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19	UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF CALIFORNIA	
20	WESTERN DIGITAL TECHNOLOGIES, INC., WESTERN DIGITAL IRELAND LTD.,	Case No.: 5:22-cv-4376
21	SANDISK 3D IP HOLDINGS LTD., SANDISK TECHNOLOGIES LLC, and SANDISK	COMPLAINT FOR PATENT INFRINGEMENT
22	STORAGE MALAYSIA SDN. BHD.,	DEMAND FOR JURY TRIAL
23	Plaintiff,	
24	v.	
25	VIASAT, INC.,	
26	Defendant.	
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This is an action for patent infringement arising under the patent laws of the United States of America, 35 U.S.C. § 1 *et seq.*, in which Plaintiffs Western Digital Technologies, Inc. ("<u>WDT</u>"), Western Digital Ireland Ltd. ("<u>WDI</u>"), SanDisk 3D IP Holdings Ltd. ("<u>SD3D</u>"), SanDisk Technologies LLC ("<u>SDT</u>"), and SanDisk Storage Malaysia Sdn. Bhd. ("<u>SDSM</u>") (collectively, or individually, "<u>Plaintiffs</u>") demand a trial by jury on all issues so triable in their complaint against Defendant Viasat, Inc. ("<u>Viasat</u>" or "<u>Defendant</u>"), alleging as follows:

# **INTRODUCTION**

- 1. This complaint arises from Defendant's unlawful infringement of the following U.S. Patents owned by Plaintiffs: U.S. Patent No. 9,424,400 (the "<u>'400 patent</u>"), U.S. Patent No. 10,447,667 (the "<u>'667 patent</u>"), and U.S. Patent No. 8,504,834 (the "<u>'834 patent</u>") (collectively, the "<u>Patents-in-Suit</u>").
- 2. Viasat develops and/or sells media streaming software, systems, and services (the "<u>Accused Products</u>"), including, by way of illustrative example, in-flight entertainment and communication ("<u>IFEC</u>") systems for use in commercial and private aviation. As further explained below, the Accused Products utilize technologies patented by Plaintiffs to deliver media content to end-users.

### THE PARTIES

- 3. WDT is a wholly owned subsidiary of Western Digital Corporation ("<u>WDC</u>"; together with WDT, "<u>Western Digital</u>"), a publicly traded corporation, and has a principal place of business located at 5601 Great Oaks Parkway in San Jose, California, 95119.
- 4. Western Digital is a leading developer and provider of data storage devices and solutions. Western Digital's products help customers capture, preserve, access, and transform every type of data currently imaginable. Western Digital's broad technology and product offerings include Client Devices (for example, desktop and notebook PCs; flash-based embedded storage products for mobile phones, tablets, and notebook PCs; and flash-based memory wafers and components); Data Center Devices and Solutions (for example, high-capacity enterprise HDDs and high

<sup>&</sup>lt;sup>1</sup> See, e.g., Viasat, Today's media for today's traveler, <a href="https://www.viasat.com/enterprise-and-mobility/aviation/commercial/inflight-entertainment/">https://www.viasat.com/enterprise-and-mobility/aviation/commercial/inflight-entertainment/</a>.

performance enterprise SSDs, data center software and system solutions); and Client Solutions (for example, HDDs and SSDs embedded into external storage products and removable flash-based products, such as: cards, universal serial bus flash drives and wireless drives).

- 5. Founded in 1970, Western Digital has a rich heritage of innovation and operational excellence, and broad research and development capabilities. As a result of its R&D investments, Western Digital now has one of the technology industry's most significant and valuable patent portfolios, with approximately 13,500 active patents worldwide.
- 6. WDI and SD3D are wholly owned subsidiaries of WDT and have a principal place of business in George Town, Grand Cayman, Cayman Islands.
- 7. SDT is a wholly owned subsidiary of WDT. SDT's parent, SanDisk Corporation ("SanDisk"), was a global leader in flash storage solutions with a strong history of innovative product offerings. SanDisk was in the business of designing, developing, and manufacturing products including solid state drives, embedded flash products, USB drives, wireless media drives, digital media players, and wafers and components.
- 8. SanDisk was founded in 1988 by Eli Harari, Sanjay Mehrotra, and Jack Yuan. Cofounder Eli Harari played a major role in the development of the first electrically erasable programmable read-only memory ("<u>EEPROM</u>"). In 1990, Western Digital and SanDisk collaborated to create the first commercial flash SSD.
  - 9. SanDisk was acquired by Western Digital in 2016.
- 10. SDSM is a wholly owned subsidiary of WDT and has a principal place of business in Palau Pinang, Malaysia.
- 11. Viasat is a company organized under the laws of Delaware, with headquarters at 6155 El Camino Real, Carlsbad, California 92009. Viasat also maintains a place of business at 333 West San Carlos Street, Suite 1700, San Jose, California 95110.
- 12. Amongst other things, Viasat provides satellite internet to customers' homes and businesses, and provides satellite internet, live TV, and in-flight entertainment to commercial and private aviation customers.

