

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA**

**INTERDIGITAL, INC., INTERDIGITAL VC
HOLDINGS, INC., AND INTERDIGITAL
MADISON PATENT HOLDINGS, SAS,**

Plaintiffs,

v.

AMAZON.COM SERVICES LLC,

Defendant.

Civil Action No. _____

JURY TRIAL DEMANDED

ORIGINAL COMPLAINT FOR PATENT INFRINGEMENT

Plaintiffs InterDigital, Inc., InterDigital VC Holdings, Inc., and InterDigital Madison Patent Holdings, SAS (collectively, “Plaintiffs” or “InterDigital”) bring this action for patent infringement against Amazon.com Services LLC (“Defendant” or “Amazon”). Plaintiffs, on personal knowledge as to their own acts, and upon information and belief as to all others based on diligent investigation, allege as follows:

NATURE OF THE ACTION

1. For years, Amazon has directly and indirectly infringed, and continues to infringe, the following issued, valid, and enforceable United States Patents: U.S. Patent No. 11,252,435 (“the ’435 Patent”); U.S. Patent No. 12,149,734 (“the ’734 Patent”); U.S. Patent No. 12,143,606 (“the ’606 Patent”); and U.S. Patent No. 8,149,338 (“the ’338 Patent”) (collectively, the “Asserted Patents”) (attached hereto as Exhibits 1-4). Plaintiffs accordingly file this Complaint seeking a judgment of and relief for Amazon’s persistent and pervasive infringement of the Asserted Patents.

2. When companies use InterDigital’s patented technologies without permission, InterDigital’s practice is to engage such companies in good faith with the goal of carefully finding a mutually beneficial solution. This solution usually takes the form of a globally negotiated patent

license achieved through a mutual and trusting exchange of technical information and license offers, under the protection of confidentiality in order to resolve the unauthorized patent use by mutual agreement—and without resort to litigation. Consistent with its commitment to resolve intellectual property matters amicably, InterDigital undertook this approach with respect to Amazon.

3. Despite InterDigital's significant efforts in attempting to find a mutually agreeable solution to resolve Amazon's unauthorized use of its digital video technology, Amazon abruptly initiated litigation in the United Kingdom seeking declaratory relief related to four UK patents. It also launched litigation in Sao Paulo, Brazil challenging over 20 of InterDigital's issued patents in that jurisdiction.

4. Amazon is not authorized to use the innovative technologies claimed by InterDigital's Asserted Patents. This Complaint is therefore necessary to put an end to Amazon's infringing conduct. Amazon continues its widespread infringement of the Asserted Patents by utilizing InterDigital's inventions that both enable high dynamic range (HDR) technology and promote efficiency in Amazon's Fire TV and Prime streaming businesses.

THE PARTIES

5. Plaintiff InterDigital, Inc. is a Pennsylvania corporation with its principal place of business at 200 Bellevue Parkway, Suite 300, Wilmington, DE 19809.

6. Plaintiff InterDigital VC Holdings, Inc. is a Delaware corporation with its principal place of business at 200 Bellevue Parkway, Suite 300, Wilmington, DE 19809. InterDigital VC Holdings, Inc. is a wholly owned subsidiary of InterDigital, Inc.

7. Plaintiff InterDigital Madison Patent Holdings, SAS is a French société par actions simplifiée (simplified joint stock company) with its principal place of business at 3 Rue du Colonel Moll, Paris, France 75017. InterDigital Madison Patent Holdings, SAS is a wholly owned

subsidiary of InterDigital, Inc.

8. Amazon.com Services LLC is a limited liability company organized under the laws of Delaware and, on information and belief, has a principal place of business at 410 Terry Ave. N, Seattle, WA 98109. Amazon.com Services LLC maintains a regular and established place of business in this District through multiple permanent physical facilities, including in particular Amazon's second headquarters located in this District at 1770 Crystal Drive, Arlington, VA 22202. On information and belief, Amazon.com Services LLC has participated in the sale or offer for sale of one or more Accused Products¹ and/or has provided digital services and content for use by the Accused Products.

9. Amazon.com Services LLC may be served through its registered agent Corporation Service Company, 251 Little Falls Dr., Wilmington, Delaware, 19808.

