



**IP strategy of the
Hamburg University of Technology (TUHH)
and
Guidelines for dealing with intellectual property**

(adopted by the Academic Senate at the 191st AS meeting on 27/09/2023)

I. IP strategy of the TUHH

1. Preamble

This IP strategy forms the basis for dealing with intellectual property (IP) at Hamburg University of Technology (TUHH). The TUHH sees it as a strategic task to make acquired knowledge accessible to the public, to protect intellectual property and to use it for the benefit of both the university and the public. The interests of the TUHH, its scientific institutions and employees are to be safeguarded, the scientists supported and at the same time access to research results, their dissemination and use through sale, licensing or spin-offs promoted and regulated.

2. Mission statement of the TUHH

The TUHH is a competitive, family-oriented and sustainable university with high performance and quality standards that strives for research excellence in its fields of expertise. It is an internationally oriented university in the Hamburg metropolitan region that is committed to Humboldt's educational ideals. It contributes to the development of society's technical and scientific expertise by training the next generation of engineers and scientists using modern teaching and learning methods and promoting technology transfer and the establishment of companies.

3. Research and technology transfer

True to its mission statement, the TUHH, founded as Germany's northernmost technical university, is one of the most innovative and modern universities in Germany. In addition to the role defined in Section 4 (6) of the HmbHG, the TUHH has pursued forward-looking approaches in research, teaching and knowledge and technology transfer since its foundation in 1978. Teaching and research activities have been organized on an interdisciplinary basis from the very beginning, and TUHH-Technologie GmbH, now Tutech Innovation GmbH, founded in 1992, was the first university-owned technology transfer company in Germany.

In research, the performance of the scientists is documented by many joint R&D projects funded by the DFG, the European Union, federal ministries and research foundations. The consistently high level of third-party funding also underlines the high standard of research work at the TUHH. For the TUHH, knowledge and technology transfer also aims to transfer intellectual property from science, namely in the form of inventions, know-how and copyrights (e.g. protectable computer programs), to society for its benefit. In order to further promote application-oriented research and to transfer research results to industrial use in an even more targeted manner, the TUHH relies on a strong culture of inventors and authors and is consistently driving forward the protection of innovations under intellectual property law and the development of an IP portfolio.

4. Strengthening innovation through internationally visible and patent- and copyright-relevant fields of research

As part of its strategy process, the TUHH has further developed its research structure in order to make the existing research topics of the institutes even more visible and to further strengthen application and technology-oriented expertise.

The analysis of current research topics has resulted in five fields of research at the TUHH, which represent the key trends in research at the TUHH both internally and externally:

1. Advanced materials & (bio-)processes
2. Aviation & Maritime Technologies
3. Cyber physical & medical systems
4. Environmental & energy systems

5. Logistics, Mobility & Infrastructure

In addition to these application-oriented fields of research, there is the "Methods of Research in Science and Engineering" area and the "Societal and Economic Impact" area, which presents the results and processes of university research and its influence on the economy and society.

With this research structure, the TUHH clearly focuses on internationally important research and development areas that are relevant to patents and copyright, actively participates in cross-university competence clusters, for example in aviation, life sciences, medical technology or renewable energies, and makes its contribution to the generation and communication of new knowledge.

The TUHH attaches great importance to the further expansion of knowledge and technology transfer for the benefit of society and the economy. The patenting of inventions in particular is an indispensable prerequisite for ensuring the commercial exploitation of knowledge generated at the university. The TUHH combines the quality of scientific research results with optimized patent protection and thus makes this quality visible to the public with its own patent applications. The TUHH fulfills its responsibility arising from the amendment of the German Employee Inventions Act (ArbEG) in 2002 by filing patent applications for university inventions for which a justified exploitation potential can be predicted.

