

ridout & maybe LLP

CANADA'S INTELLECTUAL PROPERTY AND TECHNOLOGY LAW FIRM

November 21-22, 2011

DEFINING THE SR&D PROJECT: CRITERIA & METHODS

Eligibility of Patent Services

it all starts somewhere

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CANADA'S INTELLECTUAL PROPERTY AND TECHNOLOGY LAW FIRM

Introduction

We are friends, but:

- This presentation is opinion only for discussion purposes
- This is not tax advice
- This does not create a Solicitor/Client relationship
- Opinions are not of Ridout & Maybe LLP

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Introduction

In the News... (July 1, 2011)
Nortel Patent Auction \$4.5 Billion

- Nortel patent auction goes to Apple/Microsoft/RIM consortium (Divided amongst them)
- Sold for \$4.5 B (>6,000 patents, approx. \$750k each)
- Initial bid of US\$900 million from Google

it all starts somewhere

Introduction

In the News... (August 15, 2011)
Google Buys Motorola Mobility For \$12.5B

- "Our acquisition of Motorola will increase competition by strengthening Google's patent portfolio, which will enable us to better protect Android from anti-competitive threats from Microsoft, Apple and other companies."
- Posted by Larry Page, CEO Google

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Introduction

In the News... (September 16, 2011)

Pres. Obama signs America Invents Act

- 15% increase in fees (immediately)
- Eliminates most false marking lawsuits with exceptions
- Post-grant review proceedings before the U.S. Patent and Trademark Office (after September 16, 2012)
- Change to a first inventor to file system (after March 16, 2013)



President Barack Obama signs the America Invents Act September 16, 2011, at Thomas Jefferson High School for Science and Technology in Alexandria, Va.

ewhere

Introduction

In the News...

Steve Jobs (Feb 24, 1955 – Oct 5, 2011)

- Steve Jobs, Apple, named as inventor on ~300 patents

Compare:

- Bill Gates, Microsoft (9 Patents)
- Larry Page and Sergey Brin, Google (1-2 dozen patents)



FIG. 1

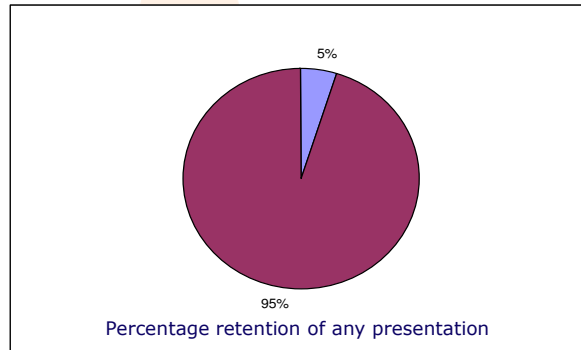
"Electronic Device", US D558,758

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Introduction

Skills you will learn today:

- 1) Company R&D vs. SR&ED
- 2) Identifying if/when patent activity would be suitable for an SR&ED claim
- 3) Where to perform your own patent searching



Percentage retention of any presentation

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Introduction

Comparison of SR&ED with Patents

SR&ED	Patents
1. Define Standard Practice	Describe the background of the invention and prior art known to those skilled in the art
2. Define Technological Uncertainties	Describe technical problems with the prior art or the field of the invention
3. Describe Related Activities and Conclusions	Requires useful end result e.g. prototype, reduction to practice Patent Office generally does not care about the actual experiments leading up to the invention

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Other Comparisons of SR&ED with Patents

Introduction

SR&ED	Patents
Specified areas of supporting work: engineering, design, computer programming, etc.	Must be related to specific areas: e.g. applied science / utility
Cannot include market research, sales promotion, social sciences, etc.	Generally can relate to "business methods" in some circumstances (in the Courts) Some software patents may have business elements to them Cannot relate to fine arts
Activities must be performed or supervised by those with appropriate technical backgrounds	Anyone can be an inventor
No "trial and error" or "routine engineering"	"Advances that would occur in the ordinary course without real innovation" is not patentable "The fact that a combination was obvious to try might show that it was obvious" and therefore not patentable KSR International Co. v. Teleflex Inc. et al. (U.S. Supreme Court, 2007)

Outline

- 1) Introduction to patents
- 2) What is eligible
- 3) Who is eligible
- 4) Tools and Searching Methods

it all starts somewhere

Outline

1) Introduction to patents

- 2) What is eligible
- 3) Who is eligible
- 4) Tools and Searching Methods

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1) Introduction to Patents
WHAT IS A PATENT?

