



Legal protection of topographies of semiconductor products

- 1. Object of protection.....	1
- 2. Acquisition of rights and registration.....	1
- 3. Starting point for protection and duration.....	1
- 4. Ownership and exclusive rights.....	2
- 5. The "T" symbol.....	2

Last updated September 2006

1. Object of protection

Semiconductors, also known as "silicon" or "micro" chips, are used to operate electronic equipment. This requires the designing of a topography, i.e. a three dimensional model of the electronic components for electric flows. [Directive 87/54](#) on the "Legal protection of Topographies of Semiconductor products" introduced *sui generis* rights as a novel category of protected subject matter in various IP systems.

In accordance with article 1(1) of Directive 87/54, a semiconductor must feature (in final or intermediate form) a body of material that includes a layer of conducting, semi-conducting or insulating material. The layers shall be arranged according to a predetermined three-dimensional pattern. The chip shall thus be intended to perform an electronic function.

The protected subject matter is the design of that product, not the product itself. Protection is granted for the topographical design, not its technical function or the technological arrangement of components. It follows that protection does not extend to any underlying concept, process, system, technique or encoded information.

Unlike semiconductor chip protection in the United States, protection is also granted for preparatory material such as drawings and layouts.

2. Acquisition of rights and registration

In most European countries, semiconductor chip protection requires registration with the relevant national authority (usually the Patent Office) within two years of its first use in commerce. The registration authority will only register the semiconductor chip. There is no investigation into its protectability. In practice, lack of originality may therefore be raised as a defence. In other countries, like the United Kingdom, registration is not necessary, as topographies are protected by unregistered rights.

3. Starting point for protection and duration

1. In several countries (France, Portugal, Austria, Denmark, Finland, Germany, Spain, Greece, Italy and Luxembourg), the starting point for protection is the first of the following dates:
 - "when the topography is first commercially exploited anywhere in the world";
 - "when an application or registration has been filed in due form"; or
 - "when the topography is first fixed or encoded."
2. In the UK and Sweden, the starting point for protection is the first of the following dates:
 - "when the topography is first commercially exploited anywhere in the world"; or
 - "when the topography is first fixed or encoded."

The duration of the rights is fixed at 10 years by Article 7 (3) of Directive 87/54 starting from the end of the year when protection started.

www.ipr-helpdesk.org
ipr-helpdesk@ua.es

If a topography has not been used anywhere in the world, the duration of protection is 15 years from the date on which it was fixed or was coded for the first time. After this period, the topography is no longer protected, and it is no longer possible to register it.

4. Ownership and exclusive rights

The protected topography is, typically, owned by its creator. However, the more important situation is when the design is created during the course of employment. In such a case, most national laws provide for an implied transfer of exclusivity to the employer.

In the United Kingdom, if the topography was made under such circumstances, the employer will also be first owner, regardless of contractual provisions.

In accordance with Article 5 of Directive 87/54, the creator of a semiconductor enjoys the exclusive rights to:

- reproduce the protected topography, i.e. to permit or prohibit the making of a physical copy and,
- the commercial exploitation or importation for the purpose of reproduction, either of the topography itself or of a semiconductor product manufactured using the protected topography.

For that purpose, a product of the topography is defined as:

- The final or an intermediate form of any product (I) consisting of a body of material which includes a layer of semi-conducting material, and (ii) having one or more other layers composed of conducting, insulating or semi-conducting material, the layers being arranged in accordance with a pre-determined pattern; and (iii) intended to perform, exclusively or together with other functions, an electronic function". (Article 1 of Directive 87/54) The term "commercial exploitation" covers commercial activities that are generally related to generating income, including sale, rental, leasing or any other method of commercial exploitation. An offer to commercially exploit suffices for that purpose.

The right granted is not absolute. In order to maintain interoperability between systems, the decompilation of a topography is permitted if done with the aim of reverse engineering or study (Art. 5.3 of Directive 87/54).

Apart from that, the Directive is limited, in general, to commercial situations, i.e. the right will not be infringed.

The owner may enforce his or her rights against an infringer through civil action, including interlocutory injunctions

When infringement can be proven, the owner generally has a choice between damages or an account of profits. In some EU Member States, the owner may also elect, in lieu of damages, to receive the equivalent of a standard license fee.

Third Parties may be authorised to use a protected topography. The authorisation (licence) must be in writing and must lay down the ways in which these acts will be carried out (markets concerned, etc.).

5. The "T" symbol

The "T" symbol can be affixed to the products containing a protected topography. This symbol is only useful for informing the public that the topography contained in the product is protected.