

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

PIRACY PROTECTION LLC)	
)	
Plaintiff,)	
)	Civil Action No. _____
v.)	
)	JURY TRIAL DEMANDED
PIONEER & ONKYO U.S.A. CORPORATION)	
)	
Defendant.)	
_____)	

COMPLAINT

For its Complaint, Plaintiff Piracy Protection LLC ("Piracy Protection" or "Plaintiff"), by and through the undersigned counsel, alleges as follows:

THE PARTIES

1. Plaintiff is a Delaware limited liability company with a place of business located at 3511 Silverside Road, Suite 105, Wilmington, Delaware 19810.
2. Defendant Pioneer & Onkyo U.S.A. Corporation ("Defendant") is a Delaware company with, upon information and belief, a place of business located at 18 Park Way, Upper Saddle River, New Jersey 07458.

JURISDICTION AND VENUE

3. This action arises under the Patent Act, 35 U.S.C. § 1 *et seq.*
4. Subject matter jurisdiction is proper in this Court under 28 U.S.C. §§ 1331 and 1338.
5. Upon information and belief, Defendant conducts substantial business in this forum, directly or through intermediaries, including: (i) at least a portion of the infringements alleged herein; and (ii) regularly doing or soliciting business, engaging in other persistent courses of conduct and/or deriving substantial revenue from goods and services provided to individuals

in this district.

6. Venue is proper in this district pursuant to 28 U.S.C. § 1400(b).

THE PATENT-IN-SUIT

7. On March 26, 2013, U.S. Patent No. 8,407,782 (the "'782 patent"), entitled "Data Copyright Management," was duly and lawfully issued by the U.S. Patent and Trademark Office. A true and correct copy of the '782 patent is attached hereto as Exhibit A.

8. The claims of the '782 patent ("patent-in-suit"), including the asserted claims, when viewed as a whole, including as ordered combinations, are not merely the recitation of well-understood, routine, or conventional technologies or components. The claimed inventions were not well-known, routine, or conventional at the time of the invention, over twenty years ago, and represent specific improvements over the prior art and prior existing systems and methods for managing and protecting copyrighted data.

9. According to the U.S. Patent and Trademark Office Board of Patent Appeals and Interferences ("BPAI"), the '782 patent's claimed invention "is directed to a data copyright management system that decrypts encrypted data for a first form of usage, such as displaying and editing data at a user's terminal, while concurrently re-encrypting data for a second form of usage, such as storing, copying and transferring of the same data." Ex. B, attached hereto, at p. 2 (citing '782 patent at Abstract, 24:5-25:2).

10. As explained in the '782 patent:

In a conventional database system, only character data is handled. However, in multimedia systems, sound data and picture data originally generated as analog data, are digitized and used as part of the database in addition to the other data in the database such as character data.

Under such circumstances, it is an important question to determine how to handle copyrights of the data in the database. However, there are no means in the prior art for copyright management and control of such actions as copying, editing, transferring, etc. of data

Ex. A, '782 patent at 2:16-25.

11. The asserted claims of the patent-in-suit are directed to specific improvements in data copyright management systems. Among other things, the asserted claimed inventions concurrently decrypt and re-encrypt encrypted data to perform copyright management and control.

12. Claim 1 of the '782 patent recites:

1. A method performed by a first computing device, the method comprising:
 - receiving an encrypted version of a first set of protected digital data;
 - receiving a first crypt key specifically associated with the first set of protected digital data;
 - decrypting the encrypted version of the first set of protected digital data using the first crypt key to produce decrypted digital data;
 - managing forms of usage of the first set of protected digital data, wherein said managing includes, for a first form of usage requested by a user of the first computing device:
 - when the first form of usage is one of a first set of usages, permitting the first form of usage using the decrypted digital data; and
 - when the first form of usage is one of a second set of usages distinct from usages in the first set, permitting the first form of usage on a re-encrypted version of the decrypted digital data generated by re-encrypting the decrypted digital data using a second crypt key.

Id. at 29:53-30:5.

13. The BPAI determined that prior art did not "disclose[] or even suggest[] that the form of usage of a first set is permitted based on the decrypted digital data, while the form of usage of another set is permitted based upon the re-encrypted version of the decrypted digital data." Ex. B at 6.

14. As noted in the '782 patent and acknowledged by the BPAI, the claimed technologies comprise innovative systems and processes that provide increased security over those existing at the time and result in a better digital copyright management. The patent-in-suit thus provides concrete applications that improved digital copyright management.

