



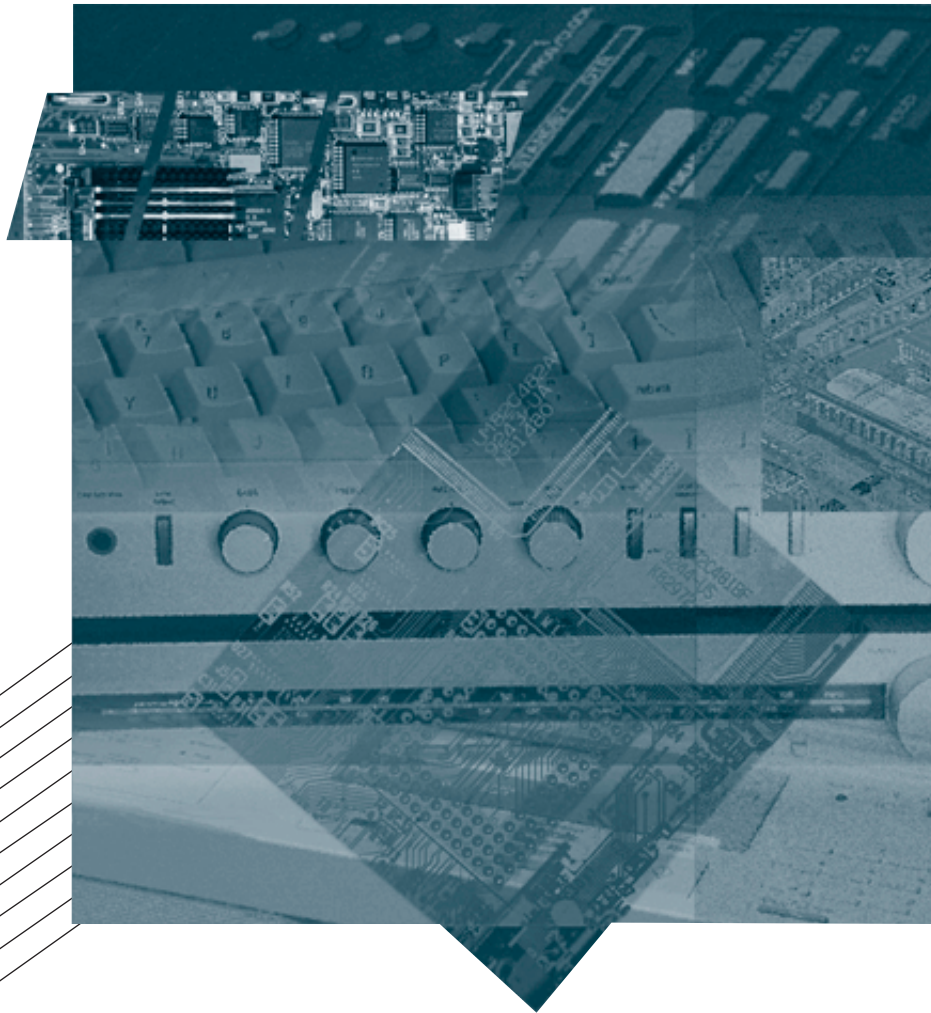
**Canadian  
Intellectual Property  
Office**

An Agency of  
Industry Canada

**Office de la propriété  
intellectuelle  
du Canada**

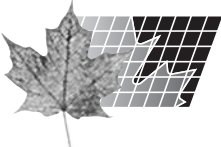
Un organisme  
d'Industrie Canada

# A GUIDE TO INTEGRATED CIRCUIT TOPOGRAPHIES



JUNE 2006

**Canada**

CIPO  OPIC

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# A GUIDE TO INTEGRATED CIRCUIT TOPOGRAPHIES



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For further information or to obtain additional copies of this publication, please contact:

Client Service Centre  
Canadian Intellectual Property Office  
Industry Canada  
Place du Portage I  
Room C-229, 2nd floor  
50 Victoria Street  
Gatineau QC K1A 0C9

Tel.: (819) 997-1936

Fax: (819) 953-7620

Email: [cipo.contact@ic.gc.ca](mailto:cipo.contact@ic.gc.ca)

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Cat. No. Iu71-4/7-2005E

ISBN 0-662-42237-6

54347E

Aussi offert en français sous le titre *Le guide des topographies de circuits intégrés*.

