Introduction

Many people confuse the concepts of the ownership of Intellectual Property (IP) and the inventorship or authorship of creations, or sometimes they are simply not aware of their different nature. Yet, it is crucial to understand how to manage these rights as their improper handling could cause real problems, such as the validity of Intellectual Property Rights (IPR) granted or the risks of legal disputes.

This fact sheet aims to clarify the ownership, inventorship and authorship concepts by explaining the different characteristics and shedding some light on the way they should be dealt with in order for any person involved in the creation of intangibles to properly identify them and avoid encountering serious problems.
1 Ownership, Inventorship and Authorship

The concept of inventorship should not be confused with ownership as they stand for two different situations. Inventorship identifies the creator of an invention, the so-called inventor\(^1\). Ownership instead recognises the right to possess that invention, namely a proprietary right. The proprietor of the invention is known as the owner and has the right to restrict others in their use of the IP it owns. The inventor does not always correspond to the owner and *vice versa*.

On the other hand, the inventor is not necessarily an author. That is why alongside the previous two statuses, the IP system also enshrines the authorship. This latter is used in the copyright domain, and more precisely in a publications context, where a person has produced a piece of writing or any other specific publication: the author.

While inventors and authors are always natural persons, when owners are a separate entity they can be organisations. This is a common situation when inventors and authors work for an organisation or employer that owns their creations due to *assignment* arrangements made in the framework of an employment relationship.

\[\text{Employee(s)/Inventor(s)} \rightarrow \text{Inventorship} \rightarrow \text{IP} \rightarrow \text{Ownership Assignment} \rightarrow \text{Employer/Organisation} \rightarrow \text{Employee(s)/Author(s)} \rightarrow \text{Authorship}\]


\(^1\) A creator is also considered a person working as a design engineer in the electro-mechanical field as well as a designer in the creative/advertising industry. For the purpose of this fact sheet we will speak about inventors, being these positions similarly regulated for most of their aspects.
In general, exclusive rights related to patent and copyright rest respectively with inventors and authors. However, although such rights are normally assigned to their employers even before the work is done, this does not affect inventorship and authorship when applying for a patent or registering copyright\(^2\). It is therefore necessary to know how to determine these aspects for the appropriate allocation and protection of IP rights and to prevent any possible related dispute.

2 The relevance of inventorship

Overall, the inventor is always a natural person and the first owner of their creation. There exist two main requirements to determine inventorship:

- The conception of the idea
- The reduction of the idea into practice

Within these situations, when two or more persons contributed in devising the invention, they are considered to be co-inventors. To properly determine who is an inventor, their ‘active contribution’ to the invention should be taken into account, in the sense that without their personal involvement the invention would not have been devised. On the other hand, a person cannot be deemed to be the inventor if they only carried out work under direction from others\(^3\).

<table>
<thead>
<tr>
<th>Inventor / Joint-Inventor</th>
<th>Not Inventor</th>
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<tbody>
<tr>
<td>Conceives the idea</td>
<td>Puts forward hypothesis</td>
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<tr>
<td>Materia[ally contributes to the development of the invention</td>
<td>Passively follows the instructions imparted</td>
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<tr>
<td>Provides solutions to problems</td>
<td>Performs routine tasks</td>
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<td>Implements the innovation</td>
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The inventor is also the first person having the right to be granted a patent protection for its creation. The European Patent Convention expressly rules in

\(^2\) Even though registration is not a requirement for copyright protection, this process can prove to be useful in some situations, particularly when it is necessary to demonstrate that a work was in the author’s possession on a certain date. It may also prevent misappropriation of information in negotiations with potential partners, since it shows that such information had already been created. On this topic see the article “What does ‘copyright registered’ mean?”, published in the European IPR Helpdesk Bulletin N°3, October - December 2011, available in the library.

\(^3\) Project managers or supervisors cannot be considered inventors if they did not make any inventive contribution.
this sense and foresees that if the person filing a patent application is not the inventor, this latter must be designated in a separate document\(^4\). This document has moreover to indicate the origin of the right that the patent applicant has to the European patent\(^5\). A patent in fact can only be granted to its inventor or to the person who claims ownership via the inventor.

To this end, it is vital to foresee suitable contractual arrangements to prove that the patent applicant is entitled to seek protection for that specific invention.

If you are an organisation, you might want to make sure that the IP created by your employees belongs to the organisation. The common default regime in most of IP laws reflects this situation\(^6\). Nonetheless, it is strongly suggested that employment contracts contain express provisions in this sense. In summary, this should state that:

- All IP generated, modified or improved by employees \textit{in the course of the employment} will rest with the organisation;
- Employees will sign any other document necessary to assign the IP to the organisation.