JURISDICTION AND VENUE

10. This Court has original jurisdiction over the subject matter of this action under 28 U.S.C. §§ 1331 and 1338(a) because the action arises under the patent laws of the United States.

11. This Court has specific and general personal jurisdiction over Amazon consistent with the requirements of the Due Process Clause of the United States Constitution and the Virginia Long-Arm Statute. Va. Code Ann. § 8.01-328.1. On information and belief, Defendant has sufficient minimum contacts with the forum because Defendant transacts substantial business in the State of Virginia and in this District.

12. Defendant Amazon has substantial contacts with the forum as a consequence of

¹ The Accused Products include both the HDR Accused Instrumentalities and the AV1 Accused Instrumentalities. The HDR Accused Instrumentalities include all Amazon devices capable of playing back HDR10, HDR10+, or Dolby Vision content. The AV1 Accused Instrumentalities include all Amazon devices capable of decoding content encoded in the AV1 compression format.

actively establishing its 6,000,000 square-foot second headquarters in Virginia and in this District (Amazon's "HQ2" facilities), which opened to much fanfare in 2023. Amazon also conducts substantial business in Virginia. Amazon states in its most recent 10-K filing to the SEC for fiscal year ended December 31, 2024, dated February 6, 2025, that "[w]e own and lease our corporate headquarters in Washington's Puget Sound region and Arlington, Virginia."² Amazon sells, makes, uses, and offers for sale its products and services, including products and services that infringe the Asserted Patents, within the State of Virginia, including to customers in Virginia. Amazon has thousands of employees located in this District, including those exemplary employees identified in Exhibit 9, who appear to be involved with the Accused Products.

13. On April 9, 2020, a Court in this District held: "It must be said that Amazon is nothing if not ubiquitous in the United States. Furthermore, after considering 238 cities, Amazon chose Arlington in the Eastern District of Virginia as the location for its HQ2, and will invest \$2.5 billion and 25,000 jobs in the undertaking. As such, Amazon cannot in good faith represent to the Court that E.D. Va. is an undesirable or inconvenient location to operate and do business. Litigating should not be an additional significant strain." *Maglula, Ltd. v. Amazon.com, Inc.*, No. 1:19-cv-01570, 2020 WL 9536937, at *16 (E.D. Va. Apr. 9, 2020).

14. Venue is proper for Defendant in this District under 28 U.S.C. §§ 1391(b) and (c), and 1400(b) because, as described above, a substantial part of the events giving rise to Plaintiff's claims occurred in this District, and because Amazon, with its second headquarters in Arlington, Virginia, resides within this District. Amazon has committed acts of infringement in this District, and Amazon has a regular and established place of business in this judicial district. Venue is also

² Amazon.com, Inc., Form 10-K for the Fiscal Year Ending December 31, 2024 (SEC File No. 000-22513) (filed Feb. 7, 2025).

proper for the reasons set forth by this Court in *Maghula. Id.*, 1:19-cv-01570, ECF 52. Venue is also convenient for the reasons set forth by this Court in *SoundClear Techs. LLC v. Amazon.com, Inc., et al.*, No. 1:24-cv-1283 (E.D. Va. Nov. 8, 2024), ECF 63 (“given that Amazon HQ2 is located in Arlington, Virginia and is involved in bringing the accused products to market, Virginia has unique ties to the underlying claims . . .”).

15. Further, Amazon has previously pled venue in this District is proper. For example, in a 2020 action filed by Amazon in this District, Amazon asserted that venue was proper under 28 U.S.C. § 1391(b) because, among other things “it is a district in which Plaintiff [Amazon] maintains headquarters and/or substantial business operations.” *Amazon.com, Inc. v. WDC Holdings LLC*, No. 1:20-cv-484, ECF No. 1, ¶ 26 (E.D. Va. Apr. 27, 2020). Additionally, Amazon did not contest venue in *DivX, LLC v. Amazon.com, Inc.*, and is actively litigating patent infringement claims in this District directed to accused products and services similar to those at issue here. *DivX, LLC v. Amazon.com, Inc.*, No. 1:24-cv-02061, ECF No. 58 (Answer) at ¶¶ 31-35 (E.D. Va. May 5, 2025)(“Amazon admits that it maintains its East Coast headquarters in Arlington, Virginia, within the Eastern District of Virginia, and does not contest, for purposes of this case only, that venue is proper under 28 U.S.C. §§ 1391 and 1400.”)

