



Software and data-bases protection for SMEs and start-ups

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Software as a company asset and the strategies businesses should follow for their protection have been discussed during the 54th session of the INSMEAcademy held by Dr. Michela Maggi, Partner - Business Lawyer - PhD Intellectual Property at Maggi Legal, Italy (*INSME Full Member*).

Dr. Maggi opened the session underlining the importance of **innovation to maintain a competitive edge within the market**. However the speaker stated that **innovating is not enough, as two further elements are fundamental** to stay one step ahead of the competition: 1) to design a protection strategy for intellectual property assets 2) to adopt a strategy on how knowledge assets should circulate on the market.

Companies should protect intellectual property assets for a variety of reasons:

- i) to maintain a privileged position within the market in order to monopolize the use of a specific innovation;
- ii) to create value and monetize a company's own innovation;
- iii) to obtain finance from investors. Potential investors positively evaluate if the product/service is protected as this is usually a good indicator demonstrating that the SME has the potential to succeed in the market;
- iv) to obtain fiscal benefits, for example by exploiting the possibility of obtaining fiscal benefits in EU through Patent Box. A Patent Box is a special tax regime granting benefits to companies demonstrating specific IP assets and having a strategy of protection of those assets;
- v) to participate in public calls to finance projects inside the company.

Specifically software is a very complex IP asset that can be protected through:

1) Copyright

In EU software is protected as a literary work of art. The Directive 2009/24/EC establishes that legal protection can be granted to any form of a computer program and some parts of the program as copyright (including the preparatory design material).

During the session Dr. Maggi presented some examples of important decisions of the Court of Justice to explain how the EU Directive has been interpreted and more specifically provide an understanding of which part of the software can be protected as copyright.

The decision C-393/09 (which involved the Ministry of Culture of the Czech Republic) states that the source code and the object code of a software can in principle be protected as copyright. This means that

a source code or an object code can be protected if they are capable of leading to the reproduction of the computer program itself, thus enabling the computer to perform its tasks.

Graphical interfaces are simply part of a computer program providing for the interaction of the elements of the software and the hardware and enabling communication between the computer and the users. The Court concluded that in these circumstances graphical interfaces do not enable the reproduction of the computer program but merely constitute an element of the program.

According to the interpretation of the Court of Justice graphical interfaces do not constitute a form of expression of a computer program and they cannot be protected as copyright. However the Court underlines that such situation does not prevent national courts to protect graphic interfaces in different ways from the software ones. For example the esthetical feature of the graphical interface might be protected as a copyright, provided that it can be demonstrated that the creation is original.

The speaker also referred to other works linked to software, but other than software that have been considered protectable as copyright under the Italian law such as:

- instruction and maintenance book;
- software output;
- other works made up of software: for instance, videogames;
- databases as a structure;
- algorithms, even though just a minority of authors states that they can be protected and only if they generate hypertext or enable content's extraction when processed in a database;
- flowchart, also in this case a minority of authors believes that it can be granted copyright protection only if it consists of a sequence of signs chosen and organized to represent the flowchart itself – that is to say if the flowchart is not merely descriptive of the functioning.

2) Patent

Dr. Maggi stated that it is very difficult to obtain a patent over a software as there are many requirements that computer programs must meet to be considered a patentable asset. The European legislation establishes that it is not possible to protect as patents computer software as such. This is due to the nature of the invention: patentable inventions usually have a technical nature, while normally computer programs are or reproduce mental operations. Therefore, software or computer programs having the technical character can in principle be protected as patents even though it is very difficult to meet this requirement. There are also a variety of differences among the Member States of the EU on this matter. Normally modifications to the hardware cannot be considered as having a technical character. With technical character it is meant a situation in which there are further effects deriving from the execution and instructions of a computer program. Those effects should be able to lead to an industrial process to grant software patentability.

3) Trade Secret

Under European law, trade secret can be protected only if it meets a series of requirements:

- it must be a set of information not known or readily accessible to experts in the area. It must concern a software which is not shared with other and above all with technicians who can be able to understand and reproduce the program;
- must have an economic value and must be able to generate value;
- must foresee measures aimed at keeping it secret meaning both 1) technical measures (such as access control to the information) 2) contractual measures (such as Non-Disclosure Agreements).

By concluding, Dr. Maggi highlighted that software can be protected both as trade secrets and copyrights, as these two protections can coexist. While trade secrets cannot coexist with patent protection, as the latter means to give an innovation to the public while trade secrets is exactly the opposite, as the innovation must be kept absolutely confidential.