Health Canada Santé Canada

Therapeutic Products Directorate

Health Products and Food Branch

Direction des produits thérapeutiques

Direction générale des produits de santé et des aliments

Changes to the Patented Medicines (NOC) Regulations

November 27, 2007

Anne Bowes
Office of Patented Medicines and Liaison

Canada

Overview

- What is a patent?
- Authorization and purpose of the *Patented Medicines (Notice of Compliance) Regulations*
- Amended Regulations
- Section 3
- Section 4 – patent eligibility
- Section 5 – “frozen” Register
- Sections 6,7,8 – prohibition on issuance of NOC
- Where does data protection fit in?

Authority

- Patents are granted under the *Patent Act* and *Rules*.
- Patents are granted by the Patent Office which is part of the Canadian Intellectual Property Office (CIPO) of Industry Canada.

What is a Patent?

- A government grant to an inventor for a stated period of time, conferring the right to exclude others from making, using or selling the invention.
- In exchange for the limited monopoly, the inventor must publicly disclose the invention.
- The term of the patent is 20 years from the date of filing the patent application.
- Patents assist in:
  - promoting research and development
  - technological information exchange.
- Patentee can use a patented invention or license it.

Patent Application

- Petition
  - appointment of representative
- Abstract
- Specification
    - disclosure
- title of the invention
    - specify technical field
    - describe the invention
    - describe any figures or drawings
    - set out method to carry out the invention, examples
    - sequence listing (where required)
    - deposit of biological material (e.g. ATCC)
    - **claims**
- Drawings

Pharmaceutical Patents

- Pharmaceutical patents may include claims for:
  - products or compounds *per se*
  - intermediates
  - process for manufacture
  - product-by-process
  - compositions, formulations
  - uses
  - dosage forms
  - apparatus for manufacture.

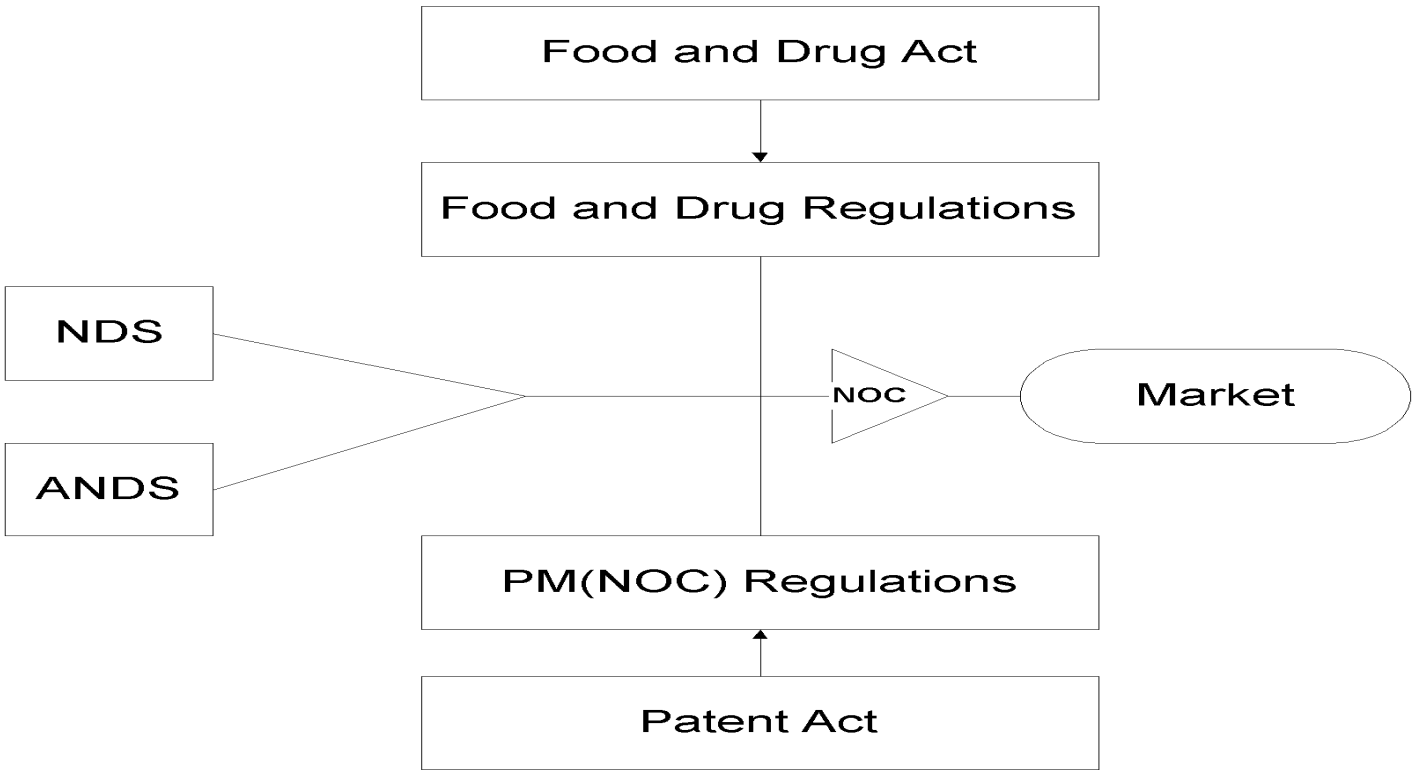
Availability of Patents

- Patent applications are laid open to the public 18 months from the earlier of Canadian filing date, or filing date abroad (convention priority date).
- Patent documents can be searched at the Patent Office in Hull, or
- By searching CIPO databases over the Internet at: http://patents1.ic.gc.ca/intro-e.html .

