



FP7-SME-1  
Project no. 262289

**HARMOSEARCH**

Harmonised Semantic Meta-Search in  
Distributed Heterogeneous Databases



**D8.3 PLAN FOR USE AND DISSEMINATION OF THE FOREGROUND**

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<b>PP</b>	Restricted to other participants (including the Commission Services)	
<b>RE</b>	Restricted to a group specified by the Consortium (including the Commission Services)	
<b>CO</b>	Confidential, only for members of the Consortium (including the Commission Services)	

## PROJECT ACRONYM: **HARMOSEARCH**

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## 1 INTRODUCTION

### 1.1 PURPOSE OF THE DOCUMENT

This deliverable was added as a new deliverable in the course of the amendment of the project (which was submitted for other reasons than this document) and was triggered by some of the feedback from the interim evaluation of the project:

- “However, D8.1 does not yet provide a list of concrete exploitable project outcomes, nor concrete routes for effective exploitation. It was noted that the following deliverable should provide this kind of information in a clear way.”
- “Recommendation 4: The consortium should consider the necessity of including more powerful digital rights management (DRM) mechanisms into the developed tools, in particular to ensure wide acceptance and use of their tools. It should provide an indication of how existing DRM mechanisms could be incorporated or used together with HarmoSearch tools to ensure more detailed description and governance of owners' rights.”

Since recommendation 4 can be seen as a matter of exploitation and we had no other deliverable that suits, we decided to include the topic in this deliverable as well.

### 1.2 RELATIONSHIP WITH OTHER DOCUMENTS

The document is a result of the evaluation of “D8.1 Knowledge management plan and legal aspects” and as such related with that document. Furthermore the exploitation of results is somehow related to the dissemination started during the project, which is reported in “D9.3 Collection of dissemination material”.

There are no other relations.

### 1.3 STRUCTURE OF THE DOCUMENT

The document is made up of three main chapters:

- 1) Exploitation of project outcomes: This chapter describes the initiatives and plans of the partners to exploit the project outcomes and to bring them to the markets. They are doing this individually as originally foreseen but also jointly since some of the services demand to bring forces together.
- 2) Digital rights management: As said above, the evaluation and discussion of the integration of digital rights management mechanisms has also been added to this deliverable. The potential demand for this functionality was acknowledged, but the implementation is seen as a so called third party service.
- 3) Patents: Eventually, also the evaluation and the outcome of research into the application of patents shall be reported here, although the consortium does not see much potential for patents. Not due to the lack of innovation, but due to the lack of patentability of innovative software services. This part is larger in comparison with the others, but it gives useful information and we considered it of value to have it documented.

## 2 EXPLOITATION OF PROJECT OUTCOMES

The consortium members and especially the SME partners had initial ideas about the later exploitation of project results before the project started. Each of the SME partners is involved in the business areas underlying the project objectives and expected an impact on future business performance – either by offering new tools or at least by having more competence and know-how. Naturally, this was the most motivating factor for participating in the project.

Also the RTD partners have been working on similar projects in the past and expected not only payment of their efforts, but also an increase of competence in the area of data mediation.

While it is still valid that each partner will follow his individual routes of exploitation, it became increasingly obvious during the life time of the project that a central online data mediation service can only be offered by all or at least some of the partners together. This is for several reasons:

- 1) Each of the SME partners is a small company and has not the necessary resources to offer and maintain an online service on his own. This is less a technical issue, but rather a matter of market competence and power. An online service has to be pushed and marketed regularly and intensively to create awareness and attract customers. This can effectively only be done by bundling the forces of a group of partners.
- 2) The different cases for the usage of data mediation services are rather limited. We have evaluated different cases and the most promising one is the exchange of event data in cultural heritage and tourism. There are some other opportunities as well, like e.g. a hotel meta search, but there is more competition and the market is thus more difficult to enter.
- 3) There is not much reason to limit such a service to national markets, since tourism and cultural heritage are heavily present on the international level. But if each partner would start such a service individually, there will soon be competition amongst each other on the international level. It is therefore preferred to start in a concerted and directed cooperation from the beginning and launch a service jointly.
- 4) The cooperation in the project has proven to be very good and effective. From the exchange and interaction of ideas to the different competencies in coordinative tasks, development, design, testing, etc. – the consortium has proven to work very well together. This is something we want to continue after project end.

For this reasons the idea of launching an event publishing- and search service was evaluated more in detail and a draft project plan was elaborated. The idea is to use the HarmoSearch service, extend it with external service to enrich existing information (e.g. by categorization), and build an event information hub out of it. The main objective is to provide advanced harmonisation services to collect, enrich and distribute data about events and attraction for commercial use. This enrichment of data is adding value by categorizing and classifying the events and attractions based on their context. Thus, the vision is to deliver to the recipients a selection of

events and attractions that are automatically filtered according to their requirements.

The amount of data available on events and attractions and the lack of interoperability between the systems providing the data makes it difficult and expensive to get the data actually needed. Organisations like e.g. publishers, tourism organisations, tour operator, etc., have to process data in an expensive process by editors to get the right piece of information in the right quality.