15. The inventor did more than simply apply current technology to an existing problem. His invention, as embodied in the asserted claims, was a significant advancement in

digital copyright management.

16. These noted improvements over the prior art represent meaningful limitations and/or inventive concepts based upon the state of the art over 25 years ago. Further, including in view of these specific improvements, the inventions of the asserted claims, when such claims are viewed as a whole and in ordered combination, are not routine, well-understood, conventional, generic, existing, commonly used, well-known, previously known, typical, and the like over 25 years ago, including because, until the inventions of the asserted claims of the patent-in-suit, the claimed inventions were not existing or even considered in the field.

17. The claimed inventions are necessarily rooted in computer technology, i.e., digital copyright management. The claimed solutions amount to an inventive concept for resolving the particular problems and inefficiencies noted above.

18. Plaintiff is the assignee and owner of the right, title and interest in and to the '782 patent, including the right to assert all causes of action arising under said patent and the right to any remedies for infringement of it.

COUNT I – INFRINGEMENT OF U.S. PATENT NO. 8,407,782

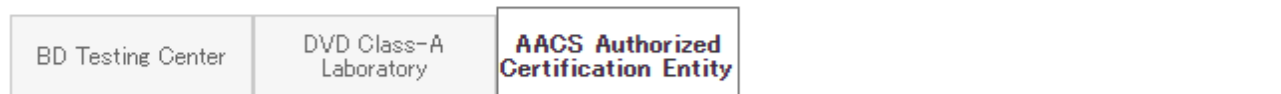
19. Plaintiff repeats and realleges the allegations of paragraphs 1 through 23 as if fully set forth herein.

20. Without license or authorization and in violation of 35 U.S.C. § 271(a), Defendant has infringed and continues to infringe at least claim 1 of the '782 patent by making, using, importing, offering for sale, and/or selling methods, products and systems for data copyright management, including, but not limited to, UDP-LX500 Universal Disc Player (the "Accused Device"), because each and every element is met either literally or equivalently.

21. Upon information and belief, Defendant used the Accused Device via its internal use and testing in the United States, directly infringing one or more claims of the '782 patent.

22. More specifically and upon information and belief, the Accused Device includes a method performed by a first computing device.

AACS Authorized Certification Entity (ACE)



In 2014 Pioneer established an AACS Authorized Certification Entity (ACE) endorsed by the AACS LA. ACE verifies that BD(Blu-ray Disc™) products are designed conforming to the AACS specifications.
* Note: "Blu-ray Disc™" is trademark of Blu-ray Disc Association.

Verification activities

- Compliance Testing specified in the AACS Adopter Agreement (Only a player is a target of the certification)
- Refer to the website of AACS LA regarding AACS license.
 [AACS LA](#)

https://global.pioneer/en/crdl_design/crdl/verif/aacs/.

Advanced Access Content System Licensing Administrator (AACS LA) has developed the Advanced Access Content System, a specification for managing content stored on the next generation of prerecorded and recorded optical media for consumer use with PCs and CE devices. Advanced Access Content System complements new innovations in the next-generation of optical discs, and enable consumers to enjoy next-generation content, including high-definition content.

<https://aacsla.com/what-is-aacs/>.