Patented Medicines (Notice of Compliance) Regulations

- Section 55.2 of the *Patent Act* provides the enabling statute for the *PM (NOC) Regulations* which were enacted in 1993 (Bill C-91).
- Bill C-91 abolished the former compulsory licensing regime for generic drugs and created early working exception to permit generics to develop drugs for purposes of obtaining regulatory approval during term of the patent. To balance early working provision, *PM(NOC) Regulations* ensure that an NOC is not issued to a generic drug manufacturer until all relevant patents listed by brand name companies on the Patent Register have been addressed.
- The *Regulations* were amended in 1998, 1999 and 2006. The 2006 amendments were published in Canada Gazette Part II on October 18, 2006.
- *PM(NOC) Regulations* are the responsibility of Industry Canada. However, they are administered by the Office of Patented Medicines and Liaison (OPML), TPD.

Patented Medicines (Notice of Compliance) Regulations



2006 Amendments

- Stricter rules governing what types of patents are eligible for listing on the Patent Register include:
  - patents must be relevant to the approved drug
  - the type of SNDSs is limited in respect of which patents can be listed, i.e. new formulations, dosage forms, indications.
  - the claims in the patent must be those sought in the SNDS
- Patents for new dosage forms are now eligible for listing.
- If a DIN is cancelled under C.01.014.6(1)(a) of the *FDR*, OPML is required to delete listed patents within 90 days.

Amendments (cont'd)

- Important changes for addressing patents:

- A generic manufacturer is only required to address the patents listed on the Patent Register when it files its submission – the register "freezes" for that submission.
  - Therefore, the filing date of the submission is very important.
- No notices of allegation (NOAs) are permitted before the submission is filed.
- An NOA must be retracted within 90 days following the date on which the Minister notifies the second person under paragraph C.08.004 (3)(b) of the *FDR* of their non-compliance or following cancellation of the submission by the second person.

Patented Medicines (Notice of Compliance) Regulations

- **Objective:** to balance the effective patent enforcement over new and innovative drugs with the timely entry of their lower priced generic competitors. (RIAS 2006).

- The *PM(NOC) Regulations* balance the early working exception of section 55.2 of the *Patent Act* through a patent enforcement mechanism. (RIAS 2006)

Section 3: Patent Register

- Section 3: The Minister must maintain a Patent Register.
- The Minister may refuse to add or may delete any information that does not meet the requirements of section 4.
- The Patent Register is open to public inspection.
- Information is added to the Register after the NOC is issued.
- The electronic version of the Patent Register is available on the Health Canada website at www.patentregister.ca .
- If a DIN is cancelled under C.01.014.6(1)(a) of the FDR, the patent(s) must be deleted from the Patent Register within 90 days.

Section 4: Patent Eligibility

- A first person (innovator manufacturer) may file a patent list for inclusion on the Patent Register in respect of a particular drug for which an NOC is sought.
- Patent lists must be filed with the submission or within 30 days of grant of the patent if it was pending at the time the drug submission was filed.
- NDS: To be eligible, a patent must contain a claim for the medicinal ingredient, a claim for the formulation that contains the medicinal ingredient, a claim for the dosage form, or a claim for the use of the medicinal ingredient. The claimed invention must have been approved through the issuance of the NOC for the NDS.

Eligibility: NDS

- A claim for the medicinal ingredient
  - Includes claims for polymorphic form of the MI, but not different chemical forms
  - Includes product-by-process claims
  - Single MI listable in respect of combination MI
  - Enantiomer not eligible against MI that is a racemate
- A claim for the formulation that contains the medicinal ingredient
  - Formulation claimed in the patent must match that in the drug submission
- A claim for the dosage form
  - Dosage form must match the dosage form approved in the drug submission
  - Examples of eligible dosage forms include patches, extended release forms, implants; do not include IV bags, stents
  - Definition: a claim for a delivery system for administering a medicinal ingredient in a drug or a formulation of a drug that includes within its scope that medicinal ingredient or formulation
- A claim for the use of the medicinal ingredient
  - Definition: a claim for the use of the medicinal ingredient for the diagnosis, treatment, mitigation or prevention of a disease, disorder or abnormal physical state, or its symptoms.
  - Claimed use matches the indications in the drug submission
  - It is not expected that the language in the patent and the product monograph will be an exact match.

Patent Eligibility: SNDS

- SNDS: limited the type of SNDSs against which additional patents can be listed:
  - a change in formulation,
  - a change in dosage forms,
  - a change in the use of the medicinal ingredient (indication).
- The patent must contain a claim for the changed formulation that contains the medicinal ingredient, or a claim for the changed dosage form, or a claim for the changed use of the medicinal ingredient that has been approved through the issuance of a notice of compliance in respect of the supplement.

Carry-forward: Section 4.1

- A patent already listed on the Patent Register can be re-submitted in relation to an additional SNDS for the same product.
- Carry-forward (Subsection 4.1(2)) should be indicated on the Form IV: Patent List.
- The timing requirements are the same as those set out in section 4. The Patent List should be filed with the SNDS or within 30 days on grant of the patent if eligible for listing on the basis of another submission in accordance with subsection 4(3).

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FORM IV: PATENT LIST -
Patented Medicines (Notice of Compliance) Regulations
COMPLETE ONE FORM PER PATENT PER SUBMISSION

PART 1

PLEASE COMPLETE EITHER SECTION A or B AS APPLICABLE.

