Ruff Wilhelm Beier Dauster & Partner

Dauster, Katja: Patent Issues Part I, Novelty and Inventive Step – Part I. In: The Recycler, Trade Magazine, 2006, Issue 162.

Patent Issues Part I: Novelty and Inventive Step I

Recently, a patent granted by the European Patent Office (EPO) to an OEM manufac-turing laser toner cartridges was issued. The patent relates to a method of recharging a toner cartridge, which according to the remanufacturing industry is not new. Novelty is a basic requirement for patentability. Nevertheless, a patent was granted. Why?

Apart from taking action against such an unjustified patent, there are some important aspects that the remanufacturing industry should learn from this experience. In a series of articles some of these aspects will be discussed.

In the first two articles the meaning of "novelty" and "inventive step", two basic requirements for patentability, will be explained in the context of the European Patent Convention (EPC). Please note that national requirements of other countries may differ. A subsequent article will illustrate the processing of a European patent application and a European patent at the EPO and the possibilities for taking actions against an application or a granted patent. The series of articles will be concluded by a discussion of several aspects of patent infringement. Each article will include a case study to allow for a better understanding.

1 Introduction

A European patent may be obtained by filing a European patent application at the European Patent Office (EPO). The patent application is examined for compliance with the requirements of the European Patent Convention (EPC). Provided that the requirements of the EPC are met, a European patent is granted on the patent application. In accordance with the EPC (as well with most national patent laws), two basic requirements for patentability are novelty and inventive step, i.e. non-obviousness.

In everyday language a product is novel if it is striking, original or unusual. Such a "novelty" of a product is often relative. A person may buy a remanufactured toner cartridge and refer to the cartridge as a new cartridge for his printer. However, the provisions of the EPC require an absolute, objective novelty: An invention is considered to be new, if it does not form part of the state of the art.

2 State of the Art

In accordance with the EPC "state of the art" is a synonym for "prior art". "State of the art" in the context of assessing novelty or inventive step of the subject matter of a patent or patent application includes "everything made available to the public by means of a written or oral description, by use or in any other way" before the effective date of the European patent application or the patent.

In other words, everything published before the "effective date" is considered state of the art (regardless of where information was published, the person publishing, and/or the language or the manner in which the relevant information was published). The prior art may even include publications of the Applicant himself relating to the same invention as the filed application. It should also be noted that state of the art is independent of an actual knowledge of the inventor or the Applicant.

So for example, an inventor may live in a country A, where no one ever recycled a cartridge. He has never left his country, and has never heard of a country B, where recycling cartridges is very common and where many articles have been published on recycling cartridges. If it now crosses the inventor's mind to recycle a cartridge, this idea is relatively new to the "inventor". However, recycling is well-known and publicly available in country B. Therefore, everything published in country B forms part of the state of the art, although the inventor did not know about these publications.

According to the EPC, there are only two specific exclusions: an evident abuse in relation to the Applicant or the fact that the Applicant has displayed the invention at an official international exhibition. In both cases, the disclosure of the invention does not belong to the state of the art and will not be taken into consideration if it occurred no earlier than six months preceding the "effective date".

2.1 Effective Date – Application and/or Priority date

Generally, the "effective date" of a patent or a patent application used for assessing the state of the art is its application date. Any publication that occurred after that application date is not considered pre-published, and is not considered when examining the application (there is an exception related to post-published applications, which will be discussed in detail in a later article). In addition, for one or more claims of a patent or a patent application a priority of an earlier first application filed for the same invention by the same Applicant or his successor may be claimed. When claiming the priority of the first application, the filing date of the later application (or of one or more claims of the application) is deemed to be the filing date of the first application, i.e. the priority date, for the purposes of determining the state of the art. Hence, the effective date is either the application date, or, if applicable, the priority date.

In order to benefit from the priority of an earlier first application, the later application is to be filed no later than 12 months after the first application. Recently, the EPO proved to be very strict in interpreting "the same invention". Because of the strict interpretation, subject matter not literally disclosed in the first application is unlikely to benefit from the priority of the first application. Consequently, if applicable, the application and the priority document should be compared, when assessing the effective date of a patent or a patent application.

2.2 Public availability

A product or process only forms part of the "state of the art" if it has been made available to the public. Public availability may be achieved in any way or through any medium, including a written or an oral description or use.

A written description may appear in a patent application, in technical documentation, in a book, in an article (e.g. an article in "The Recycler"), in a periodical, in a brochure or in a publication on the internet.