Universal Disc Player

UDP-LX500



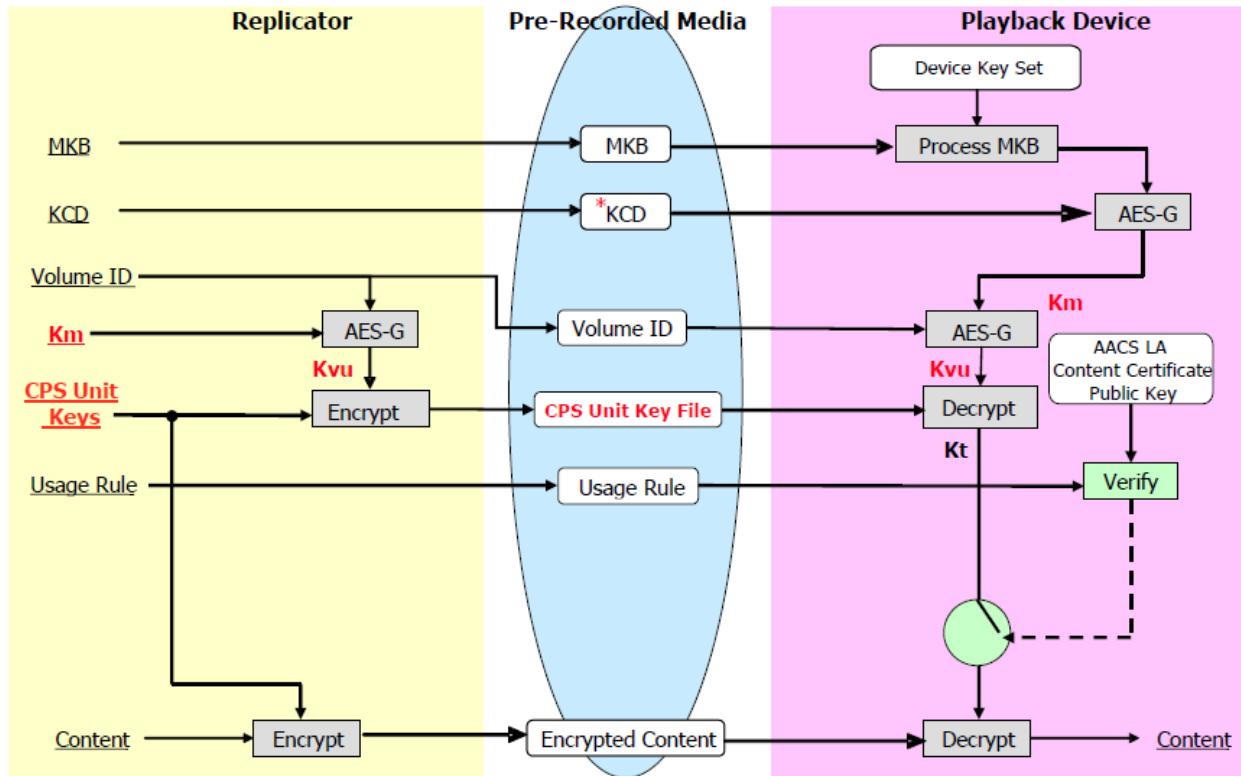
Pioneer's brand-new universal disc player brings the spectacle of Ultra HD Blu-ray™ to your home entertainment, with four times the resolution of 1080p Full HD. Featuring three-block internal layout, Ultra Rigid Construction, and Double-Layered Chassis for a robust build, 6-layered main circuit board, SDR/HDR preset mode, and support for HDR10/Dolby Vision for quality picture, as well as premium audio DAC and Zero Signal Terminal for high-grade sound, the UDP-LX500 lets you enjoy the highest video resolution as well as your other digital disc collections.

Elite Single Sheet ("Single Sheet") at p.1 (available <https://www.pioneer-audiovisual.eu/sites/default/files/datasheets/english/UDP-LX500.pdf>).

23. The Accused Device receives an receiving an encrypted version of a first set of protected digital data, receives a first crypt key specifically associated with the first set of protected digital data and decrypts the encrypted version of the first set of protected digital data using the first crypt key to produce decrypted digital data.

Chapter 3 describes Blu-Ray Disc specific procedures for the production (encryption) and off-line playback (decryption) of AACs Content on pre-recorded Blu-Ray Read Only Media.

Advanced Access Content System: Blu-ray Disc Pre-recorded Book at p. 1 (available at Source: http://aacs.tjn.chef.causewaynow.com/wp-content/uploads/2019/02/AACS_Spec_BD_Prerecorded_Final_0_953.pdf).



*KCD is used by only certain classes of devices.

Figure 6-2 Encryption and Decryption Overview for BD-ROM on which SKB / uMKB is not assigned

Id. at p. 133.

24. The Accused Device manages forms of usage of the first set of protected digital data, wherein said managing includes, for a first form of usage requested by a user of the first computing device.

2. Licensed Player Compliance Requirements

2.1 **Applicability.** This Part 2 Section 2 is applicable to all Licensed Players as shipped.

2.2 **Analog Outputs.** A Licensed Player shall not pass, or direct to be passed Decrypted AACS Content to an analog output except:

2.2.1 An analog output of audio, or of the audio portions of other forms of Decrypted AACS Content; or

Advanced Access Content System ("AACCS") Adopter Agreement at p. E-17 (available at http://aacs.tjn.chef.causewaynow.com/wp-content/uploads/2019/02/AACS_Adopter_Agreement_20121115.pdf).

