

LKC
T
226
.T6
G8
1994
C.2

CIPO
CANADIAN INTELLECTUAL
PROPERTY OFFICE



OPIC
OFFICE DE LA PROPRIÉTÉ
INTELLECTUELLE DU CANADA



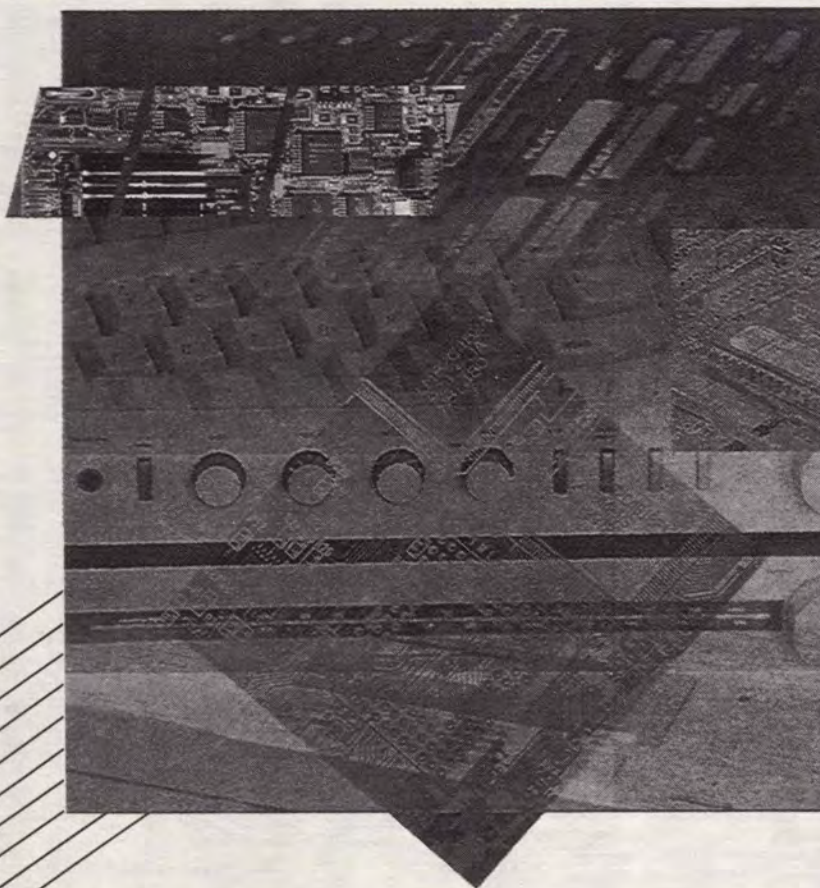
Industry
Canada

Industrie
Canada

Canada

IC

A GUIDE TO INTEGRATED CIRCUIT TOPOGRAPHIES



I N D U S T R Y C A N A D A

1994
1994
1994

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 Rules*, and in decisions of the courts interpreting them.

CANADIAN CATALOGUING IN PUBLICATION DATA

Main entry under title:

A guide to integrated circuit topographies

Issued also in French under title: Le guide des topographies de circuits intégrés

ISBN 0-662-60196-3

Cat. no. C2-225/1994

1. Industrial property — Canada — Handbooks, manuals, etc.
 2. Integrated circuits — Handbooks, manuals, etc.
 3. Electronic circuits — Handbooks, manuals, etc.
- I. Canada, Industry Canada. II. Title: Le guide des topographies de circuits intégrés.

Z565.G84 1994 346.7104'82 C94-980123-2E

Contents of this publication may be reproduced in whole or in part provided the intended use is for non-commercial purposes and full acknowledgement is given to Industry Canada.

© Minister of Supply and Services Canada 1994
IC No. 10974 94-03



This paper contains a minimum of
50% recycled fibres, including
10% post-consumer fibres.

TABLE OF CONTENTS

Introduction

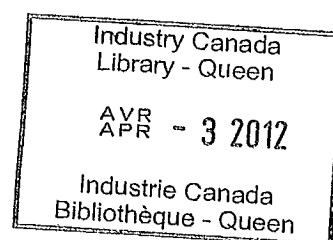
The newest kind of intellectual property	5
Purpose of this guide	5
Canadian Intellectual Property Office	5
Other forms of intellectual property	5

Integrated circuit topographies

Definition and use	6
Canadian protection for Integrated Circuit Topographies	6
Exceptions	7
Remedies	7
Protection for IC Topographies abroad	7
Registration	8
Fees	8
Marking	8
Further information	8

Fee schedule	9
--------------	---

Appendix A - Integrated Circuit Topographies Form	10
---	----



The newest 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 to 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, copyrights, trade-marks and industrial designs.

Other forms of intellectual property

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

- patent protection is for new technologies (process, structure and function);
- copyright protection is for literary, artistic, dramatic or musical works and sound recordings; computer programs have protection as literary works;
- industrial design protection is for the shape, pattern or ornamentation applied to a useful article that is mass-produced;
- trade-mark protection is for a word, a symbol, a design or a combination of these, used to distinguish the goods or services of one person from those of another in the marketplace.

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, 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*.

