENTS

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The shores of the Atlantic Ocean seem fixed in immutable positions, but the gulf between the US and Europe regarding business method patents recently widened considerably due to *Ex Parte Lundgren*, which the Board of Patent Appeals & Interferences in the US Patent & Trademark Office (USPTO) decided on 28 September 2005. After *Lundgren*, as discussed in detail below, virtually any process that a person can perform, even without machine assistance, is potentially patentable in the US.

The Decision and Its Context

Most European practitioners are aware that patentable subject matter in the US includes software inventions and business methods. The availability of US patent protection for business methods drew considerable attention in the mid-1990s, culminating in the seminal 1998 decision of the Court of Appeals for the Federal Circuit (CAFC), *State Street Bank & Trust, Inc.* In general, *State Street* held that a claimed process reciting a transformation of data and having a practical application, i.e., producing a useful, concrete, and tangible result, is potentially patentable (“statutory subject matter”). However, starting in approximately 2001, the USPTO began issuing rejections of some business method patent claims for failure to recite an invention “within the technological arts.” As a result, allowances of business method cases decreased, and the overall time to prosecute business method cases shot up.

The US Constitution empowers the US Congress to create patent laws “to promote the progress of science and the useful arts.” The Constitutional reference to “useful arts” is the foundation of the “technological arts” requirement. In rejecting claims after *State Street*, the USPTO asserted that *State Street* did not overrule a separate line of

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cases, represented principally by two 1970s decisions of the Court of Customs and Patent Appeals, predecessor court to the CAFC, *In re Musgrave* and *In re Toma*. The USPTO interpreted these decisions to require inventions to fall within the “technological arts” in order to fulfill the Constitutional mandate.

*Ex parte Lundgren*¹ squarely considers the validity of the “technological arts” test, and rejects it. Lundgren’s application claimed a method of compensating a manager of a business in a way that reduces incentives to engage in special interest lobbying or industry collusion, reciting algorithmic steps for determining various performance characteristics of the manager and then awarding appropriate monetary compensation to the manager. The application and claims disclosed and recited no connection to a computer or other machine implementation.

The procedural history of the application is complex, consuming some ten years of prosecution and appeals. At one point, the Examiner rejected the claims for failure to recite an invention that could produce “a useful, concrete and tangible result,” which is one of the criteria of *State Street* for proper statutory subject matter. The Examiner later withdrew that rejection, but then rejected the claims for failure to recite statutory subject matter based on *Musgrave* and *Toma*. The Examiner contended that “both the invention and the practical application to which it is directed [are] outside the technological arts, namely an economic theory expressed as a mathematical algorithm without the disclosure or suggestion of computer, automated means, [or] apparatus of any kind ...”

The applicant appealed, and an enlarged panel of five Administrative Patent Judges (APJs) heard the case, deciding 3-2 to overturn the rejection. The majority observed that the Examiner’s withdrawal of a rejection on the basis of producing “a useful, concrete and tangible result” meant that the claims satisfied existing applicable case law. The majority also noted that the Examiner did not reject the claims as directed to “a law of nature, physical phenomena or an abstract idea.” The majority then held that *Musgrave* and *Toma* do not create a separate “technological arts” test, but that the cases merely mentioned that a claim could be statutory when within the technological arts as a way to counter the argument

that a claim reciting only “mental steps” would be non -statutory. In essence, the *Lundgren* majority found the references to “technological arts” in *Musgrave* and *Toma* to be mere dicta.

The holding of the majority drew two impassioned dissents from other APJs. Smith APJ recommended affirming the rejection primarily to allow the federal judiciary to decide the issue on further appeal, rather than the USPTO’s Board of Appeals.² Smith also contended that the decision should not merely resolve whether a “technological arts” test exists, but should also determine whether granting a patent for the claimed invention could fall within the Constitution mandate of promoting the “useful arts.” Barrett APJ, whose dissent runs to 66 pages, would go further. While Barrett agreed that close analysis of the case law yields no separate “technological arts” test, Barrett recommended entering two new grounds of rejection: first, that the claims recited “an abstract idea”; and second, that the claims did not recite a statutory process, because the claims did not transform physical subject matter into a different state or thing.

Impact and Practice Tips

Summed up, *Lundgren* resolves, at least at the administrative appeal level before the Board, that US examiners cannot reject claims based on failure to fall within the “technological arts.” However, examiners can still reject claims that appear to recite “a law of nature, physical phenomena or an abstract idea.” Nevertheless, *Lundgren* means that a broad range of human-performed processes are now potentially patentable, provided that particular claims for such processes have novelty and inventive step. As Smith APJ stated in dissent, *Lundgren* “opens the floodgate for patents on essentially any activity which can be pursued by human beings without regard to whether those activities have anything to do with the traditional sciences or whether they enhance the technological arts in any manner.”

Patent counsel and applicants may well rush to the USPTO with applications covering business methods and other highly abstract processes. Yet the opportunity presented by *Lundgren* may be short-lived. In the past, the general response of the USPTO to an adverse decision relating to statutory subject matter has been to regroup, find new grounds for rejection that achieve the same result no longer allowed under the adverse

decision, prepare training materials for examiners, and train examiners to issue the new grounds of rejection. This process often takes the USPTO many months or years. However, with *Lundgren*, the lengthy, detailed dissent of Barrett APJ provides a clear roadmap for rejection based upon the “abstract idea” rationale; the dissent could be transformed into training material for examiners relatively easily. Therefore, the author anticipates that in response to *Lundgren* the USPTO will simply shift to that rationale as a basis of rejection.

To avoid an undesirable result, practitioners may benefit from studying the Barrett dissent, with the goal of drafting claims that will not draw an “abstract idea” rejection. Further, in preparing the patent specification for a business method or other process, practitioners should search for any available way to disclose a connection to science or technology. If possible, an implementation in software or using other technological means should be disclosed. While *Lundgren* will not reach a higher court for further consideration, a future appeal may well reach the CAFC, which could change the *Lundgren* rule. If so, an applicant may need the flexibility to amend claims to recite a scientific connection, or technological means or steps.

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¹ The entire decision with majority and dissenting opinions is available online at: <http://www.uspto.gov/web/offices/dcom/bpai/prec/2003-2088.pdf>

² The USPTO cannot appeal an adverse Board decision to any higher tribunal; therefore, the US federal courts cannot hear the *Lundgren* case, and the *Lundgren* application will be remanded to an examiner for further proceedings consistent with the Board decision. In contrast, had *Lundgren* lost, he could have appealed to the CAFC.