FACTUAL BACKGROUND

InterDigital And Its Persisting Innovation

16. InterDigital is one of the most successful and innovative research and development companies of the last half century, both domestically and globally. As a dynamic and groundbreaking engineering company, for more than fifty years InterDigital has been at the forefront of developing foundational video, wireless communication, and other digital technologies.

17. Every year, InterDigital pours a massive amount of money into its worldclass

research and IP portfolio development engine. For example, in the most recently reported fiscal year alone, InterDigital reinvested well over nine figures—a sum representing nearly 50% of its recurring revenues—back into this cycle of innovation. At its multiple facilities throughout the United States, and its bespoke video research laboratories in Rennes, France, InterDigital researches, develops, engineers, and licenses advanced video-related innovations as well as other cutting-edge technology. As discussed in further detail below, InterDigital has designed and developed a range of key technologies instrumental to video coding and related implementation techniques, including high dynamic range (“HDR”) functionality.

18. InterDigital and its employees’ technical contributions have been recognized all over the world. Its employees have held or currently hold more than 100 significant leadership positions on global industry-leading technology development bodies. InterDigital has also won many awards for its technical discoveries. As just one example, InterDigital has been named as one of the world’s 100 most innovative businesses by LexisNexis for the past three years.³ Further reflecting the company’s strength due to its technological discoveries and contributions, Forbes recently recognized InterDigital as the Number 1 company on its 2025 list of America’s Most Successful Mid-Cap Companies.⁴

19. As one of the world’s largest and most successful pure research and innovation

³ See *Innovation Momentum 2022: The Global Top 100*, LEXISNEXIS (Jan. 18, 2022), <https://go.lexisnexisip.com/hubfs/~IP%20-%20Intellectual%20Property%20Files/IP%20-%20PatentSight/2022%20Innovation%20Momentum%20Report/LexisNexis%20Innovation%20Momentum%20Report%202022.pdf>; *Innovation Momentum 2023: The Global Top 100*, LEXISNEXIS (Jan. 2023), <https://www.lexisnexisip.com/wp-content/uploads/2024/02/LexisNexis-Innovation-Momentum-Report-2023.pdf>; *Innovation Momentum 2024: The Global Top 100*, LEXISNEXIS (Jan. 2024), <https://go.lexisnexisip.com/hubfs/LexisNexis-Innovation-Momentum-Report-2024.pdf?hsCtaTracking=b73d2358-7d13-4732-afc6-e8a25be14c30%7C0b8f3fb0-888a-43b3-b2f6-70a6a3d96d87>.

⁴ See <https://www.forbes.com/sites/hanktucker/2025/12/12/americas-most-successful-mid-caps-goldilocks-stocks-thriving-in-a-difficult-market/>.

companies, InterDigital relies heavily on the cycle of invention to enable its future research and development efforts. In particular, InterDigital relies on obtaining fair compensation for its novel contributions to technological advancement in multiple industry segments, including in video coding and high dynamic range technologies, to fund its ongoing work breaking new ground for implementers and consumers alike.

20. Protecting its innovations is a key component to InterDigital's business and, to this end, it has a portfolio of over 33,000 patent assets, with a strong emphasis on video and wireless technologies. More specifically, InterDigital has approximately 6,800 patents in its video portfolio, with over 3,500 patents and applications relating to current and developing codec technologies such as AVC, HEVC, VP9, AV1, and VVC. InterDigital also has a portfolio of video-related patents including those related to improved dynamic range and many other improvements to the user video experience.

Video Coding Technology

21. Video coding technology refers to encoding video into a compressed form and decoding video so that it can be displayed and viewed by a user. This technology allows efficient transmission of video while at the same time maximizing quality.

22. In digital video, video content is represented by a series of images (called "frames"), which are displayed in sequence one after another to produce the illusion of motion. A frame is composed of many picture elements ("pixels"), which represent the smallest addressable unit of a digital video. These pixels are arranged in a grid, the resolution of which is expressed in terms of the number of pixels in the horizontal and vertical directions for each frame. For example, video with frames 1,920 pixels wide by 1,080 pixels high may be referred to as 1920x1080 or "1080p," commonly referred to as High Definition or HD. As another example, Ultra High Definition video, also known as UHD or 4K, typically has frames that are 3,840 pixels wide by

1,260 pixels high.