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# **JURISDICTION AND VENUE**

- 13. This action arises under the patent laws of the United States, 35 U.S.C. § 1, et seq., including § 271. This Court has original subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).
- 14. This Court has personal jurisdiction over Defendant because, among other things, Defendant has done business in this District, and has committed and continues to commit acts of patent infringement in this District giving rise to this action, and has established minimum contacts with this forum such that the exercise of jurisdiction over Defendant would not offend traditional notions of fair play and substantial justice. Defendant, directly and indirectly through subsidiaries and intermediaries, has committed and continues to commit acts of infringement in this District by, among other things, making, using, selling, offering to sell, and importing products that infringe the asserted patents.
- 15. Venue is proper in this District under 28 U.S.C. § 1400(b) because, among other things, Defendant has transacted business, has committed acts of infringement, and has a regular and established place of business in this District. For example, Viasat maintains a regular and established place of business in this District at 333 West San Carlos Street, Suite 1700, San Jose, California 95110.
- 16. Viasat has also sought to recruit individuals for employment within this District through its website. As of the date herein, Viasat has 20 open job postings seeking to recruit employees to its San Jose office, including engineers for its Infrastructure, Space and Commercial Segment, and Global Enterprise Mobility teams.

# **DIVISIONAL ASSIGNMENT**

17. Pursuant to Civil Local Rules 3-5(b) and 3-2(c), and General Order No. 44, because this action is an intellectual property action, it is properly assigned to any of the divisions of this District and is subject to assignment on a district-wide basis.

# **COUNT ONE: INFRINGEMENT OF THE '400 PATENT**

18. Plaintiffs reallege the foregoing paragraphs as if fully set forth herein.

- 19. One or more Plaintiffs holds title to the '400 patent, entitled "Digital rights management system transfer of content and distribution," which was issued by the United States Patent and Trademark Office ("USPTO") on August 23, 2016. A true and correct copy of the '400 patent is attached hereto as **Exhibit 1**. One or more Plaintiffs together own all substantial rights to the '400 patent, including the rights to practice, license, and transfer the '400 patent, and all economic interest in the '400 patent. All claims of the '400 patent are valid and enforceable.
- 20. Viasat develops and/or sells media streaming software, systems, and services (the "'400 Accused Products"), including, by way of illustrative example, IFEC systems for use in commercial and private aviation.
- 21. Viasat has directly infringed and continues to directly infringe one or more claims of the '400 patent in connection with the '400 Accused Products. Viasat makes, uses, sells, offers for sale, and/or tests media streaming systems and software, including but not limited to the '400 Accused Products, within the United States, and as such, Viasat has directly infringed and continues to directly infringe, either literally or under the doctrine of equivalents, at least one claim of the '400 patent, including under 35 U.S.C. § 271(a).
  - 22. Claim 1<sup>2</sup> of the '400 patent recites:
    - 1. A kiosk for provisioning secure media content to a plurality of portable data storage devices, the kiosk comprising:
      - a first data interface configured to communicate with a portable data storage device;
      - a second data interface configured to communicate, over a network, with a remote trusted server; and
      - a processor configured to:

obtain a unique identifier from the portable data storage device, wherein the unique identifier is specific to the portable data storage device and is concealed by the portable data storage device;

authenticate the portable data storage device, using at least the unique identifier, by communicating with the

<sup>&</sup>lt;sup>2</sup> Plaintiffs' allegations of infringement are not limited to the claims specifically identified herein. Viasat infringes other claims of the Patents-in-Suit based on similar attributes that are outlined in this Complaint.

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remote trusted server over the second data interface; and

in response to the authentication, provide to the portable data storage device an encrypted first media content and a corresponding access key.

- 23. The '400 Accused Products infringe at least claim 1 of the '400 patent.<sup>3</sup> The '400 Accused Products include a kiosk for provisioning secure media content to a plurality of portable data storage devices. For example, the '400 Accused Products provide access to, via the Internet, Apple Music and/or Apple TV+ to user devices and/or seat back devices connected to the '400 Accused Products, and provide each device with access to over 50 million songs, playlists and music videos and/or Apple Originals and Apple TV+ channels.<sup>4</sup>
- 24. In announcing this service, Apple's Vice President of Apple Music underscored the commercial value, stating that for "most travelers, having music to listen to on the plane is just as important as anything they pack in their suitcases." He continued to explain that, "[w]ith the addition of Apple Music on American flights, we are excited that customers can now enjoy their music in even more places. Subscribers can stream all their favorite songs and artists in the air, and continue to listen to their personal library offline, giving them everything they need to truly sit back, relax and enjoy their flight."
- 25. The '400 Accused Products include a first data interface configured to communicate with a portable data storage device, such as an interface for connecting to a user and/or seat-back device. The '400 Accused Products establish communications with the portable data storage device.

<sup>&</sup>lt;sup>3</sup> The '400 Accused Products also infringe at least the corresponding method claim (claim 9).

<sup>&</sup>lt;sup>4</sup> Apple, *Apple Music takes flight on American Airlines* (January 30, 2019), <a href="https://www.apple.com/newsroom/2019/01/apple-music-takes-flight-on-american-airlines/">https://www.apple.com/newsroom/2019/01/apple-music-takes-flight-on-american-airlines/</a>; American Airlines, *Inflight Entertainment*, <a href="https://www.aa.com/i18n/travel-info/experience/entertainment/inflight-entertainment.jsp">https://www.aa.com/i18n/travel-info/experience/entertainment/inflight-entertainment.jsp</a>.