An exclusive right to prevent others from making, selling or using an invention.

A state-sanctioned time limited monopoly granted in exchange for public disclosure of the invention.

Patent term is 20 years from the filing date.

To promote investment in research and encourage sharing of information.

Patent must be new and non-obvious
→ Keep your invention confidential until filing

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1) Introduction to Patents
WHAT IS A PATENT?



SECURITY PERIOD

BENEFITS:

All patent applications gain the benefit of an 18 month secrecy period in the patent office

DISADVANTAGE:

This means that all patent databases are approximately 18 months out of date
No such thing as complete searching

it all starts somewhere

Outline

- 1) Introduction to patents
- 2) What is eligible**
 - a) Patent Searches**
 - b) Patent Specifications**
- 3) Who is eligible
- 4) Tools and Searching Methods

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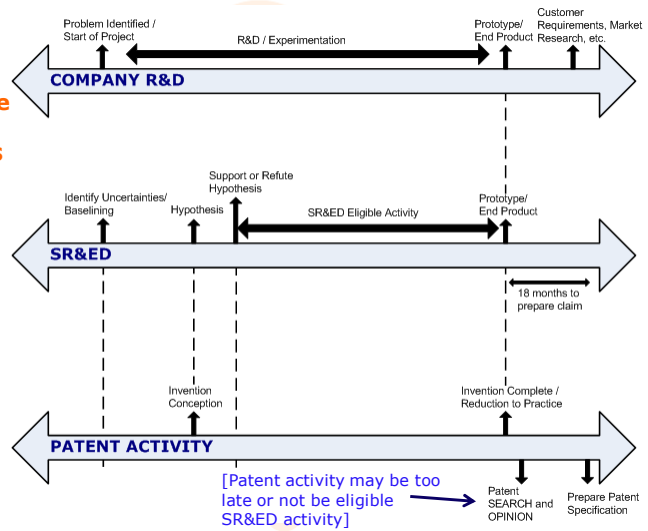
2) What is Eligible

PROBLEM STATEMENT:

Legal fees do not qualify as eligible SR&ED activity.

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**2) What is Eligible
 PROBLEM:
 TYPICAL TIMELINES**



it all starts somewhere

2) What is Eligible
a) PATENT SEARCHES

Patent Search includes:

- 1) SEARCH – Search for list of relevant patents, typically obtained by 3rd party search company
- 2) OPINION - Opinion of patentability, typically performed by Patent Attorney or Patent Agent

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2) What is Eligible (i) Feasibility and Support of Hypothesis
a) PATENT SEARCHES

Northwest Hydraulic Consultants Ltd. v. The Queen, 1998 DTC 1839 [Hydraulic].

2. Did the person claiming to be doing SRED formulate **hypotheses specifically aimed at reducing or eliminating that technological uncertainty? This involves a five stage process:**

- (a) the **observation** of the subject matter of the problem;
- (b) the formulation of a **clear objective**;
- (c) the identification and articulation of the **technological uncertainty**;
- (d) the **formulation of an hypothesis** or hypotheses designed to reduce or eliminate the uncertainty;
- (e) the methodical and **systematic testing** of the hypotheses.

Qualifying SR&ED activity usually begins here



It is important to recognize that although a technological uncertainty must be identified at the outset an integral part of SRED is the identification of new technological uncertainties as the research progresses and the use of the scientific method, including intuition, creativity and sometimes genius in uncovering, recognizing and resolving the new uncertainties.

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2) What is Eligible
a) PATENT SEARCHES

(i) Feasibility and Support of Hypothesis

Northwest Hydraulic Consultants Ltd. v. The Queen, 1998 DTC 1839 [Hydraulic].

4. Did the process result in a technological advance, that is to say an advancement in the general understanding?
- (a) By general I mean something that is known to, or, at all events, available to persons knowledgeable in the field. I am not referring to a piece of knowledge that may be known to someone somewhere. The scientific community is large, and publishes in many languages. A technological advance in Canada does not cease to be one merely because there is a theoretical possibility that a researcher in, say, China, may have made the same advance but his or her work is not generally known.
- (b) **The rejection after testing of an hypothesis is nonetheless an advance in that it eliminates one hitherto untested hypothesis.** Much scientific research involves doing just that. **The fact that the initial objective is not achieved invalidates neither the hypothesis formed nor the methods used.** On the contrary it is possible that the very failure reinforces the measure of the technological uncertainty.