Canada's IC topography legislation protects the original design of a registered topography, whether it has been embodied in an IC 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 IC 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 IC 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 IC product that embodies a protected topography or a substantial part of one;
- importing or commercially exploiting an industrial article which incorporates an IC 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 IC 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 IC 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 IC products in inventory.

When a court concludes that there has been importation of IC 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 IC Topographies abroad

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

Rights exist for Canadians in the United States, Switzerland, Japan and Australia. At the date of publication of this Guide, reciprocal rights are being negotiated with 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 announces, by a notice in the *Canada Gazette*, the names of countries in which reciprocal rights have been secured.

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; or, if an application for an "exploited" topography is received more than two years after the date of first commercial exploitation anywhere.

To register a topography, you should obtain the appropriate forms from CIPO, put the appropriate information on the forms, including title or titles or topography, date and location of first commercial exploitation, name and address of applicant, and applicant's interest in the topography, and submit the completed forms to the Copyright and Industrial Design Branch of CIPO. In addition, you must submit a complete set of overlay sheets, drawings or photographs of the topography and a description of the nature or function 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 fee schedule is included in this Guide.

Marking

While marking of IC 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

For further information on IC Topography Protection, please contact :

Integrated Circuit Topographies
Office
Canadian Intellectual Property
Office (CIPO)
Industry Canada
50 Victoria Street
Place du Portage I
Hull, Quebec
K1A 0C9
Tel.: (819) 997-1936
Fax : (819) 953-7620

Any correspondence sent to the Integrated Circuit Topographies Office through the priority courier service of Canada Post Corporation will be considered received by the Office on the date stamped on the envelope by the priority courier service.

FEE SCHEDULE

Integrated Circuit Topography – Fee Schedule – Effective May 1, 1993

- 1** Filing an application.....\$200.00
- 2** Amending an application in accordance with a request made pursuant to subsection 20(1) of these regulations75.00
- 3** 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 Act75.00
- 4** Amending an entry in the register or making a new entry therein pursuant to subsection 21(2) of the Act.....75.00
- 5** Amending a certificate or 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.....75.00
- 6** Transmitting material on file to the Federal Court pursuant to section 27 of these Regulations100.00
- 7** Providing a copy of a document, of entries in or extracts from the register, or of any material referred to in section 26 of these Regulations, for each page measuring 21.5 cm x 28 cm (8 1/2 inches x 11 inches) or less.....5.00
- 8** Providing a certified copy of a document referred to in subsection 15(2) of the Act50.00

APPENDIX A - INTEGRATED CIRCUIT TOPOGRAPHIES FORM

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

Applicant

Individuals should first write their surnames followed by a comma, and then their first names. Addresses should include the complete postal address and the street name and number where applicable. Applicants who deal with the office on a regular basis will be given a client number at a later date.

Title

The title (or titles) consisting of words and/or code is essential for identifying the topography. Only alpha-numeric characters as appear 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.

Eligibility

If the topography has not been commercially exploited, registration in Canada may be dependent upon the citizenship or residency of the creator at the time of creation of the topography or at the time of filing of the application. A topography may also be eligible for protection in Canada if the creator, at the time of creation or at the time of filing has, in Canada, a real and effective establishment for the creation of topographies or the manufacture of integrated circuit products.

First commercial exploitation

To exploit commercially means to sell, lease, offer or exhibit for sale or lease, or otherwise distribute for a commercial purpose. 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 IC products deposited (for commercially exploited topographies, at least four IC 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).



Consumer and
Corporate Affairs Canada

Consommation et
Affaires commerciales Canada

CIPO
Canadian Intellectual
Property Office
The Registrar
of Topographies

Hull, Quebec
K1A 0C9

OPIC
Office de la propriété intellectuelle
du Canada
Le Registrare des topographies

Hull (Québec)
K1A 0C9

APPLICATION FOR REGISTRATION OF AN INTEGRATED CIRCUIT TOPOGRAPHY

APPLICANT - Name and address		Client number
		Postal code
TITLE(S)		
NATURE OR FUNCTION OF TOPOGRAPHY		
INTEREST		
<input type="checkbox"/> Creator of topography OR <input type="checkbox"/> Successor in title		
ELIGIBILITY		
At the time of creation of this topography or at the date of filing of the application, the creator:		
<input type="checkbox"/> was a national of Canada or a country recognized by Canada by convention, treaty or notice published in the Canada Gazette or		
<input type="checkbox"/> has an establishment for the creation of topographies or the manufacture of integrated circuit products in Canada or in a country recognized by convention, treaty or notice published in the Canada Gazette or		
<input type="checkbox"/> Neither. Eligibility is based on first commercial exploitation in Canada		
COMMERCIAL EXPLOITATION		
<input type="checkbox"/> the topography has not been commercially exploited OR		
<input type="checkbox"/> the topography was first commercially exploited in _____ (country) on _____ (day month year)		
MATERIAL FILED AND OTHER INFORMATION		
AGENT - Name and address		Client number
		Postal code
REPRESENTATIVE FOR SERVICE - Name and address in Canada		Client number
		Postal code
SIGNATURE		
Check appropriate box <input type="checkbox"/> applicant <input type="checkbox"/> agent		
_____ Signature(s)		
Contact person (please print or type)	Telephone number	

7530-21-636-9357 (03-63) 43