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SENATE

BILL	DATE	PAGE(S)
S. 3117	Dec. 18, 1982 Part II	S15488-89

Action: Introduced by Mr. Mathias

By Mr. MATHIAS:

S. 3117. A bill to amend title 17 of the United States Code to protect semiconductor chips and masks against unauthorized duplication, and for other purposes; to the Committee on the Judiciary.

SEMICONDUCTOR CHIP PROTECTION ACT OF 1982

● Mr. MATHIAS. Mr. President, today I introduce a bill to extend the copyright laws to protect semiconductor chip designs. A semiconductor chip is a system of transistors etched onto the face of a small silicon wafer, typically no larger than a quarter of an inch square. Chips touch our lives in many ways. They make possible all of our modern gadgets—microwave ovens TV sets, refrigerators, high-fi stereo equipment, computers, and automobile engine controls. High technology firms spend many years and large sums of money developing new layout designs for the chips, in order to concentrate the maximum electronic versatility into the smallest possible space.

The men and women who spend weeks and months designing these chips, and their companies, have suffered seriously from chip piracy, where a parasite firm buys a chip on the open market, takes it apart to learn its design, then duplicates it and undersells the originating company, which has to recoup all its research and development costs.

The technology of chip manufacturing prevents the design from being hidden from competitors as a trade secret. A patent can protect the electronic circuitry used in the chip, but not the design of the chip. My bill would protect the research and development investment of the engineers and the companies that produce the new chip designs. It does so by giving them copyright protection for a period of 10 years. In order to protect unwitting purchasers of pirated chips, the bill includes a compulsory license provision allowing them to continue using the infringing chip by paying a royalty to the copyright owner.

During the 97th Congress, I have often addressed this body on the need to modify our intellectual property laws to keep pace with the miracles of space age communications. Semiconductor chips are a prime example of a technological marvel, critical to our progress in many fields, that faces a serious threat from the inadequate protection of the current law against what amounts to theft. The ingenuity of an age that has produced such remarkable tools should be able to devise the laws to protect them.

I ask unanimous consent that the text of the bill appear in the RECORD at the conclusion of my remarks.

There being no objection, the bill was ordered to be printed in the RECORD, as follows:

S. 3117

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Semiconductor Chip Protection Act of 1982."

DEFINITIONS

SEC. 2. Section 101 of Title 17 of the United States Code is amended by adding at the end thereof the following:

"A 'semiconductor chip product' is the final or intermediate form of a product—

"(1) having two or more layers of metallic, insulating, or semiconductor material, deposited on or etched away from a piece of semiconductor material in accordance with a predetermined pattern;

"(2) intended to perform electronic circuitry functions; and

"(3) that is a writing or a discovery, or the manufacture, use, or distribution of which is in or affects commerce.

"A 'mask work' is a series of related images—

"(1) having the predetermined, three-dimensional pattern of metallic, insulating, or semiconductor material present or removed from the layers of a semiconductor chip product; and

"(2) in which series the relation of the images to one another is that each image has the pattern of the surface of one form of the semiconductor chip product.

"A 'mask' is a substantially two-dimensional partially transparent and partially opaque sheet. A mask embodies a mask work if the pattern of transparent and opaque portions of the mask is substantially similar to the pattern of one of the images of the mask work. Masks and mask works shall not be deemed pictorial, graphic, or sculptural works.

"As used in sections 109(a), 401, 405, 406, 501(a), 503, 506 509, and 602 of this title,

'copy' includes a semiconductor chip product that is subject to the exclusive rights described in section 106."

SUBJECT MATTER OF COPYRIGHT

SEC. 3. Section 102(a) of title 17 of the United States Code is amended—

(1) by adding after paragraph (5) the following:

"(6) mask works;"; and

(2) by redesignating paragraphs (6) and (7) as paragraphs (7) and (8), respectively

EXCLUSIVE RIGHTS

SEC. 4. Section 106 of title 17 of the United States Code is amended—

(1) by striking out "and" at the end of paragraph (4);

(2) by striking out the period at the end of paragraph (5) and inserting "; and" in lieu thereof; and

(3) adding at the end thereof the following:

"(6) in the case of mask works—

"(A) to embody the mask work in a mask;

"(B) to distribute a mask embodying the mask work;

"(C) to use a mask embodying the mask work to make a semiconductor chip product;

"(D) in the manufacture of a semiconductor chip product, substantially to reproduce, by optical, electronic, or other means, images of the mask work on material intended to be part of the semiconductor chip product; and

"(E) to distribute or use a semiconductor chip product made as described in subclause (C) or (D) of clause (6) of this section.".

