Calendar No. 833

98TH CONGRESS
2D SESSION

S. 1201

[Report No. 98–425]

To amend title 17 of the United States Code to protect semiconductor chips and masks against unauthorized duplication, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MAY 4 (legislative day, MAY 2), 1983

Mr. MATHIAS (for himself, Mr. HART, Mr. BINGAMAN, Mr. WILSON, Mr. HATCH, Mr. LAXALT, Mr. DENTON, Mr. KENNEDY, Mr. CRANSTON, Mr. TSONGAS, Mr. LEAHY, Mr. DOMENICI, Mr. EAST, Mr. PERCY, Mr. DIXON, Mr. TOWER, Mr. ARMSTRONG, Mr. CHILES, Mr. BYRD, Mr. HATFIELD, and Mr. LAUTENBERG) introduced the following bill; which was read twice and referred to the Committee on the Judiciary

MAY 2 (legislative day, APRIL 30), 1984

Reported by Mr. THURMOND, with an amendment

[Omit the part struck through and insert the material printed in italic]

A BILL

To amend title 17 of the United States Code to protect semiconductor chips and masks against unauthorized duplication, and for other purposes.

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 1983".

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. The copyright in a mask or mask work shall not extend to any other work of authorship embodied therein.

"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 subparagraph (C) or (D) of this paragraph.".

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:

"§ 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, subject to all of the following terms and conditions, and all of the following circumstances:

"(1) The applicant has purchased a semiconductor chip product 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 circum-

stances 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(c) 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 and 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 payments of royalties.".

(b) The chapter analysis for chapter 1 of title 17 is amended by adding at the end thereof the following:

"110. 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 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 subparagraph (C) or (D) of paragraph (6) of section 106.".

INNOCENT INFRINGEMENT

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

"(c) Notwithstanding any other provision 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 ninety 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; or~~

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

That this Act may be cited as the "Semiconductor Chip Protection Act of 1984".

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 or otherwise placed on, or etched away or otherwise removed 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 the manufacture, use, or distribution of which is in or affects commerce.

"A 'mask work' is a series of related images, however fixed or encoded—

"(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 sheet, partially transparent and partially opaque to preselected radiation. 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. The copyright in a mask work shall neither extend to, nor affect, limit, or impair any copyright in any other work of authorship embodied therein or in a semiconductor chip product.

The provisions of sections 109(a), 401, 405, 406, 501(A), 503, 506, 509, and 602 of this title, applicable to copies of a work shall apply also to semiconductor chip products.".

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, only the following rights—

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

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

"(C) to embody an image of the mask work in a semiconductor chip product;

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

"(E) to distribute a semiconductor chip product made as described in subparagraph (C) or (D) of this paragraph.".

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:

"§ 119. Scope of exclusive rights: Right of reverse engineering with respect to mask works

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

"(b) It is not infringement of the rights of the owner of a copyright on a mask work to reproduce the pattern on one or more masks or in a semiconductor chip product solely for the purpose of teaching, analyzing, or evaluating the concepts or techniques embodied in the mask or semiconductor chip product, or the circuit schematic, logic flow, or organization of components utilized therein.".

(b) The chapter analysis for chapter 1 of title 17 is amended by adding at the end thereof the following:

"119. Scope of exclusive rights: Right of reverse engineering with respect to mask works.".

(c) Section 106 of title 17 of the United States Code is amended by striking out "118" and inserting in lieu thereof "119".

DURATION OF COPYRIGHT

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

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

"(1) distribution;

"(2) use in a commercial product; or

"(3) manufacture in commercial quantities of semiconductor chip products made as described in subparagraph (C) or (D) of paragraph (6) of section 106.".

INNOCENT INFRINGEMENT

SEC. 7. (a) Chapter 5 of title 17 of the United States Code is amended by adding at the end thereof the following:

"§ 511. Innocent infringement of mask works

"(a) Notwithstanding any other provision of this chapter, an innocent purchaser of an infringing semiconductor chip product shall not be liable as an infringer or otherwise be liable or subject to remedies under this chapter with respect to the distribution of units of such semiconductor chip product that occurred before such innocent purchaser had notice of infringement.

"(b) The remedies of the owner of a copyright on a mask work against an innocent purchaser shall be limited to a reasonable royalty upon each unit of the infringing semiconductor chip product that the innocent purchaser made or distributed after having notice of infringement, if the innocent purchaser establishes the applicability of all of the following circumstances:

"(1) the innocent purchaser, before first having notice of infringement, committed substantial funds to the use of the infringing product;

"(2) the innocent purchaser 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;

"(3) the innocent purchaser's use of the infringing product is and will be for substantially the same purpose that initially gave rise to the innocent purchaser's immunity under subsection (a);

"(4) in the case of an innocent purchaser who, after having notice of infringement, makes the infringing semiconductor chip product, or has it made for him, the copyright owner and the owner's licensees, if any, are unable to supply the infringing semiconductor chip product to the innocent purchaser at a reasonable price; and

"(5) it would be inequitable in the circumstances not to permit the innocent purchaser to continue the use or proposed use of the infringing product.

"(c) The immunity of an innocent purchaser and limitation of remedies with respect thereto shall extend to good faith purchasers from him.

"(d) For the purposes of this section—

"(1) 'innocent purchaser' means one who purchases an infringing semiconductor chip product in good faith, and without having notice of infringement;

"(2) 'notice of infringement' means actual knowledge that, or reasonable grounds to believe that, a product is an infringing semiconductor chip product; and

"(3) 'infringing semiconductor chip product' means a semiconductor chip product which is made or distributed in violation of the exclusive rights of an owner of a copyright in a mask work.".

(b) The table of sections for chapter 5 is amended by adding at the end thereof the following new item:

"511. Innocent infringement of mask works.".

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.

SAVINGS CLAUSES

SEC. 9. Nothing contained in this Act shall be deemed to add to or detract from existing rights of owners of copyrights in works of authorship listed in section 102(a) of title 17 of the United States Code, prior to its amendment by this Act. Nothing contained in this Act shall be deemed to detract from any right of the lawful owner of product purchased from the copyright owner, or from a person authorized by the copyright owner, freely to use, distribute and resell the product without liability therefor under the copyright laws.

EFFECTIVE DATE

SEC. 10. The amendments made by this Act shall not create liability for any conduct that occurred prior to the date of enactment of this Act, but shall apply to all acts of manufacture or distribution of semiconductor chip products that occur in the United States after such date, to all acts of importation of semiconductor chip products into the United States that occur after such date, and to all violations of the exclusive rights of the copyrights owner under section 106(6) of title 17, United States Code, as amended by section 4 of this Act, that occur after such date. Notwithstanding the provisions of this section, no alleged infringer shall be liable under this Act with respect to the continued manufacture or distribution of any semiconductor chip product that the al-

leged infringer commercially distributed in the United States prior to January 1, 1980.

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