5. Inventor- and copyright-friendly climate at the TUHH for the benefit of scientists and the university

The TUHH's IP exploitation is not aimed unilaterally at the economic development of the university. The interests of the scientists, in particular their scientific development, are also considered, thus creating an inventor- and copyright-friendly climate at the TUHH. The Patentverwertungsagentur Hamburg (PVA Hamburg), an external service provider, serves as a central point of contact for IP consulting, IP management and IP exploitation. In particular, it evaluates the invention and makes a recommendation to the TUHH either to claim or release the invention. The evaluation criteria are

- the novelty of the invention,
- the inventive height,
- the technicality and industrial applicability of the invention
- as well as the feasibility, which should be verifiable through corresponding experimental data, drawings or existing prototypes.

When evaluating inventions, filing patent applications and exploiting technology, care is taken to ensure that these activities do not delay the publication of research results wherever possible. Negative freedom of publication, i.e. the right not to publish results, is also reserved for the scientist. Inventors are encouraged to play an active role in shaping the processes of invention evaluation and exploitation. At the same time, the fact that it is appropriate and desirable for both the TUHH and the inventors to benefit from the exploitation of their results is not ignored. The aim of the exploitation is, on the one hand, an appropriate return flow of the funds generated into university research and, on the other hand, the remuneration of the inventors, also as an incentive to develop and report further inventions. Inventions with no prospect of exploitation or no strategic importance are generally not claimed. When deciding how to proceed with inventions, the TUHH therefore considers its own interests as well as the interests of society and the inventors. The inventions recommended for patent application are regarded by the TUHH as evidence of excellent research work in the same way as outstanding scientific achievements (e.g. high-quality publications, collaborative research projects).

The TUHH offers all independent inventors with a connection to the TUHH, for example students or scholarship holders, the opportunity to transfer the rights to their inventions to the TUHH under the same conditions as apply to university employees, subject to an assessment under intellectual property law and a positive assessment of their exploitation, and to have the inventions exploited by the TUHH.

6. Successful IP management and technology exploitation through collaboration in professional structures

The TUHH endeavors to operate a professional invention, patent and exploitation management system in cooperation with other technology-oriented Hamburg universities and non-university research institutions in collaboration with PVA Hamburg, which acts as a service provider. The cooperation with PVA Hamburg is regulated on the basis of a valid target agreement. By ensuring the identification, evaluation, protection and exploitation of research results, the knowledge resources available at the TUHH are to be made accessible to industry.

7. Early protection of intellectual property as the basis for successful spin-offs

In accordance with its mission statement, the TUHH supports spin-off projects and corresponding applications by prospective start-up teams based on research

results in order to promote the implementation of these results in market-ready products and thus the creation of jobs. The TUHH therefore promotes a lively start-up culture and provides appropriate structural and further training opportunities for students and employees. The path towards a start-up university has been consistently pursued and expanded since 2013, particularly as part of the nationwide measure "EXIST start-up culture - the start-up university" and the joint project "beyourpilot" funded by the FHH. The TUHH promotes the sensitization of university teachers, academic staff and students interested in founding a company for the confidential handling of IP and the evaluation of early protection of ideas and research results under intellectual property law, both in teaching and through extracurricular information events.

The TUHH will also support business start-ups by providing commercial and copyright protection rights for the purpose of using and exploiting the university's own knowledge. In doing so, the TUHH must in principle participate in the proceeds of these companies and/or be compensated for costs incurred, i.e. official fees, legal and translation costs and inventor compensation. For reasons of state aid and competition law, the TUHH must ensure that the remuneration for the use of industrial property rights and copyrights is in line with market conditions. When negotiating the conditions for the use of industrial property rights and copyrights, the TUHH considers both the financial possibilities of the founding teams and the legal framework to which it is subject as a university. The terms of use should reflect the positive development of the spin-off projects, e.g. by granting installments for an upfront payment, realistic milestone payments and an appropriate share of any revenue. The TUHH is supported in these discussions by the Hamburg Patent Exploitation Agency.

The PVA Hamburg should be involved in the spin-off process as early as possible. When exploiting university inventions, the Patentverwertungsagentur Hamburg is expected to pay special attention to spin-off projects. In addition, early cooperation with the PVA Hamburg enables optimal coordination of the IP strategy, e.g. with regard to determining the markets and countries relevant to intellectual property rights. The TUHH can offer the founders the prospect of exclusivity to the IP rights in a letter of intent until the user agreement is concluded. This is usually possible for up to 30 months from the date of the first patent application, in justified cases also for a longer period.