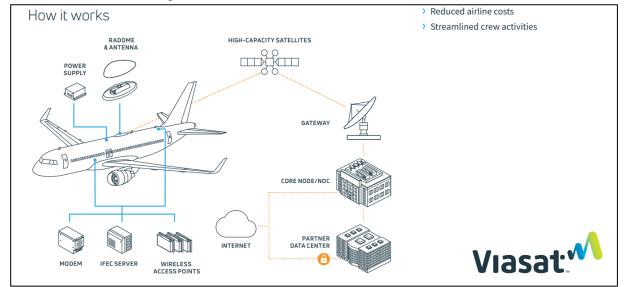
<sup>&</sup>lt;sup>5</sup> Apple, *Apple Music takes flight on American Airlines* (January 30, 2019), <a href="https://www.apple.com/newsroom/2019/01/apple-music-takes-flight-on-american-airlines/">https://www.apple.com/newsroom/2019/01/apple-music-takes-flight-on-american-airlines/</a>.

<sup>6</sup> *Id*.

<sup>&</sup>lt;sup>7</sup> American Airlines, *Inflight Entertainment*, <a href="https://www.aa.com/i18n/travel-info/experience/entertainment/inflight-entertainment.jsp">https://www.aa.com/i18n/travel-info/experience/entertainment/inflight-entertainment.jsp</a>.

26. The '400 Accused Products also include a second data interface configured to communicate, over a network, with a remote trusted server, for example, for connecting to a server for user identification and/or music delivery. The '400 Accused Products establish communications with the remote trusted server. Viasat's Sponsored Access Privacy Notice<sup>8</sup> (which sets out the terms that an end user of the '400 Accused Products must accept to access services such as Apple Music) indicates that Viasat is a data controller that collects personal information related to end-users. Viasat collects such through the second data interface of the '400 Accused Products.

27. Moreover, the '400 Accused Products include one or more processors, which may be located in-cabin or at a ground station, as illustrated below.<sup>9</sup>



28. A processor of the '400 Accused Products is configured to obtain a unique identifier from the portable data storage device, wherein the unique identifier is specific to the portable data storage device and is concealed by the portable data storage device. For example, Viasat's Sponsored Access Privacy Notice indicates that the '400 Accused Products obtain a unique identifier that "is a modified version of [a] device MAC address that is collected through the internet access

<sup>&</sup>lt;sup>8</sup> Viasat, *Viasat Sponsored Access Privacy Notice* (September 9, 2021), <a href="https://www.viasat.com/content/dam/us-site/legal/documents/Sponsored\_Access\_Global\_Privacy\_Policy-Connectivity\_and\_SA\_Final\_Sept\_2021\_ver.pdf">https://www.viasat.com/content/dam/us-site/legal/documents/Sponsored\_Access\_Global\_Privacy\_Policy-Connectivity\_and\_SA\_Final\_Sept\_2021\_ver.pdf</a>.

<sup>&</sup>lt;sup>9</sup> Viasat, *Viasat in-flight connectivity solutions*, <a href="https://www.viasat.com/content/dam/us-site/aviation/documents/565522">https://www.viasat.com/content/dam/us-site/aviation/documents/565522</a> In-flight Connectivity 011 aag.pdf.

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service provided by [an] airline or other service . . . , or by [Viasat]."10 The Privacy Notice also indicates that "Viasat does not link or otherwise associate this identifier to [the end-user's] MAC address or device as part of our provision of Sponsored Access." The user device and/or seat back device, in communication with the '400 Accused Products, conceal the MAC address associated therewith, for example, by randomizing the MAC address.<sup>12</sup>

29. The processor of the '400 Accused Products is configured to authenticate the portable data storage device, using at least the unique identifier, by communicating with the remote trusted server over the second data interface. For example, the Viasat's Sponsored Access Privacy Notice notes that "to deliver the Sponsored Access services to you, we collect a unique identifier associated with the device that you use to access the Services."<sup>13</sup> The processor of the '400 Accused Products is configured to, in response to the authentication, provide to the portable data storage device an encrypted first media content and a corresponding access key.<sup>14</sup> In one example, content provided by the '400 Accused Products to a user device and/or seat back device is encrypted using a digital rights management ("DRM") encryption scheme, such as FairPlay. 15 Moreover, as illustrated

<sup>&</sup>lt;sup>10</sup> Viasat, Viasat Sponsored Access Privacy Notice (September 9, 2021), https://www.viasat.com/content/dam/us-

site/legal/documents/Sponsored Access Global Privacy Policy-Connectivity and SA Final Sept 2021 ver.pdf.

<sup>&</sup>lt;sup>11</sup> *Id*.

<sup>&</sup>lt;sup>12</sup> See, e.g., Apple, Use private Wi-Fi addresses on iPhone, iPad, iPod touch, and Apple Watch, available at: https://support.apple.com/en-us/HT211227 ("Starting with iOS 14, iPadOS 14, and watchOS 7, your device improves privacy by using a different MAC address for each Wi-Fi network. This unique MAC address is your device's private Wi-Fi address, which it uses for that network only."); Android Open Source Project, Implementing MAC Randomization, available at: https://source.android.com/devices/tech/connect/wifi-mac-randomization ("Android devices use randomized MAC addresses when probing for new networks while not currently associated with a network.").

<sup>&</sup>lt;sup>13</sup> Viasat, Viasat Sponsored Access Privacy Notice (September 9, 2021), https://www.viasat.com/content/dam/us-

site/legal/documents/Sponsored\_Access\_Global\_Privacy\_Policy-Connectivity and SA Final Sept 2021 ver.pdf.

