



Intellectual Property Officer

Bio-economy Skills Profile



Building skills for Canada's bio-economy

About BioTalent Canada

Helping Canada's Bio-economy thrive globally

Canada is a world leader in biotechnology—the application of living organisms to industrial, agricultural, medical and other processes and products. To maintain and build on this leadership, the sector needs highly trained, job-ready people.

By acting as a national hub and central resource for employers, job-seekers, students, educators and government agencies, BioTalent Canada helps make this happen.



Building skills for Canada's bio-economy

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About the BioTalent Canada bio-economy skills profiles

Biotechnology's fusion of science and business creates unique requirements for occupations in the sector. Executives and managers must have technical expertise; technical staff often need entrepreneurial skill sets. Occupational descriptions from other sources don't always fit the bio-economy context. That's why, in partnership with industry stakeholders, BioTalent Canada has developed skills profiles specific to the bio-economy including this description of the role Intellectual Property Officer.

Occupational Definition

Intellectual Property Officers are responsible for registering trademarks, applying for patents, registering copyrights, defending intellectual property, guarding trade secrets and deciding to patent inventions and technology. They use their legal and scientific knowledge or work with legal and business development departments to negotiate and draft agreements as well as to ensure that contractual obligations are met. Intellectual Property Officers work for Canadian bio-economy companies of different sizes (e.g., small, medium, large) and in various bio-economy areas, such as:

- Agriculture
- Aquaculture
- Bioenergy
- Bioinformatics
- Bioproducts
- Biosciences
- Environment
- Food Processing
- Forestry
- Genomics
- Human Health
- Industrial
- Life Sciences
- Medical Devices
- Natural Resources
- Nanotechnology
- Nutraceuticals
- Pharmaceuticals

Components of the skills profile

Every BioTalent Canada skills profile presents the areas of competence, tasks and sub-tasks associated with a specific occupation.

Area of competence (AC): This describes a major function or responsibility associated with the profession, trade or position.

Task: This is a specific, observable unit of work with definite start and end points. Tasks can be broken down into two or more steps and are generally performed in a limited period of time. Tasks and ACs are identified in behavioural terms, beginning with a verb that describes the applied behaviour.

Subtask: This is a distinct, observable activity that comprises the steps involved in a task.

Important Action/Performance Standard: This provides a criterion for assessing competence and may be used as a performance indicator.

Focus on competencies

The BioTalent Canada skills profiles are built around *areas of competence* because competencies are flexible, inclusive and linked directly to performance: they are the traits or qualities a professional must have to succeed in a given role within a given organization, and can be used for recruiting, professional development, curriculum planning and many other purposes.

How to use the profiles

The complete contents of this or any BioTalent Canada skills profile are unlikely to be used for any one position. Because they are comprehensive, they include every area of competence, task and subtask that *could* be required for a specific occupation. In reality, the definition of a given job will encompass a narrower subset of the profile. Hiring organizations must choose the elements of the profiles that are relevant to their businesses—and tailor those elements as necessary to more precisely describe their particular job requirements.

The profiles can be put to many uses:

- **Employers** can use them to develop job descriptions, performance evaluations, professional development, succession planning, team building, target skills needed, and recruitment plans.
- **Job seekers** can use them to tailor their resumes, prepare for interviews, see job descriptions and identify additional professional development needs.
- **Educators** can build industry-oriented curricula from the profiles to produce job-ready graduates.
- **Students** can enhance their understanding of employers' expectations and choose the right educational programs to equip themselves with the skills for success.

Scenario

The following illustrates how an employer might use the BioTalent Canada skills profiles to identify professional development priorities for his or her team.

Step 1

The employer would review the ACs for each occupation and identify which apply to the related positions within his or her company, omitting those that are not relevant.

Step 2

Under the selected ACs, the employer then notes which of the associated tasks, subtasks and important actions are relevant to that specific position within his or her business.

Step 3

Now with a complete, tailored profile, the employer can assess employee performance. Needs areas are easily identified and defined—to a significant depth of detail.

Step 4

Based on the needs analysis, the employer can either develop or seek out professional development programs that address employee needs areas.

Situational Analysis

Intellectual Property Officers must often have experience in patent law, expertise in one or more scientific disciplines and proficiency in analyzing their companies' and competitors' inventions to maximize the potential investment and financial success of their employers. Intellectual Property Officers assume protective duties related to their companies' patents, copyrights, trademarks and trade secrets. If a competitor's company infringes on the patents of the Intellectual Property Officer's company, the Officer must review these proprietary issues carefully and thoroughly. Intellectual Property Officers communicate with legal counsel to discuss patent prosecution matters and appeals and to keep up-to-date on patent and intellectual property laws. Intellectual Property Officers oversee both new patents and current patents, where current patents may be in active prosecution. They are responsible for ensuring that contractual obligations regarding intellectual property are met, and they assist in the use of patent assets to generate research and development financing. They may also assess third party patent rights and conduct patentability reviews.

Intellectual Property Officers must be flexible and versatile to manage changing and conflicting priorities. They must be decisive and quick to action in addressing emergencies, such as lawsuits. They must be diligent, and detail and goal oriented individuals. They must be able to work with people with diverse job functions and at different levels in their companies, yet able also to work independently with members of partner organizations and scientists and external legal counsel.

