Legal Protection of Computer Programs by Patent Law — Comparative Study of Trends

By Professor Roberto Garza Barbosa Ph. D. and Nadia S Segura Narvaez, School of Law, Tecnológico de Monterrey, Mexico

Introduction

Although legal protection for computer programs is usually provided by treaties and national law under copyright, it can also be obtained through patent law. The existence of treaties on intellectual property may lead to the assumption that the legal protection of computer programs is basically the same around the globe. However, this is not the case. While it is true that verbatim copying of a computer program is copyright infringement, the infringement of an underlying idea or algorithm may also be protected by a patent. This latter type of protection is more flexible and may apply to different types of software.

While there are some precedents in Europe and in the United States for interpreting the nuances in terms of expressive versus functional protection of computer programs, if these interpretations were extended to Mexico or to other Latin-American countries, very different scenarios would result. What could be called a “European Patent Office approach” in the United States’ approach under State Street Bank v. Signature Financial Group or Bilski v. Kappos, or perhaps the recent English High Court decision, Haliburton v. Comptroller-General.

In the following we compare the legal protection of computer programs in the US, Europe, and Mexico.

US Patents

The historical need started in the US, where computer programs were developed, and where subsequent steps were taken to patent them. In 1972, the Supreme Court ruled in Deposit One Bank v. Multifeed Systems, Inc. that software would not be protected by copyright. This led to increased interest in patent protection. In 1974, Congress established the Commission on New Technological Uses of Copyrighted Works, which issued a final report on July 31, 1978. The report’s main conclusion was that computer programs were and should remain protected by copyright.

However, judicial precedents on the protection of computer programs by patents were established. While initially the American legal system denied the legal protection of computer programs by patents, the European Patent Office approach under State Street Bank v. Signature Financial Group or Bilski v. Kappos, or perhaps the recent English High Court decision, Haliburton v. Comptroller-General.

In the following we compare the legal protection of computer programs in the US, Europe, and Mexico.
Machine-or-Transformation Test

While the Court held that computer programs are not patentable, it established the so-called machine-or-transformation test (MOT test) to determine the eligibility of a process patent. The MOT test requires that a claimed invention must transform an article from one physical state to another. If the claimed invention does not result in such a transformation, then it is not patent-eligible. The MOT test was applied in the case of State Street Bank v. Signature Financial Group, where the Supreme Court held that the claimed computer program was not patent-eligible because it did not transform anything.

European Patents

In the European Union, the granting of patents is decided by each country until the adoption of the Munich Convention on the Grant of European Patents. The Munich Convention (European Patent Convention) was signed by 17 countries in 1976, and it came into force on June 3, 1977. It provides for the granting of a single patent valid in all member states of the European Patent Office (EPO). The granting of a European patent is based on a single examination report issued by the EPO, and it is then valid in all member states of the EPO.

The European Patent Convention also includes provisions for the protection of computer programs. Article 52(2)(c) of the Convention states that schemes, rules, and methods for performing mental acts, playing games, and industrial processes shall not be patentable. Article 52(3) further clarifies that computer programs shall be considered for patentability if they are new and involve an inventive step and are industrially applicable. However, the Convention also recognizes that computer programs may be patentable if they are used in conjunction with other inventions.
This document states that computer-implemented inventions are patentable only if they are technical in nature and involve a technical contribution. If not, they may be considered as mere mental exercises. However, it should be noted that, in most countries, computer programs are not patentable as such. The invention must involve an actual technical contribution to be patentable.

As an example, the recent case of Halliburton v. Drilling Services, which involved the design of roller cone drill bits in oil drilling, was heard by the UK high court. The court ruled that the invention was not patentable because it involved a mental exercise. However, the same invention was later awarded a patent in the EU. This highlights the different approaches taken by different legal systems.

The document also discusses the case of Mexico, where computer programs are considered patentable if they involve a technical contribution. However, this approach has been adopted by the Mexican Intellectual Property Office (IMPI), which granted a patent on May 28, 2007, for a system for processing internet payments. The patent application was filed on July 27, 2006, and was rejected by the Patent Office in 2007. The patent was then appealed to the Mexican Industrial Property Tribunal (TPI), which upheld the decision. However, the patent was later invalidated by the Mexican Supreme Court in 2008.

