# The Conference Report on the Semiconductor Chip Protection Act of 1984

EXPLANATORY MEMORANDUM OF THE SENATE
AMENDMENT TO **H.R. 6163, TITLE III,**
AS CONSIDERED BY THE HOUSE OF
REPRESENTATIVES

This memorandum essentially follows the format of the "Explanatory Memorandum of Mathis-Leahy Amendment to S. 1201" introduced during the Senate floor debate on H.R. 6163 (Federal District Court Organization Act) to which the amendment was attached as Title III). See 129 CONGRESSIONAL RECORD S12912 (daily ed. Oct. 3, 1984).

Indeed, since the House and Senate worked together and agreed in advance on the amendment to the semiconductor legislation, this memorandum coupled with the Senate's document represent an informal "conference report".

However, to the extent that the Senate emphasizes changes to its original bill (S.1201), this memorandum counters this emphasis by highlighting changes to the House's original bill (H.R. 5525).

The House-Senate compromise makes thirteen changes to H.R. 5525. Several of these changes are clarifying and technical; these latter modifications are nonetheless discussed in this memorandum in order to present a clear and concise legislative history in the House of Representatives.

## I. DEFINITION OF COMMERCIAL EXPLOITATION: SEC. 901(a)(5)

The amendment to section 901(a)(5) sharpens the definition of "commercially exploit," a concept that is important in determining when protection commences under the Act, and when it expires. In this clarified definition, the amendment substitutes the words "for commercial purposes" for the phrase "for profit." Many non-profit organizations, such as universities, engage in research and development in the semiconductor chip product field. If such an organization distributes a new chip to others for commercial purposes, its not-for-profit status should not place it in a different position than an ordinary commercial business undertaking the same conduct. The ten-year term of protection should commence, and the clock should begin to run on the two-year registration requirement.

Although H.R. 5525 used the phrase "for profit" in a broad sense and would not have barred non-profit organizations from receiving protection for their mask works, this clarifying change improves the legislation.

## II. ORIGINALITY: SECTION 902(b)

The Senate amendment follows the House bill by including, in section 902(b), a provision that makes mask works unprotectable under the Act if they are made up of "designs that are staple, familiar, or commonplace in the semiconductor industry or variations of such designs, combined in a way that, considered as a whole, is not original." The phrase "considered as a whole" is added by the Senate amendment to insure that the subject matter of a mask work must be original, when considered in its totality, even though, if the individual elements of the mask work were removed away from the whole they may appear familiar or commonplace (see H. Rep. 98-781 (Star Print) at 19).

## III. RECORDATION OF OWNERSHIP TRANSFER AND LICENSING: SECTION 903(c)

Although S. 1201 did not have a specific recordation section for ownership, transfer and licensing, a recordation procedure similar to that found in the copyright Act (See *17 U.S.C. § 205)* would have been authorized. H.R. 5525 lacked a recordation section altogether. The Senate amendment, by inserting a recordation provision, entitles mask work owners and other concerned parties to record transfers and licenses relating to mask works in the Copyright Office. Recordation constitutes constructive notice of the transfer or license. In this regard, a security interest under the Uniform Commercial Code or other state law may also be recorded as a transfer.

## IV. DURATION OF PROTECTION: SECTION 904

S.1201 provided mask work protection from the initial fixation of a mask work, such as in a drawing. Section 904(a) of H.R. 5525 began protection for mask works only when they are registered (after fixation of the work in a semiconductor chip product) or upon their first commercial exploitation, whichever occurs first. The Senate amendment basically adopts the House language.

The Senate amendment adds two refinements to section 904. First, the words "anywhere in the world" are added to clarify and carry forward the original intent of that section. Second, a change is made to clarify how long mask work protection continues after its commencement. All terms of mask work protection continue until the end of the calendar year of the tenth year after registration or first commercial exploitation, whichever is first. To accomplish this latter end, a new section 904(c) is added to make this section conform to *17 U.S.C. § 305,* a provision of the Copyright Act previously incorporated by S.1201 by implication.

The Senate amendment therefore results in slightly larger protection of mask works, depending of course on when registration or first commercial exploitation occurred during the calendar year.

## V. REVERSE ENGINEERING: SECTION 906(a)

Although the reverse engineering provisions of S. 1201 and H.R. 5525 were almost identical, the Senate amendment includes a provision (see section 906(a)(2)) to clarify the intent of both chambers that competitors are permitted not only to study protected mask works, but also to use the results of that study to design, distribute and import semiconductor chip products embodying their own original mask works. While this intent appears indisputable from the legislative history in both Houses, it seems prudent to spell in [*sic*] out in the bill itself.