This data will be analysed, matched over different platforms, categorized and pushed to or made available for the recipients. In addition, a dedicated portal shall be used to allow end-user enriching data also with their comments, recommendations and ratings of events and attractions. And to add their own objects.

The partners are currently discussing and evaluating different ways how to finance and push this project idea.

But the partners are open to contribute to other project ideas jointly as well. In the last weeks of the project two partners were contacted to contribute to a new national tourism portal, where the HarmoSearch service would be used to collect events from the different regions and push them to the national portal. HarmoSearch would make it a much easier task, since they do not need to change much on existing regional portals.

Despite the intentions to provide some services jointly each partner is still trying to use the service for his own purposes individually.

[x+o] intended to provide a data exchange service in the area of enterprise project information, where they wanted to implement the portal services plus sell the mapping tool to easily add systems or databases to exchange service. However, it became obvious during the project that the mapping tool cannot that easily be used by untrained users as it was originally foreseen. It needs some effort in learning how to create mappings and when doing so, there is still often need for an expert to help. So the mapping tool is a useful tool, but not that easily to use and thus to sell as expected beforehand by the SME partners. Still the idea is to create a project-management specific ontology and to use HarmoSearch as a platform to exchange data about projects (mostly performance indicators and resource information).

eCTRL has also been very active in the project and despite the software results, they could gain a lot of know-how and competence in collection and distribution of data. They could win one of their customers, the region of Biella, to use the service and are trying to sell more often HarmoSearch solutions together with their new recommender tool Suggesto Recommender and their Suggesto Tourism Portal solution. They are also in contact with other portal owners to offer them HarmoSearch services to feed local portals with content from partners.

EC3 Networks is using the results currently in two projects: First the know-how is needed in the development of a data-hub for the Austrian broadcasting cooperation, where the type of data (content) is different but the requirements are very much the same. There are a number of data provider (e.g. the system generating playing lists) and data consumer (e.g. the system showing logos on the TV screen) which either push or request information about broadcasts. Second EC3 Networks is currently starting a service to search for hotel prices on different platforms and provide the

information collected as price analysis reports to tourism organizations (mostly destination managers and hotel yield manager). This new service also benefits from the results of the HarmoSearch project.

Museumsmedien has received a lot of interest from German museums and public stakeholders about the HarmoSearch service. There is much interest in exchange event data from museums between the different platforms and Museumsmedien is also already supporting SPK in implementing and upgrading the service in the existing euromuse.net platform.

Last but not least Afidium has linked the HarmoSearch services with the French XFT-initiative, which follows a similar aim with a slightly different approach. However, combining these two approaches – as Afidium is currently trying to do – allows much richer information exchange services. Afidium also showed high interest in adding a more dynamic component to the project outcomes in order to allow also the processes of buying hotel rooms, event tickets and more functionality. This was not possible within the project life time but would be an exciting starting point for next steps.

To summarize the different activities, all of the partners individually and also jointly are already working on exploitation of results or at least are just starting their activities since the project ended.

It was also discussed how to continue with the rights on the foreground. By default it remains as it was defined in the consortium agreement, but there are discussions going on about either having a joint ownership agreement, which would be needed to run a service together, or also to provide at least parts of the outcomes as open source solution. There are strong arguments for both and there could also be a way with a combination of both. Especially the mapping tool could be improved by providing it open source. However, the same is true for the semantic registry or for third party services to be integrated. Discussion on this is ongoing and will continue after project end.

It should also be mentioned that a lot of effort has been invested into dissemination of project results and some new partners could be gained to cooperate with, but this issues shall be reported in the deliverable “D9.3 Collection of dissemination material”.

### 3 DIGITAL RIGHTS MANAGEMENT

The recommendation 4 about the introduction of DRM mechanism led to internal discussion about how and if DRM mechanism shall be integrated.

We started by questioning the other partners SPK and HarmoNET in the project, who are representing user groups. For both partners advanced DRM mechanisms are not a topic at the moment, also there is no interest in having such a service in the near future. SPK is very cautious with the transfer of images and multimedia content, but relies on license issue instead of watermarks or other mechanisms.

The issue has also not been a topic inside the HarmoNET member group up to that moment, since there was no need so far. The content exchanged is mostly meta-content about sensitive content, like descriptions of events instead of videos or photos from an event, and not the sensitive content itself.

However, DRM was realized by the project consortium as a topic to find an agreement how to deal with, even if none of the members or affiliates has a current interest in the issue. But there is good reason that a future prospect will need this as a core requirement.

The issue was discussed and we concluded that DRM mechanisms is a typical candidate for so called third-party services, since it is not considered a core service of the system. The HarmoSearch portal provides the possibility to integrate external services when transferring content, which could be for example automatic content translation or character exchange based on specific rules (e.g. exchange of Germanic umlauts to HTML-coded elements).

Since there is a wider range of tools or mechanisms to be integrated, it seems best to outsource this issue to a service specialized in DRM mechanisms. This can be integrated later easily when there is more need for this service. As such it is part of a range of content-related functionality which, would increase the value of this service but is kept on hold as a potential future extension.