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2) What is Eligible
a) PATENT SEARCHES

(i) Feasibility and Support of Hypothesis

"Carrying out worldwide patent search in Canada at project manager's request to scope possibility of applying ... process"

- YES (eligible for traditional and for proxy method)
- Part of technical feasibility work to support project. Legal fees cannot be claimed

Chemical Guidance Document #2, 2003

it all starts somewhere

2) What is Eligible
a) PATENT SEARCHES

(i) Feasibility and Support of Hypothesis

Patent searcher as "expert" / direct investigator

- Systematic investigation or search by experiment or analysis must be demonstrated.
- This means that a systematic investigation or search must have been performed, and that the taxpayer must have documentation or records to substantiate the work claimed.
- The personnel responsible for directing and performing the SR&ED project must have the professional skills or experience commensurate with the requirements of the project.
- *Software development guidelines, '97*
- The OPINION part of the patent search requires the above abilities to support or refute hypothesis
- Include resume/qualifications of patent searcher?

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2) What is Eligible
a) PATENT SEARCHES

(i) Feasibility and Support of Hypothesis

Conclusion

- Patent SEARCH appear to be eligible SR&ED activity if used to support and test technical feasibility of hypothesis
- OPINION is also eligible (at least non-lawyer)

Examples

- Patent search reveals inventive activity, potential advantages of hypothesis, identifies additional technical differences (uncertainties), related but not on-point disclosures
- OPINION can include a detailed description of the invention. Work typically performed during drafting of patent application possibly incorporated into search.

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2) What is Eligible
a) PATENT SEARCHES

(ii) Support for preparation of SR&ED Claim - Benchmarking

Patent searching for benchmarking

- Number of relevant patent results
- Relevance of closest patent references
- Arguably can be performed prior to first hypothesis
 - "Patent landscape search"

Patent opinion

- Used for hindsight benchmarking, likely eligible if performed early enough

Ideally, patent search and opinion should be performed during the project (e.g. fiscal year).

it all starts somewhere

2) What is Eligible
b) PATENT SPECIFICATIONS

Prosecution of SR&ED is Eligible

Documenting the SR&ED investigation by development team members qualifies as part of the SR&ED project

Writing the documentation necessary to complete qualifying testing of an SR&ED project qualifies

Includes description of system diagrams and design overviews

(Software development guidelines, '97)

3rd party technical assistance in preparing SR&ED documentation held to be qualified activity - *Val-Harmon* (97 DTC 551)

Activity to be in connection with "ongoing research and development" - *Armada* (2007 DTC 879)

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2) What is Eligible
b) PATENT
SPECIFICATIONS

Contents of Patent Specification

Likely ~90% overlap with amount of technical description required for SR&ED claim

The specification of an invention must:

- (a) correctly and fully describe the invention and its operation or use as contemplated by the inventor;
- (b) set out clearly the various steps in a process, or the method of constructing, making, compounding or using a machine, manufacture or composition of matter, in such full, clear, concise and exact terms as to enable any person skilled in the art or science to which it pertains, or with which it is most closely connected, to make, construct, compound or use it;
- (c) in the case of a machine, explain the principle of the machine and the best mode in which the inventor has contemplated the application of that principle; and
- (d) in the case of a process, explain the necessary sequence, if any, of the various steps, so as to distinguish the invention from other inventions.

- s. 27(3) Patent Act

it all starts somewhere

2) What is Eligible
b) PATENT
SPECIFICATIONS

Contents of Patent Specification

Preparing a patent specification (or draft specification) based on **hypothesis** only

Complete patent application may be based on Sound Prediction in Canada:

- (i) a factual basis for the prediction;
- (ii) an articulable and "sound" line of reasoning from which the desired result can be inferred from the factual basis; and
- (iii) proper disclosure.

- *Apotex Inc. v. Wellcome Foundation Ltd.*, [2002] 4 S.C.R. 153

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**2) What is Eligible
b) PATENT
SPECIFICATIONS**

Technical Description - GRANTS

"Prepare grant application (e.g. IRAP)"