<sup>&</sup>lt;sup>14</sup> American Airlines, Apple Music on American, <a href="https://entertainment.aa.com/en/apple-music/">https://entertainment.aa.com/en/apple-music/</a>; American Airlines, Inflight Entertainment, https://www.aa.com/i18n/travelinfo/experience/entertainment/inflight-entertainment.jsp.

<sup>&</sup>lt;sup>15</sup> TuneFab, FairPlay DRM Removal: How to Remove Apple Music DRM? (April 20, 2022), https://www.tunefab.com/tutorials/apple-music-drm--removal.html; Apple, FairPlay Streaming, https://developer.apple.com/streaming/fps/.

below, the '400 Accused Products also provide a corresponding access key to the user device and/or seat back device. 16

# Key Delivery Process FPS allows a content provider to securely deliver an AES 128-bit content key from the provider's key server. The content provider encrypts the H.264 video content with the content key. Then, FPS decrypts the encrypted video content with the content key. Figure 1-1 shows the key and content exchange. Figure 1-1 FPS exchanges Apple device FPS-aware playback app OS Key security module (KSM) Key server Content server

- 30. Viasat has had knowledge of the '400 patent from a date no later than the date of service of this Complaint. Viasat has known how the '400 Accused Products operate and/or are used and has known, or has been willfully blind to the fact, that making, using, offering to sell, and selling the '400 Accused Products within the United States, or importing the '400 Accused Products into the United States, would constitute infringement since at least the service of this Complaint.
- 31. As of the service of the Complaint, Viasat has induced, and continues to induce, infringement of one or more claims of the '400 patent, in violation of 35 U.S.C. § 271(b), by actively encouraging others (including airlines and air travelers) to use, offer to sell, sell, and import the '400 Accused Products. For example, Viasat has promoted use of the '400 Accused Products and participated in encouraging airline customers to use functionality of the '400 Accused Products that is covered by the '400 patent. For example, Viasat promotes the advantages of the '400 Accused Products, and the functionality found in the '400 Accused Products that is covered by claims 1 and

<sup>&</sup>lt;sup>16</sup> Apple, FairPlay Streaming Overview (September 14, 2016), <a href="https://developer.apple.com/streaming/fps/FairPlayStreamingOverview.pdf">https://developer.apple.com/streaming/fps/FairPlayStreamingOverview.pdf</a>; see generally, Apple, FairPlay Streaming, <a href="https://developer.apple.com/streaming/fps/">https://developer.apple.com/streaming/fps/</a>.

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<sup>20</sup> Viasat, Viasat Passenger Care, <a href="https://www.viasat.com/customer-service/aviation/">https://www.viasat.com/customer-service/aviation/</a>.

9 of the '400 patent. For example, Viasat advertises that "[v]ertically integrated technology allows Viasat to optimize the connectivity pipeline from end-to-end, delivering a game-changing in-flight connectivity service that mirrors the experience consumers have on the ground."<sup>17</sup> Through these and other statements, Viasat intends and induces customers such as airlines to adopt and deploy the '400 Accused Products, and further intends and induces airlines to encourage passengers to use the '400 Accused Products for entertainment and engagement during flights, including, specifically, the functionality of the '400 Accused Products that is the subject matter of claims 1 and 9 of the '400 patent. As another example (and as explained in paragraph 23), Viasat has promoted the ability for American Airlines passengers to stream Apple Music for free using Viasat satellite Wi-Fi and has provided instructions for users to do so. 18 Viasat has also published articles discussing passengers' desire for, and the benefits of offering, free Wi-Fi, <sup>19</sup> which acts encourage airlines to adopt the '400 Accused Products, and specifically the infringing functionality, including offering free Wi-Fi through Viasat's "Sponsored Access" model. Viasat also provides customer support to facilitate passengers' use of the '400 Accused Products for in-flight connectivity and entertainment.<sup>20</sup> All of these efforts induce a greater amount of infringing use of the '400 Accused Products. On information and belief, Viasat's acts of inducement also include providing installation services, information, and instructions, and providing the '400 Accused Products to others. In summary, Viasat induces infringement of the '400 patent by specifically advertising, encouraging, and promoting the specific infringing functionality to customers, passengers, airlines, and others.

<sup>&</sup>lt;sup>17</sup> Viasat, Commercial Aviation Inflight Connectivity, <a href="https://www.viasat.com/enterprise-and-mobility/aviation/commercial/inflight-connectivity/">https://www.viasat.com/enterprise-and-mobility/aviation/commercial/inflight-connectivity/</a>; see also Viasat, Viasat in-flight connectivity solutions, <a href="https://www.viasat.com/content/dam/us-site/aviation/documents/565522\_Inflight\_connectivity\_011\_aag.pdf">https://www.viasat.com/content/dam/us-site/aviation/documents/565522\_Inflight\_connectivity\_011\_aag.pdf</a>.

<sup>&</sup>lt;sup>18</sup> Viasat, *Music to Your Ears: American Airlines Customers Can Access Apple Music for Free in Flight* (January 30, 2019), <a href="https://www.viasat.com/about/newsroom/blog/music-to-your-ears-american-airlines-customers-can-access-apple-music-for-free-in-flight/">https://www.viasat.com/about/newsroom/blog/music-to-your-ears-american-airlines-customers-can-access-apple-music-for-free-in-flight/</a>.