23. A pixel indicates the color of the portion of the frame it represents in terms of three color components. For example, a pixel may encode the red, green, and blue (“RGB”) values of a unit of a frame or, equivalently, may encode the luminance, blue chrominance, and red chrominance (“YCbCr”) components of a unit of a frame. Each of these components can be expressed as a collection of bits. For example, in 8-bit video each color component can take a value from 0 to 255 with 0 indicating the minimum amount of that component and 255 indicating the maximum. Thus, a black pixel would have the color components [0, 0, 0] and a white pixel would have the components [255, 255, 255]. Higher bit-depths, e.g., 10-bit video, allow a wider range of colors to be represented—but require commensurately greater information per pixel.

24. While the number of pixels in a frame, and a screen capable of displaying them, can be expressed in height and width, or in X and Y axes, the color and quality characteristics of each individual pixel can be thought of as a separate Z axis. Each of these axes is important in playing high quality digital video.

25. Modern digital video typically consists of frames displayed at a rate of around 30 frames per second (“fps”), allowing the total amount of data required for a single second of video to be calculated. For an 8-bit 1080p video at 30 fps, each pixel requires 24 bits (3 components x 8 bits), and each frame consists of 1920x1080 or 2,073,600 pixels, representing a total of 49,766,400 bits. Given a frame rate of 30 fps, just one second of raw video would require transmitting or storing nearly 1.5 billion bits, or about 187 megabytes of data.

26. The massive amount of information and bandwidth required to store or transmit digital video is a fundamental problem, which experts in the field like InterDigital have aimed to solve by introducing a range of video encoders and decoders, often referred to as a “codecs”

(“coder/decoder”), which allow video to be compressed prior to storage and transmission then later decompressed prior to display. Video codecs take advantage of mathematical and statistical techniques to eliminate redundancy in digital video and reduce the amount of information that must be stored and transmitted to reproduce its content. Modern video codecs are very efficient, allowing consumers of digital video to store many hours of content on disk or to stream digital video directly to their TVs, computers, tablets, smartphones, and other devices over the internet.

27. One example of modern video coding is AV1, developed as a successor to both VP9 and HEVC. AV1 incorporates numerous technical improvements, including enhanced motion prediction, transform coding, and entropy coding, enabling up to 30% greater compression efficiency than HEVC at the same visual quality. AV1 has been increasingly adopted across the video ecosystem, with support from major technology companies and integration into hardware decoders, browsers, and streaming services. As demand grows for higher resolutions, wider color gamuts, and high dynamic range video, AV1 provides a scalable, efficient solution for next-generation internet video delivery.

HDR

28. High Dynamic Range (“HDR”) video technology represents a major step forward in digital video, allowing content to display a much wider depth and range of brightness, contrast, and color than traditional Standard Dynamic Range (“SDR”) video. The goal of HDR is simple: to make on-screen images look closer to what the human eye sees in the real world—bright highlights that still retain detail, deep shadows that do not crush to black, and richer, more realistic color overall.

29. In regular SDR systems, the image is limited to a narrow dynamic range and a smaller color space. This means bright parts of an image can look washed out and dark areas can lose detail. HDR expands both the brightness range and color gamut to cover far more of the visible

spectrum. To make that work, HDR video includes extra information (called metadata) that tells the display how bright or colorful different parts of the picture should be. This metadata can be static—applied once for the whole video—or dynamic, changing scene-by-scene or even frame-by-frame so each moment looks its best on the viewer’s screen.

30. Among the most common HDR formats are HDR10, HDR10+, and Dolby Vision. HDR10 is an open format used across most modern TVs and streaming platforms. It relies on static metadata that describes the mastering display and content brightness levels. Dolby Vision and HDR10+ build on the same foundation but add dynamic metadata. Together, these formats enable HDR playback across a wide range of devices, providing brighter highlights, deeper contrast, and more accurate color reproduction than conventional video.