A) PATENT LIST IS BEING FILED WITH SUBMISSION (please check **ONE** of the following):

i) NDS ☐ or;

ii) SNDS - CHANGE IN FORMULATION ☐
- CHANGE IN DOSAGE FORM ☐
- CHANGE IN USE ☐

iii) CARRY FORWARD, IN ACCORDANCE WITH SECTION 4.1(2) ☐

B) NEWLY ISSUED PATENT* FOR LISTING AGAINST PREVIOUSLY FILED SUBMISSION (please identify **ONE** of the following):

i) NDS SUBMISSION No.: _____ or;

ii) SNDS - CHANGE IN FORMULATION, SUBMISSION No.: _____
- CHANGE IN DOSAGE FORM, SUBMISSION No.: _____
- CHANGE IN USE, SUBMISSION No.: _____

iii) CARRY FORWARD, IN ACCORDANCE WITH SECTION 4.1(2) _____

* Newly issued patent must be submitted within 30 days of grant in accordance with subsection 4(6).

PART 2

MEDICINAL INGREDIENT(S):	
BRAND NAME:	
HUMAN: ☐ or VETERINARY: ☐	DIN:
DOSAGE FORM:	STRENGTH PER UNIT:
ROUTE(S) OF ADMINISTRATION:	
USE(S) OF THE MEDICINAL INGREDIENT(S):	

PART 3

PATENT NUMBER	CODE *	CANADIAN FILING DATE OF PATENT APPLICATION (yyyy-mm-dd)	DATE GRANTED (yyyy-mm-dd)	EXPIRATION DATE (yyyy-mm-dd)

* CODE: "A" : APPLICANT IS THE OWNER OF THE PATENT
"B" : APPLICANT HAS AN EXCLUSIVE LICENSE
"C" : APPLICANT HAS OBTAINED THE CONSENT OF THE OWNER OF THE PATENT FOR THE INCLUSION OF THE PATENT ON THE ABOVE PATENT LIST

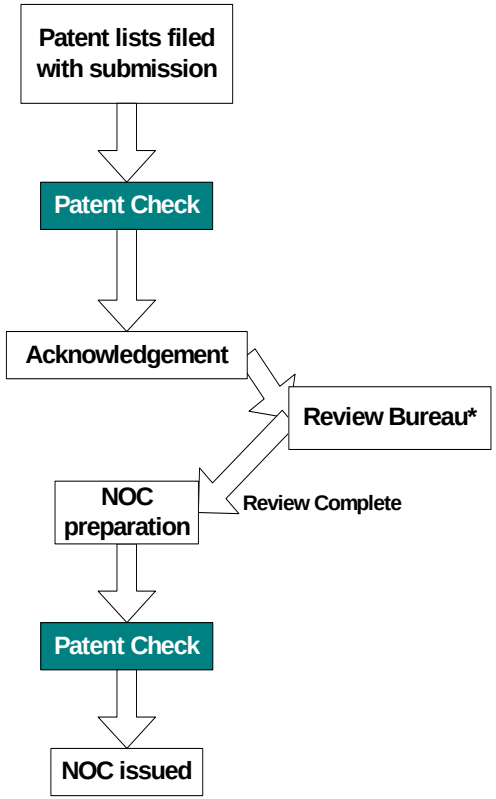
PART 4 **PLEASE UPDATE AS REQUIRED**

NAME AND ADDRESS FOR SERVICE IN CANADA:

Subsection 4(7)

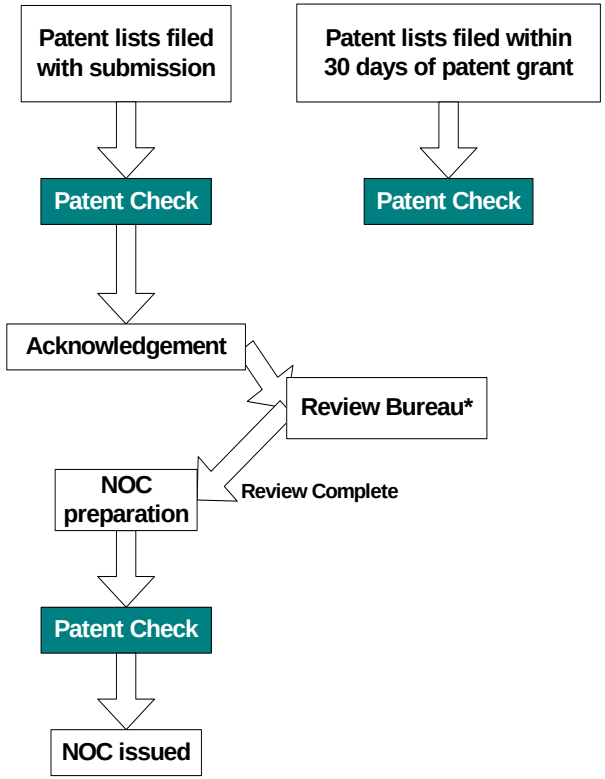
- First persons are required to keep the information on their Patent Lists up-to-date.
- A letter should be sent to OPML requesting the update be made.

