

# Legal issues in software project management

Jyoti Tamak , Divya Bindal  
Department of CSE  
UIET Kurukshetra University,  
Kurukshetra, Haryana, India

## Abstract

*This paper helps to understand the difference between copyrights, patents and liability. The author, inventor or customer always confused about copyrights and patents. Both are used for protection of software. Patent is a property right granted by government to an inventor for a finite period of time whereas the copyrights protects the original work or expressions. Liability is defined as a wrongful act other than a violation of contract that injures another and for which the law imposes civil liability.*

**Keywords:** Liability, Copyright, Patents.

## I. INTRODUCTION

### Patents:-

- Patent is a property right to an invention granted by a national government to an inventor for a finite period of time in exchange for disclosure of the invention.
- No patent rights exist until the grant.
- Requirements: invention or discovery of useful, new, novel, non-obvious process (which could include software).
- Duration of patent grant = 20 years from application.
- Owner of patent has the “the right to exclude others from making , using, offering for sale or selling” the invention in the United States or “importing” the invention into the United states. No right to make anything.
- Patents protect any new or useful product, process, article of manufacture, composition of matter or improvement.
- They legally extend the right to exclude others from making, using and selling products based on the patent.
- It is a grant from the federal government based on the United state’s constitution authorization for promotion of “useful arts”.
- Patents protect ideas and are exclusive rights for novel inventions for a limited period of time.
- The patent protects the underlying concept, not just the implementation, for 20 years from the filling date of the patent application.
- Most of the patentable material resulting from software development is new and not obvious.
- Legal (patentable) inventions often are different from scientific inventions because the standards are legal, not scientific.
- Invention occurs when a problem is solved in a new way that is not an obvious solution.
- Many sources of this inventive inspiration are technical research, professional articles, education, work experience, market awareness, customer and competitor contact and patent searches in target and related technologies.
- Many computer-related inventions are patentable.

### Copyrights:-

- Copyrights protect original works of authorship such as writings, software, photos, music, artwork architecture and sound recordings.
- Protection is automatic once the original work is fixed in a tangible medium of expression. The © notice no longer is required but is advisable. The copyright is an exclusive right to:-
  - Reproduce the work
  - Distribute the copies of work
  - Prepare derivative works
  - Perform the work
  - Display the work
- The copyright protects only the expression, not the underlying idea and there is no protection against independent creation.
- Copyrights do not prevent others from using the ideas or information contained in the work.

**Duration of copyrights**

- If individual author, life of author plus 70 years.
- If work made for hire so that entity is the author, a term of 95 years from the year of first publication or 120 years from the year of creation, whichever expires first.

**Who owns the copyright?**

In general, the author of the work owns the copyright unless:

- It has been transferred.
- “Work made for hire”.

**Liability:-**

- Liability is defined as a wrongful act other than a violation of contract that injures another and for which the law imposes civil liability.
- The definition continues as a violation of a duty imposed by law, as distinguished from contract for which damages or declaratory relief may be obtained. If the software controls a process that can cause injury if the software fails, the company can be liable for the injury under tort law.
- Product liability of seller of a product which causes injury due to a defect is the area of concern in torts related to computer software development. There are three principal liability theories:
- **First**, negligence arises in the duty of care to the purchaser and the violation of duty that causes personal or property harm. The duty of care of the manufacturer resides in the care to design products in a safe way, the duty to set up reasonably error-free manufacturing procedures and the duty to inspect and test. Vicarious liability exists if the product incorporates other products creating liability for defects caused by other products.
- **Second, warranty** is the legal concept that goods are not as they were contracted to be. The warranty can be expressed in writing or can be simply implied. Warranty is covered extensively in the UCC. It must be noted that, to be effective, warranties must be available to customers before the sale.
- **Third**, principal of liability is strict liability. This arises when the product is defective and causes personal injury or property damage. A product may be considered defective and unreasonably dangerous if no adequate warnings are provided.

**Ways to minimize impact of software liability include:**

- Strong contracts that limit liability
- Warnings against using the software for applications that may cause injury
- Product liability insurance
- Use of standards in the software development process.

**II. Difference between copyrights and patents**

| Sr. no. | Copyrights  | Patents  |
|---------|---|--|
| 1       | Copyrights occurs automatically   | Patents must be registered.  |
| 2       | Copyrights refer to the expression of an idea and protects works of authorship  | Patents refer to an invention  |
| 3       | The copyrights fee is small   | The patents fee is larger  |
| 4       | It does not include a subject or topic, only what you "express" about something.  | Patent applications can be complex and costly  |
| 5       | Copyright law does not protect a bare phrase, slogan or organization name.  | A patent for an invention is the grant of a property right to the inventor, issued by the Patent and Trademark Office  |
| 6       | The registration time is short  | The registration time is long  |
| 7       | Examination by the Copyright Office is limited to ensuring that the registration application is properly completed and suitable copies are attached | The term of a new patent is 20 years from the date on which the application for the patent was filed in the United States or, in special cases, from the date an earlier related application was filed, subject to the payment of maintenance fees |

|   |   |   |
|---|---|---|
| 8 | The copyright protects the form of expression rather than the subject matter of the writing | Patents protect inventions such as new processes, machines, or chemicals. The central idea is that patents protect ideas, not just expressions of them. |
| 9 | Copyright contains moral rights and economic rights   | A patent is a right, granted by the government, to exclude others from making, using, or selling your invention.  |

### III. Conclusion

This paper clears the difference between copyrights and patents. How the software can be safe for longer time is done by copyrights and patents. All types of data save by patents and copyrights. Liability is wrongful act for which the company or an organization paid to customer. Patent protects the underlying concept, not just the implementation. Many computer-related inventions are patentable. Copyrights protect original works of authorship such as software, photos, music, artwork architecture and sound recordings.

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