In any case, for supporting the basic needs related to content distribution, Harmosearch platform has been extended to allow each provider to specify the license of the provided contents. In this way, each receiver can get license information about the contents obtained from the platform.



## 4 PATENTS

### 4.1 INTRODUCTION

In the following we provide background information regarding general terms and nomenclature with regard to European patents. This was investigated to evaluate the idea of applying for a patent and to know the procedure.

However, after evaluating the chances for a patent, which are rather low according our investigations, we decided to stay with the rights on the foreground which gives us enough protection to use the project results commercially.

### 4.2 OVERVIEW

According to the European Patent Office (EPO)<sup>1</sup> patents are used to protect technical inventions, e.g., a product, a process or an apparatus. Inventions must fulfill certain criteria in order to become a patent candidate. An invention must be new, industrially applicable and involve an inventive step.

Patent protection has to be filed by the inventor (e.g. a company) by means of an application. The application has to provide a detailed technical description that conforms to certain formal requirements provided by the EPO. Usually the application is filed to a national patent office first. Due to the Paris Convention from 1883 that permits priority of the filing data of the application for later applications in other countries within 12 months of the first application. The EPO, responsible for granting an application, accepts applications in three languages: English, French, or German. Other languages apart of the standard ones are not permitted and require a proper translation to at least one of the listed languages.

Patents may be applied in individual countries and are valid within a specific period of time (up to 20 years). Their main purpose is to protect innovative ideas from commercial exploitation via third parties without authorization. This allows inventors to recoup development costs and make profit of their investment. Furthermore, patents are a driving factor for investments in further research and development initiatives. Beside it may also serve as a motivating factor for raising venture capital.

However, patents (that passed the application procedure successfully) are a prime source of technical information. As such they are published and available to the public (including commercial competitors).

Applying for a patent can be done in several ways following either one of the following procedures: (i) national, (ii) European, (iii) international. In general the European procedure does not supersede the national grant procedure. Thus, the applicant can choose if he wants to apply for protection in each state separately or follow the European procedure allowing to apply for a patent in all EPC contracting states (patent protection can be requested in about 40 European countries which have to be chosen by the applicant; cf. Figure 1).

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<sup>1</sup> <http://www.epo.org/> Official homepage of the European Patent Office

<i>Contracting state</i>	<i>since</i>
<b>AL</b> Albania	01.05.2010
<b>AT</b> Austria	01.05.1979
<b>BE</b> Belgium	07.10.1977
<b>BG</b> Bulgaria	01.07.2002
<b>CH</b> Switzerland	07.10.1977
<b>CY</b> Cyprus	01.04.1998
<b>CZ</b> Czech Republic	01.07.2002
<b>DE</b> Germany	07.10.1977
<b>DK</b> Denmark	01.01.1990
<b>EE</b> Estonia	01.07.2002
<b>ES</b> Spain	01.10.1986
<b>FI</b> Finland	01.03.1996
<b>FR</b> France	07.10.1977
<b>GB</b> United Kingdom	07.10.1977
<b>GR</b> Greece	01.10.1986
<b>HR</b> Croatia	01.01.2008
<b>HU</b> Hungary	01.01.2003
<b>IE</b> Ireland	01.08.1992
<b>IS</b> Iceland	01.11.2004
<b>IT</b> Italy	01.12.1978
<b>LI</b> Liechtenstein	01.04.1980
<b>LT</b> Lithuania	01.12.2004
<b>LU</b> Luxembourg	07.10.1977
<b>LV</b> Latvia	01.07.2005
<b>MC</b> Monaco	01.12.1991
<b>MK</b> Former Yugoslav Republic of Macedonia	01.01.2009
<b>MT</b> Malta	01.03.2007
<b>NL</b> Netherlands	07.10.1977
<b>NO</b> Norway	01.01.2008
<b>PL</b> Poland	01.03.2004
<b>PT</b> Portugal	01.01.1992
<b>RO</b> Romania	01.03.2003
<b>SE</b> Sweden	01.05.1978
<b>SI</b> Slovenia	01.12.2002
<b>SK</b> Slovakia	01.07.2002
<b>SM</b> San Marino	01.07.2009
<b>TR</b> Turkey	01.11.2000
<i>European patent applications and patents can also be extended at the applicant's request to the following states:</i>	
<b>BA</b> Bosnia-Herzegovina	01.12.2004
<b>ME</b> Montenegro	01.03.2010
<b>RS</b> Serbia	01.11.2004
<i>Contracting states to the European Patent Convention are automatically member states of the European Patent Organisation.</i>	

Figure 1: Contracting states to the European Patent Convention

## 4.3 PATENTABILITY

European patents are used to protect industrial applicable inventions that are new and involve an inventive step. Thereby, the EPO does not mandate the domain of application, which means that a patent can belong to any field of technology.

The following details the terms *invention*, *novelty* and *inventive step* as they are defined by the EPO.