INNOVATOR SUBMISSION



*Review Bureaux in Therapeutic Products Directorate
Biologic and Genetic Therapies Directorate (BGTD)
Veterinary Drugs Directorate (VDD)

INNOVATOR SUBMISSION



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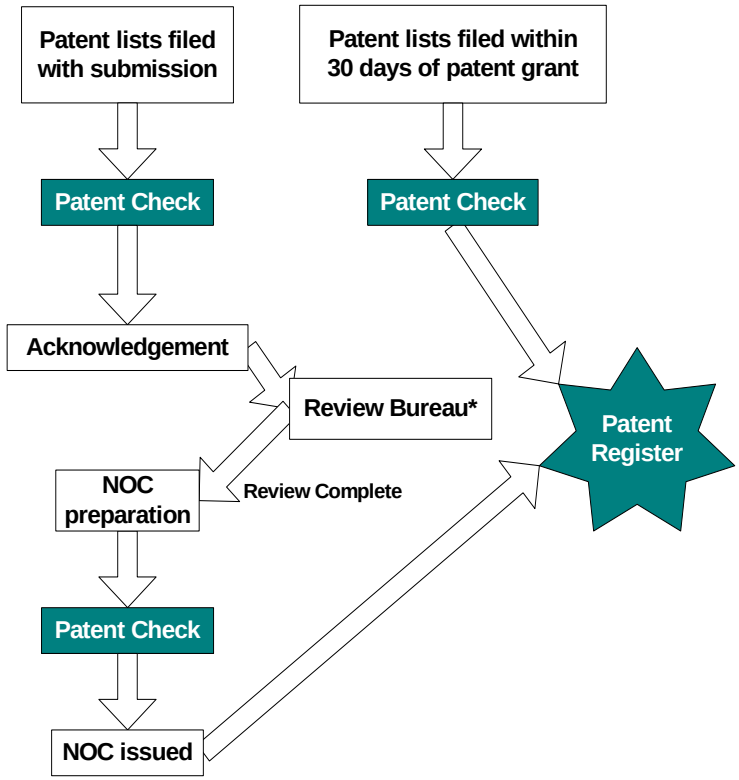
INNOVATOR SUBMISSION



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Veterinary Drugs Directorate (VDD)

	2001	2002	2003	2004	2005	2006
Number of patent lists received (during the calendar year)			510	593	940	962
Number of patent lists added to the Patent Register (during the calendar year)	204	197	139	200	449	447
Number of patent lists rejected (during the calendar year)	123	48	122	170	252	273
Brand New Patents Added (NDS)			22	28	58	49
Brand New Patents Added (SNDS)			9	15	46	41

Reason for Rejection	2001	2002	2003	2004	2005	2006
Inappropriate Claims:						
no claim to the medicine or the use of the medicine	24	29	89	85	162	167
devices, eg. patches, inhalers	19	6	2	21	27	27
intermediate	1	0	0	2	0	0
process patents	6	2	0	14	2	2
Submissions for company or product name changes	49	5	5	5	7	7
Timeline related, i.e. does not meet 4(3)[1] or 4(4)²	22	6	7	12	18	18
Patent not yet granted	2	0	3	6	17	26
Patent expired	0	0	1	0	0	0
Submission related (incorrect strength)	0	0	1	16	8	8
Wrong dosage form (4(7)b)²	0	0	14	7	11	18
Withdrawn by company	0	0	0	2	0	0
Total	**123**	**48**	**122**	**170**	**252**	**273**

[1] As this section reads prior to the October 6, 2006 amendments to the *PM(NOC) Regulations*

Section 5: Requirement to address patents

- Requires a second person (generic manufacturer) to address the patents listed for a drug marketed in Canada for which a patent list has been submitted, where the second person makes a direct or indirect comparison or reference to that drug (subsection 5(1)).

- A generic manufacturer is only required to address the patents listed on the Patent Register when it files its submission – the register "freezes" for that submission.
  - A modified acknowledgement letter is sent to the generic manufacturer indicating the filing date.

- For submissions filed before the amendments, the deemed "freeze" date is October 5, 2006.

- Where subsection 5(1) applies, the second person must either wait for patent expiry or challenge the patent through the service of a notice of allegation (NOA) on the first person. Proof of service and a copy of the NOA are required.

Section 5 continued

- An NOA may contain an allegation that the patent has expired, the patent is invalid, or that the second person will not be infringing the patent or that the statement made by the first person under 4(4)(d) is false.
- The second person must include a certification indicating the date of filing of its submission (modified acknowledgement letter) with the NOA.
- No NOAs are permitted before the submission is filed.
- The first person has 45 days to file an Application in Federal Court after service of an NOA. (Section 6)
- An NOA must be retracted within 90 days following the date on which the Minister notifies the second person under paragraph C.08.004 (3)(b) of the *FDR* of their non-compliance or following cancellation of the submission by the second person.

Health Canada Santé Canada

FORM V: DECLARATION RE: PATENT LIST

Patented Medicines (Notice of Compliance) Regulations

COMPLETE ONE FORM PER PATENT PER DIN

PART 1

SUBMISSION PREVIOUSLY FILED: YES _____ NO _____ IF YES, SUBMISSION No.: _____ AMENDMENT TO PREVIOUSLY FILED FORM: YES _____ NO _____

PART 2

SECOND PERSON'S PRODUCT	
MEDICINAL INGREDIENT(S):	
BRAND NAME:	DOSAGE FORM:
ROUTE(S) OF ADMINISTRATION:	
HUMAN: ☐ OR VETERINARY: ☐	STRENGTH PER UNIT:
USE(S) OF MEDICINAL INGREDIENT(S):	