Intellectual Property Officers require varied academic backgrounds including a mixture of educational backgrounds in science, business and law, the majority of whom hold at least Master's level degrees in one of these disciplines. Job incumbents should possess undergraduate and graduate or higher-level degree in an applicable scientific field such as biology, chemistry, biochemistry, agriculture, health, medicine, nursing, pharmacy, or food and nutrition science in order to work effectively in the biotechnology industry. A law degree and/or a degree in Business Administration are not always required, but are very complementary to the function.

They manage multiple forms of intellectual property including patent applications, current patents, patents in active prosecution, trade secrets, trademarks and copyrights, Intellectual Property Officers must maintain detailed understandings of their companies' products and technical developments to make informed decisions and guide courses of action in ways that effectively utilize assets. Intellectual Property Officers must learn continuously to maintain and enhance their knowledge of both evolving scientific and business development. Many respondents noted that personnel will require an increased ability to understand complex, emerging technologies associated with biotechnology and continual changes in the regulatory environment. The demands placed on Intellectual Property Officers to successfully identify and strategize their companies' intellectual property portfolios as part of the commercialization process to attract capital investment will increase.

Evolving regulations and laws including patent laws will place increased demands on their work as they must maintain current knowledge and utilize this knowledge for the success of their companies. Intellectual Property Officers will be called upon to participate in cost/benefit analyses, using their expertise in the identification of patentable property to anticipate the direction of intellectual property for their companies. Their abilities in this area will affect their companies’ abilities to raise research capital to address human resource issues in the intellectual property management area and promote the commercialization of their products.

Essential Skills

The most important Essential Skill(s) for this Profile: ✓					
	Reading Text		Thinking Skills – Problem Solving	✓	Working With Others
	Document Use		Thinking Skills – Decision Making		Computer Use
	Writing	✓	Thinking Skills – Critical Thinking		Continuous Learning
	Numeracy		Thinking Skills – Job Task Planning & Organizing		
✓	Oral Communication		Thinking Skills – Significant Use of Memory		
			Thinking Skills – Finding Information		

Intellectual Property Officers must learn continuously to keep current knowledge of intellectual property protection laws as they pertain to biotechnology and their companies’ intellectual property assets. They obtain training in the areas of their specific biotechnology specializations and other areas that may interest them. They may learn by reading textbooks in technical, theoretical, scientific and experimental biotechnology fields and by reading articles in peer-reviewed. They may attend biotechnology conferences. Intellectual Property Officers may learn informally from other administrative and scientific staff who may have different specializations. On their own time, they may read biotechnology and science-related magazines, reports, books and other printed resources and search Internet sites for formal learning opportunities offered by professional associations and academic institutions.

Intellectual Property Officers must be organized team players committed to the success of their companies. They must be attentive to detail, motivated and very knowledgeable in their companies’ business and scientific dealings.

Intellectual Property Officers will require enhanced decision making and critical thinking skills if they are required to participate in cost analyses and commercialization tasks associated with intellectual property. They will increasingly be called upon to assess intellectual property assets and the probabilities of successfully commercializing and licensing patents and other intellectual property.

Language Benchmarks

Intellectual Property Officers must be able to perform the full range of tasks and will need an upward language benchmark level of 12. The majority of the criteria used in the Canadian Language Benchmarks were found to be between the levels of 8 – 12.

Competency Profile

An Intellectual Property Officer must be able to:

A. Develop intellectual property strategy

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
1. Align intellectual property strategy with business strategy or align business strategy with intellectual property strategy, as required	1.1 Talk to the chief executive officer to identify the business strategy	Define and review company strategic plan- 5 to 10 year time frame
	1.2 Identify company's core technology	
	1.3 Identify surrounding technologies of interest that are non-essential	
	1.4 Ensure patents are in place to cover core technologies and products in development	
	1.5 Identify business opportunities based on intellectual property landscape	
2. Maximize the period of exclusivity for products	2.1 Manage product life cycle	For example, apply for intellectual property for: <ul style="list-style-type: none"> • Different dosage • Different formulations • Patent term extensions that are available
	2.2 Block competitors	
3. Align intellectual property protection with marketing strategy	3.1 Confer with marketing departments to determine what their commercial markets are and the relative value	
4. Align intellectual property protection with manufacturing strategy	4.1 Confer with manufacturing departments to determine areas where manufacturing may take place	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
5. Align intellectual property strategy with clinical and regulatory strategy	5.1 Liaise with clinical and regulatory staff to ensure that patent filings are appropriately timed with clinical and regulatory filings or disclosures	Follow company policies and procedures
	5.2 Ensure that existing intellectual property covers products marketed and under development	
	5.3 Ensure clinical and regulatory departments are aware of freedom to operate issues	
	5.4 Ensure that clinical and regulatory staff is aware of existing and upcoming patent applications / filings	
	5.5. Apply for patent term extensions for regulatory delays	
6. Decide what intellectual property to develop versus in-license, as required	6.1 Complete comprehensive review of company's research to identify areas and products/processes used that may be subject to intellectual property protection	
	6.2 Identify potential costs associated with patenting and/or in-licensing	
	6.3 Consider in-licensing versus design around	
7. Capture and support intellectual property from research and development activities	7.1 Ensure that research and development appropriately support intellectual property protection	
	7.2 Consider patentable subject matter	
	7.3 Work with scientists to ensure that the research supports claims made in patents and filing deadlines	
	7.4 Expand research parameters to support broader claims	
	7.5 Design experiments and research to validate claims made but not fully embellished in patent applications	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
8. Guide or inform research and development activities, if required	8.1 Make suggestions about how to conduct aspects of research to avoid freedom to operate issues	
9. Advise on research and development efforts to maximize return on investment, as required	9.1 Review research and development on an ongoing bases in commercially successful areas and consider further research and development to make improvements to patents and direct research and development accordingly	
	9.2 Ensure research is directed towards areas where company has freedom to operate	For example, ensure that you are working under your own intellectual property
	9.3 Review intellectual property portfolio for broad method and/or use claims and direct research and development accordingly	
	9.4 Encourage research and development focus on profitable intellectual property assets, if required	Assets such as: <ul style="list-style-type: none"> • Product • Compound • Composition • Apparatus
	9.5 Prioritize research and development initiatives by long-term potential profitability	
10. Identify defensive publication opportunities	10.1 Consider costs of patenting versus publishing to block third-party patents	
	10.2 Consider risk of potential trade secret protection versus third-party patenting	
	10.3 Consider nature of subject matter to be published and risk of third party to improve and obtain patent on disclosed subject matter	
	10.4 Consider relevance of proposed publication in competitors' business activities, if required	
	10.5 Maintain records of dates of publication for all	Adhere to relevant grace periods