2.22 “Decrypted AACCS Content” shall mean, with respect to a Licensed Product, AACCS Content that such product has decrypted using both AACCS Bus Decryption (where applicable) and AACCS Basic Decryption but whose control and/or protection obligations have not been passed to an output permitted by these Compliance Rules or to an AACCS Authorized Copying Method or Content Owner Authorized Copying Method permitted by this Agreement. *Note to Adopter: A copy made using a Bound Copy Method remains subject to all obligations applicable to Decrypted AACCS Content under this Agreement, until such copy is passed to an output permitted under this Agreement including but not limited to Part 2, Sections 2.2, 2.3, 3.2 and 3.6.*

Id. at E-4 – E-5.

25. When the first form of usage is one of a first set of usages, the managing permits the first form of usage using the decrypted digital data.

2.2 Analog Outputs. A Licensed Player shall not pass, or direct to be passed Decrypted AACCS Content to an analog output except:

2.2.1 An analog output of audio, or of the audio portions of other forms of Decrypted AACCS Content; or

2.2.2 An analog output of video delineated in Table A1, AACS Analog Authorized Outputs, in accordance with any associated restrictions and obligations specified therein and in the Agreement, and subject to the following sunset requirements:

2.2.2.1 **Analog Sunset – 2010.** With the exception of Existing Models, any Licensed Player manufactured after December 31, 2010 shall limit analog video outputs for Decrypted AACS Content to SD Interlace Modes only. Existing Models may be manufactured and sold by Adopter up until December 31, 2011. Notwithstanding the foregoing, Adopter may continue to manufacture and sell an Existing Model in which the implementation of AACS Technology is a Robust Inactive Product after December 31, 2010 provided that when such Robust Inactive Product is activated through a Periodic Update, such Periodic Update results in a Licensed Player that limits analog video outputs for Decrypted AACS Content to SD Interlace Modes only. Nothing in this section shall be interpreted to override limitations or obligations stated in any other section of this Agreement.

For purposes of this section, “SD Interlace Modes” shall mean composite video, s-video, 480i component video and 576i video.

2.2.2.2 **Analog Sunset – 2013.** No Licensed Player that passes Decrypted AACS Content (excluding Decrypted AACS Content that is decrypted from AACS Recordable Video where the CCI in such Decrypted AACS Content is marked other than Copy Never) to analog video outputs may be manufactured or sold by Adopter after December 31, 2013. For the avoidance of doubt, a Bound Copy Method to which AACS Content has been Moved from AACS Recordable Video with CCI marked other than Copy Never or to which AACS Content has been copied from AACS Recordable Video with CCI marked EPN, is not required to implement the analog sunset required by this Section 2.2.2.2 with respect to such AACS Content.

Id. at E-17 – E-18.

26. When the first form of usage is one of a second set of usages distinct from usages in the first set, the managing permits the first form of usage on a re-encrypted version of the

decrypted digital data generated by re-encrypting the decrypted digital data using a second crypt key.

2.3 Digital Outputs. A Licensed Player shall not pass, or direct to be passed Decrypted AACCS Content to a digital output except:

- 2.3.1 A digital output of audio, or of the audio portion of other forms of Decrypted AACCS Content, in compressed audio format (such as AC3) or in Linear PCM format in which the transmitted information is sampled at no more than 48 kHz and no more than 16 bits.
- 2.3.2 An output delineated in Table D1, AACCS Authorized Digital Outputs in accordance with any associated restrictions and obligations specified therein and in the Agreement.

Id. at E-18 – E19.

TABLE D1

AACCS Authorized Digital Outputs (Non-Copying Methods)

AACCS Authorized Digital Outputs	Associated Restrictions and Obligations
DTCP	A Licensed Player may pass Decrypted AACCS Content to an output protected by DTCP, provided that when doing so, the Licensed Player shall (a) carry any DTCP System Renewability Messages delivered in association with such content (in the manner described or referenced in the AACCS Specifications) to the DTCP Source Function, and (b) set the following fields of the DTCP Descriptor to the indicated values:

Id. at E67.

DVI	A Licensed Player manufactured on or before December 31, 2010 that is incorporated into a computer product may pass Decrypted AACS Content for which the Digital Only Token was not set to a DVI output as a Constrained Image. Furthermore, Existing Models with such DVI output may be manufactured and sold by Adopter up until December 31, 2011. Notwithstanding the foregoing, Adopter may continue to manufacture and sell an Existing Model with such DVI output in which the implementation of AACS Technology is a Robust Inactive Product after December 31,
	2010 provided that when such Robust Inactive Product is activated through a Periodic Update, such Periodic Update results in a Licensed Player that does not pass Decrypted AACS Content to DVI outputs.
HDCP	A Licensed Player may pass Decrypted AACS Content to an output protected by HDCP, provided that when doing so, the Licensed Player shall (a) carry any HDCP System Renewability Message delivered in association with such content (in the manner described or referenced in the AACS Specifications) to the HDCP Source Function and (b) verify that the HDCP Source Function is fully engaged and able to deliver protected content, which means (i) HDCP encryption is operational on such output, (ii) processing of the valid received System Renewability Message associated with such content, if any, has occurred as defined in the HDCP Specification and (iii) there is no HDCP Display Device or Repeater on such output whose Key Selection Vector is in such System Renewability Message.