PART 3

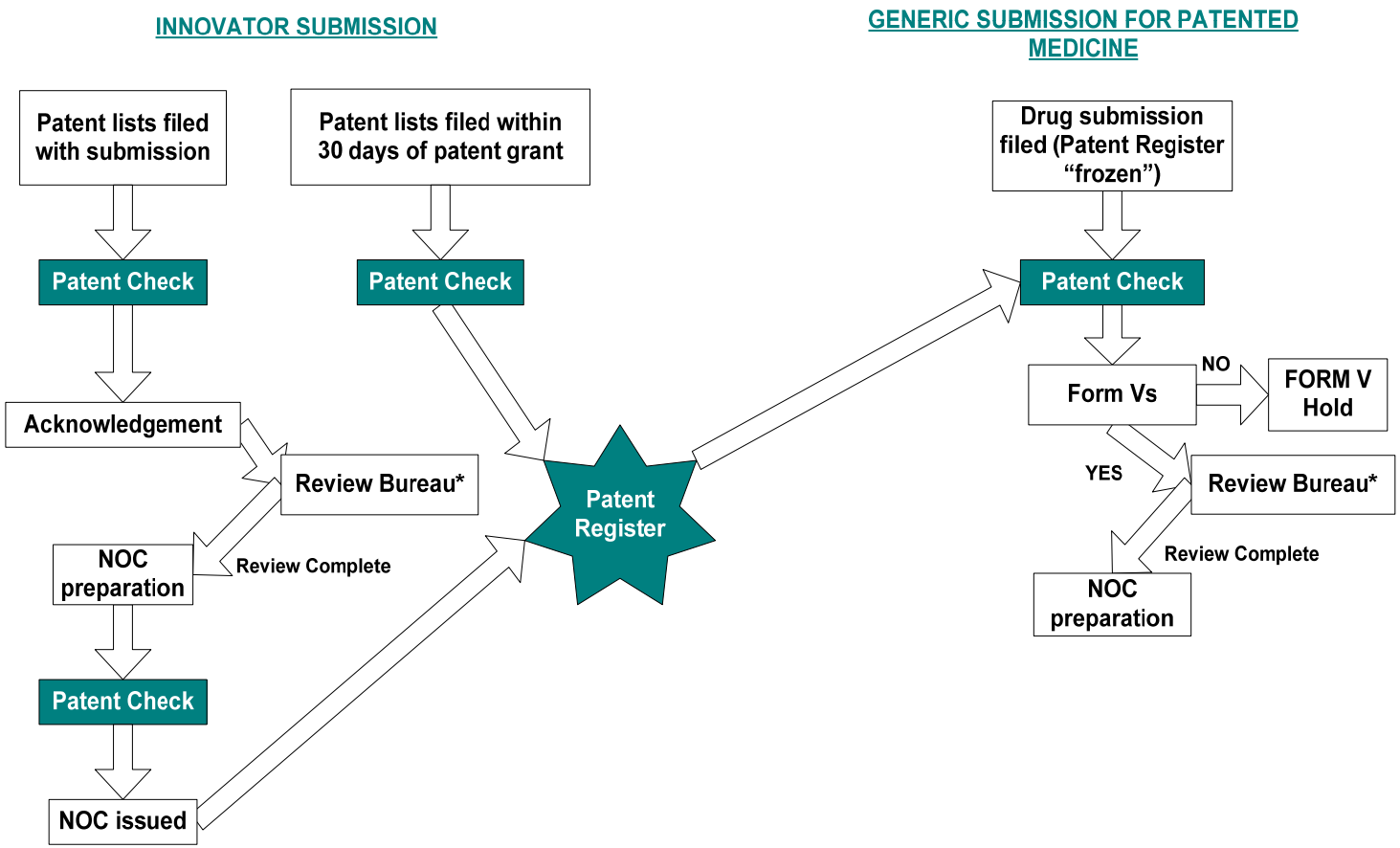
FIRST PERSON'S REFERENCE PRODUCT: Under subsection 5(1) and 5(2) of the *Regulations*, address each patent listed in respect of the drug to which you directly or indirectly compare, or make reference.	
MEDICINAL INGREDIENT(S):	
BRAND NAME:	DOSAGE FORM:
DIN:	HUMAN: ☐ OR VETERINARY: ☐
ROUTE(S) OF ADMINISTRATION:	STRENGTH PER UNIT:
USE(S) OF MEDICINAL INGREDIENT(S):	
NAME OF MANUFACTURER:	

PART 3.1

PATENT NUMBER	EXPIRATION DATE (yyyy-mm-dd)

PART 3.2 CHECK THE FOLLOWING AS APPROPRIATE:

	The Second Person has obtained consent from the patent owner to the making, constructing, using or selling of the drug in Canada.
	The Second Person accepts that the Notice of Compliance will not issue until the patent expires.
The Second Person alleges that:	
	the statement made by the First Person pursuant to paragraph 4(4)(d) is false;
	the patent has expired;
	the patent is not valid;
	no claim for the medicinal ingredient, no claim for the formulation, no claim for the dosage form and no claim for the use of the medicinal ingredient would be infringed by the second person making, constructing, using or selling the drug for which the submission is filed.
NOTE: IF YOU HAVE CHECKED ANY OF THE ALLEGATIONS ABOVE, YOU ARE REQUIRED TO COMPLY WITH SUBSECTION 5(3) OF THE *REGULATIONS*.	