8. working in partnership with industry

University inventions and patent applications as well as protectable computer programs can represent considerable economic value for industrial partners. When exploiting intellectual property rights, it is therefore important to work out the specific value for the companies and to support the partnership-based relationship with the companies. Companies should be motivated to pay market rates for the acquisition of property rights. For inventions that are created as part of contract research or research and development collaborations between TUHH and companies, regulations on how to deal with these inventions and/or protectable computer programs are established early on in the cooperation agreements. Early clarification and clear regulations are essential for all parties involved. In the event of exploitation, the respective contractual provisions are considered. An appropriate balance of interests and the protection of inventors' rights and copyrights are important requirements for the TUHH. This should also lead to the promotion of mutual trust, as long-term and targeted research collaborations can only be established if the interests of all parties involved are considered.

II Guidelines for dealing with intellectual property

Against the background of this IP strategy, the following guidelines apply in addition to the Patent Act (PatG) and the Employee Inventions Act (ArbEG) as well as the Copyright Act (UrhG) in their respective valid versions.

1. Definitions

For the purposes of this guideline, an inventor is a person who has made an invention alone or together with others. Invention means all patentable or potentially patentable ideas or know-how as well as the technology required for the development or application of these ideas or know-how.

Service invention means an invention within the meaning of the ArbEG and these guidelines made during the term of the employment relationship, which either arose from an activity for which the employee is responsible at the university (task invention) or is essentially based on experience or work at the university (experience invention).

A free invention is an invention that does not meet the aforementioned criteria of a service invention.

Computer programs are protected if they constitute individual works in the sense that they are the result of their author's own intellectual creation. No other criteria, in particular qualitative or aesthetic criteria, are to be applied to determine their eligibility for protection (see Section 69a (3) UrhG). If a computer program is created by an employee in the performance of his or her duties or in accordance with the instructions of the TUHH, the TUHH is exclusively entitled to exercise all property rights to the computer program, unless otherwise agreed (cf. § 69b para. 1 UrhG). This principle does not apply to full professors, honorary professors, visiting professors, university lecturers and lecturers (hereinafter referred to as university lecturers) who work at the TUHH independently and autonomously. This exception is justified by the fact that all rights to the computer programs belong to them due to the freedom of science and research guaranteed in the Basic Law (Art. 5 para. 3 GG). Nevertheless, the PVA Hamburg will open up the possibility in the consultations that a license agreement to be concluded between university teachers and the TUHH can be of benefit to both parties. Something else may apply if university teachers are expressly commissioned by the TUHH to create a computer program.

2. Notification and reporting obligation

2.1 Service inventions

Employees of the TUHH are obliged to report their service inventions, which are to be made publicly accessible, to the TUHH's Department 4 Research, Transfer and Scientific Careers using the "Invention Report" form available online. If several employees are involved in the creation of an invention, a joint invention disclosure should be submitted. The inventors are required to complete the invention disclosure in full.

2.2 Communication of free inventions

Inventions that are made during the term of the employment relationship and are regarded as free inventions by the inventor must be indicated with the label "Notification of a free invention".

2.3 Computer programs eligible for protection

TUHH employees are obliged to notify the TUHH's Department 4 Research, Transfer and Scientific Careers of computer programs that are eligible for protection and are to be commercially exploited using the "Software Notification" form, which is also available online. The decision as to whether commercial exploitation is

planned should, if possible, be made by the project management at the beginning of the project. If several persons are co-authors, the notification should also include the individual percentage shares of the co-authors in the computer program. Although the software notification is not subject to any statutory deadlines, it should be submitted to the TUHH without delay.

2.4 Protectable computer programs for open source use

The TUHH has had an openTUHH policy for openness in research and teaching since September 26, 2018 (hereinafter: "openTUHH policy"). The openTUHH policy recommends developing your own software in research projects and student work as open source in order to simplify usability and open exchange with other researchers. Protectable computer programs that are created during the term of the employment relationship and that are intended by the author for open source provision on a TUHH-owned platform can be reported with the label "Software notification of open source computer software". There is no obligation to report – as in the case of computer programs that are to be commercially exploited (see Section 2.3 Sentence 1). Section 2.3 sentences 3 and 4 apply mutatis mutandis in the event of a notification.

