

ANALOG CONTENT SECURITY PRESERVATION ACT OF 2005

109TH CONGRESS
1ST SESSION

To amend title 35, United States Code, to require certain analog conversion devices to preserve digital content security measures.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

TITLE I

Section 101. No person shall

(a) manufacture, import, offer to the public, provide or otherwise traffic in any –

(1) analog video input device that converts into digital form an analog video signal that is received in a covered format, or an analog video signal in a covered format that is read from a recording on an inserted storage medium, unless any portions of such device that are designed to access, record or pass the content of the analog video signal within that device: (i) detect and respond to the rights signaling system with respect to a particular work by conforming the copying and redistributing of such work to the information contained in the rights signaling system for such work in accordance with the compliance rules set forth in section 201 and the robustness rules referred to in section 202; and (ii) pass through or properly reinsert and update the CGMS-A portion of the rights signaling system or coding and data pertaining to CGMS-A and pass through the VEIL portion of the rights signaling system in conformance with such compliance rules and robustness rules; or

(2) analog video input device that does not convert into digital form an analog video signal that is received by such device in a covered format, or an analog video signal in a covered format that is read from a recording on an inserted storage medium, unless such device: (i) preserves, passes through or properly reinserts the CGMS-A portion of the rights signaling system or coding and data pertaining to CGMS-A and passes through the VEIL portion of the rights signaling system in conformance with the compliance rules set forth in section 201 and the robustness rules referred to in section 202, and (ii) outputs the analog video signal in a covered format.

(b) manufacture, import, offer to the public, provide or otherwise traffic in any technology, product, service, device, component, or part thereof, that—

(1) is primarily designed or produced for the purpose of modifying or causing an analog video input device to no longer conform to the requirements set forth in subsection (a);

(2) has only limited commercially significant purpose or use other than to modify or cause an analog video input device to no longer conform to the requirements set forth in subsection (a); or

(3) is marketed by that person or another acting in concert with that person with that person's knowledge for use in modifying or causing an analog video input device to no longer conform to the requirements set forth in subsection (a).

Section 102. Exceptions.

Section 101 shall not apply to a particular¹ product or device that:

(a) was legally manufactured and sold as new prior to the effective date of this title and is subsequently offered for sale or otherwise trafficked in, provided that such product or device has not been modified, subsequent to the effective date, so that a product that was previously in compliance with Section 101 is configured in a manner such that the modified product or device is no longer in compliance with that section;

(b) was legally manufactured and sold as new in compliance with Section 101 at the time of such sale and is subsequently modified, upgraded, or refurbished and offered for sale or otherwise trafficked in, provided that such product or device has not been modified or configured in a manner such that the product is no longer in compliance with that section; or

(c) is a device capable solely of displaying programs and such device cannot be upgraded or readily modified so as to incorporate transmission, redistribution or recording capabilities.

Section 103. Encoding Rules.

No person shall encode a program, or cause a program to be encoded, using the rights signaling system unless such encoding conforms to the following requirements:

(a) The rights signaling system may be encoded so as to prevent or limit copying, redistribution, or both, of prerecorded media, video on demand, pay-per-view, subscription-on-demand, and undefined business models that are comparable to any of the foregoing;

(b) The rights signaling system may not be encoded so as to prevent first generation of copies as are permitted under Title II of pay television transmissions, non-premium subscription television, free conditional access delivery, and undefined business models that are comparable to any of the foregoing, but the rights signaling system may be encoded so as to prevent or limit further copying of any of the foregoing (including comparable undefined business models) redistribution of any of the foregoing, or both;

¹ This is to clarify that the exception pertains to specific individual devices and not on a "model or version" basis.

- (c) The rights signaling system may not be encoded so as to numerically limit copying as permitted under Title II of a non-conditional access broadcast transmission and undefined business models that are comparable to a non-conditional access broadcast transmission, but the rights signaling system may be encoded so as to prevent redistribution of any of the foregoing; and
- (d) The VEIL portion of the rights signaling system may only be encoded in program formats described in subsection (a) until 12 months following the effective date as established in Section 106; thereafter the VEIL portion of the rights signaling system may be encoded in any and all program formats, provided, however, that under all circumstances if a person encodes a program or causes a program to be encoded with the VEIL portion of the rights signaling system, then that person shall also encode the program or cause the program to be encoded with the CGMS-A portion of the rights signaling system.