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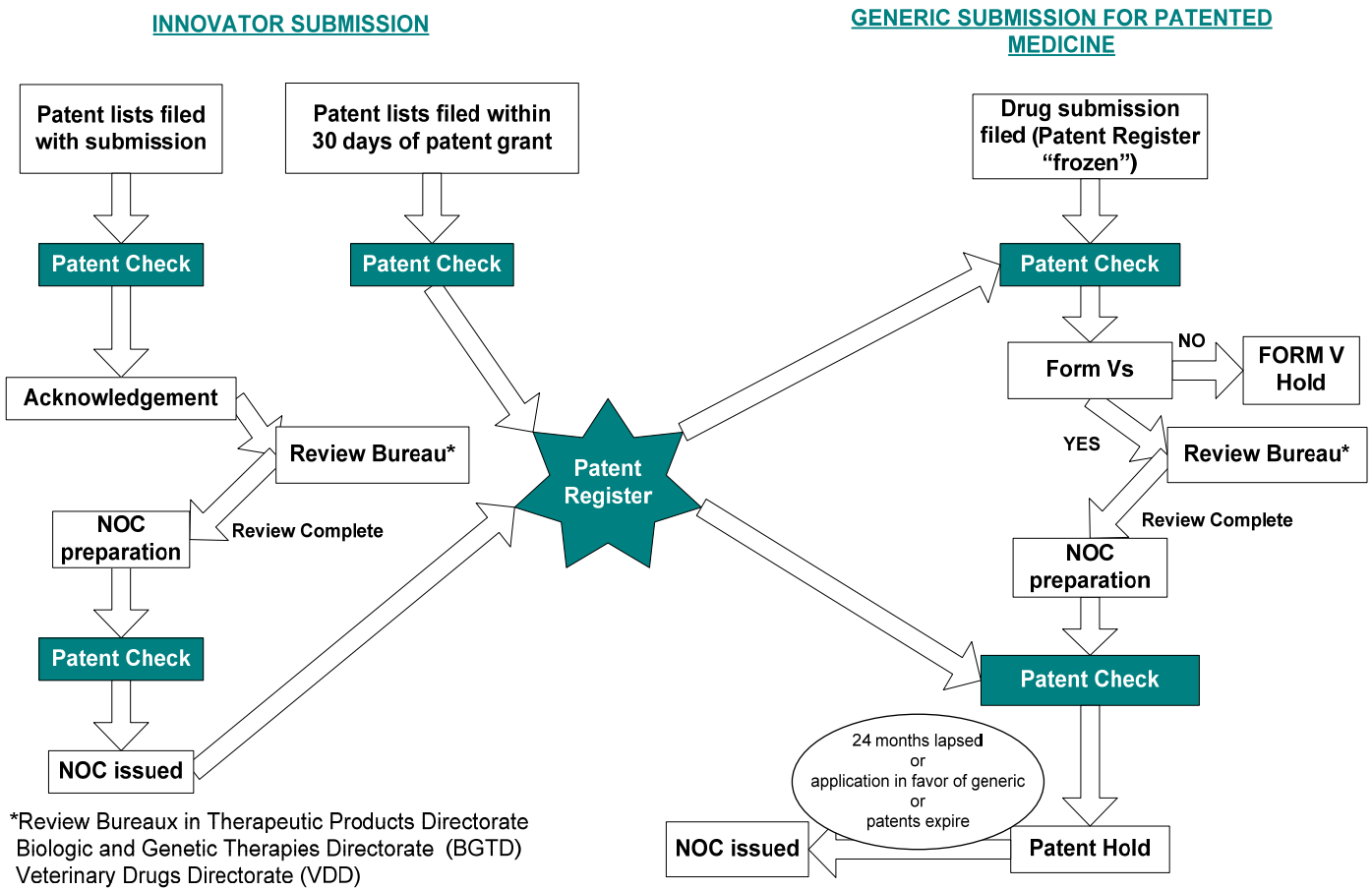
Section 6

- First person files Notice of Application in Federal Court within 45 days.
- Upon filing the Application, a statutory stay of 24 months arises, preventing the Minister from issuing an NOC to the second person until the case is resolved or the stay ends.
- An order may be sought for the Minister to verify that any portion of the second person submission produced corresponds fully to the information in the submission.

Section 7 and 8

- Section 7 determines when the notice of compliance may issue to the second person.
- The NOC can issue at the later of :
  - the day on which the second person complies with section 5,
  - the expiration of any patent on the register that is not the subject of an allegation,
  - the expiration of 45 days after the receipt of proof of service of a notice of allegation under paragraph 5(3)(*a*) in respect of any patent on the register,
  - the expiration of 24 months after the receipt of proof of the making of any application under subsection 6(1), and
  - the expiration of any patent that is the subject of an order pursuant to subsection 6(1).

- Section 8 (not administered by HC)
- Provides that a generic may seek damages in the event they were unduly delayed from market entry by the innovative company.
- OPML can provide a certification of the date on which the NOC would have been issued in the absence of the *PM(NOC) Regulations*
  - This is the date the submission went on “patent hold”.
- The Minister is not liable for damages under this section.