### 4.3.1 Invention

According to the EPO a patent is granted in case the invention under consideration is new, involves an inventive step and is susceptible of industrial application. Thereby, an invention may belong to any field of technology.

The EPO itself does not define the term “invention” but provides a non-exhaustive list of subject-matter and activities that may not be regarded as inventions. Thereby, the EPO especially focusses four fields (i) programs for computers, (ii) methods for treatment of the human or animal body, (iii) plant and animal varieties, and (iv) inventions that would be in contrary to public order and morality. In the following we focus on (i), which is considered as relevant regarding potential patent applications in the course of the HarmoSearch project.

Computer programs are considered as not excluded from patentability in case the software runs on a computer and causes a further technical effect going beyond the “normal” physical interaction between the software and the computer’s hardware. A typical example according to the EPO is software that controls a technical process or governs the operation of a technical device.

### 4.3.2 Novelty

According to the EPO an invention is considered to be new, when it is not part of the state-of-the art. State-of-the art is thereby defined as:

*“The state of the art comprises everything made available to the public anywhere in the world by means of a written or oral description, by use, or in any other way, before the date of filing or priority.”<sup>2</sup>*

Furthermore, the EPO explicitly states that *“[...] Novelty is prejudiced only by something which is clearly disclosed to a skilled person in a single source of prior art, e.g., in a patent application published before the date of priority.”<sup>3</sup>*

The state-of-the-art also comprises applications of European patents that have been submitted before the date of filing but have not been published on or after the date.

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<sup>2</sup> European Patent Convention: *“How to get a European Patent – Guide for applicants Part 1”*, May 2010, 13th Edition, p. 16

<sup>3</sup> European Patent Convention: *“How to get a European Patent – Guide for applicants Part 1”*, May 2010, 13th Edition, p. 16

Such applications are only part of the state-of-the-art in case the EPO acts as designated Office and if the filing fee has been paid accordingly. Furthermore, the applications have to be submitted in one of the EPO's officially granted languages, i.e., English, French, and German. In case the application has been published in another language a proper translation into one of the official EPO languages must have been filed (e.g., Arabic, Chinese, Japanese, Korean, Portuguese, Russian or Spanish). Applications that have been filed earlier are prejudicial to novelty.

#### **4.3.3 Inventive Step**

Usually an invention is supposed to include an inventive step if it is not obvious to the skilled target group in the domain under consideration. The requirement to provide an inventive step has been introduced by the EPO in order to prevent barriers to normal and routine development.

Evaluating the inventive step is usually done by applying a "problem-solution" approach. Thereby, the presented problem solution described in the patent application will be evaluated by skilled people in the domain under consideration. The experts determine if the solution is intended to be obvious or not. Obviously the evaluation depends on the case and the specific circumstances. Therefore, various factors are taken under consideration depending on the specific situation, e.g., unexpected effects, necessary parameters, overall difficulty for trained personnel applying the invention.

## 4.4 PREPARING A PATENT APPLICATION

In order to apply for an European patent the applicant has to fulfill distinct requirements. The remainder of this chapter provides a concise overview about the main formal requirements as well as additional information with regard to filing an European patent application.

### 4.4.1 Formal Requirements

European patents may be filed by any natural or legal person independent of the applicant's nationality or place of residence (or business). Applications for an European patent may also be filed by two or more applicants, which are not in the same designated contracting states (see Figure 1 for more information on participating EPO states).

In general patent applications can be filed in any language but need an additional translation in case the language in which the application is written is not one of the official supported languages of the EPO, i.e., English, French, German. The designated language or translation in case it differs from the official languages is also made the language of the proceedings. Consequently, additional amendments must be drawn up in that language, too.

European patent applications consist of the following items:

- **Request for grant:** The request for grant is a pre-defined form, which can be obtained directly from the EPO or national industrial property offices. More information and downloads can be found on the EPO website<sup>4</sup>.
- **Designation of inventor:** Another formal requirement is the designation of the original inventor of the invention, which is target of the European patent application. In case the applicant is not at all or not the sole inventor a corresponding document has to be provided, which must indicate the origin of the applicant's right to the European patent. In case the original inventor cannot be submitted within a given time period (defined by the EPO) the application will be refused.
- **Claiming priority:** An application may also include claiming the priority of an earlier application. Therefore, the applicant has to provide the date, country and file number of the earlier application. A single application may claim multiple priorities in respect of one European patent application.
- **Representation:** A European patent application has to be filed by a legal person, who has his resident or place of business in a contracting state. Is this not the case the applicant has to appoint a representative, who acts in all proceedings before the EPO. These representatives have to be listed as professionals who are on a list maintained by the EPO or by legal practitioners entitled to act before the EPO. The list of professional accredited representatives can be found on the EPO's website<sup>5</sup>.

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<sup>4</sup> <http://www.epo.org>

<sup>5</sup> <http://www.epo.org>

#### 4.4.2 Presenting an invention

In general a European patent application has to describe an invention in a manner sufficient, clear and understandable for a person skilled in the domain of the art. Thereby, the description and accompanying drawings serve as fundamental basis and are also used to interpret the stated claims. Detailed information on the contents of the description, claims, drawings and abstract are defined in articles 83,84, and 85 of the European Patent Convention<sup>6</sup>.