It is important to understand the ‘\textit{in the course of employment}’ requirement for the assignment of the invention. In principle, the invention is assigned to the employer when the inventor has done their creative work in the course of their job duties. The following situations can help ascertain when there is an implied assignment:

- The inventor has a managerial or other key role within the organisation;
- The inventor used material put at their disposal by the organisation\(^7\);
- The inventor worked on their own invention during working hours;
- The inventor was hired for that purpose.

\(^4\) If the designation of the inventor is missing, the deficiency should be corrected within a limited period of time that if not respected will cause the rejection of the patent application.  
\(^5\) For more information you can read the guide for applicants “How to get a European patent”, available at \url{http://www.epo.org/applying/european/Guide-for-applicants.html}.  
\(^6\) National laws may however regulate this issue differently. Therefore you should familiar with your national legal framework and always consult a legal expert before taking action.  
\(^7\) This also holds true outside the working hours.
Beyond such situations, the inventor can be deemed to be the owner if, for example:

- The development of the creation started before its actual employment;
- The inventor used their own funds to develop the invention;
- The creation has been developed with the inventors’ material outside their working hours;
- The inventor devised an invention in a field different from their job domain.

All these examples can help to individuate the true inventor joint-inventors in order to correctly include them within the patent application. For organisations to efficiently keep track of any research and development activities, laboratory notebooks as well as sketch workbooks are ideal tools by means of which it is possible to establish the inventorship.

To sum up, active contributors should be clearly identified at any stage of the inventions’ conception so as to be qualified as inventors. Inventors have to be named when filing patent applications and should also be informed about the patent filing to give them the chance to verify the ownership and any likely joint-inventorship.

3 The relevance of ownership
Any organisations having innovation development as a core business should put in place an assignment system allowing them to acquire all the IP generated by their employees. To avoid later disputes in fact employment contracts should set forth express rules on the allocation of IP rights ownership.

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8 We will see in the next paragraph that such registers are an indispensable means also for handling ownership. Although the pictures show some examples of notebooks available in paper format, it is worth noting that there also exist commercially available electronic versions that can be more practical for the storage of large data-lists.
While standard employment contracts can in overall terms allocate ownership of employees’ inventions to the organisations (e.g. when employees are expressly hired for R&D purposes), there exist some situations where it is more appropriate to regulate IP ownership on a case by case basis.

Some common situations likely to bring inconveniences are:

- Where the inventive job was carried out by a sub-contractor⁹;
- Where the invention was devised by a PhD student in a Research Organisation (RO)¹⁰;
- Where the invention has been developed within the framework of a joint venture or other collaborative projects¹¹;
- Where improvements have been made at a later stage after the end of the employment relationship.

Therefore, at the beginning of the relationships listed above, it would be a good practice to make the workers concerned sign an assignment agreement, whereby clearly establishing what IP allocations are within the scope of the relationship in question.

Whether in employment contracts or in assignment agreements, clauses dealing with invention assignment should at least provide:

- Full assignment of any invention devised in the course of employment, or by means of the material which the organisation puts at the inventor’s disposal;
- The obligation for the employee to disclose any invention generated in the course of employment, or by means of the material which the organisation puts at the inventor’s disposal;
- The allocation of the ownership of improvements made after the end of the employment relationship on inventions developed during the contract terms;
- The obligation not to disclose confidential business information;
- The inhibition for former employees on working for direct competitors up to when the confidential information loses its inherent value to the business.

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⁹ Differently from the default regime in employment relationships, the IP generated by an independent contractor belongs to that contractor, as a general rule. More than in any other situations, a specific assignment agreement is then needed when an organisation subcontracts a work to an external entity.

¹⁰ In such cases, in fact, PhD students may not be employees as such.

¹¹ To better understand this issue, see the European IPR Helpdesk factsheet on “Commercialising Intellectual Property: Joint Ventures”, available in the library.
These rules should nevertheless be supported by the whole scheme of compensations and benefits and mainly by specific recognitions\textsuperscript{12} offered to incentivise the creation and assignment of IP\textsuperscript{13}.

In order for any organisation to record all the relevant activities linked to the development of an invention, it is advisable that laboratory notebooks and sketch workbooks be properly kept. This would certainly be crucial to show evidence regarding the date of the invention and its inventorship. Alongside these registers an accurate invention disclosure report should be completed by the inventor(s) to ascertain who created it and whether the described invention should be pursued further with an IP registration (e.g. patent, utility model, design) or be kept protected by other means (e.g. trade secrets).

