In its Bilski v. Kappos decision, issued June 28, 2010, the U.S. Supreme Court implicitly acknowledged the difficulty of reforming an Industrial Age intellectual property concept to meet the challenges of the Information Age, the age that has been shaping the world for at least the last four decades. Patents arose in the Industrial Age when a primary characteristic of “inventions” was tangibility. In the Information Age, however, “inventions” can be more intangible than tangible.

One definition sometimes offered for the term “patent” is an invention and a description of the invention. For many of the so-called business method patents that have been issued by the USPTO over the last 20 years, however, invention and description are one in the same. The invention is little more than words strung together to constitute a description. There is no tangibility, only words.

In Bilski, the Supreme Court’s favorable reaction to the machine-or-transformation test can be interpreted as an effort to ensure a degree of tangibility in patents. But the Court did not appear enthralled with the result and invited other tests. One possible test is Data In-Date Out. If a process is little more than Data In-Data Out, it likely lacks tangibility. The result is likely an abstraction, which seemed to be the ultimate reason the Court does not approve of certain types of process patents.

Many so-called business method patents and patent applications appear to be little more than exercises in data manipulation. Data is input into a manipulation system of some type—usually a computer or computers—the manipulation occurs, and data is output. The output may be little more than a score, a rating, or a recommendation. The alleged innovation may be no more than a sales forecast from past levels of sales. Or it may be a complex, multi-layered manipulation of many inputs. In either case, the basic form is the same: data in-data out, hence the term Data In-Data Out Patents.

In the simplest cases, an off-the-shelf statistical package performing such common calculations as regression analysis appears to provide most of the data manipulation. In other cases, the bulk of the manipulation effort appears to be provided by specially written computer programs. In both cases, computer software is a central component of the alleged invention.

Patents and computer software have an ambiguous relationship. Support can be found in judicial decisions and Patent Office practice for a variety of positions on software patentability. The statement is often made that computer software per se cannot be patented. But a small added ingredient—a ranking of potential stock selections, for example—has in many cases been all that is necessary for the award of a patent.

The manipulation of data is a fundamental component of the Information Age. It is also easy and inexpensive. Computers allow data to be organized, reorganized, manipulated, remanipulated, without end. The ease of designing a data in-data out process, and the ambiguousness of many of the results, are why some observers are wary.
of expanding the reach of patents to Information Age intangible “inventions.” Perhaps a Data In-Data Out test on 35 U.S.C. §101 patentability would be a better test to determine abstractness than the machine-or-transformation test.

A Data In-Data Out test might also be a way to control the growing use of patents to protect such abstractions as tax strategies and complex financial instruments. These types of abstractions are, after all, no more than the inputting of data to produce an intangible result that can be characterized as just more data.