The information in this booklet is to be considered solely as a guide and should not be quoted as or considered to be a legal authority. It may become obsolete in whole or in part at any time without notice. Authority must be found in the *Integrated Circuit Topography Act*, the *Integrated Circuit Topography Regulations*, and in decisions of the courts interpreting them.



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## TABLE OF CONTENTS

### INTRODUCTION

A new kind of intellectual property	1
Purpose of this guide	1
Canadian Intellectual Property Office	1
Other forms of intellectual property	1
Visit CIPO's website	1

### INTEGRATED CIRCUIT TOPOGRAPHIES

Definition and use	2
Canadian protection for integrated circuit topographies	2
Exceptions	3
Remedies	3
Protection for integrated circuit topographies abroad	3
Registration	3
Fees	4
Marking	4
Further information	4

### TARIFF OF FEES

	5
--	---

### APPENDIX A — INSTRUCTIONS FOR COMPLETING AN APPLICATION FORM

	6
--	---

### APPENDIX B — APPLICATION FORM

	7
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### A new kind of intellectual property

Integrated circuit topographies are now considered a form of intellectual property. Recognizing the growing impact of integrated circuit technology in virtually all fields of industry, and the need to protect Canadian innovations in this technology both nationally and internationally, Canada has introduced protection for integrated circuit topographies. Topographies are innovative, three-dimensional circuit designs used in many different products. Examples of such products are automobiles, industrial robots, cameras, spacecraft and computers.

On May 1, 1993, the *Integrated Circuit Topography Act* and Regulations came into force. The Act defines the protection available for integrated circuit topographies, the three-dimensional configurations of the materials that form integrated circuits. Protection under this Act is extended to nationals of other countries on a reciprocal basis, thereby making protection in other countries available to Canadians.

### Purpose of this guide

In this booklet, we will look at what integrated circuit topographies are, how they can benefit you and how to register them. With a basic knowledge of the process, you can take steps to protect your integrated circuit topographies from copying by others. You may also develop a better understanding of the

intellectual property rights of others. This may help you avoid the costly and time-consuming legal battles that could result from infringing those rights.

Keep in mind that this booklet offers general information and does not cover all the complex issues that may arise through the registration process. This guide does not provide authoritative definitions and explanations.

### Canadian Intellectual Property Office

The federal agency responsible for integrated circuit topographies in Canada is the Canadian Intellectual Property Office (CIPO), which is part of Industry Canada — the federal department responsible for industry and science in Canada. CIPO is responsible for other forms of intellectual property as well: patents, trade-marks, copyrights and industrial designs.

### Other forms of intellectual property

Along with integrated circuit topographies, intellectual property rights include patents, trade-marks, copyrights and industrial designs. These are all rights that are granted for intellectual creativity. The differences are:

■ **patents** — cover new inventions (process, machine, manufacture, composition of matter), or any new and useful

improvement of an existing invention;

■ **copyrights** — provide protection for artistic, dramatic, musical and literary works (including computer programs), and three other subject-matter known as performances, communication signals and sound recordings;

■ **trade-marks** — are words, symbols, designs (or a combination of these), used to distinguish the wares and services of one person or organization from those of others in the marketplace;

■ **industrial designs** — are the visual features of shape, configuration, pattern or ornament (or any combination of these features), applied to a finished article of manufacture.

### Visit CIPO's website

CIPO's website includes useful information about its product lines, services and legislative changes. The five intellectual property guides are available, as are interactive tools that explain intellectual property in an enjoyable way. You may visit our website at the following address: [www.cipo.gc.ca](http://www.cipo.gc.ca).

