Business Method Patents -
Development in the US and a Comparison with China

The recent *Bilski* decision has narrowed the patentability of business methods in the US. By comparison, China has long provided a relatively definite view on the patentability of computer and business methods.

Business Method Patents ("BMP") grant exclusive rights to their holders to prevent others from practicing the patented business method. Until the 1998 *State Street Bank* decision which confirmed that a business method is patentable provided that it has a “useful, concrete and tangible” result, it was uncertain whether business methods were patentable in the US. Since this decision, there had been a flood of these so-called BMP in the US.

New BMP Requirements in the US

In the recent case of *Re Bilski*, the Court of Appeals for the Federal Circuit ("CAFC") overhauled the patentability requirements on the patenting of business methods. The decision has the effect that, apart from having to meet the “useful, concrete and tangible” requirement, a patentable method or process must also meet the new “Machine or Transformation” test. Under this new test, a process is not patentable unless: (1) it is tied to a “particular machine” or apparatus (the “machine requirement”); or (2) it is able to transform an article or a substance into a different state or thing (the “transformation requirement”).

Transformation Requirement

The *Bilski* decision states that mere transformation of signals, data or “abstract constructs such as legal obligations, organizational relationship, and business risks” does not fulfill this “transformation requirement”. There must be some transformation on physical object or substance to fulfill this requirement. For example, the requirement would be satisfied if the storage space on a hard disk had been reduced, or the shape or property of a tangible product had been altered as a result of the process. It is however unclear whether this requirement would be fulfilled for the transformation of a signal for indicating whether a part of a piece of equipment (e.g. a part of an aircraft, vehicle, or heart pacer) needs replacement, which ultimately leads to the physical change of the equipment (i.e. with the part replaced).
Machine Requirement

As *Bilski* did not involve any type of machine at all, the CAFC did not extensively discuss the “machine requirement”. However, the CAFC explicitly stated that a general purpose computer might not be sufficient to meet the “particular machine” standard.

Although it is unclear whether the decision would be reviewed by the US Supreme Court, it is generally expected that the business methods patenting would be more difficult following *Bilski*.

BMP Requirements in China

By comparison with the present unclear position in the US, the current Chinese Patent Examination Guidelines (the “Guidelines”) have laid down a more definite view on patenting of business methods. Regardless whether the claims process is a computer process or a business process, the Guidelines specify that a claimed process is patentable as long as it provides a technical solution. According to the Guidelines, a technical solution involving a process must:

1. intend to solve a technical problem;
2. operate on natural laws; and
3. produce technical result according to natural laws.

The Guidelines do not specify the meaning of “natural laws”, but the examples in the Guidelines indicate that such refers to the exclusion of substantial human intervention. For example, if the key step of a process requires a human operator to determine what parameter should be used under a particular condition, the process would not be considered as operating on natural laws.

Again, the Guidelines do not specify what would be considered as “technical result”, but the examples in the Guidelines indicate that such refers to the ability to ultimately transform a substance, or obtain certain unknown parameters of a substance in order to achieve a useful result. This somewhat resembles the “transformation requirement” in the *Bilski* decision. However, the Guidelines even go a step further to indicate that the ability to obtain certain unknown parameters of a substance is also considered as a “technical result”.
One should also bear in mind that the mere implementation of a known process to a machine for automation is considered as obvious and not patentable under the patent laws of many countries including the US, the UK, China and in Europe.

**Conclusion**
To strengthen the position of a BMP in the US and China, a patent specification for inventions involving business methods should be drafted carefully to indicate the physical and technical contexts of the invention. In particular, the following should be included:-

- the implementation of the inventive process to a machine (for example program flow charts, or existing machines that can carry out similar process);
- the possibility of the invention to transform an article or substance physically (for example the ability of the invention to cause a machine to stop working automatically due to detection of malfunctioning parts, or the increase of performance of a machine or system that can be measured physically);
- the technical problem to be solved;
- the ability of the process to be operated without substantial human intervention; and
- the results of the invention that can be achieved, particularly if the invention is able to physically transform or measure the parameter of a substance.