The EPO explicitly states that “[...] once a European patent application has been filed, no amendments extending beyond its content as filed may be made to the description, the claims or the drawings.”<sup>7</sup> Thus, it is not allowed to add any material such as examples or features to the application documents afterwards. Moreover, an application must not be changed w.r.t. its claims, e.g., by omitting certain features. Accordingly, the application has to clearly identify and address the invention that is the actual target of the patent application. As such a European patent application must relate to a single rather than multiple inventions.

The accompanying documents have to follow formal requirements dictated by the EPO forming the application have to be filed in a single copy, e.g., *description, claims, drawings, abstract*. Furthermore, the documents must be filed as a strong, pliable and white A4 paper (portrait orientation).

The main requirements<sup>8</sup> for drafting the technical application documents are as follows:

- The accompanying documents forming the application have to be filed in a single copy, e.g., description, claims, drawings, abstract.
- The documents have to be filed as A4 paper in portrait format. Furthermore, the paper must be strong, pliable and white.
- Each document making up the application must begin on a new sheet, i.e., request, description, claims, drawings, abstract.
- There must be no handwritten additions to the text.

Official examples on how to draft a European patent application are included in the Annex of the European Patent Convention<sup>9</sup>.

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<sup>6</sup> European Patent Convention: “How to get a European Patent – Guide for applicants Part 1”, May 2010, 13th Edition

<sup>7</sup> European Patent Convention: “How to get a European Patent – Guide for applicants Part 1”, May 2010, 13th Edition, point 68, page 25

<sup>8</sup> European Patent Convention: “How to get a European Patent – Guide for applicants Part 1”, May 2010, 13th Edition, point 71, page 26

<sup>9</sup> European Patent Convention: “How to get a European Patent – Guide for applicants Part 1”, May 2010, 13th Edition, page 71



In the following the content and purpose of the listed components are described in the order they should appear in a patent application.

The *description* has to cover

- A clear definition of the technical domain the invention is related to
- A background section. The background section describes relevant information that is necessary in order to understand the underlying principles of the invention at hand. Similar to scientific publications sources must be cited accordingly. Proper examples are provided in the annex of the European Patent Convention.
- A clear and comprehensive disclosure of the invention. The disclosure must provide a clear definition of the problem the invention addresses to solve as well as the solution. Moreover, the disclosure has to state the advantages compared to commonly used solutions. However, this has to be done in an objective way without degrading existing solutions, products, or producers.
- A detailed description and examples on how to apply the invention in practice.

The *claims* section defines the matter for which protection is sought in terms of technical features of the invention<sup>10</sup>. Accordingly, the claims must be clear, understandable, and supported by the description. In general a claim should describe the matter of protection as explicit as possible. The number of claims a European patent application may contain is not restricted. According to the European Patent Convention, however, states that only the first 15 claims are free. For each claim over or above this number a claims fee must be paid. Detailed information can be found in the Schedule of Fees, which can be downloaded from the EPO website<sup>11</sup>.

*Drawings* are used to support the explanation of the invention or essential parts of it. Drawings must be referenced in the description or explanatory part of the European patent application. According to the European Patent Convention<sup>12</sup> flow charts and diagrams are also seen as drawings.

The *abstract* should provide a concise summary of technical information, drafted in a way that it allows efficient search in a particular research field. The summary should not exceed 150 words. Furthermore, it should provide concise information about the disclosure, claims, and drawings. Most important the abstract must indicate the technical field to which the invention is related. Thereby, the text has to summarize and clearly state the technical problem as well as the proposed solution for that problem through the invention and its principle use. Once the abstract has been published as part of the application it is not amended again.

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<sup>10</sup> European Patent Convention: "How to get a European Patent – Guide for applicants Part 1", May 2010, 13th Edition, page 30

<sup>11</sup> <http://www.epo.org/applying/online-services/fee-payment.html>

<sup>12</sup> European Patent Convention: "How to get a European Patent – Guide for applicants Part 1", May 2010, 13th Edition, page 32

#### 4.4.3 Filing A European Patent Applications

European patent applications can be filed:

- With the EPO in Munich, its branch at The Hague or its sub-office in Berlin, but not at its sub-office in Vienna
- With the central industrial property office of other competent authority of a contracting state if the law of the state so permits or prescribes

Applications must be filed in written form. Accordingly, the application has to be filed in one of the following forms:

- electronic form
- in person
- by post
- by fax

Filing per fax is permitted in all contracting states with the exception of Cyprus, Estonia, Hungary, Italy, the Netherlands, Romania, and Turkey. Applications that are sent in electronic form can be submitted online or on an electronic data carrier. Thereby, software<sup>13</sup> issued by the EPO must be used. Furthermore, electronic applications can also be filed with the competent national authorities of the contracting states which so permit. Note, however, patent applications which are sent via e-mail, telegram, telex or teletext are not accepted by the EPO.