### Definition and use

Semiconductor integrated circuits are at the heart of modern information, communications, entertainment, manufacturing, medical and space technologies, and are now finding their way into items as ordinary as household appliances. The Act and Regulations refer to the “microchips” which embody such integrated circuits as “integrated circuit products.”

Today’s integrated circuit products are constructed from a complex series of layers of semiconductors, metals, dielectrics (insulators) and other materials on a substrate. The Act and Regulations refer to the three-dimensional configuration of these layers as an “integrated circuit topography.” The *Integrated Circuit Topography Act* provides protection against copying of registered topographies, but does not prevent others from developing integrated circuit products which use other topographies to provide the same electronic functions.

Some integrated circuit products, such as Random Access Memories (RAMs) and Read Only Memories (ROMs) may be used to store sets of instructions for electronic processors. In addition to the protection available for integrated circuit topographies embodied in such integrated circuits, the sets of instructions they store may be subject to protection under the *Copyright Act* as literary works, and may in some cases be patentable as industrial methods. Other aspects of integrated

circuit products may also be patentable, for example, the structure and method of operation of electronic circuits embodied in integrated circuit products, or industrial processes used to manufacture integrated circuit products. Indeed, protection available under the *Patent Act* can be much broader than the protection available under the *Integrated Circuit Topography Act*, and should generally be considered in addition to protection under the *Integrated Circuit Topography Act*.

Protection in other countries should also be considered, particularly where significant market opportunities are expected, or where significant foreign competitors have manufacturing facilities.

### Canadian protection for integrated circuit topographies

Canada’s legislation to protect integrated circuit topographies is comparable to that of some other countries. The protection is provided by the *Integrated Circuit Topography Act*.

This legislation protects the original design of a registered topography, whether it has been embodied in an integrated circuit product or not. Topographies which define only part of the structure needed to perform an electronic function may be registered. For example, topographies which define generic layers of gate array integrated circuit products, and topographies that define interconnection layers

which customize gate array integrated circuit products to perform specific electronic functions, may be registered separately.

A topography will qualify as original if it is developed through the application of intellectual effort, and if it is not produced by the mere reproduction of all, or a substantial part, of another topography. The Act does not protect pre-existing topographies which are commonplace among topography designers or integrated circuit product manufacturers.

The *Integrated Circuit Topography Act* provides protection by giving owners of registered topographies exclusive statutory rights to control certain actions. The legislation permits owners of registered topographies to exclude others from:

- reproducing a protected topography or any substantial part of one;
- manufacturing an integrated circuit product incorporating the topography or a substantial part of one;
- importing or commercially exploiting (which includes the sale, lease, offering or exhibiting for sale or lease, or other commercial distribution) a topography or a substantial part of one, or of an integrated circuit product that embodies a protected topography or a substantial part of one;

- importing or commercially exploiting an industrial article which incorporates an integrated circuit product that embodies a protected topography, or a substantial part of one.

The Act protects registered integrated circuit topographies for up to ten years. The term begins on the filing date of the application for registration. The term ends on December 31 of the tenth year after the year of the first commercial exploitation or the year of the filing date, whichever is earlier.

### Exceptions

The exclusive rights listed above are subject to some exceptions, three of which are:

- 1 One exception relates to the exhaustion of rights applying to integrated circuit products legitimately put on the market anywhere in the world with the authorization of the owner of the rights. After the first legitimate sale of such a product, the topography owner has no statutory right to control its use, rental, resale or redistribution.
- 2 Another exception allows the unauthorized copying of a protected topography for the sole purpose of analysis or evaluation, or for the sole purpose of research or teaching with respect to topographies.
- 3 The Act also permits reverse engineering, which is a process of taking apart an integrated circuit to design a new and original topography. The topography created by such a procedure must meet the

originality requirements of the Act if it is to be exploited commercially without the authorization of the original owner of the rights. With this exception, the legislation provides for the suppression of piracy without creating unnecessary obstacles to a free market in semiconductor chips or to the spread of chip technology.