<sup>&</sup>lt;sup>19</sup> Viasat, *This year's International Aviation Day comes at an industry crossroads* (December 7, 2020), <a href="https://www.viasat.com/about/newsroom/blog/international-aviation-day/">https://www.viasat.com/about/newsroom/blog/international-aviation-day/</a>; Viasat, *How to make free internet a reality on commercial flights* (August 14, 2019), <a href="https://www.viasat.com/about/newsroom/blog/how-to-make-free-internet-a-reality-on-commercial-flights/">https://www.viasat.com/about/newsroom/blog/how-to-make-free-internet-a-reality-on-commercial-flights/</a>.

- 32. Viasat's acts of direct and indirect infringement have caused damage to Plaintiffs, and Plaintiffs are entitled to recover from Viasat the damages sustained by Plaintiffs as a result of Viasat's wrongful acts in an amount subject to proof at trial.
- 33. Viasat's acts of direct and indirect infringement have caused and, unless restrained and enjoined, will continue to cause, irreparable injury and damage to Plaintiffs for which there is no adequate remedy at law.

# **COUNT TWO: INFRINGEMENT OF THE '667 PATENT**

- 34. Plaintiffs reallege the foregoing paragraphs as if fully set forth herein.
- 35. One or more Plaintiffs holds title to the '667 patent, entitled "Secure stream buffer on network attached storage," which was issued by the USPTO on October 15, 2019. A true and correct copy of the '667 patent is attached hereto as **Exhibit 2**. One or more Plaintiffs together own all substantial rights to the '667 patent, including the rights to practice, license, and transfer the '667 patent, and all economic interest in the '667 patent. All claims of the '667 patent are valid and enforceable.
- 36. Viasat develops and/or sells media streaming software, systems, and services (the "<u>'667 Accused Products</u>"), including, by way of illustrative example, IFEC systems for use in commercial and private aviation.
- 37. Viasat has directly infringed and continues to directly infringe one or more claims of the '667 patent in connection with the '667 Accused Products. Viasat makes, uses, sells, offers for sale, and/or tests media streaming systems and software, including but not limited to the '667 Accused Products, within the United States, and, as such, Viasat has directly infringed and continues to directly infringe, either literally or under the doctrine of equivalents, at least one claim of the '667 patent, including under 35 U.S.C. § 271(a).
  - 38. Claim 11 of the '667 patent recites:
    - 11. A method of transmitting media content from a media streaming system, the method comprising:

establishing a connection, via a wide area network (WAN), to a network attached storage (NAS) device operating on a local area network (LAN);

receiving an indication of the NAS device having a secure region comprising a buffer for streaming media on a separate display device on the local area network, wherein access to the secure region is controlled by the media streaming system;

transmitting media content to the secure region within the NAS device for playback by the display device from the buffer; and

transmitting instructions to the NAS device to control streaming access to the media content stored on the buffer.

39. The '667 Accused Products infringe at least claim 11 of the '667 patent. The '667 Accused Products implement a method of transmitting media content from a media streaming system. For example, the '667 Accused Products implement the Open Caching standard, developed by the Streaming Video Alliance; for example, to stream live TV from fuboTV.<sup>21</sup> Open Caching is an edge caching architecture that allows Content Delivery Networks ("CDN") to utilize caches deployed by Internet Service Providers (like Viasat) at the edge of their network in video streaming applications and other use cases.<sup>22</sup>

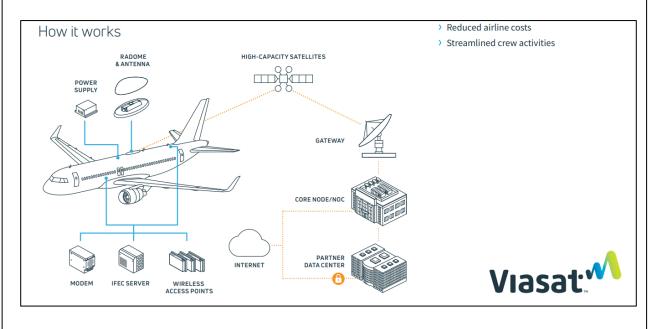
40. The '667 Accused Products establish a connection, via a wide area network ("WAN"), to a network attached storage ("NAS") device operating on a local area network ("LAN"). The '667 Accused Products include an "edge caching node," as required by the Open Caching standard, and as admitted by Dan Newman, Head of Content Delivery Services at Viasat.<sup>23</sup> The edge caching node is connected to the Internet, via Viasat's satellite Internet system, and is also connected to Viasat's IFEC server(s) within the aircraft, for example, using a LAN. The architecture of the environment in which '667 Accused Products operate is illustrated below.<sup>24</sup>

<sup>&</sup>lt;sup>21</sup> Aviation Today, *Viasat Using Open Caching to Bring Free fuboTV to Connected Flights* (February 25, 2020), available at <a href="https://www.aviationtoday.com/2020/02/25/viasat-using-open-caching-bring-free-fuboty-connected-flights/">https://www.aviationtoday.com/2020/02/25/viasat-using-open-caching-bring-free-fuboty-connected-flights/</a>.

<sup>&</sup>lt;sup>22</sup> Streaming Video Alliance, *Open Caching Request Routing Functional Specification* (Nov. 14, 2016), available at <a href="https://www.streamingvideoalliance.org/product/open-cache-request-routing-functional-specification/">https://www.streamingvideoalliance.org/product/open-cache-request-routing-functional-specification/</a>.