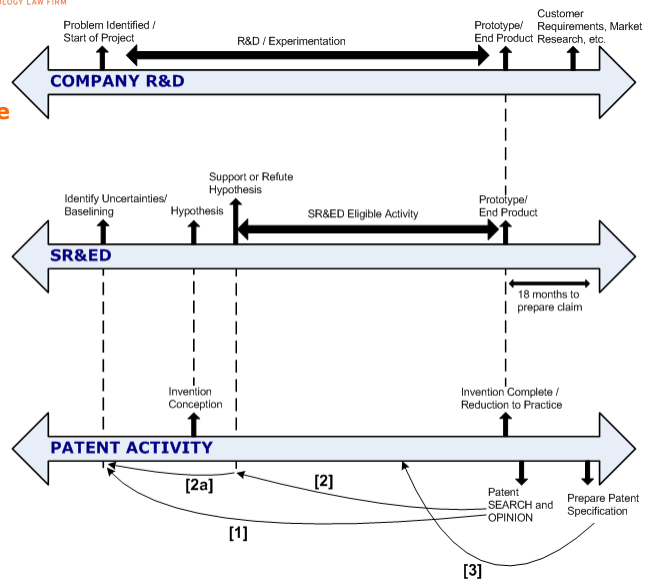
- YES (eligible for traditional; NO for proxy method)
- Directly related and incremental salaries of claimants' employees. Funds are used to perform SR&ED.

- Chemical Guidance Document #2, 2003

Likely ~90% overlap with amount of technical description required for grant application

it all starts somewhere

**2) What is Eligible
PROPOSED
TIMELINES**



2) What is Eligible TIMELINES

Normally, patent activities are performed at the **end** of the project or after completion.

For eligibility, timing wise, patent activity likely needs to be in connection with "ongoing research and development" - *Armada*

Recommendations (see handout):

[1] Baseline - Patent search can be done at the beginning, arguably even prior to the first hypothesis (e.g. landscape search)

[2] Hypothesis Feasibility - Patent search and opinion can be done to test feasibility or refute hypothesis. Some work typically performed during drafting of patent application possibly incorporated into search opinion e.g. assess technical differences and draft a patent claim.

[a] Results also used for hindsight baselining and analysis - should be eligible

[3] Technical description (e.g. patent draft specification) can likely be performed soon after patent search.

it all starts somewhere

2) What is Eligible CONCLUSIONS

Arguably, it is irresponsible for a client to not consider patent searching at all phases of R&D.

Patent searches assist in feasibility and supporting (or refuting) of hypotheses.

Patent searches are an essential element to completion of benchmarking.

SR&ED Claim can be rejected if there is insufficient support.

Patent searching could be done during the SR&ED project (not just at the end)

Claiming the patent services for SR&ED eligibility is an *additional* potential benefit.

it all starts somewhere

Outline

- 1) Introduction to patents
- 2) What is eligible
- 3) Who is eligible**
- 4) Tools and Searching Methods

it all starts somewhere

3) Who is Eligible

Who Qualifies:

- ✓ Employees
- ✗ Law Firms
- ? Patent Agents (non-lawyers)
- ✓ Patent Search Companies
- ✓ "Expert" or direct investigator

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3) Who is Eligible



Employees

Employees appear to always qualify

- In-house counsel as part of investigative team or as technical writer
- Having a law degree should add to the qualifications (not detract)
- Performing the activities previously discussed for "What is eligible"
- Attach resume
- Temporary in-house counsel for hire?

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3) Who is Eligible



Law Firms

- Law firm typically provides patent OPINION based on results of 3rd party patent SEARCH
- Legal fees are specifically excluded
- Name on top of invoice will automatically exclude

Possible solutions

- Separate legal advice from technical advice by % or detailed time entries (*Val-Harmon, 2007 DTC 879*)
- Law firm forms consulting corp. to assist in patent searches and technical specification writing
- Patent agent corp. (next slide)

it all starts somewhere

3) Who is Eligible



Patent Agents (non-lawyers)

Patent Agents are qualified to represent clients in the Patent Office

- May be non-lawyer / non-law firm
- Often have technical background and can provide patent OPINION
- Arguably can be a technical consultant
- Loss of legal privilege

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3) Who is Eligible



Patent Search Companies

- Likely qualifies
- Should invoice directly to client rather than passed on as a disbursement from law firm
- Advise search company of proper language to use e.g. "feasibility work"
- Some only provide patent SEARCH
- Not many good ones in Canada

it all starts somewhere

3) Who is Eligible



"Expert" or direct investigator

Patent lawyer as part of the team

- Systematic investigation or search by experiment or analysis must be demonstrated.

- The personnel responsible for directing and performing the SR&ED project must have the professional skills or experience commensurate with the requirements of the project.

- Still need proper invoice - wearing "technical consultant" hat from non-law company

it all starts somewhere

3) Who is Eligible

Important points regarding the invoice:

- Initial test - Company name on top
- Description of services performed should be related to eligible SR&ED activity
- Invoice should be during fiscal year and should be paid within 18 months of end of year. See *Armada* (2007 DTC 879).

