FROM INNOVATION TO COMMERCIALIZATION

The Invention Valorization Guide

















This guide is presented for informative purposes only. It does not provide legal advice or opinions, and should not be interpreted as such. In addition, the information is subject to variations over time, with respect to the evolution of law, university rules, and guidelines.

For any questions or clarifications, please reach out to the SARIC or TransferTech Sherbrooke.

It will be our pleasure to provide further information.

<u>Protect your intellectual property - Research, innovation and creation support service - Université de Sherbrooke (usherbrooke.ca)</u>

https://www.transfertech.ca/



TRANSFERTECH SHERBROOKE

WHO WE ARE

TRANSFERTECH SHERBROOKE (TTS) IS THE VALORIZATION COMPANY IN CHARGE OF COMMERCIALIZING INVENTIONS ARISING FROM RESEARCH AT THE UNIVERSITY OF SHERBROOKE.

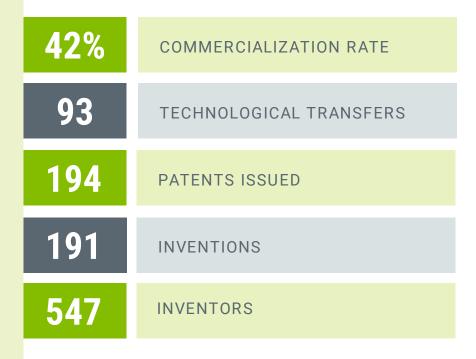
In order to achieve its goal, TTS actively protects and manages intellectual property, while contributing to technological maturation.

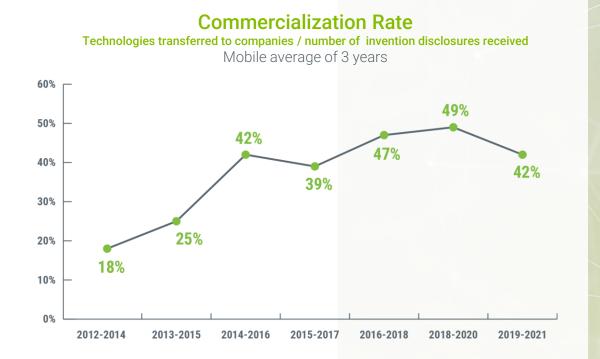
TTS interacts with numerous and diverse business partners, from start-ups of various sizes to Fortune 500 companies.

TTS' team proficiently combines commercial, scientific and legal expertise on a daily basis.



A FEW NUMBERS











VALORIZATION PROCESS



FUNDRAISING, SERVICE CONTRACT, NDA, ETC.

EXPERIMENTA-TION & PROOF OF CONCEPT

INVENTION DISCLOSURE

PATENT COMITTEE ANALYSIS

(*<u>*</u>





VALORIZATION





UNIVERSITÉ DE SHERBROOKE

→ TRANSFERTECH SHERBROOKE

Intellectual Property Transfer





- COMMILTOTALIZATION

PATENT COMMITTEE



THE PATENT COMITTEE'S ROLE IS TO ENSURE THAT:

- THE INVENTION WAS PRODUCED IN AN ACADEMIC SETTING;
- EVERY CONTRIBUTING INVENTOR AND PARTNER IS PROPERLY IDENTIFIED; and
- VALIDATE THAT THE INTELLECTUAL PROPERTY HOLDS A POTENTIAL FOR PROTECTION IN LAW

For any further questions related to inventions and the examination process carried out by the Patent Committee, please contact the Service d'appui à la recherche, à l'innovation et à la création (SARIC).

Protect your intellectual property - SARIC - Université de Sherbrooke (usherbrooke.ca)

TransferTech Sherbrooke's ROLE

Collaborate thoroughly with

the inventors

Analyze inventions on a

legal and commercial basis





Seek and obtain funding for

invention maturation

Elaborate marketing

strategies and contact

business partners

Elaborate and implement

strategies in order to protect

intellectual property

Negotiate with partners and

produce business

contracts.

ACCEPTING PROJECTS:

TTS' Analysis

COMMERCIAL ANALYSIS:

- Evaluate the distinctive advantages of each technology;
- Evaluate the commercial potential



- Evaluate the possibility of 1) protecting and 2) commercializing the intellectual property.
- * Before considering the aspect of commercialization, it is crucial to identify all the people or organizations having contributed to the creation or funded the invention.
- * It is also necessary to ensure absence of public disclosure prior to the University disclosure.

