The end product of the reverse engineering process is not an infringement, and itself qualifies for protection under this Act, if it is an original mask work, as contrasted with a substantial copy. If the resulting semiconductor chip product is not substantially identical to the original, and its design involved significant toil and investment so that it is not a mere plagiarism, it does not infringe the original chip, even if the layout of two chips is, in part, similar. As noted in the House Report (p.21), the courts are not likely, as a practical matter, to find it unduly difficult to draw the line between reverse engineering and infringement, because the additional work required to come within the privilege established by section 906(a) will ordinarily leave a "paper trail."

Of course, apart from the foregoing, the Senate amendment, like both bills, incorporates the familiar copyright principle of substantial similarity. Although, as a practical matter, copying of an insubstantial portion of a chip and independent design of the remainder is not likely, copying of a material portion nevertheless constitutes infringement. This concept is particularly important in the semiconductor chip industry, where it may be economical, for example, to copy 75 percent of a mask work from one chip and combine that with 25 percent of another mask work, if the copied parts are transferable modules, such as units from a cell library.

The reverse engineering section, as amended, strikes the appropriate balance between the rights of the creator and the needs of the public. Courts, in reviewing whether a given reproduction qualifies for a reverse engineering exception, will do so on case-by-case basis, as they do for the copyright doctrine of "fair use."

## VI. FIRST SALE: SECTION 906(b)

Section 906(b) of the Senate amendment simply clarifies the intent of H.R. 5525 as relates to application of the first sale doctrine to mask works. It is made clear that a customer is free to use a semiconductor chip product unit as he chooses, after becoming its owner by buying it from the mask work owner or its licensee. However, the customer's permissible use does not include reproducing the semiconductor chip product (except in the course of reverse engineering, which is separately governed under section 906(a)).

## VII. REGISTRATION OF CLAIMS OF PROTECTION: SECTION 908

In general, the Senate amendment follows the pattern of H.R. 5525, which in turn largely replicates the corresponding provisions of the Copyright Act.

Some technical changes were necessary, however, to clarify the intent of the House Bill. The Senate amendment therefore revises section 908(a) to set forth a procedure pursuant to which mask work owners file applications for registration under the Act. Also, section 908(c) is modified to require applicants to pay a fee, and to submit identifying

materials prescribed by the Copyright Office. Applicants should not, of course, be required to deposit material that would disclose trade secrets or would facilitate domestic or foreign chip piracy; it is anticipated that the Copyright Office's implementing regulations should reflect this principle to the greatest extent possible, while keeping in mind the necessity of benefitting the public by keeping a public record.

Further, section 908(g) permits applicants to go immediately to court in emergency situations, when the Register of Copyright refuses or fails to issue a certificate of registration within a specific time frame. Failure to issue a certificate after four months (as opposed to three months as was provided in H.R. 5525) shall be deemed a refusal to issue for purposes of being able to bring a civil cause of action. Also, the Senate amendment authorizes a reviewing district court, upon a showing of good cause, to shorten such four-month period.

## VIII. NOTICE: SECTION 909

H.R. 5525 created a new, M-in-a-circle symbol for its nonmandatory or discretionary notice, and also allowed use of the words "Mask Work." Since printers do not usually carry M-in-a-circle symbols in stock, and most typewriters and word processing equipment also lack them, the Senate amendment provides an alternative abbreviation: "*M*". The Senate amendment also eliminates the notice requirement found in H.R. 5525 for the year in which the mask work was first fixed in a semiconductor chip product.

## IX. COMMERCE: SECTION 910(a)

In order to avoid any constitutional questions on the issue of whether, as both Houses found, mask works can be protected as "writings" within the meaning of the Constitution's intellectual property clause, section 910(a) of the Senate amendment includes a commerce limitation, so that it reaches only conduct in or affecting commerce.

This modification, found to be unnecessary in the House (see H. Rep. 98-781 at 16, n.36), limits somewhat the scope of the bill.

## X. ENFORCEMENT OF EXCLUSIVE RIGHTS AND CIVIL ACTIONS: SECTION 910 AND 911

Clarifying changes to the House bill are also made in other parts of section 910. In section 910(b), a clause is added to make it clear that a timely registrant may sue for pre-registration damages (as well as for post-registration damages) so long as they occur as a result of conduct during the ten-year term. Additional clarification of section 910(b) permits the exclusive licensee of all rights in a mask work to sue, as an owner may. A change in section 910(c) permits the Customs Service to exclude not only infringing copies but also products used for purposes of contributory infringement in violation of the rights of mask owners.