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Outline

- 1) Introduction to patents
- 2) What is eligible
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- 4) Tools and Searching Methods**

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2) Tools and Searching Methods

Patent Offices

Country	Website
Canada	http://strategis.ic.gc.ca/sc_mrksv/cipo/welcome/welcome-e.html
U.S. (*)	http://www.uspto.gov/patft/index.html
Europe (*)	http://worldwide.espacenet.com/?locale=EN_ep

Third Party Searching Tools

Name	Website
Google US patents (*)	http://www.google.com/patents
Delphion (\$)	http://www.delphion.com/

Patent Download Websites

Name	Website
Google US patents	http://www.google.com/patents
Patent Fetcher (*)	http://sughrue.patentfetcher.com/
Pat2Pdf	http://www.pat2pdf.org/

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2) Tools and Searching Methods

1) Patent Offices

Source websites for searching of a particular country or region's Patent Office records

Advantages

- Database is based on the official Patent Office records

Disadvantages

- Limited to specific country (except Europe P.O.)
- Some search fields are limited or hard to use
- Basic search engine algorithms (boolean)
- Page-by-page downloading of patents is cumbersome
- US database separates patents from applications

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2) Tools and Searching Methods

1) Patent Offices (U.S. Patent Office)

US Published Application Full-Text Database Boolean Search

Page 1 of 1

US PATENT & TRADEMARK OFFICE
PATENT APPLICATION FULL TEXT AND IMAGE DATABASE

[Help](#) [Home](#) [Boolean](#) [Manual](#) [Number](#) [PTDLs](#)
[View Shopping Cart](#)

Data current through September 11, 2008.

Query [\[Help\]](#)

Term 1: in Field 1:

Term 2: in Field 2:

Select years [\[Help\]](#)

2) Tools and Searching Methods

2) Third Party Searching Tools

Proprietary software or websites which allow searching of different country databases

Advantages

- Flexibility and natural language searching e.g. Google patents
- Good litmus test approach
- One source may be able to search multiple databases – one stop shop

Disadvantages

- Possibly additional \$
- Reliant on the source databases
- Broad search results may not give you the answer

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2) Tools and Searching Methods

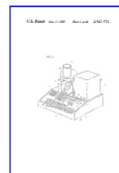
2) Third Party Searching Tools (e.g. Google patents)

[Web](#) [Images](#) [Maps](#) [News](#) [Shopping](#) [Gmail](#) [more](#) [Sign In](#)



[Search Patents](#) [Advanced Patent Search](#) [Google Patent Search Help](#)

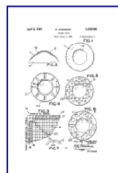
Search over 7 million patents.



Food processor



UNICYCLE



CONTACT LENS



DESIGN FOR A SALOON FIXTURE



ARTIFICIA

where

2) Tools and Searching Methods

3) Patent Download Websites

Provide full pdf versions of patents

Advantages

- Does not require page-by-page downloading
- Time-saving
- Should be used once searching is done to obtain patents

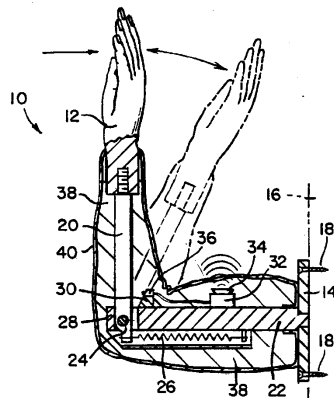
Disadvantages

- Poor search functionality – only accepts the patent number
- Additional logos added to documents

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Concluding Remarks

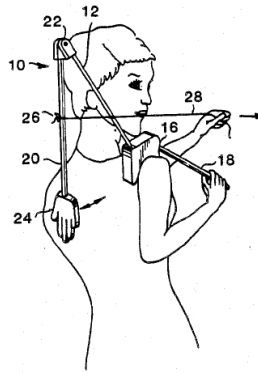
**U.S. Patent No. 5,356,330
Apparatus for simulating a "high five"**



it all starts somewhere

Concluding Remarks

U.S. Patent No. 4,608,967
"Pat on the back apparatus"



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Thank You

Special thank you to the following for their invaluable input:

David Sabina, MEUK, RDBase.net



David Hearn, SciTax Advisory Partners LP
See "Advisor's Fees as SR&ED?", Cdn. Tax Foundation April, 2008, scitax.com



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