



# Inventions and Working with Your Technology Transfer Office: FAQs

This document is intended to answer some of the key questions associated with making an invention and working with your institutionally-affiliated Technology Transfer Office (TTO). It is intended to supplement the “Early Considerations for Commercialization” and “Technology Readiness Assessment and Case Study” documents.

The TTO should always be your first point of contact for any questions regarding your potential invention. TTOs (at universities, hospitals, research institutions and government labs) exist to help academic inventors identify, evaluate, patent and commercialize new inventions via license agreements and/or new company formation. They may also assist with finding industrial partners to establish sponsored research collaborations. Furthermore, TTO staff is trained to answer questions that you might have on any aspect of the technology commercialization process.

## WHAT IS AN INVENTION?

- The Canadian Patent Act defines an invention as “any new and useful art, process, machine, manufacture or composition of matter or any new and useful improvement in any art, process, machine, manufacture or composition of matter.”<sup>1</sup>
- More generally, it is a new scientific or technical idea that ideally solves a practical problem and, in doing so, provides value for individuals and/or society.

## HOW DO I KNOW IF I HAVE AN INVENTION?

- Does it solve an existing problem or unmet need?
- Is it novel? (i.e., was the inventive idea previously known to the public?)
- Is it non-obvious? (i.e., would the inventive discovery have been easily predicted by an individual with skilled expertise in the specific field?)
- Does it have utility i.e. a practical purpose?

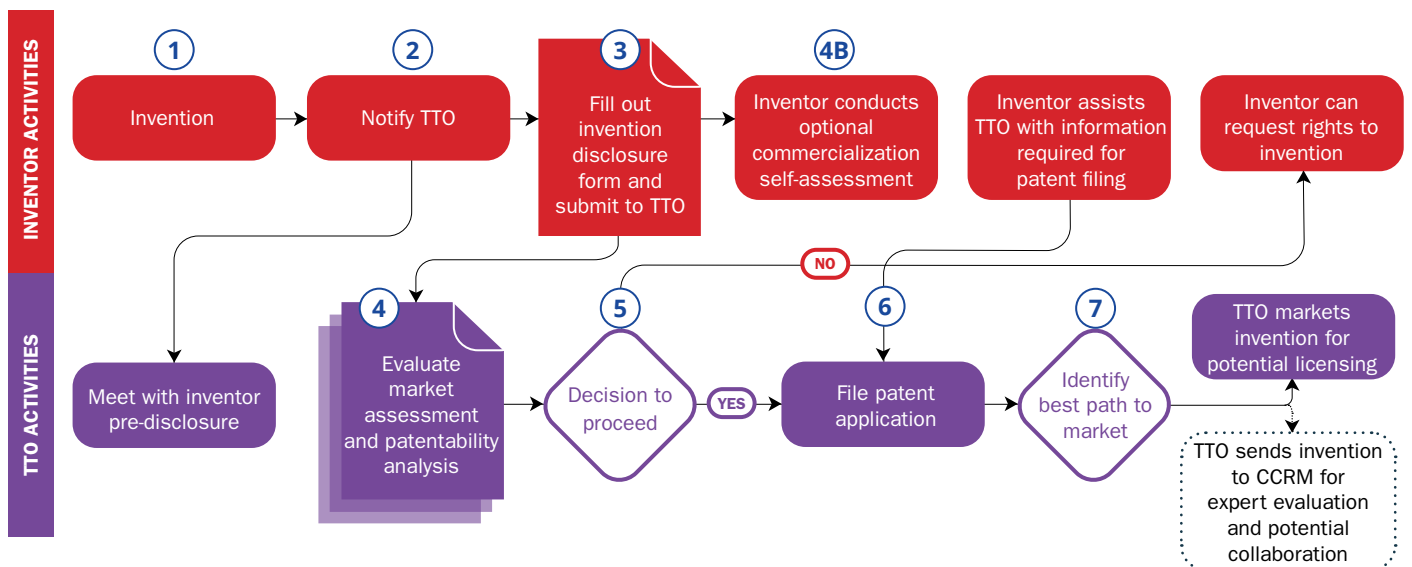
Your TTO and their legal support can help assess your idea against these criteria.

## IS MY INVENTION PATENTABLE?

- For an invention to be patentable, it must satisfy three criteria: novelty, non-obviousness and utility. For more information, please consult with your TTO and/or a licensed patent agent.
- Has it been publicly disclosed? (E.g. Has it been published as an abstract? Has it been presented as part of a poster or seminar presentation? Has it been published online?)
  - If yes, then this may negatively impact your ability to obtain patent protection globally for your invention. However, the potential impact of a public disclosure must be evaluated by your TTO.
- Your TTO and/or a patent agent may be able to conduct a patentability assessment to determine if your invention is patentable.
- Your invention may be protectable in other ways. For example, know-how and trade secrets can be valuable forms of intellectual property. Please consult with your TTO for more information.

## WHAT ARE THE STEPS IN THE COMMERCIALIZATION PROCESS?

There is typically no fixed approach to this, but the following is an example of one possible pathway. Please consult with your TTO for the specific approach used by your institution.