According to the Guide for Applicants of the EPO patent applications<sup>14</sup> are scanned fully automated for the purpose of printing. Thus, applicants are requested to use a machine-readable typeface for their applications.

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<sup>13</sup> see Online Filing software at <http://www.epo.org>

<sup>14</sup> European Patent Convention: "How to get a European Patent – Guide for applicants Part 1", May 2010, 13th Edition, page 34



When filing a European patent application the following fees must be paid:

Fee	Cost in EUR
Filing fee	115 (online) 200 (offline)
Any additional fee for the 36 <sup>th</sup> and each subsequent page of the application.	See EPO Fees Document
Search fee	1.165
Claims fee (in respect of the 16 <sup>th</sup> and each subsequent claim)	225
Designation fee	555
Extension fee (one for each extension state)	See EPO Fees Document
Examination fee	1.555
Renewal fees (in respect of the 3 <sup>rd</sup> and each subsequent year)	See EPO Fees Document

*Table 1: Fees that have to be paid when filing a European patent application*

The filing and search fees (also including the claim fees, when filed together with the application) have to be paid within one month of the date of filing. The designation fee and any extension fees have to be paid within the next six month starting from the month of the date of filing.

The EPO recalls that the fees have to be paid in due time otherwise the European patent application is deemed to be withdrawn. Moreover, the EPO does not send invoices or reminders to pay the fees in due time.

Important and selected notes on paying fees to the EPO:

- Fees due to the EPO must be paid in Euros.
- It is advisable to pay fees as promptly as possible, preferably at the same time as filing your application. Depending on how you pay, the deemed date of payment is the day on which:
  - The amount of the payment or transfer is actually credited to a bank account held by the Office, or
  - The order to debit a deposit account is received at the EPO
- Payment and transfers must be to one of the accounts of the EPO. The applicant is free to choose the bank of his choice (if he pays through a banking establishment)
- Regardless of the payment method, it is advisable to use the fee payment form to communicate particulars concerning payments. The form (Form 1010) can be downloaded from the EPO website or obtained from the EPO or from the central industrial property offices of the contracting states free of charge.

#### **Postal addresses Munich**

EPO Building	Street	ZIP	City	Country
Isar building	Erhardtstrasse 27	80469	Munich	Germany
PschorrHöfe buildings	Bayerstrasse 34	80335	Munich	Germany
Capitellum building	Landsberger Strasse 30	80339	Munich	Germany

*Table 2: Postal addresses of the EPO offices in Munich, Germany*

#### Postal addresses The Hague

EPO Building	Street	ZIP	City	Country
Tower and Hinge buildings	Patentlaan 2	2288	EE Rijswijk	The Netherlands
Shell building	Patentlaan 3-9	2288	EE Rijswijk	The Netherlands
Rijsvoort building	Visseringlaan 19-23	2288	ER Rijswijk	The Netherlands
Le Croisé building	Verrijn Stuartlaan 2a	2288	EE Rijswijk	The Netherlands

*Table 3: Postal addresses of the EPO offices in The Hague*

## 4.5 THE GRANT PROCEDURE

The European grant procedure is an examination procedure, which is sub-divided into two phases:

- The first stage of the procedure comprises an examination on filing, formalities examination, preparation of the European search report and a preliminary opinion on patentability, and publication of the application and the search report. Responsibility for this stage rests with the Receiving Section and a search division.
- The second stage comprises substantive examination and grant. Examining divisions are made up of three technically qualified examiners, who may if necessary be joined by a legally qualified examiner. Until a decision has to be taken on the application, this examination is as a rule entrusted to one of the technically qualified examiners. The examiner is responsible for issuing the requisite communications and for discussing the application with the applicant in writing, in person or on the phone.

After the grant of the patent there may be opposition proceedings, which involve third parties such as competitors as opponents. Responsibility for examining oppositions rests with the opposition divisions, which are composed in the same way as the examining divisions, except that only one member of the opposition division may have been involved in the earlier grant proceedings. In addition that member is not allowed to chair the division.

Moreover, after the grant of the patent there may also be revocation or limitation proceedings initiated by the patent proprietor himself. At any time after the grant of the patent the patent proprietor may request the revocation or limitation of this patent. Decisions on the revocation or limitation of the European patents are taken by the examining divisions.

Appeal procedures constitute a special procedure. Appeals may be filed against decisions taken by the Receiving Section, the examining divisions, the opposition divisions or the Legal Division. A decision which does not terminate proceedings as regards one of the parties can only be appealed together with the final decision, unless the decision allows separate appeal. Decisions on appeals are taken by the boards of appeal.

### **4.5.1 Procedure up to the publication of the application**

The Receiving Section examines a submitted European patent application whether it can be accorded a date of filing in case the application document contains:

- An indication that a European patent is sought
- Information identifying the application
- A description or a reference to a previously filed application

Be aware, that it is not necessary to file any claims in order to obtain a date of filing. As previously described the applicant may file claims within two months from the data of filing or from an invitation requesting the applicant to do so.

