Avoiding Abstract Claims by Broadly Defining the Problem

Stated narrowly, the Supreme Court's holding in *Bilski* was that the claims sought are unpatentably abstract. Moving forward, I believe that it will become increasingly important to consider how the courts and the Patent Office will delineate the boundaries of the doctrine — *i.e.*, when does a claim move into the realm of impermissible abstraction?

In its opinion, the Supreme Court offers a few nuggets of reasoning to explain its conclusion. In particular, the Court found that the Bilski claims were abstract because they were so broadly written so as to cover the entire concept of risk hedging:

> The concept of hedging, described in claim 1 and reduced to a mathematical formula in claim 4, is an unpatentable abstract idea, just like the algorithms at issue in *Benson* and *Flook*. Allowing petitioners to patent risk hedging would pre-empt use of this approach in all fields, and would effectively grant a monopoly over an abstract idea.[1]

The Court noted that the remaining dependent claims merely limit the hedging method to particular fields of use or add "token postsolution components."[2] As the Supreme Court held in *Flook*, these additions cannot transform an otherwise abstract claim into one that is patentable.[3]

Of course, a major difficulty with the Supreme Court's analysis is its poorly explained application of the law to the facts. Pointedly, the particular claims in question do not attempt to "patent risk-hedging" as a whole and would not have preempted the use of all or even most risk hedging methods. Rather, the claims are directed to a specific series of transactions that balance risk position in a particular way. In his concurring opinion, Justice Stevens identified this problem with the majority opinion, noting that:

> The patent now before us is not for a principle, in the abstract, or a fundamental truth. Nor does it claim the sort of phenomenon of nature or abstract idea that was embodied by the mathematical formula at issue in *Gottschalk v. Benson* and in *Flook*. . . . The Court, in sum, never provides a satisfying account of what constitutes an unpatentable abstract idea. Indeed, the Court does not even explain if it is using the machine-or-transformation criteria. The Court essentially asserts its conclusion that petitioners' application claims an abstract idea. This mode of analysis (or lack thereof) may have led to the correct outcome in this case, but it also means that the Court's musings on this issue stand for very little.[4]

Moving forward

One area ripe for skilled lawyering in future cases is in the framing of the problem solved by a claimed invention. In antitrust law, companies can avoid charges of unlawful monopolization by broadly defining their market. As an example, although a mobile-phone carrier may have a large market-share of the mobile-phone market, that same company may only be a small player (and thus not subject to certain antitrust controls) in a more broadly defined market that included all remote voice communications. Similarly, a claim that preempts the concept of hedging may not be seen as preempting the more broadly defined concept of investment strategies – especially when practical alternative solutions are identified that fall outside the scope of the claims.

Mayo Collaborative Svcs. v. Prometheus Labs. is a patentable subject matter case now pending before the Federal Circuit.[5] In that case, the challenged claims cover an iterative method of dosing 6-thioguanine (6-TG) for the treatment of an immune-mediated gastrointestinal disorder. The invention is based on a discovery that a properly treated patient should have a 6-TG body-concentration of between 283 and 493 pmol per 10,000 red blood cells, and the claims are written in a way that arguably preempts all uses of that newly-discovered natural phenomenon. In its counter, the patentee may hope to reframe the debate by focusing on the fact there are many possible ways to treat the disorder and that the claimed method is only one such mechanism.

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Endnotes

1 *Bilski* Slip Opinion, **Kennedy at 15 (majority opinion)**
2 *Id*.
3 *Id*. at 15-16.
4 *Bilski* Slip Opinion, **Stevens at 8-9 (internal quotations and citations omitted).**
5 App. No. 08-1403.