INVENTOR'S ROLE IN THE COMMERCIALIZATION **PROCESS**

Once the INVENTION DISCLOSURE is transferred from the Patent Committee to TTS following acceptance, inventors can either assist TTS in the technological transfer of their invention to a company, or develop their own start-up.

Please note that it is possible to create an R&D-type start-up, solely for the pursuit of technological development. Upon further development, one could potentially sell the invention to an established company, or negotiate the purchase of the start-up as a whole.

A start-up may also generate profit by granting licenses, allowing other companies to use the invention.

In other words, there are multiple business models and your company doesn't necessarily have to produce and market finished products.















INVENTOR'S ROLE

The inventor's help and contribution are essential to our staff's full understanding of the technology at stake and hence to the success of subsequent commercialization activities.

When several inventors have contributed to an invention, the active involvement of all is generally not necessary. Moreover, the main contact designated by the inventors does not have to be the inventor who has made the most significant inventive contribution.















A CLOSE **COLLABORATION** BETWEEN PARTIES

Regular discussions between inventors and TTS allows both parties to define their respective roles and discuss expectations, as well as invention protection and commercialization strategies in order to establish favorable conditions. This sets the table for a harmonious cooperation at every step along the way.















DESIRED COLLABORATION AT EACH STAGE

HERE'S HOW INVENTORS INTERVENE OR ARE CONSULTED AT EACH STEP OF THE VALUATION PROCESS



By sharing their expertise on target markets and by disclosing appropriate information regarding scientific and financial contributors



By submitting their ideas regarding marketing and maturation strategies



By collaborating in the development of the intellectual property strategy, supporting patent attorneys in the drafting of patent applications, and informing TTS of all past and future disclosures (conferences, publications and others)



By applying for technology maturation grants in collaboration with TTS



By leveraging their network of contacts



By being available for the preparation of negotiations, then by carrying out the transfer of expertise to the commercial partner













COLLABORATION AND REVENUE SHARING

The "mixed" approach adopted by the Université de Sherbrooke aims at encouraging inventors to choose the path of commercialization, while recognizing the public roots of the research funds having rendered the invention viable. The mixed approach also recognizes the University's contribution as an employer, but also as an invaluable ally regarding infrastructures, personnel and various university resources.

The institutional share of profits, minus the commercialization costs, is reinvested in the pursuit of the university mission.

Thus in order to reward the inventors' work, and in accordance with regulations, policies and collective agreements, 50% of net commercialization revenues are redistributed directly to the inventors, according to preestablished inventive contributions.















INVENTION

INTELLECTUAL **PROPERTY**

AN INVENTION IS A CREATION THAT CAN TAKE DIFFERENT FORMS. IT MAY BE A PROCESS, A METHOD, A PRODUCT, A COMPOSITION OF MATERIAL, A SOFTWARE, ETC.

INTELLECTUAL PROPERTY - Ownership of intangible property resulting from the creations of the mind. The idea must be materialized in order to qualify for protection.







RIGHTS









INTELLECTUAL PROPERTY FORMS

TRADEMARK – "a combination of letters, words, sounds or designs that distinguishes one company's goods or services from those of others in the marketplace".

COPYRIGHTS – "the exclusive right to produce, reproduce, publish or perform an original literary, artistic, dramatic or musical work".

INDUSTRIAL DESIGNS – "protects a product's unique appearance, not what it is made of, how it is made or how it works".

PATENTS – "grants an exclusive, time-limited and legally protected right to exclude others from creating, using and selling an invention".

TRADE SECRETS – "any business information that has commercial value derived from its secrecy".

PLANT BREEDER'S RIGHTS – "a form of intellectual property protection that allows plant breeders to protect new varieties of plants".

INTEGRATED CIRCUIT TOPOGRAPHIES – "registration of your ICT gives you exclusive legal rights. With your registration, you can exclude others from reproducing your topography, and from manufacturing an integrated circuit product that incorporates your topography, or a substantial part of it".













* CIPO Definitions (Canadian Intellectual Property Office)

INTELLECTUAL PROPERTY **STRATEGIES**

Patent protection is the preferred means of protection for TTS given the nature of the inventions and the requirements of the academic environment, but other forms of protection may complement a patent, such as copyright or trade secret. More rarely, there may be cases where no patent protection is more appropriate and desired by the inventors and/or TTS.