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	publications in case there is an interest in patenting	(normally one year) from applicable patent Acts such as the <i>Canadian Patent Act</i> and <i>US Patent Act</i>
	10.6 Maintain database of all publications for prior art submissions	
11. Identify trade secret information	11.1 Consider possibility of reverse engineering	
	11.2 Ensure internal employees are aware of information that constitutes trade secrets and	Follow company policies and procedures regarding diligence requirements for trade secrets
	11.3 Ensure there are no external disclosures of trade secrets	
	11.4 Consider costs and benefits of trade secrets versus patents	
	11.5 Consider how trade secret information is disseminated to third parties in-license agreements, research and development agreements, and co-development agreements	
12. Identify opportunities for improvement patents	12.1 Review the patent protection of core technologies	
	12.2 Review costs associated with research and development improvement patents	
	12.3 Review costs associated with filing and prosecuting improvement patents	
	12.4 Review extension of term provided by exclusive rights	
	12.5 Examine third parties' business activities in areas subject to patent protection	
	12.6 Identify areas of profit for company and review for potential improvement patents	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
13. Identify opportunities for defensive patents	13.1 Identify your company's technologies and products	
	13.2 Examine third parties' business activities in areas subject to patent protection	
	13.3 For company's key products, consider intellectual property protection in associated areas	For example, assess the feasibility of intellectual property protection in: <ul style="list-style-type: none"> • Methods of manufacturing • Methods of use • Derivative products
	13.4 Consider possibility of filing patent applications for the purpose of cross-licensing	
	13.5 Review your intellectual property portfolio to ensure it creates freedom to operate issues for third parties	
14. Identify intellectual property risks and opportunities	14.1 Identify risks and opportunities resulting from oppositions, litigations and re-examinations	For example, financial risks, market exclusivity, etc. Intellectual property which has survived litigations and re-examinations may help litigations in other jurisdictions.
	14.2 Identify prosecution risks	
	14.3 Identify failure to obtain patents to cover products or technology	
15. Keep abreast of changes to patent laws and case law	15.1 Attend patent conferences, conduct research and subscribe to web-sites	

An Intellectual Property Officer must be able to:

B. Identify all intellectual property assets

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
1. Review company research for inventions, as required	1.1 Speak to research and development personnel on a regular basis	
	1.2 Participate in research and development meetings	
	1.3 Solicit and review invention disclosure forms	
	1.4 Conduct research audits	
2. Identify commercial applications of research findings, as required	2.1 Review similar products in the marketplace	Follow company policies and procedures
	2.2 Examine market or long-term need	
	2.3 Identify problems that currently exist in associated areas of research and products	
	2.4 Identify patentable subject matter	
	2.5 Consult with subject matter experts in identifying commercial applications, as necessary	
3. Evaluate internal invention disclosures	3.1 Confirm no public disclosure	Follow company policies and procedures
	3.2 In case of public disclosure, establish dates and content for same	Follow company policies and procedures
	3.3 Verify invention disclosure statements are in line with intellectual property strategy	Follow company policies and procedures
	3.4 Rank invention disclosures by importance	Follow company policies and procedures
	3.5 Identify trade secrets versus patentable inventions	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
4. Identify industrial designs, as required	4.1 Identify articles with aesthetic appeal	
	4.2 Ascertain if aesthetic article has function	
	4.3 Verify design protection is in line with intellectual property strategy	Follow company policies and procedures
	4.4 Monitor all company activities for potential industrial designs	For example: <ul style="list-style-type: none"> • Researchers • Sales and marketing • Manufacturers Follow company policies and procedures
	4.5 Ensure invention disclosure forms provide for design information	
5. Identify trademark strategy	5.1 Consider trademarks for products, compositions, apparatus and devices subject to trademark protection	
	5.2 Consider multiple trademarks for the same item, ware or service	
	5.3 Consider trademark costs	
	5.4 Monitor branding activities	
	5.5 Consult other company areas for input to potential trademarks	
	5.6 Consider global trademarks	For example, when trademarks do not translate very well into other languages or for other cultures
6. Identify possible copyrights	6.1 Consider data, formats, internet appearance and content packaging	For example, of clinical case report forms
	6.2 Ensure copyright compliance	
7. Review marketing materials for trademarks, copyrights and design patents, as required	7.1 Review company website, signage and brochures to ensure trademarks and copyrights are properly protected	Follow company policies and procedures