Once the date of filing has been accorded, the Receiving Section examines whether the filing and search fees have been paid in due time and whether a translation of the application into the language of the proceedings, if required, has been filed in due time. If one of the above mentioned fees has not been paid in due time, the patent application is deemed to be withdrawn.

#### **Formality Examination**

If the European patent application meets all the above mentioned requirements, the Receiving Section checks for compliance with the provisions governing translations, the content of the Request for Grant, the presence of claims, the filing of the abstract, representation, formal requirements, designation of the inventor and the filing of any drawings. If the Receiving Section finds correctable deficiencies, it invites the applicant to remedy them. If the application fails to do so, the legal consequences provided for in the EPC take effect, i.e., the application is deemed to be withdrawn or is refused.

If the deficiencies related to a claim for priority and are not correctable, or if the applicant does not remedy them although invited to do so, he loses the right of priority.

If parts of the description or drawings referred to in the description or the claims are missing on the data of filing but are filed subsequently, the application has a choice between re-dating the application to the date when the missing parts of the description or the drawings are filed and deleting the late-filed parts of the description or drawings together with references to them in the application. However, the first option is available only within two months from the date of filing or, alternatively, within two-month time limits set in an invitation.

#### **European Search Report**

The search report is drawn up on the basis of the claims, with due regard to the description and any drawings. It mentions the documents available to the EPO when it is drawn up which may be taken into consideration in assessing novelty and inventive step.

The search report is accompanied by an opinion on whether the application and the invention to which it relates meet the requirements of the EPC.

The non-binding opinion is not published together with the search report but is available to the public by way of file inspection after publication of the application.

If the application contains more than one independent claim in the same category and no exception applies the applicant will be invited to indicate, within a two-month period, the basis on which the search is to be carried out. If he fails to do so, the search will be carried out on the basis of the first independent claim in each category. Similarly, if it is impossible to carry out a meaningful search on the basis of all or some of the subject-matter claimed, he will be invited to file, again within a two-month period, a statement indicating the subject-matter to be searched. Should the statement not be sufficient to overcome the deficiency, the EPO will issue a partial search report or a declaration that no meaningful search can be carried out.

Immediately after it has been drawn up, the European search report is transmitted to the applicant together with copies of any cited documents. If the applicant requires a second copy of the documents, he can obtain it by indicating it in the appropriate box on the Request for Grant form when filing the application and by paying the prescribed administrative fee.

Important to note, the applicant may withdraw the application if he thinks it has not chance of success. If he decides to pursue the patent grant procedure, he will have an opportunity to amend the application to reflect the results of the search.

If the search division considers that the application does not comply with the requirement of unity of invention, it draws up a European search report on those parts which relate to the invention first mentioned in the claims. It informs the application that, if the search report is to cover the other inventions, he must pay a further search fee in respect of each of them within a period that is specified. If the application does not respond to this invitation, and if the examining division considers the search division's objection justified, the applicant is deemed to want the application to proceed in respect of the invention for which the search report has been drawn up. The application must not include claims for subject-matter for which a further search fee has not been paid.

#### **4.5.2 Publication of the European patent application**

The European patent application is published without delay once eighteen months have elapsed since the date of filing or the earliest priority date. Earlier publications, however, have to be requested by the applicant.

The publication contains the description, the claims and any drawings, as a filed, plus the abstract. If the European search report is available in time, it is annexed; if not, it is published separately. A European patent application which was not filed in English, French or German is published in the language of proceedings.

All European patent applications, European search reports and European patent specifications are published in electronic form only, on the EPO's publication server, which is available via the EPO's website<sup>15</sup>.

If you amend the claims after receiving the European search report but before completion of the technical preparations for publication, the amended claims will be published in addition to the claims as filed. The technical preparations are deemed to

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<sup>15</sup> <http://www.epo.org>

have been completed five weeks before expiry of the eighteenth month after the date of filing or, if priority is claimed, after the date of priority.

In case the patent application has been refused or withdrawn or deemed withdrawn before completion of the technical preparations for publication it will not be published at all.

The EPO informs the applicant of the date on which the European Patent Bulletin mentions publication of the European search report. Furthermore, it draws attention to the period for filing the request for examination (paying the fee for examination), which begins on that date. It also informs you that the designation fees must be paid within six months of the date on which the European Patent Bulletin mentions publication of the European search report.

A contracting state not having the language of the proceedings as an official language may prescribe that provisional protection does not take effect until a translation of the claims into one of its official languages at the applicant's option or, where that state has prescribed the use of one specific official language, in that language:

- Has been made available to the public in the manner prescribed by national law, or
- Has been communicated to the person using the invention in that state. The contracting states all make provisional protection conditional upon a translation of the claims. The same applies to the extension states.

Once the European patent application has been published, files relating to it are available for public inspection by way of the European Patent Register, which can be accessed via the EPO website.

From that time, too, the public has access to the application's bibliographic data and to information about the state of the proceedings by means of the European Patent Register, which can be accessed via the EPO website.