Even following transfer to a partner, inventions are subject to a research license allowing inventors to continue their academic work on the technologies they have created.

Once a patent application is filed, it is usually possible to publish the results related to the invention. Thus, scientific outreach and commercialization are indeed reconcilable.















SOFTWARE

Software is patentable in most cases. Methods, user-executed steps and computer software, devices, systems or networks as well as recording media and their execution are all likely to be patentable.

Copyrights is another protection that can be combined with certain patents. It may apply to computer codes, for instance.















SOCIAL Innovation

TTS is open and flexible to adapt to academic creations, including social innovations and evolving IP protection practices. Do not hesitate to contact us to discuss it.















PROTECTION BY PATENTING



PATENTING CRITERIA

THE NOVELTY – The invention must not have been made public in Canada or elsewhere in the world (some jurisdictions, however, tolerate disclosure if it occurs less than a year before the filing of the patent application).

THE UTILITY – The invention must work and be useful: a patent cannot be granted for something that does not work or has no concrete result.

THE INVENTIVE CONTRIBUTION

 The invention must constitute a technical change or improvement that would not have been obvious to a person skilled in the art or science to which the subject matter relates.













PATENT ATTORNEY'S ROLE

PATENT ATTORNEYS POSSESS THE EXPERTISE TO DRAFT PATENT APPLICATIONS THAT ENSURE MAXIMAL PROTECTION FOR INVENTIONS.

Over time, TTS has developed connections with renowned specialists for each type of technology.

The role of the inventor is essential. Their knowledge of how inventions work makes them indispensable individuals. With the support of the patent attorney, inventors help optimize the chances of a patent being granted and hence maximize its value.















DON'T WAIT TOO LONG!

Although inventions must attain a certain level of maturity in order to attract potential business partners, it is better to contact TTS as soon as possible.

TTS will assess the most appropriate time to file a patent application while inventors pursue the development with the financial support of technological maturation grants.















MATURATION

There are many technological maturation and market pursuit grants.

This development path orients inventions with regard to market needs and therefore facilitates the subsequent commercialization process.

Certain funding programs allow matching of up to four times the initial private investment.















GRANTS AND TECHNOLOGICAL MATURATION

TTS helps you quickly find your way around the various funding agencies.

Several categories of grants can be cumulated:

- Market research;
- Technological maturation without a commercial partner;
- Technological maturation with a commercial partner;
- Wage subsidies

















THE IMPORTANCE OF MATURATION

The maturation of inventions is all the more important since university inventions are on average at development stages corresponding to level 3 on the TRL (Technology Readiness Levels) scale. This scale, developed by NASA, is the most commonly used reference.

Technology transfers come easier as of TRL-5.















TRL SCALE: TECHNOLOGY READINESS LEVEL



https://www.nasa.gov/directorates/heo/scan/engineering/technology/technology_readiness_level

COMMERCIALIZATION STRATEGIES







TOWARDS AN ESTABLISHED COMPANY

SERVICE OR RESEARCH CONTRACT





ASSIGNMENT (SALE)













COMMERCIAL PARTNER IDENTIFICATION







TRANSFERTECH'S CONNECTIONS





- Consortia
- Symposiums
- Contests



BUSINESS INTELLIGENCE PLATFORMS

- Patent Inspiration
- In-Part
- FlintBox
- Explorer IP
- BCC Research
- MarketsAndMarkets
- TTS Website
- KTMINE













TOOLS FOR MARKET RESEARCH, VISIBILITY AND PATENT INFORMATION

SPECIALIZED FIRMS AND SOLUTIONS

DATA BANKS, MARKET STUDIES, INTELLECTUAL PROPERTY, VISIBILITY





























TTS ALSO HELPS YOU ORGANIZE YOUR GAME PLAN WITHIN THE INNOVATION ECOSYSTEM





Centre intégré universitaire de santé et de services sociaux de l'Estrie - Centre hospitalier universitaire de Sherbrooke





























NEGOTIATING AND DRAFTING CONTRACTS

TRANSFERTECH'S VALORIZATION MODEL "WIN-WIN" CONTRACTS

ADJUSTMENTS TO BUSINESS CHALLENGES

EFFICIENT EXECUTION

FLEXIBLE APPROACH WITH REGARD TO INVENTION MARKETING















TYPES OF AGREEMENTS

DIFFERENT TYPES OF AGREEMENTS CAN BE NECESSARY DEPENDING ON THE STAGE OF DEVELOPMENT AND THE PARTNER

- Agreements with coinventors or their employers;
- Confidentiality agreement and material transfer agreement;
- License option (related or not to the research contract);
- License (exclusive or nonexclusive);
- · Assignment (sale of the invention).