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	7.2 Ensure all marketing materials are authorized for release	Follow company policies and procedures
	7.3 Ensure compliance of product trademark	
	7.4 Ensure compliance of company name and logo	
8. Identify domain name registration for the internet	8.1 Register name	
	8.2 Monitor use of domain name	

An Intellectual Property Officer must be able to:

C. Evaluate intellectual property

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
1. Conduct freedom to operate assessment	1.1 Identify jurisdictions of interest	For example, territories in which you want to market and territories in which you want to manufacture
	1.2 Search patents in jurisdictions of interest for subject matter associated with company's core products and services	
	1.3 Analyze claims of third-party patents	
	1.4 Monitor patentability of claims in pending applications	
	1.5 Verify expiry of patents versus development timelines by jurisdiction	For example, ensure no patent term extensions have been applied for and ensure maintenance fees have been paid
	1.6 Analyze the intellectual property provisions in jurisdictions of interest	For example, does clinical research infringe?
	1.7 Consider options for design around	
	1.8 Recommend licensing in of third-party intellectual property, when applicable	
2. Review prior art	2.1 Establish relevant search terms	
	2.2 Perform detailed search in multiple jurisdictions	
	2.3 Search patent and non-patent literature	Include, for example, conference proceedings, etc.
	2.4 Consult with research and development team for known references in the subject area	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	2.5 Establish dates of publication for all potential references	
3. Conduct patentability analysis	3.1 Determine patentability of subject matter	Follow applicable patent Acts, for example: <ul style="list-style-type: none"> • <i>Canadian Patent Act</i> • <i>US Patent Act</i> • European Union
	3.2 Consider breadth of desired claims and support in specification	
	3.3 Consider breadth of required claims	
	3.4 Consider ease of prosecution	
4. Conduct infringement analysis	4.1 Consider scope of third-party patent claims	
	4.2 Consider scope of desired product or activity	
	4.3 Consider validity and term of prior art patents	
	4.4 Consider intellectual property protection in individual countries	Follow applicable patent Acts, for example: <ul style="list-style-type: none"> • <i>Canadian Patent Act</i> • <i>US Patent Act</i>
	4.5 Consider licensing patents that may be infringed upon	
	4.6 Consider validity analysis as a means of defense	
5. Conduct competitive analysis, as required	5.1 Work with a team to identify competitors, as appropriate	
	5.2 Work with a team to identify competitors' key products and services, as appropriate	
	5.3 Examine depth of competitors' intellectual property portfolio	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	5.4 Examine location of competitors' filed patents and trademarks	
	5.5 Maintain active search on competitor activities	For example, patent filing, product registrations, etc.
	5.6 Identify potential partners from patentability analysis	
	5.7 Identify other partners in immediate subject matter area	
	5.8 Identify strategic partners in associated subject matter areas	
6. Perform valuation on own and external intellectual property, as required	6.1 Help identify intellectual property strength, risk and duration	
7. Assist in review of licensing deals as they relate to intellectual property terms/provisions	7.1 Help identify intellectual property strength, risk and duration	
8. Assist in review of financing deals as they relate to intellectual property terms/provisions	8.1 Help identify intellectual property strength, risk and duration	
9. Conduct trademark search	9.1 Search trademark databases and common law databases in jurisdictions of interest	
	9.2 Review trademark laws in jurisdictions of interest	
	9.3 Conduct Internet searches	
10. Review and maintain domain names	10.1 Search trademark databases and common law databases in jurisdictions of interest	
	10.2 Review trademark laws in jurisdictions of interest	
	10.3 Conduct Internet searches	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
11. Conduct periodic review of intellectual property portfolio for non-interest	11.1 Review issued claims on each patent in each jurisdiction awarded protection	
	11.2 Analyze issued claims from general intellectual property and business strategy perspectives	
	11.3 Consider abandonment of cases no longer relevant to business objectives	
12. Carry out periodic review of portfolio for management to advise on intellectual property for out-licensing	12.1 Recommend intellectual property for out-licensing or sale	
	12.2 Estimate potential royalty stream	
	12.3 Identify your company's core technologies	
	12.4 Review the financials and business strategies of third parties you may consider out-licensing or selling to	
	12.5 Consider exclusive versus non-exclusive out-licenses	

An Intellectual Property Officer must be able to:

D. Draft and file intellectual property

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
1. Assess nature and type of intellectual property	1.1 Identify intellectual property	Review, for example: <ul style="list-style-type: none"> • Patent Act • Copyright Act • Trademark Act
	1.2 Determine if intellectual property falls under patent, design, trademark, copyright, plant breeder’s rights, integrated circuit topography or trade secret	For example, consider opportunity for protection using two or more forms of intellectual property
	1.3 Consider potential exclusions of subject matter from certain forms of intellectual property protection	
2. Identify countries where intellectual property protection is desired, as required	2.1 Consider the enforceability of the intellectual property laws in those countries	Intellectual Property Officers may consult with Sales and Marketing departments to identify desired markets
	2.2 Consider where your competitors are located	
	2.3 Consider where partners are located	
	2.4 Consider internal and competitive manufacturing and research locations and labour options (costs)	
	2.5 Decide which markets should be protected	
3. Estimate the costs of intellectual property protection options	3.1 Consider costs associated with protection in required/desired countries	For example, carry out cost-benefit analysis