### Remedies

The Act provides for the full range of civil remedies including injunctions, damages and punitive damages. It also provides a defence to innocent infringers, i.e., persons dealing commercially with an infringing integrated circuit product, but unaware, or having no reasonable grounds to believe, that it has been manufactured without authority. After having been notified of the infringement, their liability is limited to the payment of a reasonable royalty with respect to the disposal of integrated circuit products in inventory.

When a court concludes that there has been importation of integrated circuit products in contravention of the Act, Revenue Canada Customs may be required by the court to stop the entry of such products and of articles which incorporate them, and to arrange disposal of them according to a court order.

### Protection for integrated circuit topographies abroad

Some twenty countries have explicit intellectual property protection for semiconductor chips.

Rights exist for Canadians in the United States, Switzerland, Japan, Australia and other countries.

The intent is to arrange protection for nationals and residents of Canada in countries which offer comparable protection to that provided in Canada.

The Minister of Industry Canada announced, by a notice in the *Canada Gazette*, the names of countries in which reciprocal rights have been secured. A list of countries granting reciprocal rights may be found in the *Integrated Circuit Topography Act*.

In addition, the Act has been amended to allow for protection for World Trade Organization members, without the necessity of an agreement or the publication of a notice of reciprocity in the *Canada Gazette*.

Protection in other countries should be considered, particularly where significant market opportunities are expected or where significant foreign competitors have manufacturing facilities.

## Registration

For the owner of a topography to have rights under the Act, the topography must be registered. The creator of the topography (the owner) or the successor in title may apply for registration of the topography.

The Registrar of topographies will not examine a topography to determine originality or compliance with the requirements of the Act. However, the Registrar has authority to reject an application if the creator does not meet the nationality requirements.

To register a topography, you should obtain the forms from CIPO, put the appropriate information on the forms, including title or titles of topography, date and location of first commercial exploitation, name and address of applicant, applicant's interest in the topography, and a description of the nature or function of the topography, and submit the completed forms to the Office of the Registrar of Topographies. **More information is available on the CIPO website at [www.cipo.gc.ca](http://www.cipo.gc.ca) under the title Integrated Circuit Topographies, Electronic Services Delivery.**

In addition, you must submit a complete set of overlay sheets, drawings or photographs of the topography. Under certain conditions, some confidential information can be omitted from the drawings or photographs of the topography.

Please note that the application must be filed within two years of

the first commercial exploitation of the topography.

## Fees

Fees are charged for various services in relation to the registration of a topography. A tariff of fees is included in this guide.

Please note that payments may be made by credit card (VISA, MasterCard or American Express), deposit account, postal money order or cheque payable in Canadian dollars to the Receiver General for Canada. Do not add federal and provincial taxes.

## Marking

While marking of integrated circuit products is not obligatory, it is advisable to mark a product with a title corresponding to the registered title or titles. Failure to do so may constitute a valid defence in an infringement action if a defendant can prove having had no knowledge of the registration of the topography.

## Further information

Staff at the Office of the Registrar of Topographies will be pleased to assist you with general questions about integrated circuit topographies and the registration process.

Address your correspondence to:  
Office of the Registrar of  
Topographies  
Canadian Intellectual  
Property Office  
Industry Canada  
Place du Portage I  
50 Victoria Street  
Gatineau, QC K1A 0C9

You may also telephone for general information and application forms at (819) 997-1936 between 8:30 a.m. and 4:30 p.m., Eastern time, Monday through Friday, except on legal holidays.

Any correspondence addressed to the Office of the Registrar of Topographies at CIPO headquarters in Gatineau and delivered:

**1** during business hours to CIPO headquarters, will be accorded the date of receipt that day;  
**2** during business hours to Industry Canada headquarters or to one of its regional offices, will be accorded the date of receipt in that office\*;  
**3** at any time electronically, including by facsimile, will be considered to be received on the day that it is transmitted, if received before midnight, local time, at CIPO headquarters\*; or  
**4** through the Registered Mail service of the Canada Post Corporation (CPC), will be accorded the date stamped on the envelope by CPC\*.

