

IMPACT FACTOR: 5.47

ISSN 2278 - 9529



# GALAXY

INTERNATIONAL MULTIDISCIPLINARY RESEARCH JOURNAL

Refereed and Peer-Reviewed  
Open Access e-Journal

Vol. X, Issue-3 (May 2021)

Editor-In-Chief : Dr. Vishwanath Bite  
Managing Editor : Dr. Madhuri Bite



[www.galaxyimrj.com](http://www.galaxyimrj.com)

**About Us:** <http://www.galaxyimrj.com/about-us/>

**Archive:** <http://www.galaxyimrj.com/archive/>

**Contact Us:** <http://www.galaxyimrj.com/contact-us/>

**Editorial Board:** <http://www.galaxyimrj.com/editorial-board/>

**Submission:** <http://www.galaxyimrj.com/submission/>

**FAQ:** <http://www.galaxyimrj.com/faq/>



## Intellectual Property Rights and Computer Software

**Dr Chandrani S. Bagadi**  
Assistant Professor

**Article History:** Submitted-06/04/2021, Revised-07/05/2021, Accepted-04/06/2021, Published-05/06/2021.

### Abstract:

Intellectual Property Rights have become important in today's world. In today's world computer security is of utmost important. There are certain goals of computer security like secrecy, integrity and availability which is tried to be fulfilled by the legislation but not to that extent. In the online world, IPR protected information like computer software. Unfortunately, current domestic laws governing intellectual property specifically computer software do not protect it as required.

“Security used to be an inconvenience sometimes, but now it's a necessity all the time”

Martina Naviratilova

**Keywords:** Computer Software, Intellectual property rights, programs.

### INTRODUCTION

In this online world, IPR information including computer software should be protected. Computer Software or programs are instructions that are executed by computer. Software is protected under copyright law and inventions related to software are protected under patent law. Computer holds information in the binary electronic notation of 0s and 1s, so that it can be transferred, stored and manipulated to quite extraordinary degrees. Computers are the basic machinery from which has increased rapidly the Knowledge Economy. The remarkable transformation that has come about in industrial production, financial and commercial operations, government, international relations, education and much more in today's world.

Computer software is the digital instructions which are used to drive the electronic hardware of the computer itself. There is basic computer and well recognized embedded computers contained in devices such as mobile phones, dvd players, household appliances, automobiles and medical equipment. Programs relevant to PCs will be the basic operating system of the machine. Embedded computing system on the other hand, are designed to perform dedicated functions like to allow the washing machine to play. The free Software or Open Source movement has a 20-year history of promoting the concept that contracts which license software should allow recipients to correct, adapt and develop the program and accompanying source material, subject only to an undertaking that alterations to the program will be made available to the public in the same terms.

## **OBJECT**

Object of the paper is to study

\* To discuss various types of intellectual property including patents, trademarks, and copyright with respect with computer software. development tools, like relational database

. \* To highlight the loopholes surrounding computer software and its place in the intellectual property area.

## **COMPUTER SOFTWARE**

Computer Software or programs are instructions that are executed by a computer. Software is protected under copyright law and inventions related to software are protected under patent law. Computer Software is digital goods. The term 'Computer Software' is a wider term and commonly used to describe computer programs and ancillary materials such as database preparatory material and associated documents like manuals for users of the program and the persons maintaining the programs. Therefore computer software nothing but collection of items and materials associated with the development and operation of computer program but it does not include computer hardware. It may include:



- 1) Preparatory design materials, like flowcharts, diagrams, written specifications, form and report layouts, designs for screen displays for screen display etc.
- 2) Object Code and Source Code and other executable code.
- 3) Software development tools, like relational database development system compilers, report etc
- 4) Database and data files.
- 5) Computer Output for example sound, printout, computer files or data electronic signals.
- 6) Screen displays
- 7) Manual and guides
- 8) Program languages.

Using programming language computer programmer creates computer software. Commands in the programming language are written by the programmer, these commands are called source code. Another computer program called a compiler is then used on the source code, transforming the commands into language that the computer can understand. The result is an executable computer program which is another name for software.

## **POSITION OF COMPUTER SOFTWARE UNDER LAW**

Computer Software or computer program is covered under literary work under copyright law. Like any literary work, a computer program has an 'expression' of its own. Article 9.2 of TRIPS Agreement, 1994 provides that copyright protection shall extend to expression and not to ideas, procedures, and method of operation or mathematical concepts. Further 10(1) of TRIPS Agreement, 1995 provides computer program whether it is source code or object code shall be protected as literary work.