### 4.5.3 Examination Procedure

#### **Request for examination**

The request for examination has to be filed within six months of the date on which the European Patent Bulletin mentions publication of the European search report. The request, which must be submitted in writing, is contained in the Request for Grant form, but it is not deemed to be filed until the applicant has paid the examination fee. Once filed, it cannot be withdrawn.

The examination fee is refunded in full if the application is withdrawn, refused or deemed to be withdrawn before the examining division has assumed responsibility, and at a rate of 75% after that date but before substantive examination has begun.

To speed up proceedings, the applicant can also simply waive his right to the invitation to confirm the request for examination. In that case, when the applicant receives the search report he is deemed to have indicated that he wishes to proceed further with the application, and the examining division then assumes responsibility for the procedure.

Within the same time limit as for filing or confirming the request for examination, the applicant will be invited to comment on the extended European search report, to correct any deficiencies noted in the opinion accompanying it, and to amend the

description, claims and drawings as appropriate. If he fails to comply with the invitation in due time, the application will be deemed withdrawn.

If no objections were raised in the opinion accompanying the European search report, no invitation will be issued. Instead the applicant will be informed about the possibility of making amendments within a certain period of time.

### **Stages of the Procedure**

After receiving the search report and before receiving the examiner's first communication, the applicant must file substantive observations on any objections raised in the search report; he may also amend the description, claims and drawings.

If the examiner responsible within the examining division has objections to the application, he sends a first reasoned communication inviting the applicant to file his observations and, if necessary, to submit amendments to the description, claims and drawings. If he fails to reply in due time to this or any further communication, the application is deemed to be withdrawn

The applicant of a European patent application might also be invited to provide information on prior art taken into consideration in the examination of national or regional patent applications and concerning an invention to which the European patent application relates. If he does not provide this information within a specified time limit, the application is deemed withdrawn. It is recommended that any search results relating to an earlier application from which priority is claimed are filed as soon as they are available.

If, after examining the response, the examiner considers that the application is not yet grantable, he will continue with the examination procedure by issuing a further written communication or talking to the applicant in person or on the telephone.

If the examining division is of the opinion that a European patent cannot be granted, it will refuse the application. The decision is issued by the examining division as a whole, and the grounds of refusal must be stated. Refusals may be based only on grounds on which you have had an opportunity to comment.

If the application and the invention to which it relates meet the requirements of the Convention, the examining division will decide to grant a European patent provided that the requisite fees have been paid in due time and a translation of the claims into the other two official languages of the EPO has been filed in due time.

The examining division informs the applying party of the text in which it intends to grant the European patent, and invites it to pay the fee for grant and publishing and any claims fees for claims in excess of 15 which have not yet been paid, as well as to file a translation of the claims into the two official languages of the EPO other than the language of the proceedings within a non-extendable period of four months.

If the applicant pays the prescribed fees and file the necessary translations of the claims in due time, he is deemed to have approved the text intended for grant. If he fails to file the translations and/or to pay the fee for grant and publishing and/or claims fees, the application is deemed to be withdrawn.

Before a patent can be granted, any renewal fee and additional fee due must also be paid. If a renewal fee falls due before the expected date of publication of the



mention of grant of the European patent, the applicant will be informed accordingly. Mention of grant will not be published until he has paid the renewal fee. If the applicant fails to pay the renewal fee and any additional fee in due time, the application is deemed to be withdrawn.

The grant does not take effect until the date on which it is mentioned in the European Patent Bulletin. At the same time as it publishes this mention, the EPO publishes a European patent specification containing the description, the claims and any drawings. The European Patent Bulletin is published electronically on the EPO's publication server.

A certificate for the European patent, with the specification annexed, will be issued on request.

### **Amending Applications Before and During Examination Proceedings**

It is not permitted to amend the description, claims or drawings before receiving the European search report. The applicant should always indicate any amendments made and identify their basis in the application as filed.

No further amendments are allowed without the examining division's consent. Amended claims may not relate to unsearched subject-matter which does not combine with the originally claimed invention to form a single general inventive concept. In deleting subject-matter from an application, any statement any statement which could be interpreted as abandonment of that subject-matter should be avoided. Otherwise the subject-matter cannot be reinstated.

The application may on no account be amended in such a way that it contains subject-matter which extends beyond the content of the application as filed (which does not include the priority document). However, subsequently filed examples or statements of advantage may be considered by the examiner as evidence in support of the invention's patentability. This technical information is generally added to the part of the file that is open to public inspection. From the date on which it is added, it forms part of the state of the art. A note is printed on the cover page of the patent specification to alert the public that information submitted after the application was filed is not included in the specification.

Amendments to the European patent application can be made in one of the following ways:

- By filing replacements pages. This method should only be chosen if the amendments are extensive and complicated. If it is not immediately clear how or why an amendment is to be made, the applicant should provide explanatory notes in the margin of the replacement pages or on separate sheets.
- By annotating a copy of the relevant pages of the application. This is the preferred method if the amendments are not too extensive. The amendments may be handwritten or typed.
- By indicating the changes in a letter. This method is suitable if for example the applicant wishes to delete whole pages, paragraphs or drawings.