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	3.2 Review timing of costs based on expected prosecution timelines	
4. Determine filing strategy	4.1 Identify where the invention was made	
	4.2 Identify nationality of inventors	
	4.3 Consider filing first priority application	
	4.4 Assess where to file priority application	For example, if all inventors are American, filing first in the United States if necessary
	4.5 Consider prior disclosures	For example, duty of disclosure in the United States
	4.6 Consider timing of filings	
	4.7 Determine costs associated with filing	
	4.8 Work within budget constraints	
	4.9 Consider options such as Patent Co-operation Treaty (PCT)	
	4.10 Consider timing of product launch and marketing	
5. Draft patent applications	5.1 Decide whether to outsource or draft internally	
	5.2 Prepare appropriate drawings and sequence listings	
	5.3 Consider biologic deposits at recognized collection agencies/depositories, if required	
	5.4 Work with researchers to ensure all relevant materials are included in application	
	5.5 Obtain results from all tests conducted	
	5.6 Analyze implications/conclusions of experimental results with scientists, if required	
	5.7 Draft claims to capture essential subject matter	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	5.8 Identify deficiencies in patent application	
	5.9 Tailor claims to jurisdiction in drafting applications	
	5.10 Review scope of patent applications for subject matter broader than the invention	
	5.11 Ensure correct inventorship	For example, comply with <i>Patent Act</i> and rules
	5.12 Ensure inventors review patent application before filing	
	5.13 Obtain declaration of entitlement	For example, comply with <i>Patent Act</i> and rules
	5.14 Perfect ownership, in accordance with company policies	
6. Draft industrial design applications	6.1 Prepare appropriate drawings	
	6.2 Decide whether to outsource	
	6.3 Work with researchers to ensure all relevant materials are included in application	
	6.4 Ensure correct inventorship	For example, comply with <i>Industrial Design Act</i> and rules
7. Draft trademark applications	7.1 Decide whether to outsource	
	7.2 Review relevant materials to determine whether use of trademark has begun	For example, comply with <i>Trademarks Act</i> and rules
	7.3 Consider products and services on which mark has been or will be used	For example, comply with <i>Trademarks Act</i> and rules
8. File patent applications, as required	8.1 Consider outsourcing patent application filing	
	8.2 Review requirements to award filing date in each country of interest	
	8.3 Ensure compliance with requirements prior to transmitting new application to patent office	For example, comply with <i>Patent Act</i> and rules
	8.4 Maintain all patent filing records	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	8.5 Prepare and file Information Disclosure Statements (IDS)	
9. File industrial design applications, as required	9.1 Consider outsourcing industrial design application filing	
	9.2 Review requirements to award filing date in each country of interest	
	9.3 Ensure compliance with requirements prior to transmitting new application to Industrial Design Office	
	9.4 Maintain all industrial design filing records	
10. File trademark applications, as required	10.1 Consider outsourcing trademark application filing	
	10.2 Review requirements to award filing date in each country of interest	
	10.3 Ensure compliance with requirements prior to transmitting new application to Trademark Office	For example, comply with <i>Trademarks Act</i> and rules
	10.4 Maintain all trademark filing records	

An Intellectual Property Officer must be able to:

E. Co-ordinate intellectual property registrations and applications

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
1. Perform cost-benefit analysis regarding the use of external counsel	1.1 Identify external counsel without conflicts	
	1.2 Contact patent professionals in countries of interest to obtain, for example, estimate of filing, approximate prosecution and maintenance fee costs	
2. Monitor costs and review invoices	2.1 Ensure fees charged are in line with initial estimates	
	2.2 Ensure fees charged are in line with work requested	
	2.3 Revise budget for unexpected cost overruns	
3. Enter countries where intellectual property protection is desired	3.1 Instruct foreign counsel in timely manner	Follow company policies and procedures
	3.2 Obtain translations, if necessary	
4. Ensure consistency among foreign applications	4.1 Identify countries having existing case law to affect the scope of desired protection	
	4.2 Review corresponding cases before making amendments	
	4.3 Ensure arguments and remarks are consistent across different jurisdictions	
5. Provide instructions to counsel	5.1 Consider instructions to never let case “go abandoned”	Follow company policies and procedures
	5.2 Consider level of detail in reporting letters required to respond to official actions	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	5.3 Forward instructions to counsel well in advance of deadlines	Follow applicable company policies
6. Consult with inventors during prosecution	6.1 Ask inventors to review prior art citations	
	6.2 Ask inventors to review draft responses for accuracy and thoroughness	
	6.3 Determine whether continuations or divisionals are needed when application is allowed and consult with management, if required	
	6.4 Notify inventors when application is issued	
7. Provide documentation required to complete intellectual property applications	7.1 Ensure inventors have signed assignments	
	7.2 Have inventors execute all necessary powers of attorney and declarations	
	7.3 Order certified copies of required documents	Comply with relevant statutes
	7.4 Consult reminder system to ensure deadlines for submission of documents are met	
	7.5 Ensure documents are notarized and legalized where required	Comply with relevant statutes
8. Monitor and prosecute filed applications	8.1 Respond to office actions and meet deadlines	For example: <ul style="list-style-type: none"> • Transmit instructions to counsel well in advance of deadlines • Confer with counsel on country-specific issues and objections • Obtain translations by foreign counsel,