<sup>&</sup>lt;sup>23</sup> The Broadcast Knowledge, *Video: Layer 4 in the CDN* (October 19, 2020), <a href="https://thebroadcastknowledge.com/2020/10/19/video-layer-4-in-the-cdn/">https://thebroadcastknowledge.com/2020/10/19/video-layer-4-in-the-cdn/</a>.

<sup>&</sup>lt;sup>24</sup> Viasat, *Viasat in-flight connectivity solutions*, <a href="https://www.viasat.com/content/dam/us-site/aviation/documents/565522">https://www.viasat.com/content/dam/us-site/aviation/documents/565522</a> In-flight Connectivity 011 aag.pdf.



41. The '667 Accused Products receive an indication of the NAS device having a secure region comprising a buffer for streaming media on a separate display device on the local area network, wherein access to the secure region is controlled by the media streaming system. For example, the Open Caching standard, which the '667 Accused Products implement, requires that the edge caching node advertise its available capacity.<sup>25</sup> The '667 Accused Products also transmit media content to the secure region within the NAS device for playback by the display device from the buffer.<sup>26</sup> The '667 Accused Products also transmit instructions to the NAS device to control streaming access to the media content stored on the buffer, as required by the Open Caching standard, including for example, because the CDN may have certain security requirements for serving content.<sup>27</sup>

<sup>&</sup>lt;sup>25</sup> See, e.g., Streaming Video Alliance, Open Caching Request Routing Functional Specification at 15; see also, id. at 19, 33.

<sup>&</sup>lt;sup>26</sup> See, e.g., id. at 19; see also, The Broadcast Knowledge, Video: Layer 4 in the CDN (October 19, 2020), <a href="https://thebroadcastknowledge.com/2020/10/19/video-layer-4-in-the-cdn/">https://thebroadcastknowledge.com/2020/10/19/video-layer-4-in-the-cdn/</a>; Aviation Today, <a href="https://www.aviation.com/2020/10/25/viasat-using-open-caching-bring-free-fuboty-connected-flights/">https://www.aviation.com/2020/10/19/video-layer-4-in-the-cdn/</a>; Aviation Today, <a href="https://www.aviation.com/2020/02/25/viasat-using-open-caching-bring-free-fuboty-connected-flights/">https://www.aviation.com/2020/02/25/viasat-using-open-caching-bring-free-fuboty-connected-flights/</a> (discussing transmission of media content from fuboTV to an edge caching node); See generally Streaming Video Alliance, Optimizing Video Delivery with the Open Caching Network (September 5, 2018).

<sup>&</sup>lt;sup>27</sup> See, e.g., Streaming Video Alliance, Open Caching Request Routing Functional Specification at 14; see also, Stellar Jobs, Software Engineering Manager, Platform APIs, available at <a href="https://stellarjobs.co/jobs/11449959-software-engineering-manager-platform-apis">https://stellarjobs.co/jobs/11449959-software-engineering-manager-platform-apis</a> (job description for a Software Engineering Manager explaining that Viasat's "Content Delivery team owns APIs

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42. Viasat has had knowledge of the '667 patent from a date no later than the date of service of this Complaint. Viasat has known how the '667 Accused Products operate and/or are used and has known, or has been willfully blind to the fact, that making, using, offering to sell, and selling the '667 Accused Products within the United States, or importing the '667 Accused Products into the United States, would constitute infringement since the service of this Complaint.

43. As of the service of the Complaint, Viasat has induced, and continues to induce, infringement of one or more claims of the '667 patent, in violation of 35 U.S.C. § 271(b), by actively encouraging others (including airlines and air travelers) to use, offer to sell, sell, and import the '667 Accused Products. For example, Viasat promotes the advantages of the '667 Accused Products, and the functionality found in the '667 Accused Products that is covered by claim 11 of the '667 patent. For example, Viasat advertises that "[v]ertically integrated technology allows Viasat to optimize the connectivity pipeline from end-to-end, delivering a game-changing in-flight connectivity service that mirrors the experience consumers have on the ground."<sup>28</sup> Through these and other statements, Viasat intends and induces customers such as airlines to adopt and deploy the '667 Accused Products, and specifically the functionality of the '667 patent that is the subject matter of claim 11 of the '667 patent, and further intends and induces airlines to encourage passengers to use the '667 Accused Products and, specifically, the accused functionality for entertainment and engagement during flights. Viasat also provides customer support to facilitate passengers' use of the '667 Accused Products for in-flight connectivity and entertainment.<sup>29</sup> As another example, Viasat has monitored passengers' media consumption and tried to differentiate its entertainment offerings to be more attractive so as to induce airlines and customers to adopt them and has taken steps, such as partnering with DIRECTV, to make it "less cumbersome" for airlines to make in-flight entertainment available to passengers.<sup>30</sup> Among other in-flight programming, Viasat's efforts have

that allow content providers to manage delivery of their content to our end users.").

<sup>&</sup>lt;sup>28</sup> Viasat, Commercial Aviation Inflight Connectivity, <a href="https://www.viasat.com/enterprise-and-mobility/aviation/commercial/inflight-connectivity/">https://www.viasat.com/enterprise-and-mobility/aviation/commercial/inflight-connectivity/</a>; see also Viasat, Viasat in-flight connectivity solutions, <a href="https://www.viasat.com/content/dam/us-site/aviation/documents/565522">https://www.viasat.com/content/dam/us-site/aviation/documents/565522</a> Inflight Connectivity 011 aag.pdf.