Berne Convention (1883) Article 11- recognizes rental rights in respect of computer program and cinematographic work. WIPO Copyright treaty is a special agreement within the meaning of Article 20 of the Berne Convention therefore, computer program is covered under literary work and hence subject matter of copyright protection.

According to Computer Programs Directive art.1 (2) protection extends “to the expression in any form of a computer program” but not to its underlying ideas and principles thus excluding algorithms and programming languages.”

In India, Computer database is defined in Section 43, Explanation (ii) of the IT Act, 2000 as “representation of information, knowledge, facts, concepts, or instructions in text, image, audio, video” which are being prepared or have been prepared in a “formalized manner” or are produced by a computer and are intended for use in a computer, computer system or computer network.ii In India, original database are protected as literary work under section 13(1) (a) of the Copyright act, 1957 in Daljeeth Titus case wherein the Court took the view that the copyright protection is available to computer database containing drafts of agreements, client details and other proprietary information which was considered as confidential information for a law firmiii

Even though protection is given to Computer Software under Intellectual Property there are certain loopholes. Looking to the Section 3(k) of the Patents Act –(3) the following are not inventions within the meaning of this Act: (k) a mathematical or business method or computer programme per se algorithms. Therefore, computer software are kept in the same category as “mathematical methods”, “algorithms”, and “business method”, and seen with the angle of mathematical calculations. It is also said algorithm is only a step out as a rule in solving problem and it is not patentable as it is only an abstract idea and not extended to a ‘useful’ application, an essential qualifying factor in patentability. The same is the position relating to a mere mathematical method. In India, Computer database is defined in Section 43, Exp (ii) of the IT Act 2000 as ‘representation of information, knowledge, facts, concepts or instructions in text, image, video, audio which are being prepared or have been prepared in a ‘formalized manner’ or are produced by a computer and are intended for use in a computer system or computer network. Copyright Protection is granted to original expression and computer software under Copyright Act, 1957, unless it leads to a technical effect and is not a computer software per se. Generally computer software which does not have a technical effect is protected under copyright law. Computer Programme will not get sufficient degree of effort required to claim a copyright protection which only generates multiplication.

In Gale,s Applicaion iv The applicant’s essential discovery was of a computerized method of calculating square roots by eliminating division and restricting multiplication to



specified binary functions. This could be given form in the electronic circuitry of a read- only-memory (ROM) and the claim were to a ROM carrying the relevant controls. Aldous J. was prepared to accept the claim; but the Court of Appeal refused the application for its very apparent reference to mathematical procedures for producing numbers. The Court refused to accept in such a case that embodiment in a ROM made the program patentable, where it would not be if expressed purely in mathematical terms for insertion in a computer. Therefore, algorithms which are used are looked with the angle of mathematical calculations.

Even in Patent (Amendment) Act, 2002 excludes Computer Programmes from patentability. Under section 3(k), a mathematical or business method or a Computer programme per se or algorithms are non- patentable. Therefore, computer software is not protected under law

## **CONCLUSION**

This paper has attempted to highlight the position of computer software in intellectual property. Certain protection is given in the intellectual property but algorithms are looked with a angle of mathematical calculations which is not patented. The protection as required is still not given in law. Has hampered its growth due to absence of case law, patent examiners are not as expected according o the situation On new ideas and technology software patents have been granted and no on real software as such. The judiciary as well as legislative should focus on this area so that we can cope with rapid technological changes, so that inventive steps will be taken by Indians which will affect the decision of the policy makers against patenting computer software. As we know software is a necessity in this technology world, therefore protection should also e given to programmers. Even people are not aware how computer software can be protected under law, therefore awareness should be done.

---

<sup>i</sup> Cornish, Liewelyn and Aplin, Intellectual Property Patents, Copyright, Trade marks and Allied Rights, South Asian Edition, Eighth Edition.

- ii Karnika Seth, Computers, Internet and News Technology laws LexisNexis, Second Edition.
- iii Dajeet Titus v. Alfred A. Adebare, 130 (2006) DLT 330, (2006) 32 PTC 609
- iv Gale,s Application (1991) R.P.C. 305.

**Works Cited:**

**Books**

1. Cornish, Liewelyn and Aplin, Intellectual Property Patents, Copyright, Trade marks and Allied Rights, South Asian Edition, Eighth Edition
2. Karnika Seth, Computers, Internet and News Technology laws LexisNexis, Second Edition.

**Case Laws**

1. Dajeet Titus v. Alfred A. Adebare, 130 (2006) DLT 330, (2006) 32 PTC 609
2. Gale,s Application (1991) R.P.C. 305.