Section 104.

Whenever requested by an owner or authorized licensee of a live event or copyrighted audiovisual work to transmit the rights signaling system for a transmission of such live event or copyrighted audiovisual work, any person making a transmission of such live event or copyrighted audiovisual work shall include in its transmission the rights signaling system and shall not deactivate or alter without authorization the rights signaling system, provided that the rights signaling system is requested and applied in compliance with the encoding restrictions set forth in Section 103.

Section 105. Definitions.

For purposes of this title:

- (a) “analog video input device” means a hardware device of a type distributed to individuals for use by individuals, and any firmware or software provided with, and specific to the operation of, that device, whether or not included with or as part of some other device, and any software or firmware that may be configured with or added to another device that is designed (i) to receive an analog video signal in a covered format or to read an analog signal in a covered format from a recording on an inserted storage medium, and (ii) to record or digitize such signal, or to alter such signal in a way that affects the state or passage of the rights signaling system if present in such signal. Analog video input device shall not include a professional device as defined below.
- (b) “commercial advertising messages” shall mean, with respect to any service, program, or schedule or group of programs, commercial advertising messages other than (i) advertising relating to such service itself or the programming contained therein, or (ii) any advertising which is displayed concurrently with the display of any part of such program(s), including but not limited to “bugs,” “frames” and “banners.”

- (c) “comparable” means, when used in connection with a defined business model and an undefined business model, that such undefined business model approximates such defined business model more closely than it approximates any other defined business model;
- (d) “compliance rules” means the rules provided for in section 201;
- (e) “conditional access delivery” means any delivery, whether analog or digital, of a service, program, or schedule or group of programs via any commercially-adopted access control method, including digitally-controlled analog scrambling systems, whether now or hereafter in commercial use, but conditional access delivery does not include any service, program, or schedule or group of programs, that is a further transmission of a non-conditional access broadcast transmission that, substantially simultaneously, is made by a terrestrial television broadcast station located within the United States, regardless of whether such further transmission is itself subject to a commercially-adopted access control method;
- (f) “covered format” means any analog video format for which the rights signaling system is specified, provided that such specification is included on Table X in accordance with the procedures established pursuant to section 202;
- (g) “defined business model” shall mean prerecorded media, video-on-demand, pay-per view, pay television transmission, subscription-on-demand, non-premium subscription television, free conditional access delivery, or non-conditional access broadcast transmission;
- (h) “free conditional access delivery” shall mean a conditional access delivery, as to which viewers are not charged any fee, other than government-mandated fees, for the reception or viewing of the programming contained therein;
- (i) “non-conditional access broadcast transmission” means a broadcast transmission, including an over-the-air transmission for reception by the general public using radio frequencies allocated for that purpose, whether analog or digital, that is not subject to a commercially-adopted access control method;
- (j) “non-premium subscription television” means an analog or digital delivery of a service, or schedule or group of programs, including those which may be offered for sale together with other services, or schedule or group of programs, for which subscribers are charged a subscription fee for the reception or viewing of the programming contained therein, other than pay television and subscription-on-demand. Such term shall include, without limitation, basic cable service and extended basic cable service.
- (k) “pay-per-view” shall mean an analog or digital delivery of a single program or a specified group of programs, as to which each such single program is generally uninterrupted by commercial advertising messages and for which recipients are charged a separate fee for each program or specified group of programs. The term “pay-per-view”

shall also include delivery of a single program as described above for which multiple start times are made available at time intervals which are less than the running time of such program as a whole. If a given delivery qualifies both as pay-per-view and a pay television transmission, then such delivery shall be deemed, for purposes of this title, pay-per-view rather than a pay television transmission;

(l) “pay television transmission” shall mean an analog or digital transmission of a service or schedule of programs, as to which each individual program is generally uninterrupted by commercial advertising messages and for which service or schedule of programs subscribing viewers are charged a periodic subscription fee, such as on a monthly basis, for the reception of such programming delivered by such service whether separately or together with other services or programming, during the specified viewing period covered by such fee. If a given delivery qualifies both as a pay television transmission and pay-per-view, video-on-demand, or subscription-on-demand then such delivery shall be deemed, for purposes of this title, pay-per-view, video-on-demand or subscription-on-demand rather than a pay television transmission;