<sup>&</sup>lt;sup>29</sup> Viasat, Viasat Passenger Care, <a href="https://www.viasat.com/customer-service/aviation/">https://www.viasat.com/customer-service/aviation/</a>.

<sup>&</sup>lt;sup>30</sup> Viasat, Airlines adjusting in-flight entertainment options as travelers return,

focused on live events, which functionality Viasat enables through its use of technology that infringes at least claim 11 of the '667 patent. For example, Viasat stated that "[o]ur statistics show the live services provided through our offering is valued by the customers." As another example, Viasat announced that it was giving passengers the NBA League Pass in-flight, providing access to live basketball games, at no additional cost on JetBlue and American Airlines—and further touted that Viasat was "the only one offering the NBA League Pass in-flight." Viasat's statements and efforts encourage airlines to adopt the '667 Accused Products, and specifically the infringing functionality, including streaming of live TV, and induce a greater amount of infringing use of the '667 Accused Products. On information and belief, Viasat's acts of inducement also include providing installation services, information, and instructions, and providing the '667 Accused Products to others. In summary, Viasat induces infringement of the '667 patent by specifically advertising, encouraging, and promoting the specific infringing functionality to customers, passengers, airlines, and others.

- 44. Viasat's acts of direct and indirect infringement have caused damage to Plaintiffs, and Plaintiffs are entitled to recover from Viasat the damages sustained by Plaintiffs as a result of Viasat's wrongful acts in an amount subject to proof at trial.
- 45. Viasat's acts of direct and indirect infringement have caused, and unless restrained and enjoined, will continue to cause, irreparable injury and damage to Plaintiffs for which there is no adequate remedy at law.

# **COUNT THREE: INFRINGEMENT OF THE '834 PATENT**

- 46. Plaintiffs reallege the foregoing paragraphs as if fully set forth herein.
- 47. One or more Plaintiffs holds title to the '834 patent, entitled "Method and system for activation of local content with legacy streaming systems," which was issued by the USPTO on

 $\underline{https://www.viasat.com/about/newsroom/blog/airlines-adjusting-in-flight-entertainment-options-as-travelers-/.}$ 

<sup>&</sup>lt;sup>31</sup> *Id*.

<sup>&</sup>lt;sup>32</sup> Viasat, *Meet the Experts: Making inflight connectivity better and better* (August 13, 2021), <a href="https://www.viasat.com/about/newsroom/blog/meet-the-experts--making-inflight-connectivity-better-and-better/">https://www.viasat.com/about/newsroom/blog/meet-the-experts--making-inflight-connectivity-better-and-better/</a>.

August 6, 2013. A true and correct copy of the '834 patent is attached hereto as **Exhibit 3**. One or more Plaintiffs together own all substantial rights to the '834 patent, including the rights to practice, license, and transfer the '834 patent, and all economic interest in the '834 patent. All claims of the '834 patent are valid and enforceable.

- 48. Viasat develops and/or sells media streaming software, systems, and services (the "<u>'834 Accused Products</u>"), including, by way of illustrative example, IFEC systems for use in commercial and private aviation.
- 49. Viasat has directly infringed and continues to directly infringe one or more claims of the '834 patent in connection with the '834 Accused Products. Viasat makes, uses, sells, offers for sale, and/or tests media streaming systems and software, including but not limited to the '834 Accused Products, within the United States, and as such, Viasat has directly infringed and continues to directly infringe, either literally or under the doctrine of equivalents, at least one claim of the '834 patent, including under 35 U.S.C. § 271(a).
  - 50. Claim 14 of the '834 patent recites:
    - 14. A method for activation of local content, the method comprising:

performing the following in a host device in communication with a storage device storing encrypted content:

receiving a stream of data from a network;

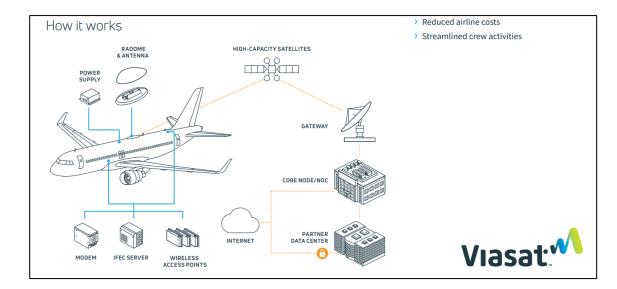
deriving a key from the received stream of data; and

decrypting the encrypted content using the key derived from the received stream of data.

51. The '834 Accused Products infringe at least claim 14 of the '834 patent. The '834 Accused Products implement a method for activation of local content. The '834 Accused Products include an IFEC server that stores encrypted content for streaming to user devices running Viasat software and/or seat-back devices, over Viasat's in-cabin wireless and/or wired network. The architecture of the environment in which '834 Accused Products operate is illustrated below.<sup>33</sup>

<sup>&</sup>lt;sup>33</sup> Viasat, *Viasat in-flight connectivity solutions*, <a href="https://www.viasat.com/content/dam/us-site/aviation/documents/565522">https://www.viasat.com/content/dam/us-site/aviation/documents/565522</a> In-flight Connectivity 011 aag.pdf.