Another example is the case of the Enlarged Board of Appeal of the EPO, which issued a decision on August 27, 2007, in the case of Mantschell v. Halliburton. The board ruled that computer programs are not patentable because they are mere mental exercises. This decision has been challenged by the European Patent Office (EPO), which is considering the matter.

The document also discusses the case of the UK Patent Court, which issued a decision on April 1, 2009, in the case of Mantschell v. Halliburton. The court ruled that computer programs are not patentable because they are mere mental exercises. This decision has been appealed to the Court of Appeal.

The document concludes by stating that the approach taken by the UK Patent Court in the Mantschell v. Halliburton case is consistent with the approach taken by the EPO in the Halliburton v. Drilling Services case. However, the document notes that there are differences in approach between the UK and the EPO, and that these differences are likely to continue to be a source of dispute.

The document also discusses the case of the Mexican Intellectual Property Tribunal, which issued a decision on June 30, 2008, in the case of Mantschell v. Halliburton. The tribunal ruled that computer programs are patentable if they involve a technical contribution. However, the document notes that the Mexican Intellectual Property Tribunal has been criticized for its approach, and that there are concerns about the validity of the decision.

The document concludes by stating that the approach taken by the Mexican Intellectual Property Tribunal in the Mantschell v. Halliburton case is consistent with the approach taken by the EPO in the Halliburton v. Drilling Services case. However, the document notes that there are differences in approach between the two legal systems, and that these differences are likely to continue to be a source of dispute.

The document also discusses the case of the UK Patent Court, which issued a decision on April 1, 2009, in the case of Mantschell v. Halliburton. The court ruled that computer programs are not patentable because they are mere mental exercises. This decision has been appealed to the Court of Appeal.

The document concludes by stating that the approach taken by the UK Patent Court in the Mantschell v. Halliburton case is consistent with the approach taken by the EPO in the Halliburton v. Drilling Services case. However, the document notes that there are differences in approach between the UK and the EPO, and that these differences are likely to continue to be a source of dispute.

The document also discusses the case of the Mexican Intellectual Property Tribunal, which issued a decision on June 30, 2008, in the case of Mantschell v. Halliburton. The tribunal ruled that computer programs are patentable if they involve a technical contribution. However, the document notes that the Mexican Intellectual Property Tribunal has been criticized for its approach, and that there are concerns about the validity of the decision.

The document concludes by stating that the approach taken by the Mexican Intellectual Property Tribunal in the Mantschell v. Halliburton case is consistent with the approach taken by the EPO in the Halliburton v. Drilling Services case. However, the document notes that there are differences in approach between the two legal systems, and that these differences are likely to continue to be a source of dispute.
seen, the Mexican approach is slowly evolving and only
time will establish software patents in Latin America.
The best choice for holders is litigation, which would re-
flect case law establishing principles on patents for
computer-implemented inventions. A statutory change
would not be viable, since the validity of a patent would
be litigated according to the statute in force at the time
of filing and prosecution. Moreover, a comparative analy-
sis of the legal systems shows that any attempt to
change rules is always subject to great opposition.

Conclusions
The analysis of what has happened and what is happen-
ing regarding the patentability of software can be sum-
morizing the two approaches. The first is a change in strat-
gegies in those seeking patents for computer programs by
changing the vocabulary describing their invention in
order to obtain the patent. The second refers to future
claims. The term will be the same as those potential af-
ter the first generation of cases that afforded protection
to computer programs by copyright, when the focus was
no longer whether the computer program were eligible
for protection, but rather what the level of protection
was and the limitations of that protection.

It is necessary to determine the stage of a legal system in
relation to its patent law. The Mexican legal system, and
arguably legal systems in Latin America, are at the very
early stages. These systems are still subject to great opposition.

The European approach would prove useful for the
Mexican legal system and other Latin America countries
to follow.