(m) “prerecorded media” shall mean the delivery of one or more programs, in prerecorded form, whether in analog or digital format, on packaged media, such as VHS tapes and DVD discs or on other optical media or storage devices;

(n) “professional device” means a device that is designed, manufactured, marketed and intended for use by a person who regularly employs such a device for lawful business or industrial purposes, such as making, performing, displaying, distributing or transmitting copies of audiovisual works on a commercial scale at the request of or with the explicit permission of the copyright owner. If a device is marketed to or is commonly purchased by persons other than described in the foregoing sentence, then such device shall not be considered a “professional device”;

(o) “program” means an audiovisual work, in analog or digital format, as defined in section 101 of title 17, United States Code, that is offered for transmission, delivery or distribution, either generally or on demand, to subscribers, purchasers or the public at large, or otherwise for commercial purposes;

(p) “redistribution” [consider whether need definition of redistribution to ensure that it clearly covers retransmission]

(q) “rights signaling system” means Content Generation Management System—Analog (“CGMS-A”) supplemented by Video Encoded Invisible Light technology (“VEIL”);

(r) “robustness rules” means the minimum robustness requirements established pursuant to section 202;

(s) “subscription-on-demand” means the delivery of a single program or a specified group of programs for which (i) a subscriber is able, at his or her discretion, to select the time for commencement of exhibition thereof; (ii) where each such single program is generally

uninterrupted by commercial advertising messages; and (iii) for which program or specified group of programs subscribing viewers are charged a periodic subscription fee for the reception of programming delivered by such service during the specified viewing period covered by the fee. In the event a given delivery of a program qualifies both as a pay television transmission and subscription-on-demand, then such delivery shall be deemed, for purposes of this title, subscription-on-demand rather than a pay television transmission.

(t) “undefined business model” means the transmission, delivery or distribution of a program or programs that does not fall within the definition of any defined business model;

(u) “video-on-demand” means a delivery of a single program or a specified group of programs for which (i) each such individual program is generally uninterrupted by commercial advertising messages; (ii) recipients are charged a separate fee for each such single program or specified group of programs; and (iii) a recipient is able, at his or her discretion, to select the time for commencement of exhibition of such individual program or specified group of programs. In the event a delivery qualifies as both video-on-demand and a pay television transmission, then such delivery shall be deemed, for purposes of this title, video-on-demand.

Section 106. Effective date.

This Act shall be effective 12 months from the date of its enactment, provided that if such date is earlier than 18 months from the date of first introduction of legislation containing this title, then this Act shall be effective 18 months from the date of first introduction of the legislation containing this title.

Section 107.

(a) If upon petition by any interested party the Patent and Trademark Office determines that the VEIL portion of the rights signaling system has become materially ineffective in a way that cannot be adequately remedied by existing technical flexibility in the embedding function of the VEIL portion of the rights signaling system, then the Patent and Trademark Office shall have the authority to adopt commercially reasonable improvements to the detection function of the VEIL portion of the rights signaling system in order to maintain the functionality of the rights signaling system as contemplated in this legislation. Such improvements, if adopted, shall be adopted by a formal, expedited rulemaking proceeding and shall be limited to adjustments or upgrades solely to the same underlying VEIL technology of the existing rights signaling system.

(b) In a rulemaking described in subsection (a), the Patent and Trademark Office shall encourage representatives of the film industry, the broadcast, cable and satellite industry, the information technology industry, and the consumer electronics industry to negotiate in good faith in an effort to reach agreement on such commercially reasonable improvements to the detection function of the VEIL portion of the rights signaling

system. The Patent and Trademark Office shall cause such negotiation process to be open and public in which all potentially affected parties are invited to participate through public notice. The Patent and Trademark Office shall cause any agreement for which there is substantial consensus of the parties on all material points to be published and a final rule adopted.