INNOVATOR SUBMISSION
GENERIC SUBMISSION FOR PATENTED MEDICINE
Patent lists filed with submission
Patent lists filed within 30 days of patent grant
Drug submission filed (Patent Register "frozen")
Patent Check
Patent Check
Patent Check
Acknowledgement
Form Vs
NO
FORM V Hold
YES
Review Bureau*
Review Bureau*
Patent Register
NOC preparation
Review Complete
Review Complete
NOC preparation
Patent Check
Patent Check
24 months lapsed or application in favor of generic or patents expire
NOC issued
NOC issued
Patent Hold
*Review Bureaux in Therapeutic Products Directorate
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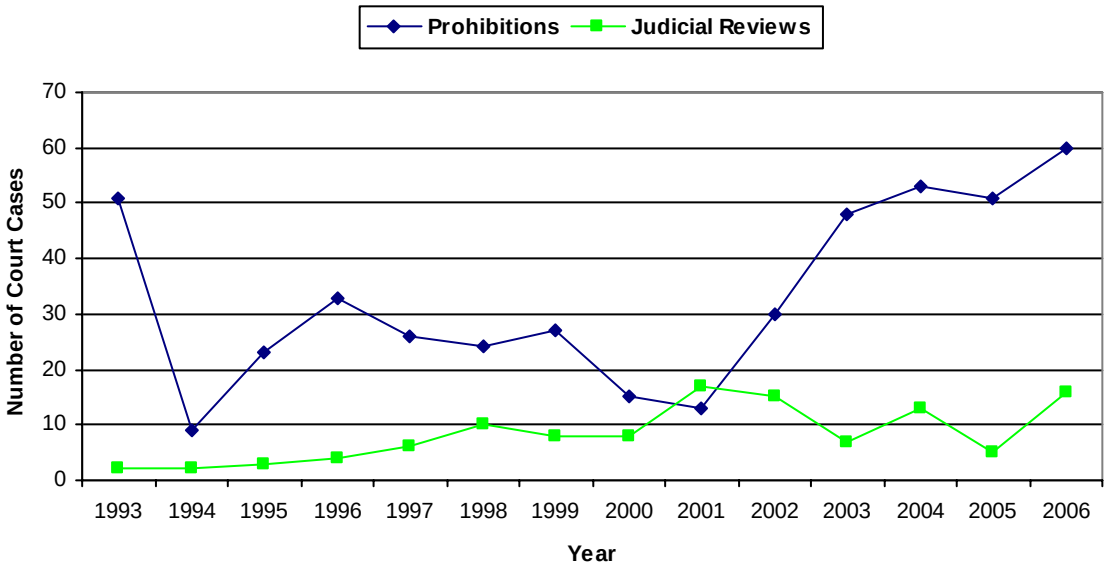
Transition provisions

- Section 4 of the *PM(NOC) Regulations* does not apply to patents on a patent list submitted prior to June 17, 2006.
- The date of filing of the submission is deemed to be the date of the coming into force of the amendments –October 5, 2006.
- Subsection 8(4) of the *PM(NOC) Regulations* does not apply to an action commenced under section 8 prior to coming into force of these Regulations.
- Note: The eligibility requirements for Patent Lists submitted before June 17, 2006, including those not yet added, are found in the *PM(NOC) Regulations* as they read before the amendments.


Prohibitions
Judicial Reviews
Number of Court Cases
70
60
50
40
30
20
10
0
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
Year

Data Protection Amendments (C.08.004.1)

- Data protection now prohibits “generic” approval until **8 years** after the approval of an “innovative drug” (C.08.004.1(8))
- Definition of Innovative Drug added
  - a drug that contains a medicinal ingredient not previously approved in a drug by the Minister and that is not a variation of a previously approved medicinal ingredient such as a salt, ester, enantiomer, solvate or polymorph.
- Within this 8 years is a **6 year “no-filing” period** during which subsequent entry manufacturers are prohibited from filing a submission that compares directly or indirectly with the innovative drug (C.08.004.1(3))
- There is an **exception** for a submission filed under **C.07.003** (Canada’s Access to Medicines Regime) (C.08.004.1(7))

Data Protection: Pediatric Extension

- A Six-month pediatric extension (C.08.004.1(4)) is granted if:
  - clinical trials are designed and conducted for the purpose of increasing knowledge of the use of the innovative drug in pediatric populations, thereby providing health benefits. Description and results of clinical trials (SNDS) **must be filed within five years of issuance of the first NOC**, and;
  - the Minister determines **before year six**, that the trials were designed and conducted for the purpose of increasing the knowledge of the use of the innovative drug and that knowledge would lead to a health benefit.