In any case, all of the cited inventories should be clear, dated and should sufficiently record each stage of the invention development to ensure that any inventive step is protected. Most importantly, thanks to these records the organisation is able to monitor the creation of inventions and have knowledge of the IP assets it owns.

In conclusion, in order to clearly identify who are the inventors, to be aware of what is the IP owned by the organisation and to properly allocate inventorship and ownership in patent applications, it is advisable:

\begin{itemize}
  \item To foresee clear and understandable clauses within agreements dealing with the allocation of the IP ownership (i.e. employment contract and assignment agreements);
  \item To carefully keep track of the employees inventive activities in any development stages;
  \item To have an IP professional preparing and revising any agreement dealing with the allocation of the IP ownership;
  \item To take into account all the requirement linked to the inventorship and ownership when filing a patent application.
\end{itemize}

4 The relevance of authorship
Copyright law protects authorship intended as the expression of an original work created by an author. This generally applies to literary, musical, artistic, and other intellectual works. Similarly to the inventorship, the general rule here is that the author is the first owner of the copyrighted material and can then decide

\begin{itemize}
  \item This may be done under the guise of royalties redistribution, promotion opportunities, awards or any other economic reward.
  \item There are a number of different approaches to compensation for employees/inventors. To have an overview on how EU national laws regulate these rights, it is suggested to read Peberdy, M. and Strowel, A. "Employee’s rights to compensation for inventions - a European perspective", PLC Cross-border Life Sciences Handbook, 2009/10, available here.
\end{itemize}
as they wish about the use others can make of their works. However, when the work has been created in the course of employment\textsuperscript{14} copyright belongs to the employer as per the default regime\textsuperscript{15}.

Although copyright protection arises automatically upon the creation of the work, it is a common practice for organisations to register copyrighted works with ad hoc services offered by some national IP offices or private organisations. In these circumstances the registration forms ask for two separate type of information: the name of the author of the copyrighted material and the name of the person entitled to register the copyright.

As with inventorship, similar considerations apply to authorship as far as the assignment and proof of ownership are concerned\textsuperscript{16}. Here, however, it is important to note that unlike other IP rights, copyright also entails moral rights. Such rights may include:

- The right of an author to be identified as the author of their work;
- The right to the integrity of their works (e.g. prohibition of alteration, distortion, or mutilation);
- The right to decide whether the work should or not be published and in which way;
- The right to withdraw the work from publication;
- The right not to see their works used for illegal, immoral and undesired purposes.

Moral rights are personal rights so that, as a general principle, they cannot be transferred by assignment or be licensed\textsuperscript{17}. However, depending on national legislations, they may be waived in whole or in part by written consent from the author to the organisation to avoid any possible infringement. Again, this can be done within employment contracts or assignment agreements.

\textsuperscript{14} See paragraph 2 for an explanation of this requirement and any related issue.
\textsuperscript{15} As with patent right and any other IP right, copyright regime can differ from country to country in the EU. It is therefore suggested again that you be familiar with your national legal framework and always consult a legal expert before taking action.
\textsuperscript{16} The information provided in the previous paragraphs can be used for handling authorship in employment relationships.
\textsuperscript{17} Some EU countries allow nevertheless moral rights to be permanently assigned (e.g. Luxembourg).
Useful Resources

For further information on the topic please also see:


GET IN TOUCH

For comments, suggestions or further information, please contact

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The European IPR Helpdesk aims at raising awareness of Intellectual Property (IP) and Intellectual Property Rights (IPR) by providing information, direct advice and training on IP and IPR matters to current and potential participants of EU funded projects. In addition, the European IPR Helpdesk provides IP support to EU SMEs negotiating or concluding transnational partnership agreements, especially through the Enterprise Europe Network. All services provided are free of charge.

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Website: On our website you can find extensive information and helpful documents on different aspects of IPR and IP management, especially with regard to specific IP questions in the context of EU funded programmes.

Newsletter and Bulletin: Keep track of the latest news on IP and read expert articles and case studies by subscribing to our email newsletter and Bulletin.
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From 2015 the European IPR Helpdesk operates as a project receiving funding from the European Union’s Horizon 2020 research and innovation programme under Grant Agreement No 641474. It is managed by the European Commission’s Executive Agency for Small and Medium-sized Enterprises (EASME), with policy guidance provided by the European Commission’s Internal Market, Industry, Entrepreneurship and SMEs Directorate-General.

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