\*Only if it is also a day on which CIPO headquarters in Gatineau is open, if not, it will be considered received on the next working day.



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**TARIFF OF FEES**

<b>1</b> Filing an application.....	\$200
<b>2</b> Amending an application in accordance with a request made pursuant to subsection 20(1) of the Regulations.....	\$75
<b>3</b> Entering in the register particulars of a transfer of an interest or grant of a licence affecting a registered topography pursuant to subsection 21(1) of the Act.....	\$75
<b>4</b> Amending an entry in the register or making a new entry therein pursuant to subsection 21(2) of the Act.....	\$75
<b>5</b> Amending a certificate of registration or issuing a new certificate, pursuant to subsection 19(4) of the Act, for the purpose of correcting a typographical or clerical error made as a result of incorrect information supplied by the applicant.....	\$75
<b>6</b> Transmitting material on file to the Federal Court pursuant to section 27 of the Regulations.....	\$100
<b>7</b> Providing a copy of a document, of entries in or extracts from the register, or of any material referred to in section 26 of the Regulations, for each page measuring 21.5 cm x 28 cm (8 1/2 inches x 11 inches) or less.....	\$5
<b>8</b> Providing a certified copy of a document referred to in subsection 15(2) of the Act.....	\$50

*INSTRUCTIONS FOR  
COMPLETING AN  
APPLICATION FOR  
REGISTRATION OF AN  
INTEGRATED CIRCUIT  
TOPOGRAPHY*

**Applicant**

Individuals should write their surnames followed by a comma, and then their first names. Addresses should include the complete postal address: the street name and number, the postal code or the post office box number, where applicable. If your application has been assigned a number by the Office of the Registrar of Topographies, please indicate the number on all correspondence relating to your application.

**Title**

The title (or titles) consisting of words and/or code is essential for identifying the topography. Only alphanumeric characters as shown on standard North American keyboards can be entered in the register.

**Nature**

Insert a brief description of the nature (structure type) or function of the topography. An example of the function would be “operational amplifier” while examples of the nature would be “bipolar, CMOS, or linear.”

**Interest**

Please indicate if the applicant is the creator of the topography or a successor in title by marking the appropriate block.

**Conditions of registration**

Registrability in Canada is dependant upon the following conditions:

The creator of the topography is, at the time of its creation or on the filing date of the application:

- i) a national of Canada;
- ii) a national of a country recognized by Canada by convention or treaty that affords protection for topographies;
- iii) a national of a country that the Minister has certified by a notice published in the *Canada Gazette*.

OR

The creator of the topography has, at the time of its creation or at the time of filing, a real and effective establishment for the creation of topographies or the manufacture of integrated circuit products in Canada or a country that is a member of the World Trade Organization or has a reciprocal agreement with Canada.

OR

The topography is first commercially exploited in Canada and the application is filed within two years thereafter.

**First commercial exploitation**

To commercially exploit means to sell, lease, offer or exhibit for sale or lease, or otherwise distribute for a commercial purpose.

**Date**

The date (day, month and year) as well as the country must be indicated.

**Material filed and other information**

List of material being filed with the application and other information. You should indicate:

- the number of layers of the topography;
- the number of layers being deposited;
- the number of layers containing confidential information for which design data is submitted;
- the number of integrated circuit products deposited (for commercially exploited topographies, at least four integrated circuit products must be submitted if parts of the design data are blocked out).

**Agent**

This section should only be completed if the application is filed by someone appointed to act on the applicant’s behalf.

**Representative for service**

This section must be completed if the applicant does not have a Canadian address.


**Signature**

The application must be signed and dated by either the applicant or the applicant’s agent.

**Fees**

The fee for filing an application is \$200 (Canadian funds). (Please do not add provincial or federal taxes.)