The Senate amendment authorizes Federal district courts to issue impounding orders against infringing chip products. S. 1201 authorized exercise of this judicial remedial power based on the Copyright Act, but H.R. 5525 omitted it. Like temporary restraining orders and preliminary injunctions, impounding orders are a useful and important remedy, if not abused. To prevent such abuse, the Senate amendment provides that applications for impounding orders should be heard, where practicable, in the same manner as applications for temporary restraining orders and preliminary injunctions: that is, not ex parte, and with customary procedural safeguards.

## XI. RELATION TO OTHER LAWS: SECTION 912

The relationship of the Semiconductor Chip Protection Act to other laws is made somewhat complicated by the uncertainty of the application of those laws to mask works--the very predicament that motivated this legislation in the first place.

Enactment of this bill will provide an explicit Federal remedy for misappropriation and unauthorized copying of mask works. Within the carefully defined ambit of the reach of this legislation, the remedy it provides is intended to be exclusive. However, four factors limit the effect of this principle.

First, as expressed in section 912(e), nothing in the bill affects rights in mask works first commercially exploited prior to July 1, 1983. The rights that remain untouched by this bill include claims arising under the Copyright Act. As is evident in the legislative history, the availability of copyright protection for mask works was "sufficiently doubtful" to

discourage investment and innovation; but this amendment should clarify that Congress does not find that such protection is available. The decision not to provide relief under this Act for future misappropriations of mask works that come to market before July 1, 1983 should not be misinterpreted as a conclusion that no such protection ought to be accorded.

With respect to state law, the same principles apply. The states are permitted to regulate these older chips as they see fit, so long as the state enactment does not directly conflict with some other Federal law. Of course, since state contract law is not affected by this Act, existing license agreements with respect to pre-July 1, 1983 mask works may still be enforced. Nor are future enactments, or future decisions of state or Federal courts barred from this field. As to chips first commercially exploited prior to July 1, 1983, this legislation simply has no preemptive effect.

Second, with respect to mask works first commercially exploited after July 1, 1983, the preemption of "equivalent" state law remedies is ineffective until January 1, 1986. This provision of the Senate amendment, section 912(c), conforms with the House bill.

The third limiting principle is that state law remedies which are not "equivalent" are not preempted, even after January 1, 1986, unless they directly conflict with the Federal act. As the House Report recognized (at page 29), "state trade secret law is a necessary adjunct to this Act, and provides a needed protection during a time period when this law provides none," referring to the period prior to commercial exploitation or registration.

Finally, enactment of the bill has no preemptive or superseding effect upon other, more general legislation which may affect the semiconductor industry, e.g., unfair trade practice laws or patent laws.

Subject to these limiting principles, the Act is intended to provide an exclusive remedy. Congress does not intend to provide protection which is (as to post-July 1, 1983 chips) cumulative to the protections that may be claimed under the Copyright Act; as to these chips, the Act will replace copyright protection. Similarly, the privileges created by this Act, such as the reverse engineering right, may not be restricted by reference to the narrower privileges that obtain under copyright, such as fair use. The legislative history of this bill includes repeated assurances that mask work protection in no way erodes copyright protection for subject matter such as computer programs or data bases, even if that subject matter is embodied in a semiconductor chip. The converse is also true; assertions of copyright in mask works masquerading as copyright subject matter should not be permitted to detract from the integrity and exclusivity of the protection scheme created by this Act.

In short, the failure of this Act to provide mask work infringement remedies against the piracy of pre-July 1, 1983 semiconductor chip products should not be interpreted as a legislative declaration condoning such unfair competition or stating a Federal policy against state or Federal law enforcement activity to prohibit or remedy such piracy. To the contrary, absent declarations to the contrary, Congress generally takes the view that works produced prior to a legislative act should not be stripped of existing protection that they have under pre-existing law. When Congress intervenes in an area of new technology, it should not weaken any existing rights unless it is necessary to replace them with other rights and remedies with which the prior rights would interfere. That is not the case here for pre-July 1, 1983 semiconductor chip products. The decision to leave chips commercially exploited prior to July 1, 1983, simply reflects a decision to leave them subject to the more general laws that would remain in effect absent this legislation. In other words, pre-July 1, 1983 chips are left no better or worse off by this legislation.