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
		<p>as necessary</p> <ul style="list-style-type: none"> • Ensure that responses are consistent across jurisdictions
	8.2 Monitor status of applications	<p>To monitor applications, Intellectual Property Officers may:</p> <ul style="list-style-type: none"> • Establish approximate timelines for examination and general prosecution • Consider conducting status checks on cases • Review publicly available databases for status
	8.3 Re-evaluate scope of Canadian claims prior to issuance to ensure benefit with respect to pricing regulation	<p>For example, determine advantage of exclusivity - whether more is gained from exclusion at a higher price or at a lower price with a higher market share</p>
	8.4 Maintain patent files/filing system	<p>Maintain filing system by, for example:</p> <ul style="list-style-type: none"> • Retaining paper and electronic copies of applications and prosecution materials • Ensuring applications are easily searched and located • Considering streamlining patent filing system in your organization
	8.5 Maintain patent database	<p>To maintain databases, Intellectual Property Officers may:</p> <ul style="list-style-type: none"> • Create databases of all deadlines associated with cases • Create a database with general filing histories for each case and assign classification information such as: <ul style="list-style-type: none"> ○ Filing dates

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
		<ul style="list-style-type: none"> ○ Priority dates ○ Serial numbers ○ Foreign counsel reference numbers ● Ensure databases are regularly updated
	8.6 Monitor due dates	<p>For example, by:</p> <ul style="list-style-type: none"> ● Ensuring due dates are docketed immediately upon receipt of notification ● Instituting reminder systems with multiple reminders leading up to due dates
	8.7 Ensure payment of renewal fees	<p>Ensure payment through, for example:</p> <ul style="list-style-type: none"> ● Considering outsourcing patent annuity payments ● Complying with relevant statutes in each country ● Instituting reminder systems with multiple reminders leading up to renewals ● Ensuring renewal fees are paid at correct amounts

An Intellectual Property Officer must be able to:

F. Establish company intellectual property policies

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
1. Review employment contracts, if required	1.1 Ensure non-disclosure clauses are included	
	1.2 Ensure transfer of ownership is noted in employment agreements	
	1.3 Re-negotiate existing company agreements that do not meet needed standards	
	1.4 Consider instituting non-compete clauses in employment agreements in case of termination	
2. Establish and ensure compliance with research documentation standards	2.1 Witness research records periodically, if required, or ensure that records are witnessed and dated	Follow company policies and procedures
	2.2 Ensure all experiments and research are fully documented	Follow company policies and procedures
	2.3 Ensure lab books are not altered in an unauthorized manner	Follow company policies and procedures
	2.4 Ensure that all lab book changes and alterations are witnessed and dated	Follow company policies and procedures
	2.5 Copy full lab books, if required, and transfer off site when books are complete	Follow company policies and procedures
	2.6 Ensure easy retrieval of lab notebooks for establishing date of invention	Follow company policies and procedures
3. Review proposed company publications	3.1 Review and authorize proposed publications and presentations to prevent improper disclosure	Follow company policies and procedures
	3.2 Ensure proposed publications align with internal prosecution arguments	Follow company policies and procedures

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	3.3 Educate researchers of repercussions of inadvertent disclosures	Follow company policies and procedures
4. Implement invention disclosure procedures	4.1 Provide invention disclosure form and instructions	For invention disclosure form, include: <ul style="list-style-type: none"> • Section on nature of invention • Section to describe the problem that the invention solves • Section on how the problem is currently dealt with in art • Section of relevant prior art in the area • Section on prior disclosures made on the subject matter and dates of public disclosure • Section about the circumstances behind the creation of the invention and the persons involved
	4.2 Identify any outside personnel that may have contributed to the invention	
	4.3 Ensure researchers are aware of the importance of fully completing invention disclosure forms	
	4.4 Ensure easy access to invention disclosure forms	
	4.5 Ensure invention disclosure forms are signed and dated by all submitters	
5. Develop basic intellectual property education system for all employees	5.1 Conduct internal intellectual property seminars for research and development staff	Educate, for example: <ul style="list-style-type: none"> • Researchers • Manufacturing • Sales and marketing • Commercial operations

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	5.2 Ensure research and development staff are in compliance with intellectual property process	
6. Assist development of appropriate reward system for new intellectual property, as required	6.1 Provide feedback to the development of company reward systems	Follow company policies and procedures
	6.2 Observe employment compensation regulations, where applicable	For example, consider offering financial incentives for commercially successful inventions

An Intellectual Property Officer must be able to:

G. Enforce intellectual property and defend against third party intellectual property actions*

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
1. Review patents and applications filed by other companies	1.1 Utilize patent watch service to find competitors’ applications and patents as they are published or issued	
	1.2 Perform regular patent database searches	
	1.3 Assess validity of issued patents	
	1.4 Assess ability to design around claims of issued patents	
	1.5 Identify the owner of the patents or licensee	
	1.6 Monitor status of competitor patent applications	
	1.7 Monitor the status and results of competitors’ patents in litigation	
2. Monitor competitors' activities	2.1 Liaise with business development personnel to understand what competitors are doing	
	2.2 Analyze competitors’ business strategies	
	2.3 Analyze competitors’ intellectual property portfolios	
	2.4 Maintain detailed records of suspected infringement by competitors	

* The Skills Profile development committee outlined both ‘offensive’ activities (which include, for example, monitor competitors’ activities, draft cease and desist letters, engage litigation counsel, coordinate litigation proceedings, interfere with prosecution, impeach patents, send notices of allegation, etc.) as well as ‘defensive’ activities (which include, for example, review patents and applications by other companies, respond to notices of allegation, engage in litigation, respond to cease and desist letters, etc.).