- 52. The '834 Accused Products perform the claimed steps in a host device, such as a user device running Viasat software and/or seat-back device, in communication with a storage device, such as Viasat's IFEC server, storing encrypted content. Viasat's IFEC server "ingests" and encrypts media content in accordance with DRM requirements.<sup>34</sup>
- 53. The '834 Accused Products receive a stream of data from a network. For example, a Viasat IFEC server streams "on-demand content directly to passenger devices via a user interface that delivers the experience of popular streaming services." <sup>35</sup>



<sup>&</sup>lt;sup>34</sup> *Id.*; Viasat, *Entertainment*, available at: <a href="https://www.viasat.com/enterprise-and-mobility/aviation/commercial/inflight-entertainment/">https://www.viasat.com/enterprise-and-mobility/aviation/commercial/inflight-entertainment/</a>.

<sup>&</sup>lt;sup>35</sup> Viasat, Wireless Inflight Entertainment, available at: <a href="https://www.viasat.com/content/dam/us-site/aviation/documents/1181038">https://www.viasat.com/content/dam/us-site/aviation/documents/1181038</a> Wireless IFE Datasheet 007 aag.pdf.

derived from the received stream of data to playback the media content.

The '834 Accused Products derive a key to decrypt the streamed media content from

Viasat has had knowledge of the '834 patent from a date no later than the date of

As of the service of the Complaint, Viasat has induced, and continues to induce,

the received stream of data. The key is derived from media and/or information provided by the

Viasat IFEC server, for example, where the server "encrypts content in accordance with DRM

requirements."<sup>36</sup> The '834 Accused Products then decrypt the encrypted content using the key

service of this Complaint. Viasat has known how the '834 Accused Products operate and/or are

used and has known, or has been willfully blind to the fact, that making, using, offering to sell, and

selling the '834 Accused Products within the United States, or importing the '834 Accused Products

infringement of one or more claims of the '834 patent, in violation of 35 U.S.C. § 271(b), by actively

encouraging others (including airlines and air travelers) to use, offer to sell, sell, and import the '834

Accused Products. For example, Viasat promotes the advantages of the '834 Accused Products, and

the functionality found in the '834 Accused Products that is covered by claim 14 of the '834 patent.

For example, Viasat promotes its infringing on-demand content feature as providing "an end-to-end

entertainment solution for airlines, supporting every part of the delivery process, from content

management and quality assurance to captivating your in-flight audience."<sup>37</sup> Through these and

other statements, Viasat intends and induces customers such as airlines to adopt and deploy the '834

Accused Products, and specifically the functionality of the '834 patent that is the subject matter of

claim 14 of the '834 patent, and further intends and induces airlines to encourage passengers to use

the '834 Accused Products and, specifically, the accused functionality for entertainment and

engagement during flights. Viasat also provides customer support to facilitate passengers' use of

the '834 Accused Products for in-flight connectivity and entertainment.<sup>38</sup> On information and belief

into the United States, would constitute infringement at least since the service of this Complaint.

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36 Id.
 37 Viasat, Entertainment, <a href="https://www.viasat.com/enterprise-and-mobility/aviation/commercial/inflight-entertainment/">https://www.viasat.com/enterprise-and-mobility/aviation/commercial/inflight-entertainment/</a>; see also Viasat, Wireless Inflight Entertainment, <a href="https://www.viasat.com/content/dam/us-">https://www.viasat.com/content/dam/us-</a>

site/aviation/documents/1181038 Wireless IFE Datasheet 007 aag.pdf.

<sup>38</sup> Viasat, Viasat Passenger Care, <a href="https://www.viasat.com/customer-service/aviation/">https://www.viasat.com/customer-service/aviation/</a>. For

Viasat's acts of inducement also include providing installation services, information, and instructions, and providing the '834 Accused Products to others. In summary, Viasat induces infringement of the '834 patent by specifically advertising, encouraging, and promoting the specific infringing functionality to customers, passengers, airlines, and others.

- 57. Viasat's acts of direct and indirect infringement have caused damage to Plaintiffs, and Plaintiffs are entitled to recover from Viasat the damages sustained by Plaintiffs as a result of Viasat's wrongful acts in an amount subject to proof at trial.
- 58. Viasat's acts of direct and indirect infringement have caused, and unless restrained and enjoined, will continue to cause, irreparable injury and damage to Plaintiffs for which there is no adequate remedy at law.

# **DEMAND FOR JURY TRIAL**

59. In accordance with Rule 38 of the Federal Rules of Civil Procedure and Civil Local Rule 3-6, Plaintiffs hereby demand a jury trial on all issues triable before a jury.

# PRAYER FOR RELIEF

WHEREFORE, Plaintiffs pray for the following relief:

- A. For entry of judgment by this Court against Viasat and in favor of Plaintiffs in all respects, including that Viasat has and continues to infringe one or more claims of the Patents-in-Suit;
- B. For entry of a judgement by this Court against Viasat and in favor of Plaintiffs in all respects, including that Viasat has and continues to induce infringement of one or more claims of the Patents-in-Suit;
- C. For an order enjoining Viasat, and its officers, directors, shareholders, agents, servants, employees, attorneys, all parent, subsidiary and affiliate corporations, their successors in interest and assigns, and all other entities and individuals acting in concert with it or on its behalf, including customers, from making, importing, using, offering for sale, and/or selling any product or

example, Viasat assisted customers and monitored the situation when an issue with iOS 15 prevented playback of in-flight entertainment, *see* <a href="https://www.flyertalk.com/forum/american-airlines-aadvantage/2054388-apple-ios-15-no-aa-ife-playback.html">https://www.flyertalk.com/forum/american-airlines-aadvantage/2054388-apple-ios-15-no-aa-ife-playback.html</a>.