## XII. TRANSITIONAL PROVISIONS: SECTION 913

The Senate amendment follows the confines of H.R. 5525 with some changes and clarifications.

The amendment makes the Semiconductor Chip Protection Act fully effective upon enactment, as opposed to January 1, 1985, as is provided in H.R. 5525. However, section 913(a) holds the registration and enforcement mechanisms in abeyance for sixty days to allow adequate time for the Copyright Office to prepare to receive applications for registration. The Copyright Office, not only during its preparation period, but also thereafter, will keep the House and Senate Judiciary Committees apprised of its problems and experiences with the Act.

Section 913(b) clarifies that the bill has no retroactive effect. No act of chip piracy that occurred prior to the date of enactment is an actionable infringement under the Act. The disposition of semiconductor chip products that result from such pre-enactment unauthorized copying is governed by section 913(d).

Subsection (d) deals with protection of mask works first commercially exploited between July 1, 1983 and the date of enactment. Unauthorized copies of chips embodying these mask works may be imported or distributed, subject to a compulsory license that includes two important conditions, both found in H.R. 5525. First, the importation and distribution privilege applies only to semiconductor chip product units that were in existence on the date of enactment. In other words, existing inventory may be disposed of, but further manufacture must cease upon enactment. Second, the importer or distributor must agree to pay a reasonable royalty to the mask work owner. If he does not agree, of if he fails to make such payments, the importer or distributor forfeits the compulsory license privilege, and the mask work owner may make use of the remedies provided for post-enactment mask works, including injunctions and exclusion orders.

The owner of a mask work first commercially exploited after July 1, 1983 but before enactment may obtain protection (subject to the compulsory license just described) by registering the mask work with the Copyright Office before July 1, 1985. The license terminates two years after such registration. Thus, by July 1, 1987, all privileges will have expired, and the pre-enactment mask work will be treated identically to one first commercially exploited after enactment. The two-year period provides ample time to dispose of inventory of unauthorized copies of chips, and removes from litigation within a reasonable time the potentially contentious factual issue of when a particular semiconductor chip product unit was manufactured.

In short, section 913 remains essentially as found in H.R. 5525. The major change is a six-month recession to the Senate--from January 1, 1984 back to July 1, 1983--relating to the time period of first commercial exploitation in order to qualify for protection under this Act.

## XIII. INTERNATIONAL TRANSITION: SECTION 914

H.R. 5525 denies protection to foreign owners of mask works unless the works were first commercially exploited in the United States. While it was contemplated that foreign countries would eventually obtain full protection by concluding treaties or enacting chip protection legislation, no protection was available in the interim other than by transferring rights to a U.S. national or domiciliary before first commercial exploitation. In order to encourage such steps toward a regime of international comity in mask work protection, the Senate amendment includes important international transitional provisions, contained in Section 914.

Section 914(a) provides that the Secretary of Commerce may extend the privilege of interim protection under the Semiconductor Chip Act to nationals of foreign nations under certain conditions. These are: (1) that the foreign nation in question is making progress (either by treaty negotiation or legislative enactment) toward a regime of mask work protection generally similar to that under the Act; (2) that its nationals and persons controlled by them (such as subsidiaries or affiliated companies) are not engaging and have not in the recent past engaged in chip piracy or the sale of products containing infringing semiconduct [*sic*] components; and (3) that entry of the Secretary's order would promote the purposes of the Act and of achieving international comity toward mask work protection.

The Secretary is particularly well situated to make these determinations because of the Department's broad ranging intellectual property, trade, and foreign relations responsibilities. The Assistant Secretary of Commerce and Commissioner of Patents and Trademarks is in a position to evaluate the legal adequacy of proposed foreign legislation and, as well, can advise the Secretary on the international intellectual property law aspects of foreign chip protection. The International Trade Administration with its worldwide network of Foreign Commercial Service Officers in the United States Embassies is in a position to provide input on commercial activities in foreign countries where they may be concerned with actual or potential misappropriation of United States semiconductor chip products. The Secretary thus will have the benefit of balanced consideration of legal and trade issues to draw upon in making the determination to extend, deny, or withdraw the interim protection provided under section 914.