- ① Creation of invention
- ② Inventor(s) informally notifies TTO and arranges pre-disclosure meeting
- ③ Inventor(s) submits invention disclosure to TTO
- ④ TTO conducts patentability & market assessment of invention
- ④B Inventor(s) conducts optional “Technology Readiness Assessment” as suggested by SCN and CCRM
- ⑤ Upon completing its evaluation, TTO decides to proceed with intellectual property (IP) protection
- ⑥ TTO files patent application(s)
- ⑦ TTO identifies best path to market – either
  - TTO markets the technology to industry for potential licensing or
  - TTO sends invention to an accelerator such as CCRM (for expert evaluation and potential collaboration)

## DOES MY INVENTION HAVE COMMERCIAL POTENTIAL?

- Does it address an unmet need in the market?
- Does it have advantages over competing technologies/products?

Please see the “*Technology Readiness Assessment*” document for additional information.

## WHY SHOULD I DISCLOSE AN INVENTION TO MY TTO?

- The IP will typically be owned by the host institution and employees may therefore be contractually obligated to divulge any inventions to their TTO. Inventors are encouraged to contact their TTO for clarification on any institutionally-specific IP ownership obligations.
- To investigate the commercial potential for your invention to reach the marketplace.
- To identify if there is an opportunity to generate research funding via industry support.
- To provide educational and networking opportunities for students.
- To fulfill any obligations that may exist; for example, in relation to research funding agreements that require a potential invention to be disclosed.

## WHEN SHOULD I CONTACT MY TTO?

- This will depend on the preference of each TTO; however, it is usually better to start the conversation early.
- Typically, you should submit an invention disclosure to your TTO when you believe you have a solution to a problem or unmet need (a “eureka moment”).
- Ideally, the TTO should be notified well in advance of any public disclosure (i.e., well before sharing information about the invention orally or in written form to individuals or entities outside of your institution), as this may negatively impact your ability to obtain patent protection for your invention.

## WHAT SHOULD I DO IF I THINK I HAVE AN INVENTION TO DISCLOSE TO MY TTO?

Consult your TTO for specific information relating to the disclosure process at your institution.

## WHAT IS AN INVENTION DISCLOSURE?

It is a document that describes the invention to the institution. It typically contains the following: a description of the technology; a listing of inventors and contributors; a list of any prior public disclosures; and, a list of competing academic labs. Each institution has its own unique invention disclosure template document.

## HOW WILL I BENEFIT FROM DISCLOSING MY INVENTION TO THE TTO?

- Depending on your institutional policies (i.e., if the invention is deemed to be institutionally owned), your TTO may assume the extensive legal and administrative cost of patenting your invention (at their own discretion).
- Depending on your institutional policies (i.e., if the invention is deemed to be institutionally owned), your TTO may decide, following their assessment, to proceed with a patent application and commercialization support.
- In the event that they do proceed, they may cover the legal and administrative costs associated with filing a patent application for your invention. If you are funded by the Stem Cell Network, a portion of your award can be used to offset patent filing costs.
- If the technology generates revenue via commercialization, a portion of the proceeds are shared with the inventor(s). Please review your institutional IP policy for information on monetary benefit as a result of successfully commercializing an invention.

## WHAT HAPPENS IF I DON'T DISCLOSE TO MY TTO?

- It is recommended to have a discussion with your institution about the potential consequences of not disclosing your invention. Meeting with your TTO first is considered to be a best practice.

## WHAT INFORMATION SHOULD I PREPARE BEFORE A MEETING WITH MY TTO?

Please consult with your TTO for specifics, but consider preparing the following information:

- A brief description of your proposed invention, emphasizing the novel components and methods.
- A description of the problem or unmet need that it is solving.
- A summary of the potential advantages of the invention over competing technologies/products.
- A description of the potential end-user and/or customer.
- A list of individuals who have contributed to the conception and development of the invention.
- A summary of contributions from each individual.
- A list of financial contributors to the project, as funding might impact ownership of the invention.
- A list of next steps that are required for further development.
- An estimate of funds required for further development (if possible).
- A list of potential industry partners that might be interested in the invention.
- Any submitted or draft manuscripts that are related to the invention.
- A summary of the current standard of care in the market that your invention addresses (if applicable).

Please see the “*Early Considerations for Commercialization*” document for additional information.

## WHAT IS AN INVENTOR?

An inventor is a person who contributes to the inventive concept and/or reduction to practice (steps in the demonstration) of the invention. Funding or supervising a project is not sufficient for inventorship, nor is reviewing documents describing an invention. An inventor contributes to the “eureka moment” behind one or more claims of the patent.

## HOW DO I KNOW IF I AM AN INVENTOR?

- Please review your institutional IP policy for information on inventorship.
- Your TTO will make a non-legal determination on inventorship based on specific patent law for your chosen jurisdiction.
- A patent agent or attorney will make a final determination of inventorship based on the specific legal standards of inventorship for your chosen jurisdiction.

## DO I OWN THE RIGHTS TO MY INVENTION?

- This depends on the language specified in your institution’s inventions or IP policy. “Inventorship” and “ownership” are separate considerations, but patent offices usually consider inventors to be owners unless otherwise declared.
- Some institutions have an “inventor-owned” policy and others have an “institution-owned” policy. This is an important distinction, and all inventors should be aware of any potential monetary and legal implications.

## REFERENCES

1. [Patent Act \(R.S.C., 1985, c. P-4\)](#)