(c) In determining whether or not to adopt commercially reasonable improvements to the detection function of the VEIL portion of the rights signaling system, including an agreement of the parties as described in subsection (b), the Patent and Trademark Office shall consider the impact on content owners, content distributors, consumers, manufacturers, and competition generally in all affected markets resulting from the failure to adopt such improvements, as well as from the adoption of such improvements. As part of this determination, the Patent and Trademark Office shall inquire into the licensing terms under which improvements would be licensed with the presumption that the licensing terms shall impose no materially greater burdens than those terms already established for the VEIL portion of the rights signaling system, the intellectual property rights implicated by the improvements, and the effect of the improvements on interoperability of consumer audiovisual products (including consumer electronic and information technology products capable of receiving, displaying or recording programs). The Patent and Trademark Office shall require those parties participating or filing comments in this determination process to disclose any material intellectual property rights in improvements under consideration and shall impose a bar to making material misrepresentations in the process. The Patent and Trademark Office shall determine the appropriate timetable for implementation of any improvements adopted consistent with the provisions of this legislation, giving due consideration to the generally accepted manufacturing cycle of 18 months in case involving improvements that require material changes to the design or implementation of detectors. After issuance of a final rule, petitions for reconsideration shall be permitted by the Patent and Trademark Office.

Section 108. Civil Remedies.

(a) Civil actions. - Any person injured by a violation of section 101 may bring a civil action in an appropriate United States district court for such violation.

(b) Powers of the Court. - In an action brought under subsection (a), the court -

(1) may grant temporary and permanent injunctions on such terms as it deems reasonable to prevent or restrain a violation, but in no event shall impose a prior restraint on free speech or the press protected under the 1st amendment to the Constitution;

(2) at any time while an action is pending, may order the impounding, on such terms as it deems reasonable, of any device or product that is in the custody or control of the alleged violator and that the court has reasonable cause to believe was involved in a violation;

(3) may award damages under subsection (c);

(4) in its discretion may allow the recovery of costs by or against any party other than the United States or an officer thereof;

(5) in its discretion may award reasonable attorney's fees to the prevailing party; and

(6) may, as part of a final judgment or decree finding a violation, order the remedial modification or the destruction of any device or product involved in the violation that is in the custody or control of the violator or has been impounded under paragraph (2).

(c) Award of Damages.

(1) In general. - Except as otherwise provided in this title, a person committing a violation of section 101 is liable for either -

(A) the actual damages and any additional profits of the violator, as provided in paragraph (2), or

(B) statutory damages, as provided in paragraph (3).

(2) Actual damages. - The court shall award to the complaining party the actual damages suffered by the party as a result of the violation, and any profits of the violator that are attributable to the violation and are not taken into account in computing the actual damages, if the complaining party elects such damages at any time before final judgment is entered.

(3) Statutory damages. - At any time before final judgment is entered, a complaining party may elect to recover an award of statutory damages for each violation of section 101 in the sum of not less than \$200 or more than \$2,500 per device, product, component, offer, or performance of service, as the court considers just.

(4) Repeated violations. - In any case in which the injured party sustains the burden of proving, and the court finds, that a person has violated section 101 within three years after a final judgment was entered against the person for another such violation, the court may increase the award of damages up to triple the amount that would otherwise be awarded, as the court considers just.

(5) Innocent violations. -

(A) In general. - The court in its discretion may reduce or remit the total award of damages in any case in which the violator sustains the burden of proving, and the court finds, that the violator was not aware and had no reason to believe that its acts constituted a violation.

- (B) Nonprofit library, archives, educational institutions, or public broadcasting entities. -
- (i) Definition. - In this subparagraph, the term "public broadcasting entity" has the meaning given such term under section 118(g) of title 17, United States code.
 - (ii) In general. - In the case of a nonprofit library, archives, educational institution, or public broadcasting entity, the court shall remit damages in any case in which the library, archives, educational institution, or public broadcasting entity sustains the burden of proving, and the court finds, that the library, archives, educational institution, or public broadcasting entity was not aware and had no reason to believe that its acts constituted a violation.

Section 109. Criminal Offenses and Penalties.

- (a) In General. - Any person who violates section 101 willfully and for purposes of commercial advantage or private financial gain -
 - (1) shall be fined not more than \$500,000 or imprisoned for not more than 5 years, or both, for the first offense; and
 - (2) shall be fined not more than \$1,000,000 or imprisoned for not more than 10 years, or both, for any subsequent offense.
- (b) Limitation for Nonprofit Library, Archives, Educational Institution, or Public Broadcasting Entity. - Subsection (a) shall not apply to a nonprofit library, archives, educational institution, or public broadcasting entity (as defined under section 118(g) of title 17, United States Code).
- (c) Statute of Limitations. - No criminal proceeding shall be brought under this section unless such proceeding is commenced within five years after the cause of action arose.

