

Guidelines on the Protection and Commercialization of Intellectual Property at Freie Universität Berlin

1. Prologue and Objectives

Strictly speaking, the term “knowledge and technology transfer” is used to refer to cooperation processes between a university and its external partners with the primary objective of transferring knowledge and technology for use in commercial or practical applications. Knowledge and technology transfer are considered a core task of universities alongside research and teaching:

“The universities and institutions of higher education shall promote knowledge and technology transfer” (Section 2.7 of the German Framework Act for Higher Education).

“They [the universities] shall promote knowledge transfer between their institutions and all sectors of society, and work toward ensuring that any scientific and scholarly findings gained can be further developed or utilized in the interest of wider society” (Section 4.5.2 of the Berlin Higher Education Act).

The commercial exploitation of inventions and other forms of intellectual property is considered a feasible and important form of knowledge and technology transfer. As the employer of those working at the university – and thus generally speaking the holder of commercially exploitable intellectual property – Freie Universität Berlin has a duty of care with regard to the protection and commercialization of said intellectual property. This strategy for the commercial exploitation of intellectual property at Freie Universität Berlin serves as the foundation on which the university fulfills this important role and implements its objectives in the long term while factoring in the existing framework conditions to the greatest possible extent and meeting the associated legal requirements.

Objectives of Freie Universität Berlin:

- ***Ensure the freedom of scientific research and contribute to the transfer of research results for the benefit of society***

The freedom of scientific research at Freie Universität Berlin should not be restricted by the protection and commercial exploitation of intellectual property. In the case of research conducted with third parties, freedom of scientific research must at the very least be guaranteed and expanded by granting royalty-free rights of use for non-commercial research and teaching purposes. Ideas, products, and technologies developed at Freie Universität Berlin should serve wider society as a principle.

- ***Safeguard legal claims to intellectual property***

Safeguarding the legal claims to intellectual property (research results, inventions, copyrights, expertise, materials, etc.) to which Freie Universität Berlin is entitled in terms of its value is a basic requirement for commercial exploitation later on. This concerns both independent research conducted by working groups at Freie Universität Berlin and research carried out in cooperation with third parties (i.e., other research institutions, research contracts from companies, as well as research financed by public bodies or private investors). In order to protect legal claims to intellectual property at the earliest stage possible, the university prefers to conclude agreements for any cooperation with third parties. The agreements establish appropriate, equitable conditions for commercial exploitation and factor in both prior scientific achievements that will contribute to the project as well as those achievements that the project aims to accomplish. They also cover details regarding monetary contributions by the parties involved. If the resources or infrastructure of the university are used by third parties, especially independent inventors, then suitable regulations regarding how to proceed with any research results produced are to be put in place.

- ***Showcase research specializations and support the acquisition of third-party funding***

Because Freie Universität Berlin faces competition from other universities and research institutions, copyright protected and commercially exploitable research results serve as an indicator of research

output and thus are a key factor in successfully acquiring third-party funding. This also enhances the university's attractiveness for further partners in research, society, and business. Endeavors to utilize and commercially exploit intellectual property at a later stage are often the subject of incidental provisions in the case of externally funded projects.

- ***Boost the employability of the next generation of researchers***

Freie Universität Berlin strives to carry out awareness-raising and qualification measures in order to safeguard and commercially exploit intellectual property with the aim of increasing the employability of the next generation of researchers, which is also a prominent goal of the Bologna Process. Knowledge and experience in protecting and commercially exploiting intellectual property are in high demand on the labor market, especially in areas like the natural sciences and computer science.

- ***Generate revenue***

Freie Universität Berlin wants to reap the financial benefits of making intellectual property commercially exploitable so that it can feed this revenue back into funding further research projects. At the same time, utilizing protected intellectual property is also considered as generating value for the university when it helps in acquiring new research projects and external funding, for example, through registering inventions as patents.

- ***Foster spin-offs***

Spin-offs are an important type of knowledge and technology transfer that help to bridge the gap between basic research and practical applications. The professional management and provision of the university's intellectual property should therefore also serve the purposes of fostering spin-offs.

2. Types of Intellectual Property

2.1 Inventions

The Rights and Obligations of Inventors

The job-related inventions of university employees must generally be reported to their employer pursuant to Section 5 of the German Employee Inventions Act (ArbnErfG) two months before disclosing any publication in the form of an invention disclosure so that the university is able to assert its rights vis-à-vis a job-related invention without restriction. For that reason, you should also comply with the policy "first patent, then publish." As patents will also be published at a later point in time, patent disclosures constitute additional publications.

A "job-related invention" is produced by an employee within the scope of an activity assigned to them at the university or based on their expertise or activities as pertaining to their employment (Section 4.2 of ArbnErfG). This also applies to inventions that are made in the context of research activities conducted for third parties, especially commissioned research and collaborative research projects. If an invention is produced within the context of secondary employment activities, then it is almost always considered a job-related invention, as the subject of such secondary employment tends to pertain to the area in which said employees are involved in their research or teaching at Freie Universität Berlin. All other inventions are considered non-job-related inventions, which nevertheless must be reported to the university in the same manner. As for the purposes of better commercial exploitation, Freie Universität Berlin strives to consolidate rights when several people are involved in developing an invention, independent inventors such as students and scholarship holders are offered a transfer of their share of rights to the university in exchange for remuneration on par with that of an inventor who is an employee.