The various contracts aim at protecting the inventions and providing income while preserving as much academic freedom as possible. We will gladly discuss the subject with you if you are planning on undertaking the commercialization route for your invention.













RISK MITIGATION

BEWARE OF THE RISKS!

Inventors' opinions are always taken into account, but inventors should not discuss commercial terms directly with potential partners nor make legal representations, as they run the risk of litigation.

TTS has the mandate and the expertise to protect the interests of inventors and successfully conduct commercial negotiations while limiting the legal risks related to process.















PUTTING AND END TO THE COMMERCIALIZATION PROCESS

TTS sometimes offers, through its own initiative, to reassign inventions to inventors when we consider that the commercial potential is too limited, or that invention maturation is no longer possible.

Inventors can choose to accept or decline the reassignment offer (for joint inventions, each inventor can make this decision individually).

DÉFINITIONS DE CONCEPTS CLÉS

BREVET - Titre conférant à son titulaire l'exclusivité de l'exploitation de son invention pour une durée limitée en retour d'une divulgation de l'invention dans le domaine public

CESSION - Transmission à titre onéreux d'un droit de propriété

CHAÎNE DE TITRES - Le passage des droits d'un propriétaire à l'autre. Dans les cas des inventions universitaires, il faut s'assurer d'avoir identifié tous (tes) les inventrices et les inventeurs ainsi que les titulaires de droit de propriété ou les titulaires d'autres droits (droit d'usage, droit de regard sur la commercialisation, droit à une part des revenus de commercialisation, etc.) afin de s'assurer que la commercialisation est bien possible et des conditions à respecter, le cas échéant

DÉCLARATION D'INVENTION - Document permettant d'identifier les inventrices et les inventeurs et leur apport inventif, comprend une divulgation de l'invention, du contexte de développement et du financement utilisé

DIVULGATION – Communications non confidentielles de l'invention écrites ou orales

ENTENTE DE VALORISATION - Document permettant d'établir le processus de commercialisation et les rôles des inventrices et des inventeurs ainsi que de TransferTech

ENTREPRISE DÉRIVÉE « SPIN-OFF » - Entreprise totalement indépendante résultant du milieu académique ou d'une autre entreprise

ENTREPRISE « START-UP » - Nouvelle entreprise généralement innovante et/ou avec un fort potentiel de croissance économique

INVENTRICE, INVENTEUR - Personne physique ayant contribué intellectuellement à la réalisation de l'invention, et ce, peu importe le pourcentage d'apport

INVENTION BREVETABLE - Se qualifie comme invention brevetable toute réalisation, procédé, machine, fabrication ou composition de matières, ou tout perfectionnement quelconque de l'un d'eux, présentant le caractère de la nouveauté, de la non-évidence et de l'utilité et satisfaisant aux exigences nécessaires pour l'obtention d'un brevet

LICENCE - Concession d'un droit de propriété intellectuelle à un tiers afin de lui permettre d'en faire l'exploitation dans des conditions déterminées moyennant une contrepartie (redevances, paiement forfaitaire, équité, remboursement de frais de brevet, etc.)

MATURITÉ TECHNOLOGIQUE - Possibilité de la définir au sens du système de « Technology Readiness Level » (TRL) de la NASA (p.25)

OPTION DE LICENCE - Droit de négocier de bonne foi ou d'acquérir une licence selon des termes prédéterminés

PROPRIÉTÉ INTELLECTUELLE - Droit de propriété sur un bien intangible résultant des créations de l'esprit. L'idée doit être matérialisée pour pouvoir bénéficier d'une protection

TERM SHEET - Document permettant d'établir l'essentiel du contenu d'une entente future pour clarifier les attentes des parties

TRANSFERT TECHNOLOGIQUE – Selon la définition de l'AUTM (Association of University Technology Managers) : « Un transfert de découvertes scientifiques par un organisme à un autre, à des fins de développement et de commercialisation »

VALORISATION - Processus visant à promouvoir et à contribuer à la maturation d'une technologie par l'obtention de financement et/ou l'identification de partenaires commerciaux dans le but d'atteindre le plein potentiel de cette technologie

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