Id. at E-70 – E71.

❖ **When connected to a DVI device**

- **It is not possible to connect DVI devices (computer displays, for example) that are not compatible with HDCP.** HDCP is a specification to protect audiovisual content across the DVI/HDMI interface.

UDP-LX500 Operating Instructions ("Operating Instructions") at p. 17 (available at https://www.pioneerelectronics.com/ephox/StaticFiles/PUSA/Files/Home/SN29403458_UDP-LX500_EnFrEs_180703_web.pdf).

Connecting using an HDMI cable

The audio and video signals can be transferred to HDMI-compatible devices as digital signals with no loss of sound or video quality.



Note

- Make the **HDMI Mode** setting at the **Initial Setup** menu according to the connection of the devices to the player (pages 18 and 42).
- Make the settings at the **Setup Navigator** menu according to the connected HDMI-compatible device (page 24).
- 1080p and 4K video signals may not be output, depending on the HDMI cable being used. To watch 4K video or HDR video of ULTRA HD Blu-ray™, use an 18 Gbps-compatible Premium High Speed HDMI®/™ cable (optional).

About HDMI

This player incorporates the High-Definition Multimedia Interface (HDMI®) technology.

Operating Instructions at p. 17.

Terminals

- › HDMI 2 Out (1 Main for Audio/Video, 1 Sub for Audio)
- › Digital Coaxial Out
- › Digital Optical Out
- › USB 2 In (1 Front, 1 Rear)
- › Ethernet
- › RS-232C

Single Sheet at p. 1.

Max Sampling Frequency	48kHz	Outputs audio signals that are limited to a sampling frequency below the set sampling frequency from the DIGITAL OUT terminal. Select according to the performance of the connected device.
	96kHz	
	192kHz	

Operating Instructions at p. 41.

- When playing an UHD-BD disc, if the connected HDMI device does not support HDCP 2.2, the video cannot be output in 4K or 4K24p resolution even if **Auto**, **4K24p**, **4K** or **Source Direct** is selected. Also, depending on the HDMI device, the HDMI or HDCP setting may be required. Check the operating instructions of the connected device.

Operating Instructions at p. 26.

3.4 HDCP Cipher

The HDCP cipher consists of a 128-bit AES module that is operated in a Counter (CTR) mode as illustrated in Figure 3.2.