LIMITATION ON EXCLUSIVE RIGHTS AS TO MASKS

SEC. 5. (a) Chapter 1 of title 17 of the United States Code is amended by adding at the end the following:

"SEC. 119. SCOPE OF EXCLUSIVE RIGHTS: COMPULSORY LICENSING WITH RESPECT TO MASK WORKS.

"(a) In the case of mask works, the exclusive rights provided by section 106 are subject to compulsory licensing under the conditions specified by this section.

"(b) The owner of a copyright on a mask work shall be required to grant a compulsory license under the copyright, to any applicant therefor, on the following terms and conditions, and in the following circumstances:

"(1) The applicant has purchased semiconductor chip products made or distributed in violation of the owner's exclusive rights under section 106.

"(2) When the applicant first purchased such semiconductor chip product (hereinafter in this section referred to as the 'infringing product'), the applicant did not have actual knowledge that or reasonable grounds to believe that the infringing product was an infringing product (hereinafter in this section referred to as 'having notice of infringement').

"(3) The applicant, before having notice of infringement, committed substantial funds to the use of the infringing product; the applicant would suffer substantial out-of-pocket losses (other than the difference in price between the infringing product and a noninfringing product) if denied the use of the infringing product; and it would be inequitable in the circumstances not to permit the applicant to continue the use or proposed use of the infringing product.

"(4) The applicant offers, subject to the applicant's rights, if any, under section 501(e) of this title, to pay the copyright owner a reasonable royalty for infringing products.

"(5) The royalty shall be for each unit of the infringing product distributed or used by the applicant after having notice of infringement.

"(6) The license shall be one to make, have made (but only if the copyright owner and the owner's licensees, if any, are unable to supply the applicant at a reasonable price), use, and distribute the infringing product, for substantially the same purposes that gave rise to the applicant's right to a compulsory license, throughout the United States, for the life of the copyright, revocable only for failure to make timely payment of royalties.".

(b) The sectional analysis at the beginning of chapter 1 of title 17 is amended by adding the following:

"119. Scope of exclusive rights: Compulsory licensing with respect to mask works.".

DURATION OF COPYRIGHT

SEC. 6. Section 302 of title 17 of the United States Code is hereby amended by adding at the end thereof the following:

"(f) MASKS.—Copyright in mask works endures for a term of ten years from the first authorized—

(1) distribution;

(2) use in a commercial product; or

(3) manufacture in commercial quantities of semiconductor chip products made as described in subclause (C) or (D) of clause 6 of section 106 of this title.".

INNOCENT INFRINGEMENT

SEC. 7. Section 501 of title 17 of the United States Code is amended by adding at the end thereof the following:

"(e) Notwithstanding the other provisions of this chapter, a purchaser of a semiconductor chip product who purchased it in good faith, without having notice of infringement (as that term is used in section 119 of this title), shall not be liable as an infringer or otherwise be liable or subject to remedies under this chapter with respect to the use or distribution of units of such semiconductor chip product that occurred before such purchaser had notice of infringement."

IMPOUNDING AND SEIZURE

SEC. 8. Sections 503(a), 503(b), and 509(a) of title 17 of the United States Code are each amended by inserting "masks," after "film negatives," each place it appears.

EFFECTIVE DATE

SEC. 9. The amendments made by this Act shall take effect 90 days after the date of enactment of this Act, but shall not apply to—

(1) semiconductor chip products manufactured in the United States or imported into the United States before the effective date;

(2) masks made in the United States or imported into the United States before the effective date;

(3) semiconductor chip products manufactured in the United States by means of masks described in paragraph (2) of this section.●