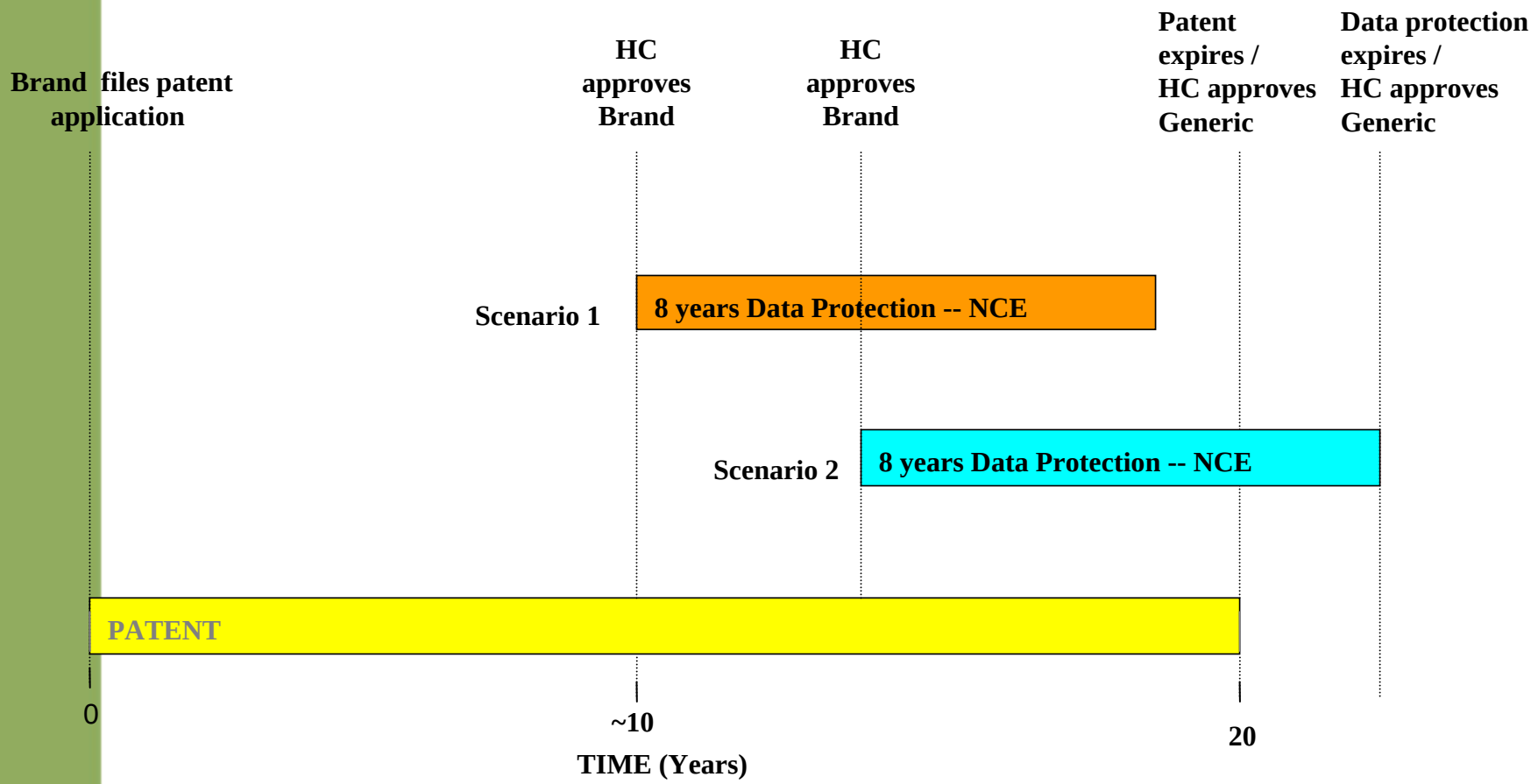
Sample: Register of Innovative Drugs

Register of Innovative Drugs
Registre des drogues innovantes

Submission Number / N° de la présentation	Medicinal Ingredient / Ingrédient médicinal	Brand Name / Marque nominative	Manufacturer / Nom du fabricant	NOC Date dd-mm-yyyy / Date de l'AC jj-mm-aaaa	6 Year "No File" Date / Date de la période de "non-dépôt" de 6 ans	Pediatric Extension Y or N / Prolongation pédiatrique O ou N	Data Protection Ends / Fin de la période de protection des données
098531	abatacept / abatacept	Orencia	Bristol-Myers Squibb Canada	29-06-2006	29-06-2012		29-06-2014
103287	acamprosate calcium / calcium d'acamprosate	Campral	Prempharm Inc.	16-03-2007	16-03-2013		16-03-2015
103381	alglucosidase alfa / alglucosidase alfa	Myozyme	Genzyme Canada Inc.	14-08-2006	14-08-2012		14-08-2014
110061	cefovecin / céfovécine sodique	Convenia	Pfizer Canada Inc., Animal Health Group	30-05-2007	30-05-2013		30-05-2015
101419	ciclesonide / ciclésonide	Alvesco	Altana Pharma Inc.	11-09-2006	11-09-2012		11-09-2014
103324	darunavir / darunavir	Prezista	Janssen-Ortho Inc.	28-07-2006	28-07-2012		28-07-2014
104993	dasatinib monohydrate / monohydrate de dasatinib	Sprycel	Bristol-Myers Squibb Canada	26-03-2007	26-03-2013		26-03-2015
099821	deferasirox / déférasirox	Exjade	Novartis Pharmaceuticals Canada Inc.	19-10-2006	19-10-2012		19-10-2014
091404	fludeoxyglucose 18F / fludésoxyglucose 18F	Cantrace	Ipet Pharmaceuticals Inc.	27-07-2006	27-07-2012		27-07-2014
096420	gadofosveset trisodium / gadofosveset trisodique	Vasovist	Berlex Canada Inc.	31-10-2006	31-10-2012		31-10-2014
109857	idursulfase / idursulfase	Elaprase	Shire Human Genetic Therapies, Inc.	13-06-2007	13-06-2013	Yes	13-06-2015
098949	lanreotide / lanréotide	Somatuline Autogel	Ipsen Limited	17-07-2006	17-07-2012		17-07-2014
102240	lanthanum carbonate / carbonate hydrate de lanthane	Fosrenol	Shire BioChem Inc.	17-10-2006	17-10-2012		17-10-2014

http://hc-sc.gc.ca/dhp-mps/prodpharma/applic-demande/regist/reg_innov_dr_e.html

Link: Protection and Data Protection



Further information …

- Canada Gazette Part II: http://canadagazette.gc.ca/partII/2006/20061018/pdf/g2-14021.pdf
- Register of Innovative Drugs is found at: http://hc-sc.gc.ca/dhp-mps/prodpharma/applic-demande/regist/index_e.html
- Patent Register website address is: http://www.patentregister.ca
- Regulations: search at http://laws.justice.gc.ca (or link from Patent Register)
- Draft Guidance document: http://www.hc-sc.gc.ca/dhp-mps/prodpharma/applic-demande/guide-ld/patmedbrev/index_e.html
- Email Inquires: patent_register@hc-sc.gc.ca