Title II

Section 201. Compliance Rules.

- (a) Definitions.

Where a capitalized term is not defined in this section, the definition of the corresponding lower-case term in Section 105 shall apply.

- (1) "Analog Video Signal" means a signal conforming to one of the specifications listed on Table X , as such list may be amended from time to time in accordance with the procedures established pursuant to Section 202.

(2) “Authorized Digital Output Method” means an output method listed on Table Y, as such list may be amended from time to time in accordance with the procedures established pursuant to Section 202.

(3) “Authorized Recording Method” means a recording method listed on Table Z, as such list may be amended from time to time in accordance with the procedures established pursuant to Section 202.

(4) “Bound Recording Method” means a method for recording content that effectively and uniquely associates such recording with a single Analog Video Input Device (using a cryptographic protocol or other effective means) so that such recording cannot be accessed in usable form by another product (except where the content of such recording is passed to another product as permitted under these requirements).

5) “Computer Product” means a device that is designed for or permits the end user to install a wide variety of commercially available software applications thereon, such as a personal computer, handheld “personal digital assistant” and the like, and further includes a subsystem of such a product, such as a graphics card.

(6) “Constrained Image” means an image having the visual equivalent of no more than (i) 350,000 pixels per frame (e.g. an image with resolution of 720 x 480 pixels for a 4:3 (non-square pixel) aspect ratio) and (ii) 30 frames per second, where such an image may be attained by reducing resolution, such as by discarding, dithering or averaging pixels to obtain the specified value, and can be displayed using video processing techniques such as line doubling or sharpening to improve the perceived quality of the image.

(7) “Copy Unlimited No Redistribution Content” means, with respect to an Analog Video Input Device, the visual content of an Analog Video Signal received by such device via transmission from a source external to that device, or by reading a recording of such signal from an inserted storage medium, with a rights signaling system encoding indicating “copy control restrictions not asserted but redistribution of the work is intended to be limited” as defined in Table W, or the result of combining such content with any content other than Copy One Generation Content or Copy Prohibited content, which content has not been passed from such device to an analog or digital output pursuant to Section 201(d) or recorded by such device using an Authorized Recording Method pursuant to Section 201(c), both of the foregoing in a manner permitted under the minimum robustness requirements established pursuant to section 202.

(8) “Copy One Generation Content” means, with respect to an Analog Video Input Device, the visual content of an Analog Video Signal received by such device via transmission from a source external to that device, or by reading a recording of such signal from an inserted storage medium, with a rights signaling system encoding indicating “one generation of copies may be made” as defined in Table W, or the result of combining such content with any content other than Copy Prohibited Content, which

content has not been passed from such device to an analog or digital output pursuant to Section 201(d) or recorded by such device using an Authorized Recording Method pursuant to Section 201(c), both of the foregoing in a manner permitted under the minimum robustness requirements established pursuant to section 202.

(9) "Copy Prohibited Content" means, with respect to an Analog Video Input Device, (i) the visual content of an Analog Video Signal received by such device via transmission from a source external to that device, or by reading a recording of such signal from an inserted storage medium, with a rights signaling system encoding indicating "no copying is permitted" as defined in Table W or (ii) content received by such device as Copy One Generation Content that has been recorded using a Bound Recording Method pursuant to Section 201(c)(2)(B), or (iii) the result of combining either of the foregoing content with any other content, which content, whether content described in clause (i), (ii), or (iii), has not been passed from such device to an analog or digital output pursuant to Sections 201(d)(1) or 201(d)(2).

(b) Detecting.

In relation to any Analog Video Signal received by an analog video input device subject to Section 101(a)(1), where such receipt is via transmission from a source external to that device or by reading a recording of such signal from an inserted storage medium, such analog video input device shall detect or cause to be detected the presence of the rights signaling system in such Analog Video Signal and, if the rights signaling system is present in such Analog Video Signal, shall determine, or cause to be determined, based on information conveyed by the rights signaling system, whether the content contained in such Analog Video Signal is Copy Unlimited No Redistribution Content, Copy One Generation Content, or Copy Prohibited Content as defined in this section and in Table WI and shall abide by the relevant recording, output and passing rules set forth in subsections (c), (d), and (e), below.