Commercially Exploiting Inventions

As patents tend to incur high costs, an evaluation in the form of a cost-benefit analysis is performed before filing a patent application or filing a patent for an already registered invention in other countries. The possible scope of protection including potential workarounds, the market situation for a potential product, the stage of development, and prospects for further development are all factored into the evaluation. External experts may be consulted in individual cases. When it comes to commercially exploiting inventions at Freie Universität Berlin, the department in which the invention was produced is not considered relevant. However, in order to handle patent fees responsibly and with foresight, the conditions for filing a patent and its later renewal or relinquishment should be discussed together with the inventor as part of an exit strategy.

It is necessary to disclose inventions early on so that a well-substantiated evaluation and any upcoming publications of research results can go ahead unimpeded. A decision as to whether an invention will be claimed is generally made by Freie Universität Berlin, usually within six weeks, or within four months at the latest as stipulated by law. It is possible to register copyrights for strategic purposes from an institutional perspective, in other words, without commercial exploitation being the primary objective.

Patenting Process and Registration Strategy

Patent registration is usually carried out in close cooperation between the inventor, the responsible unit of the central university administration, and a specialist patent lawyer. The patent fees will be borne by the university. Typically, you start the process by claiming the right of priority when filing a German or European patent application. The inventor then has a maximum of twelve months to protect any other information under the patent. By then filing an international patent application (also known as a patent cooperation treaty or PCT), you can gain another eighteen months until the final selection of countries in which the patent will be disclosed. That is why a specific opportunity for commercial exploitation should usually be established within thirty months. In exceptional cases, for example, if costs are shared by the inventor's working group, the university will assume any additional costs for further registrations. Furthermore, working groups generally have the option to contribute to the patent fees. This can have a positive effect on the distribution of generated revenue, where applicable (see 4.4).

In the event that Freie Universität Berlin does not file a patent for an invention, revokes its application before a patent is issued, or does not maintain a patent application, then the invention will be released or offered back to the inventor. In order to simplify commercial exploitation efforts, the inventor can waive this right to release or re-offering; they will nevertheless be notified of the university's intention to relinquish the patent. To prevent conflicts of interest later on and to meet any obligations vis-à-vis the research project funders, privately filed patent applications may only be incorporated and further developed within the framework of research projects at Freie Universität Berlin if the applicable regulations were established with the university beforehand.

Many inventions are collaborative in nature, as inventors from other institutions may also be involved in producing them. In such cases, registration strategies and revenue distribution will be coordinated with further patentholders and corresponding agreements will be made.

2.2 Copyright Protected Works and Software

Freie Universität Berlin, which has a number of focus areas in the humanities and social sciences, is also a place where copyright protected works (such as texts, images, photographs, films, etc.) are created that can hold just as much importance in science and research as they do potential for commercial exploitation. The use of software is growing increasingly important for societal and economic purposes. Software that can be commercially exploited is developed in almost all departments of Freie Universität Berlin – and not just in computer science. Protecting software by copyrighting it is paramount, along with potentially patenting it.

If copyright protected works are created while fulfilling work or contractual obligations, the rights of exploitation to the created work lie exclusively with the university (Section 69b German Act on Copyright and Related Rights [UrhG] regarding software and Section 43 UrhG regarding other works). However, this does not cover works that the employee creates independently in the context of their own scientific work; this principle also applies, generally speaking, to works created by university instructors in the context of their research activities, but not for the purposes of their teaching obligations. That is why an evaluation as to whether software and copyright protected works (such as open-source or open access solutions) have potential for commercial exploitation must be carried out at the earliest stage possible in coordination with the responsible unit before such works developed at Freie Universität Berlin are published and/or made available for use by external parties. For legal reasons and with regard to commercial exploitation, we recommend proceeding with caution when it comes to the participation of groups of people in the creation of copyright protected works who do not have a direct employment relationship with Freie Universität Berlin, such as students, scholarship holders, and contract employees. If such categories of people are to contribute to the creation of a copyright protected work, then a thorough clarification of the rights of use and exploitation held by Freie Universität Berlin is as crucial to the process as a detailed documentation of said contractual negotiations and the respective nature and scope of the contribution.

2.3 Expertise and Expertise-Based Material

Expertise (in terms of non-patented research results, generated data, or experiential knowledge) can also be commercially exploited, as Freie Universität Berlin is also entitled to these rights as an employer. There is plenty of commercially exploitable expertise-based material to be found in the natural sciences especially, such as in relation to organisms, plasmids, proteins, DNA/RNA, chemical bonds, transgenic animals, antibodies, mouse models, cell lines, and other materials like prototypes. Freie Universität Berlin reserves the right to commercially exploit this expertise and such material with a societal and/or scientific use. Before such expertise is disclosed to third parties (even for purely scientific purposes) terms of use are to be agreed upon; for materials a Material Transfer Agreement (MTA) must be made.