In making determination of good faith efforts and progress (section 914(a)(1)), the Secretary should take into account the attitudes and efforts of the foreign nation's private sector, as well as its government. If the private sector encourages and supports action toward chip protection, that progress is much more likely to continue. See, e.g., letters dated July 18, 1984, to Hon. ROBERT W. KASTENMEIER and CHARLES McC. MATHIAS, Jr., from Akio Morita (President, Electronic Industries Association of Japan.) With respect to the participation of foreign nationals and those controlled by them in chip piracy, the Secretary should consider whether any chip designs, not simply those provided full protection under the Act, are subjected to misappropriation. The degree to which a foreign concern that distributes products containing misappropriated chips knows or should have known that it is selling infringing chips is a relevant factor in making a finding under section 914(a)(2). Finally, under section 914(a)(3), the Secretary should bear in mind the role that issuance of the order itself may have in promoting the purposes of this chapter and international comity.

The Secretary's order is to be made in an informal rule-making proceeding, reviewable in an appropriate district court under the Administrative Procedures Act for abuse of discretion or want of substantial evidence. If the privilege of interim protection is abused, or if the conditions that led to its issuance appear to the Secretary no longer to exist, the Secretary may rescind the order in a further informal rule-making proceeding (or simply allow it to expire). Proceedings may be initiated by the Secretary upon his own motion or at the request of a foreign nation, or other interested party. The Secretary may begin any such proceeding and may issue an appropriate order at any time after the enactment of this Act. In the case of those countries already having a system allowing mask work protection, or having substantial semiconductor industries (such as Japan), expedited action may be particularly appropriate to encourage and facilitate efforts to establish international comity. Also, the Secretary has discretion to make his order effective as of the date he receives a request to initiate a proceeding under section 914.

The Secretary may set the expiration date of the order. A short-term order may be appropriate where progress is not substantial enough to justify a longer order. As a consequence, a foreign nation might be unable actually to introduce any proposed law for the protection of semiconductor chip products, because its parliament is out of session. Yet, it might be able to announce its intention to propose such a law, and then appoint a study group to draft appropriate legislation that would be consistent with stated general principles. In such circumstance, it would be appropriate that the Secretary enter a short-term order, and subsequently re-evaluate the situation. If reasonable progress was being made, the Secretary would then issue a further order for an additional appropriate period.

The interim protection would permit citizens of the relevant foreign nation to apply for mask work registration under section 908, to sue for infringement of mask work rights under section 910(b), and to secure legal and equitable remedies under section 911, as United States citizens may, during the ten-year terms of their mask work registrations. If a Secretarial order were rescinded, the effect would be to withdraw the privilege of further registrations, but not the ten-year period of rights under those registrations previously issued. It would be unfair to punish those foreign nationals and domiciliaries who choose to participate in this legislative scheme for the actions of others, outside their control.

The Secretary's power under this section is limited to three years, and all orders issued will expire at that time. In close consultation with the Register of Copyrights (whose office, of course, will have principal administrative responsibility for the Act but who also is extremely well-qualified in the area of international intellectual property law), the Secretary is to report to the Congress one year before the expiration of his authority, as to the progress being made toward international comity in mask work protection, and as to the further steps, if any, that are believed appropriate. The Secretary's report undoubtedly will become the subject of a hearing before the House and Senate Judiciary Committees.

Of course, aside from the interim order procedure created by section 914, it remains possible for a foreign concern to obtain mask work protection in the United States by transferring all rights under the Act to a U.S. national or domiciliary before the mask work is commercially exploited, or by commercially exploiting the mask work first in the United States. This was the scheme originally envisioned by H.R. 5525 and this option is unchanged by the Senate amendment. As noted above, a transferee of all rights (under this Act) in the mask work is an "owner," and the nationality of ownership on the date of registration of first commercial exploitation (whichever occurs first) governs eligibility for protection under section 902(a)(1)(A). As a consequence, if a foreign subsidiary of a U.S. company owns a mask work that has not been commercially exploited, it may transfer all rights under this act to its U.S. parent. The parent would then be entitled to obtain protection under this Act by registering the mask work or commercially exploiting it. By the same token, a U.S. subsidiary of a foreign company would be entitled to claim protection under the bill for a mask work created by its foreign parent by securing a transfer of all rights under this act from the parent prior to first commercial exploitation. Finally, both under the original terms of H.R. 5525 and the Senate amendment (see section 902(a)(1)(B)), a mask work that is first commercially exploited in the United States is eligible for protection, regardless of the nationality of its owner.

FOOTNOTES:

[n1] Footnote *. This Explanatory Memorandum emanating from the House of Representatives was issued after the House-Senate compromise, and is, in effect, a conference report of both houses. See also the slightly different version of this report emanating from the Senate in 130 Congress. Rec. § 12916 through § 12919 (daily ed. October 3, 1984).