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	2.5 Watch for new products in markets of interest	
	2.6 Monitor partnerships and collaborations of competitors	
3. Draft cease and desist letters	3.1 Consider implications of sending cease and desist letters	
	3.2 Map out short- and long-term strategies for potential responses and actions arising from cease and desist letters	
	3.3 Document suspected infringement by third-parties	
	3.4 Confirm action with independent legal counsel	
4. Respond to cease and desist letters, as required	4.1 Consider implications of responding to cease and desist letters	
	4.2 Map out short- and long-term strategies for potential responses and actions arising from cease and desist letters	
	4.3 Confirm action with independent legal counsel	
5. Engage litigation counsel	5.1 Identify, interview and select appropriate counsel	Consider, for example: <ul style="list-style-type: none"> • Counsel experience in that particular kind of case • Their jurisdiction • Their track record
6. Co-ordinate litigation proceedings, as required	6.1 Draft out litigation strategy	For example, determining where to file first litigation
	6.2 Engage counsel in foreign jurisdictions, as required	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	6.3 Consider periodic meetings of worldwide litigation team to align strategy, as required	
	6.4 Consider limitation periods	Follow statutory rules and regulations
7. Interfere in prosecution of third-party patents, as required	7.1 File prior art during prosecutions	Follow statutory rules and regulations
	7.2 File oppositions	Follow statutory rules and regulations
	7.3 Request re-examinations	Follow statutory rules and regulations
	7.4 Closely monitor third-party patent applications	
8. Impeach/Revoke patents	8.1 Conduct validity analysis prior to impeaching/ revocation/invalidation	
	8.2 Estimate chances of succeeding	
	8.3 Analyze implications of unsuccessful impeachments	
	8.4 Assess costs	
	8.5 Engage counsel	
9. Respond to and send notices of allegation, as required	9.1 Conduct validity analysis prior to sending and responding to notices of allegation	
	9.2 Consider engaging counsel	
	9.3 Review situation particulars to determine information required for full discovery	
10. Negotiate settlement agreements, as required	10.1 Consider litigation costs versus settlement costs	Consider non-damage costs, for example: <ul style="list-style-type: none"> • business disruption • opportunity costs • possibility of an injunction • refer to external counsel, as necessary
	10.2 Consider timelines required to conclude litigation	
	10.3 Consider damages incurred and/or profits made	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	10.4 Consider injunctive measures against the infringing article	
11. Advise on design around third-party patent claims	11.1 Analyze breadth of third-party patent claims	
	11.2 Consider having infringement opinions undertaken on design around of third-party patents	
	11.3 Consider cost and time required to design around patent protection	
	11.4 Consult with researchers to explore feasibility of design around patent protection	
12. Ensure patents are listed on the appropriate regulatory register, if applicable	12.1 Analyze patent applications for listability at time of allowance	For example: <ul style="list-style-type: none"> • Hatch Waxman • Patented Medicines Notice of Compliance Regulations (PMNOC) • Patented Medicines Prices Review Board (PMPRB) regulations
	12.2 Ensure deadlines are met	

An Intellectual Property Officer must be able to:

H. Leverage intellectual property

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
1. Support identification of strategic alliances	1.1 Identify companies with complementary technologies	
	1.2 Review patent portfolio of companies with complementary technologies	
	1.3 Assess filings with respect to validity and freedom to operate	
2. Negotiate and draft research and development agreements	2.1 Define ownership of intellectual property created through joint research and development initiatives	
	2.2 Define each party's existing intellectual property rights	
	2.3 Define ownership of data generated through joint research and development ventures	
	2.4 Define scope of research and development required and timelines for delivering research and development	
	2.5 Define rights upon termination	
	2.6 Define allocation of costs and profits	
	2.7 Involve independent counsel during negotiation and drafting, if needed	
3. Negotiate and draft material transfer agreements, as required	3.1 Establish specific material and amount of material to be transferred	
	3.2 Ascertain how the material will be used and by whom	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	3.3 Include provisions for ownership of intellectual property generated by use of transferred material	
	3.4 Include provisions for non-compliance with agreed uses	
	3.5 Include provisions to ensure no further transfer of material	
	3.6 Include provisions in the return or destruction of unused material	
4. Negotiate and draft license agreements, as required	4.1 Identify third parties that may benefit from licensing technology IP and/or “know how”	
	4.2 Identify third parties that require licenses in order to practice in the technology area	
	4.3 Consider if the license will be exclusive or non-exclusive	
	4.4 Define scope and timelines for licenses	
	4.5 Consider provisions for terminating license agreements	
	4.6 Determine royalty rate parameters	
	4.7 Determine territorial scope	
	4.8 Determine representations and warranties	
	4.9 Involve independent counsel during negotiation and drafting	
5. Ensure compliance with intellectual property terms in license agreements	5.1 Monitor licensees’ activities	For example, ensure that licensee fulfills reporting requirements
6. Support negotiation of sale or purchase of intellectual property	6.1 Assist in determining the value of intellectual property	
	6.2 Consider representations, warranties and indemnities	For example, get an indemnity against claims of infringement by third-parties: <ul style="list-style-type: none"> • Consider the ability to continue using