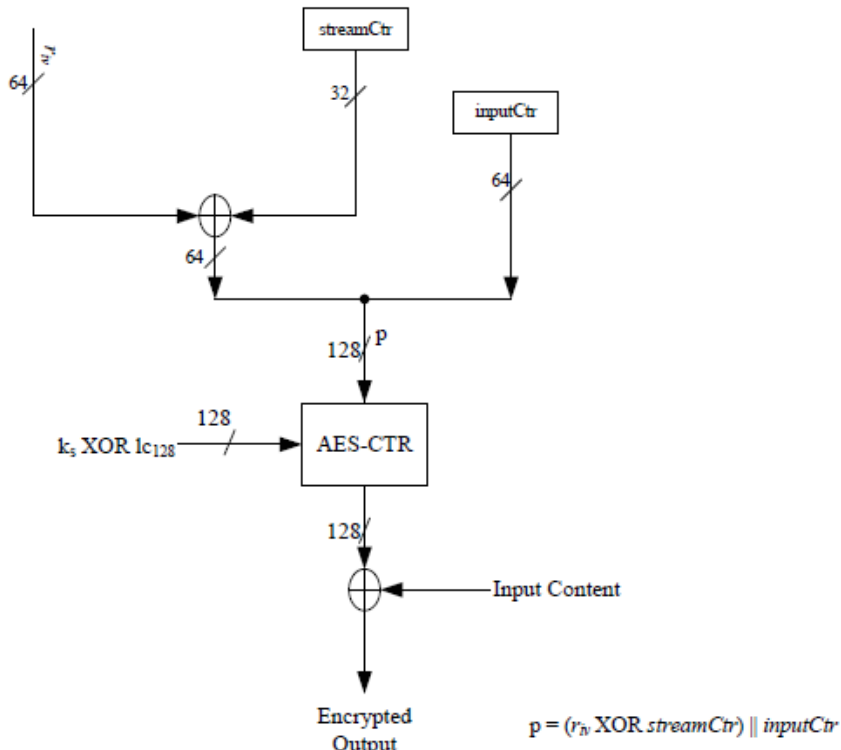
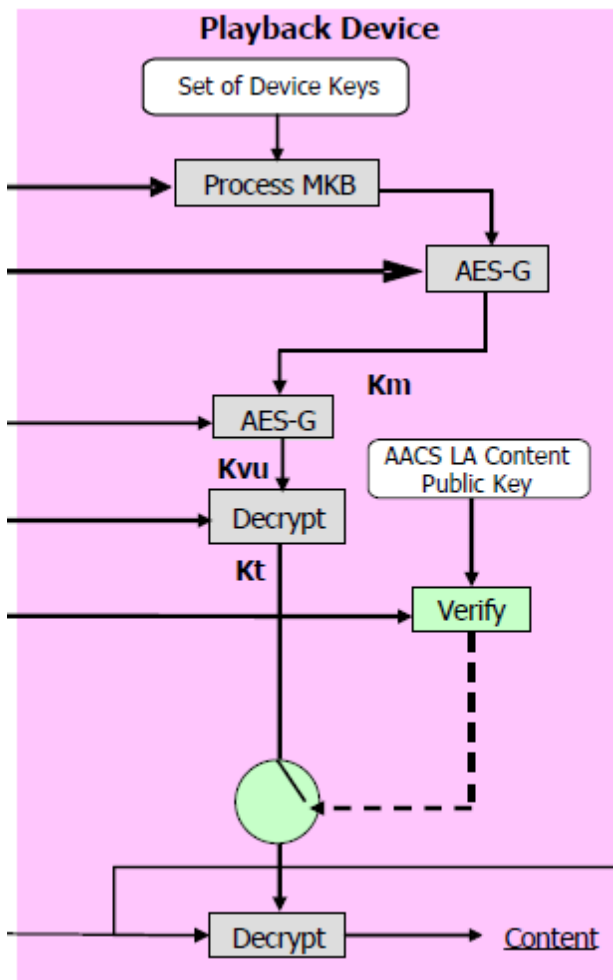


Figure 3.2. HDCP Cipher Structure

k_s is the 128-bit Session Key which is XORed with l_{c128} . Elementary streams within a given program or across multiple programs may use the same k_s and r_n .

High-bandwidth Digital Content Protection System: Interface Independent Adaptation at p. 53 (available at https://www.digital-cp.com/sites/default/files/specifications/HDCP%20Interface%20Independent%20Adaptation%20Specification%20Rev2_2_FINAL.pdf).



Advanced Access Content System (AACs): Blu-ray Disc Pre-recorded Book at p. 63 (available at http://aacs.tjn.chef.causewaynow.com/wp-content/uploads/2019/02/AACS_Spec_BD_Prerecorded_Final_0_953.pdf).

27. Plaintiff is entitled to recover from Defendant the damages sustained by Plaintiff as a result of Defendant's infringement of the '782 patent in an amount subject to proof at trial, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

JURY DEMAND

Plaintiff hereby demands a trial by jury on all issues so triable.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff requests that this Court enter judgment against Defendant as follows:

- A. An adjudication that Defendant has infringed the '782 patent;
- B. An award of damages to be paid by Defendant adequate to compensate Plaintiff for Defendant's past infringement of the '782 patent and any continuing or future infringement through the date such judgment is entered, including interest, costs, expenses and an accounting of all infringing acts including, but not limited to, those acts not presented at trial;
- C. A declaration that this case is exceptional under 35 U.S.C. § 285, and an award of Plaintiff's reasonable attorneys' fees; and
- D. An award to Plaintiff of such further relief at law or in equity as the Court deems just and proper.

Dated: October 29, 2019

STAMOULIS & WEINBLATT LLC

/s/
Stamatios Stamoulis (#4606)
Richard C. Weinblatt (#5080)
800 N. West Street, Third Street
Wilmington, DE 19801
Telephone: (302) 999-1540
Facsimile: (302) 762-1688
stamoulis@swdelaw.com
weinblatt@swdelaw.com

*Attorneys for Plaintiff
Piracy Protection LLC*