3. Confidentiality, publications, disclosure of knowledge

Employees of the TUHH are obliged to take the necessary precautions to ensure that the TUHH can exercise its rights to exploit service inventions and protectable computer programs within the meaning of Section 2.3 without restriction.

This includes in particular the confidentiality of an invention. Both the inventors as employees and the TUHH as an employer are obliged to maintain the confidentiality of inventions to the extent stipulated in Section 24 ArbNErfG. Before any publication (e.g. in the form of a publication, a publicly accessible abstract, a lecture or a press release), it must be checked whether the intended publication contains inventions for which a patent application can be filed.

Employees of the TUHH who have registered an invention are also obliged to notify the Patentverwertungsagentur Hamburg or the TUHH immediately of any reasons they know or become aware of that prevent the granting of a patent (e.g. own or third-party publications or presentations at specialist conferences).

4. Utilization

The TUHH forwards the invention disclosures to the Hamburg Patent Utilization Agency for evaluation. The agency evaluates the invention and makes a recommendation to the TUHH either to claim or release the invention. The evaluation criteria are

- the novelty of the invention,
- the inventive height,
- the technicality and industrial applicability of the invention,
- the feasibility, which should be proven by corresponding experimental data, drawings or existing prototypes,
- the commercial potential of the invention and
- possible further relevant factors specific to the invention.

The TUHH decides on the basis of a statement by the Hamburg Patent Exploitation Agency within the statutory period on a possible claim to the invention in accordance with Section 6 (1) or (2) ArbNErfG.

5. Patent application

In the event of an invention being claimed, the TUHH strives to file a patent application without delay, provided there are no other obligations arising from cooperation agreements. The Patentverwertungsagentur Hamburg is responsible for the patent application procedure, generally with the involvement of expert patent law firms. The inventors must participate in the application procedure in accordance with the TUHH in coordination with the Hamburg Patent Agency.

6. Commercial exploitation

With regard to the commercial exploitation of an invention or a protectable computer program, the TUHH has, in principle, sole decision-making authority and relies on the opinions of the Hamburg Patent Exploitation Agency when making its decisions. The operational exploitation tasks, as regulated in a corresponding target agreement, also lie with the Hamburg Patent Exploitation Agency. In cases where agreements with third parties (e.g. with public funding institutions or industrial partners) contain rules for handling TUHH inventions, the TUHH will take these provisions into account and implement them to the best of its ability. If inventions are not part of such third-party funding agreements, TUHH will ensure that the inventors concerned are involved in the exploitation procedure and that their industry contacts and project plans are considered appropriately. Where

possible and necessary, inventors are encouraged to support exploitation activities.

7. Revenue sharing

The inventors participate in the income from the exploitation of an invention in accordance with the provisions of the ArbEG. This inventor remuneration represents a share of the proceeds for personal use by the inventors (employee inventor remuneration).

The authors participate in the income from the exploitation of a protectable computer program in accordance with the Copyright Act and this copyright remuneration represents a share of the proceeds for personal use by the authors.

8. Release of inventions

If the TUHH does not wish to claim an invention, withdraw a patent application before a patent is granted or does not wish to maintain a patent, the invention will be released to the inventor or inventors or offered for reassignment after the four-month release period (see Section 6 (2) ArbNErfG) has expired. It is checked in advance that the release or reassignment of the invention does not violate existing agreements with third parties. If the inventor(s) express their willingness to transfer the invention within the specified period, all rights to the invention are transferred to the inventor(s). Any costs incurred in further patent proceedings must be borne by the inventor(s).

This translation of the „IP-Strategie der Technischen Universität Hamburg (TUHH) und Leitlinien zum Umgang mit geistigem Eigentum“ is intended solely as a convenience to the non-German-reading public. Any discrepancies or differences that may exist between this translation and the official German version are not binding and have no legal effect for compliance or enforcement purposes.