3. Commercial Exploitation of Intellectual Property

3.1 Further Development to Commercial Viability

A commercial exploitation strategy is developed together with the inventors or authors/creators, as well as external agencies where necessary. Generally speaking, hardly any results from basic research go straight to commercially viable applications. Company spin-offs are an important tool in bridging the gap between research and practical applications at Freie Universität Berlin. However, commercial exploitation with established companies is also a promising option, especially if their requirements are determined at an early stage and further development of the innovation project with a strong orientation on goals is carried out with the support of the inventors and/or authors/creators. Funding opportunities that can even lead to additional third-party funding are frequently available for further development of the project.

3.2 Licensing and Sale of Intellectual Property

If a buyer or licensee is found, then the responsible unit of the central university administration will take over negotiations and the drafting of the commercial exploitation contract. Preference is given to the commercial exploitation of intellectual property through licensing, in other words, the granting of exclusive or non-exclusive rights of use or rights of use limited to specific lines of business and/or countries. This way, copyrights remain property of the university, allowing it to benefit from any profits that are produced through licensed goods to some extent later on. Freie Universität Berlin approves of

the use of socially responsible licensing models for suitable patent families, especially in order to provide access to medical technologies, vaccines, and medication to people in countries with a low economic output.

In justified and exceptional cases, it may also be possible to transfer intellectual property that was developed at Freie Universität Berlin to contractual partners. There are two ways of doing this: a sale at the price of the property right costs accrued up to that point, in addition to a long-term component in the form of sales-dependent licensing fees (royalties), or a direct sale at a once-off inclusive price according to an external appraisal, with the appraisal costs being borne by the purchaser.

Freie Universität Berlin is also open to further options for benefiting from profits generated through commercial exploitation such as participating as a minority shareholder in spin-offs; however, the university does not act as an investor.

Freie Universität Berlin reserves the right to continue to use all objects of commercial exploitation for the purposes of non-commercial research and teaching under any circumstances. The university is also required to engage in commercial exploitation based on prevailing market conditions.

3.3 Commercial Exploitation of Intellectual Property Based on Collaborative and Commissioned Research

If intellectual property is produced over the course of research activities that the university itself finances in full or finances using government funding, the legal situation is generally rather straightforward, in that the university holds the rights of use and exploitation to all research results. Research results produced as part of cooperation projects with third parties are attributed to the different research partners according to the regulations laid out for administering intellectual property in the cooperation contract drawn up before the project begins. Prior to such research results being commercially exploited, the other research partners must be consulted regarding the terms of commercial exploitation (especially the lead PI, assumption of costs, revenue sharing).

With regard to commercially exploitable intellectual property developed as part of a commissioned research project, inventions by their very nature cannot be considered to form part of the commission. It is not possible to preplan inventions, which means that the university cannot be obliged to produce them. That is why additional remuneration in line with market conditions should be arranged.

3.4 Distribution of Revenue to Inventors and Other Incentives

The inventors will receive remuneration amounting to thirty percent of the (gross) revenue generated from commercial exploitation (Section 42 of the German Employee Inventions Act). The laws in place aim to provide due appreciation of the inventors' unique contributions by means of allocating them individual remuneration. The total inventor remuneration is split between several inventors according to their proportional contributions to the invention.

Having deducted inventor remuneration, the university first uses the leftover money to refinance external costs, especially registration costs as well as maintenance and commercial exploitation of patents (for example, external agencies).

After these costs have been refinanced, the remaining revenue is split between the central university administration of Freie Universität Berlin and the inventor's working group. Fifty percent of the remaining net revenue is allocated to the working group of the researchers involved in the invention. This money does not have to be used for a specific purpose. If a working group assumes the patent fees, for example, from externally funded projects, then this will have a positive effect on the refinancing of external costs, and the working group can benefit from profits generated by the invention at an earlier stage. That is why prior to submitting the application you must always examine whether the respective funding program also includes funding for registering intellectual property rights and commercial application costs.

If other rights to intellectual property (for example, copyrights, know-how, or materials) are commercially exploited, then the same standards apply as for inventions when it comes to distributing the revenue.

Along with the inventor remuneration and the revenue split between the inventors following successful commercial exploitation, there is also the possibility of obtaining a one-off payment through re-appointments and retention negotiations amounting to 2,000 euros for each invention for which a patent has been filed by Freie Universität Berlin.

4. The Patent and Licensing Service as the Central Office for Knowledge and Technology Transfer in the Research Division at Freie Universität Berlin

The Patent and Licensing Service within the Research Division at Freie Universität Berlin is responsible for putting these guidelines and objectives into practice. The Patent and Licensing Service supports researchers, students, and alumni in protecting and commercially exploiting research results and making innovations a reality.

The process of handling innovative research results and their commercial exploitation requires close and conscientious teamwork between the researchers at Freie Universität Berlin and the Patent and Licensing Service staff. That is why Freie Universität Berlin has pooled all expertise and roles necessary for knowledge and technology transfer in the Research Division – from technology scouting and awareness-raising for intellectual property through informational and further training measures, to property right administration, through to evaluating the economic and legal conditions for commercial exploitation.