APPENDIX B – APPLICATION FORM

	<p><b>Canadian Intellectual Property Office</b> An Agency of Industry Canada</p>	<p><b>Office de la propriété intellectuelle du Canada</b> Un organisme d'Industrie Canada</p>							
<p><b>APPLICATION FOR REGISTRATION OF AN INTEGRATED CIRCUIT TOPOGRAPHY</b></p>									
<p><b>APPLICANT - Name and address</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%; height: 40px;"></td> <td style="width: 20%; font-size: small;">Client Number (if already assigned by IC<sup>3</sup>)</td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td style="font-size: small;">Postal code</td> <td></td> </tr> </table>					Client Number (if already assigned by IC <sup>3</sup> )			Postal code	
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Postal code									
<p><b>TITLE(S)</b></p> <div style="border: 1px solid black; height: 30px;"></div>									
<p><b>DESCRIPTION OF THE NATURE OR FUNCTION OF TOPOGRAPHY</b></p> <div style="border: 1px solid black; height: 50px;"></div>									
<p><b>INTEREST</b></p> <p><input type="checkbox"/> Creator of topography          OR          <input type="checkbox"/> Successor in title</p>									
<p><b>CONDITIONS OF REGISTRATION</b></p> <p style="font-size: x-small;">Registrability in Canada is dependent upon the following conditions:</p> <p style="font-size: x-small;">The creator of the topography is, at the time of its creation or on the filing date of the application:          (i) a national of Canada;          (ii) a national of a country recognized by Canada by convention or treaty that affords protection for topographies;          (iii) a national of a country that the Minister has certified by notice published in the Canada Gazette; OR</p> <p style="font-size: x-small;">The creator of the topography has, at the time of its creation or on the filing, a real and effective establishment for the creation of topographies or the manufacture of integrated circuit products in Canada or a country that is a member of the World Trade Organization (WTO) or has a reciprocal agreement with Canada; OR</p> <p style="font-size: x-small;">The topography is first commercially exploited in Canada and the application is filed within two years thereafter.</p>									
<p><b>COMMERCIAL EXPLOITATION</b></p> <p><input type="checkbox"/> The topography has not been commercially exploited;          OR</p> <p><input type="checkbox"/> The topography was first commercially exploited in _____ on _____.</p> <p style="font-size: x-small; text-align: center;">(place/country)    (day/month/year)</p>									
<p><b>MATERIAL FILED AND OTHER INFORMATION</b></p> <div style="border: 1px solid black; height: 40px;"></div>									
<p><b>AGENT - Name and address</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%; height: 40px;"></td> <td style="width: 20%; font-size: small;">Client Number (if already assigned by IC<sup>3</sup>)</td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td style="font-size: small;">Postal code</td> <td></td> </tr> </table>					Client Number (if already assigned by IC <sup>3</sup> )			Postal code	
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<p><b>REPRESENTATIVE FOR SERVICE - Name and address in Canada</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%; height: 40px;"></td> <td style="width: 20%; font-size: small;">Client Number (if already assigned by IC<sup>3</sup>)</td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td style="font-size: small;">Postal code</td> <td></td> </tr> </table>					Client Number (if already assigned by IC <sup>3</sup> )			Postal code	
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<p><b>SIGNATURE(S)</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 35%; height: 40px; vertical-align: bottom; font-size: small;">Contact person (please print or type)</td> <td style="width: 65%; font-size: small;">(check appropriate box) <input type="checkbox"/> applicant    <input type="checkbox"/> agent</td> </tr> <tr> <td style="border-top: none;"></td> <td style="border-top: none;">Telephone no. (    )</td> </tr> <tr> <td style="font-size: x-small;">Signature(s)</td> <td></td> </tr> </table>				Contact person (please print or type)	(check appropriate box) <input type="checkbox"/> applicant <input type="checkbox"/> agent		Telephone no. (    )	Signature(s)	
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