(c) Recording.

(1) Copy Prohibited Content. An Analog Video Input Device shall not record or cause the recording of Copy Prohibited Content in digital form except for retention for a period not to exceed 90 minutes from initial receipt of each unit of such content, including retention and deletion on a frame-by-frame, minute-by-minute or megabyte-by-megabyte basis, using a Bound Recording Method, and provided that such content shall be destroyed or otherwise rendered unusable prior to or upon expiration of such period.

(2) Copy One Generation and Copy Unlimited No Redistribution Content. An Analog Video Input Device shall not record or cause the recording of Copy One Generation Content or Copy Unlimited No Redistribution Content in digital form except

(A) using an Authorized Recording Method listed on Table Z, in accordance with any obligations set out in Table Z applicable to such Authorized Recording Method or

(B) using a Bound Recording Method, in which case Copy One Generation Content so recorded becomes Copy Prohibited Content with respect to that device.

(3) Transitory Image. These requirements do not prohibit temporary storage of data for the sole purpose of enabling a function not prohibited by these requirements where such stored data (a) does not persist materially after such function has been performed and (b) is not stored in a way that permits copying or redistribution of such data for other purposes.

(d) Outputs.

(1) Analog Outputs. An Analog Video Input Device shall not pass, or direct to be passed, Copy Prohibited Content, Copy One Generation Content or Copy Unlimited No Redistribution Content to an analog output except

(A) as an Analog Video Signal that is passed with:

- (i) in the case of Copy Prohibited Content, the rights signaling system encoding indicating “no copying is permitted,” as defined in Table W and X;
- (ii) in the case of Copy One Generation Content, the rights signaling system encoding indicating “one generation of copies may be made,” as defined in Table W and X, or
- (iii) in the case of Copy Unlimited No Redistribution Content, the rights signaling system encoding indicating “copy control restrictions not asserted but redistribution of the work is intended to be limited,” as defined in Table W and X; or

(B) where such device is incorporated into a Computer Product, to a VGA output or to a similar output that was widely implemented as of May 1, 2001 that carries uncompressed video signals with a resolution less than or equal to a Constrained Image to a computer monitor.

(2) Digital Outputs. An Analog Video Input Device shall not pass, or direct to be passed, Copy Prohibited Content, Copy One Generation Content or Copy Unlimited No Redistribution Content to a digital output except

- (A) to an output protected by an Authorized Digital Output Method listed on Table Y, in accordance with any obligations set out in Table Y applicable to such Authorized Digital Output Method;
- (B) for the purpose of making a recording (pursuant to Sections 201(c)(1) and 201(c)(2)), where such content is protected, including during transmission, by the corresponding Authorized Recording Method pursuant to compliance and robustness rules applicable to such Authorized Recording Method.

(e) Passing via Other than an Output (Add-in Devices).

Where an Analog Video Input Device passes Copy Prohibited Content, Copy One Generation Content or Copy Unlimited No Redistribution Content from such Analog Video Input Device to another product, other than via an output pursuant to Section 201(d), it shall so pass such content protected in accordance with the minimum robustness requirements established pursuant to section 202.

Section 202. Implementing Regulations.

No later than 90 days after enactment of this Act, the Patent and Trademark Office, in consultation with the Register of Copyrights, shall adopt regulations to establish –

- (a) minimum robustness requirements to ensure the content security preservation requirements set forth in section 201 are implemented in a reasonable method so that they cannot be defeated or circumvented by the use of generally available tools or equipment, and can only with difficulty be defeated or circumvented by use of professional tools or equipment;
- (b) criteria and procedural rules to govern the certification and removal of Analog Signals in Table X, and approved Protection Technologies in Tables Y and Z; and
- (c) arbitration rules necessary for purposes of resolving disputes under (c) above and for resolving disputes concerning comparable undefined business models under Section 103.

Section 203. Savings Clause.

The Patent and Trademark Office may implement regulations for analog conversion devices, provided that such rules are consistent with Title 17, United States Code.