An oral description may take place on television, on the radio, in a conference or even in an open discussion. Further, a product or process may be "publicly used" for example by manufacturing, advertising, selling, or exhibiting in a trade show.

However, complications may arise because not every written or oral description or use of a product or a process is actually considered to have been made available to the public. The description is regarded as having been made available to the public, if it was possible for members of the public to gain knowledge of its content. Furthermore, there should have been no declaration of confidentiality (written or tacit) restricting the use or propagation of the content.

In practice, the public availability of written descriptions such as patent applications, books or articles, i.e. the publication date, is easy to determine, whereas the public availability of technical documentation, an oral description or a "use" is not always without ambiguity.

Firstly, the technical documentation, the oral description or the use may be considered as having been bound to secrecy. For example, using a process on a non-public property such as in a factory in most cases will be considered as bound to secrecy, hence, not made available to the public. On the other hand, if the public had had entry to the factory, e.g. in guided tours, without a bar on confidentiality, the use on the non-public property may be considered to have been made available to the public.

Further, it may be the case that not all features of a product have been made available to the public by its use. In particular, features which are only accessible when disassembling a machine may be considered as not made available to the public if the machine has been exhibited at a tradeshow. Also, a use of a product, which may be produced in different processes, in most cases is not suitable for asserting a specific prior art method for production.

Generally, to prove public availability the questions to be answered are: Where, when and what was disclosed and to whom?

2.3 Case Study

Let us look at a particular scenario. Imagine that an OEM files an application concerning the recycling of a cartridge and that this fulfils all formal requirements and is subjected to

substantive examination before the EPO. A remanufacturer becomes aware of the application and is of the opinion that the method described in the application is well-known. He therefore files the following "objection":

"I am a remanufacturer of cartridges. Recycling cartridges is not new. For many years my company has remanufactured thousands of cartridges. I am also of the strong opinion that granting this application would be contrary to public interest on both environmental and economic grounds. Therefore, I object to granting of the patent application."

Such an "objection" will not be considered by the EPO. But why?

As outlined above, state of the art is everything made available to the public before the effective date of a patent or a patent application. According to the objection, a recycling method was used "for many years". There is no evidence given that this includes a concrete time before the effective date of the patent application.

The objection may be understood to suggest a prior use of the method claimed in the patent application. However, there is no evidence that the methods used by the remanufacturer were made available to the public. As outlined above, a specific method may have been used for many years without ever making it available to the public. This internal use may protect the user from claims of the patent proprietor, however, without making the use available to the public, it is not part of the relevant state of the art.

In short, the information given in the objection does not tell us about where, when and what was published.

Please note, as long as the question of public availability leaves doubts, the prior art item will not be considered when assessing novelty and/or inventive step. What is worse, once the patent is granted, the "objection" may even be turned against the remanufacturer as a use of the (patented) method was admitted.

2.4 Conclusion

What the remanufacturing industry should learn from this example is the importance of publications – unless, of course, a certain method or product is to be kept a trade secret for economic reasons.

When publishing in a periodical, the date and the content of the publication can very easily be determined. However, in other cases one has to rely on people's memory. Very often the importance of a publication only becomes apparent many years after it took place. In many cases, the persons involved with the publication moved jobs and/or can no longer remember the exact circumstances of the "public use" or the oral description. Therefore, a documentation on the prior art use, documenting where, when and what was disclosed to whom is strongly recommended. The same applies when publishing on the internet. The content of a website may change. However, for assessing novelty and/or inventive step only

the content before the effective date is relevant. Consequently, a printout of the presentation showing the date is recommended.

Another effective way to create publications and protect oneself from claims of others at the same time may be to apply for patents oneself. In general, a patent application is published 18 months after its effective date. Further, granted patents may improve your standing in negotiations. Small companies may team up when applying for patents or, preferably, establish an IP-pool, to which every member brings his or her knowledge, patent application or patent, and, in return, gets a royalty-free licence for the use of patents and/or knowledge of other members. This will allow the members to gain a good protection, while keeping the costs per member reasonable.

About the author:

Dr.- Ing. Katja Dauster,

German Patent Attorney and European Patent, Design and Trademark Attorney with Patentanwälte Ruff, Wilhelm, Beier, Dauster & Partner, Stuttgart, Germany, born in 1972, studied general mechanical engineering at the TU München graduating with a Doctor's Degree (Dr.-Ing.) in 2001. Active in the field of intellectual property law since 2001, admitted as German and European Patent attorney in 2005, with Patentanwälte Ruff, Wilhelm, Beier, Dauster & Partner in 2006.