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
		<p>the intellectual property after sale</p> <ul style="list-style-type: none"> • Review long-term intellectual property strategy for fit with purchased intellectual property • Review long-term business strategy for fit with purchased intellectual property • Conduct due diligence to ensure intellectual property is rightfully owned

An Intellectual Property Officer must be able to:

I. Demonstrate personal competencies

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
1. Manage multiple tasks	1.1 Manage tasks with competing priorities	
	1.2 Divide time appropriately	
	1.3 Prioritize tasks	
	1.4 Identify and manage resources to assist in completing tasks	
	1.5 Delegate, when possible	
2. Demonstrate attention to detail		
3. Manage sensitive information	3.1 Identify and deal with sensitive information, as appropriate	Observe, for example: <ul style="list-style-type: none"> • Access to Information Act • Freedom of information
	3.2 Identify personnel with access to sensitive information	
	3.3 Guard sensitive information carefully	Observe applicable laws and company policies and procedures
	3.4 Restrict access to sensitive information, as required	
4. Set priorities	4.1 Ensure critical information is available to set priorities and is cascaded to relevant personnel	
	4.2 Keep goals and company objectives in mind	
	4.3 Use strategies and tools to help set priorities	
	4.4 Be aware of time-sensitive issues	
	4.5 Consider available resources and redistribute as required	
	4.6 Communicate priorities to relevant personnel	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	4.7 Delegate prioritized tasks to appropriate personnel	
	4.8 Set priorities in accordance with the established plan	
	4.9 Be vigilant of critical deadlines	
5. Make informed decisions	5.1 Apply training to analyze situations and answer questions	
	5.2 Gain confidence from experience	
	5.3 Research creative and effective solutions	For example, out-of-the-box thinking and problem solving, etc.
	5.4 Be able to support decisions	
6. Seek help when needed	6.1 Know when you should engage counsel	For example, engage help for litigation and prosecution, according to personal competence and experience
	6.2 Assess own personal strengths and weaknesses	
	6.3 Know own limitations and the limitations of those you work with	
7. Demonstrate teamwork	7.1 Accept diversity	
	7.2 Recognize the skills and abilities of others	
	7.3 Motivate team members	
	7.4 Mentor/coach junior team members	
8. Demonstrate strategic planning	8.1 Align quarterly and annual objectives with strategic plan	
	8.2 Consider the consequences and future implications of plans and actions	
	8.3 Recommend actions or options to mitigate or prevent negative consequences	
	8.4 Anticipate future trends and developments	
	8.5 Develop contingency plans	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	8.6 Recommend appropriate actions	
9. Participate in continuous learning	9.1 Make time for continuous learning	
	9.2 Identify opportunities for continuous learning	
	9.3 Keep up-to-date on intellectual property laws	
	9.4 Keep up-to-date on recent domestic and foreign case law	
	9.5 Keep abreast of relevant science and technology	
10. Display interpersonal skills	10.1 Communicate well and clearly	
	10.2 Show respect	
	10.3 Show empathy and sensitivity	
	10.4 Be engaged	
	10.5 Demonstrate integrity	
11. Solve problems	11.1 Identify the problem	
	11.2 Seek resolution	
	11.3 Involve the appropriate resources	
	11.4 Be focused	
	11.5 Consider options for resolution	
12. Build strategic inter- and intra-company relationships	12.1 Develop and maintain professional and corporate networks	
13. Demonstrate sensitivity to individual and group dynamics	13.1 Be aware of demographics	
	13.2 Be respectful of differences	
	13.3 Treat everyone fairly	
	13.4 Accommodate special needs	
14. Take responsibility	14.1 Ask for and accept feedback	
	14.2 Learn from mistakes	
15. Demonstrate commitment	15.1 Be engaged in the process	
	15.2 Be passionate	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	15.3 Be positive	
	15.4 Demonstrate initiative	
	15.5 Support individuals and teams	
16. Maintain professional integrity		

An Intellectual Property Officer must be able to:

J. Communicate

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
1. Communicate with diverse audiences	1.1 Demonstrate an ability to clearly articulate complex issues	For example, communicate with: <ul style="list-style-type: none"> • Lawyers • Researchers • Regulatory affairs • Management • CEO • Business development personnel • Marketing departments
2. Develop networks	2.1 Attend meetings to engage and meet counsel in domestic and foreign jurisdictions	
	2.2 Attend patent and relevant scientific/ technological conferences	
3. Negotiate	3.1 Resolve conflicts in a mutually beneficial manner	
	3.2 Explain point of view clearly and concisely	
	3.3 Maintain personal and professional integrity	
	3.4 Represent stakeholders appropriately	
	3.5 Be a strong and persuasive advocate for the importance of intellectual property in the company	
4. Motivate colleagues to meet deadlines	4.1 Provide research and development staff with an understanding and appreciation of how thorough and timely completion of intellectual property requirements can protect the value of an intellectual property portfolio	

TASKS	SUBTASKS	IMPORTANT ACTIONS / PERFORMANCE STANDARDS
	4.2 Tie-in with incentives for research and development staff, when applicable	
5. Make presentations	5.1 Use presentation equipment	
	5.2 Deliver and adapt message for appropriate audiences	
6. Apply industry terminology	6.1 Translate, simplify and explain terms when speaking with parties who understand terminology and with those who may not	
	6.2 Interpret and maintain familiarity with business terminology in the subject area	
	6.3 Interpret and maintain familiarity with scientific terminology in the subject area	
	6.4 Interpret and maintain familiarity with legal terminology in the subject area	

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