OVERVIEW OF THE ASSERTED PATENTS

The ’435 Patent

31. U.S. Patent No. 11,252,435 (“the ’435 Patent”) entitled “Method and apparatus for parametric, model-based, geometric frame partitioning for video coding,” issued on February 15, 2022, and names Oscar Divorra Escoda and Peng Yinas the inventors. The ’435 Patent is attached as Exhibit 4.

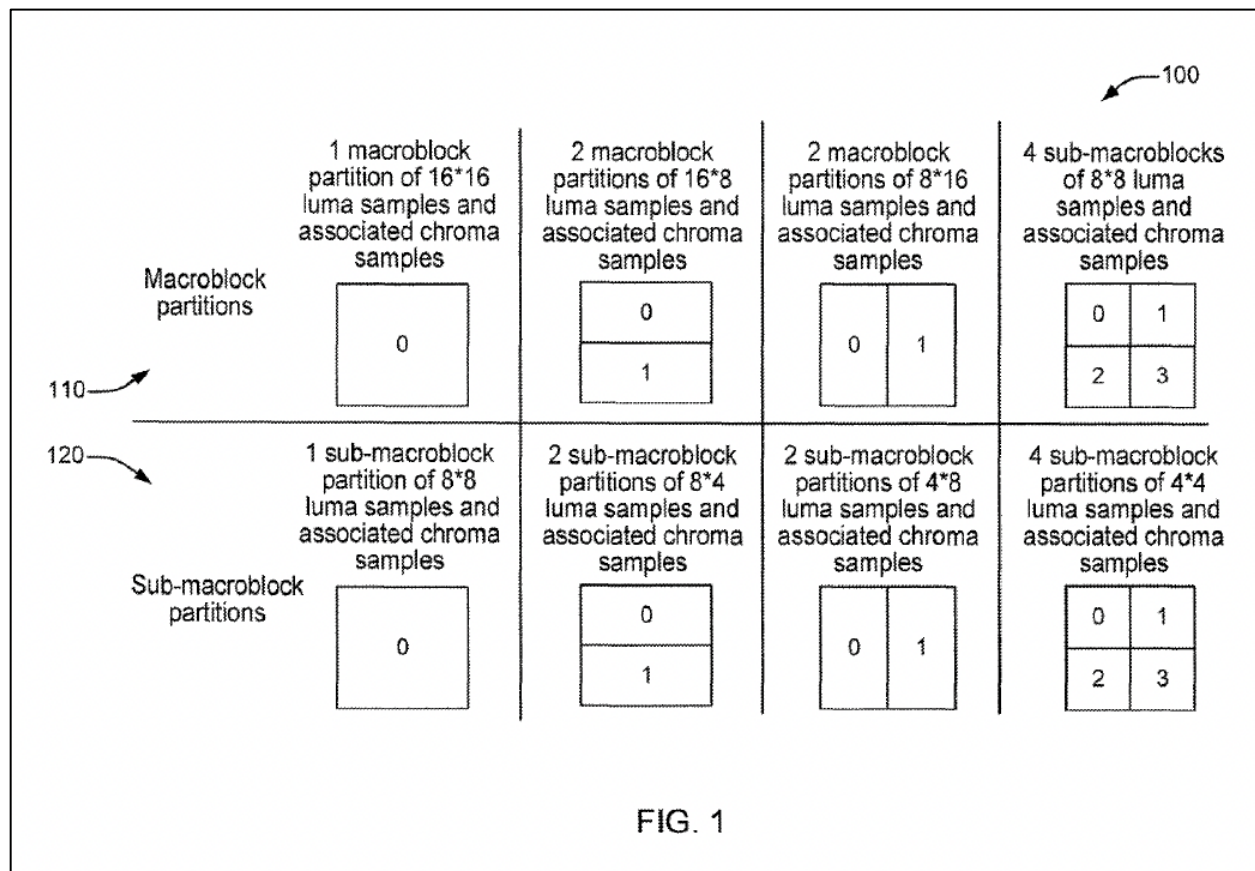
32. InterDigital VC Holdings, Inc. owns all rights, title, and interest in the ’435 Patent, and holds all substantial rights pertinent to this suit, including the right to sue and recover for all past, current, and future infringement.

33. The ’435 Patent is valid and enforceable and directed to patentable subject matter.

34. The ’435 Patent is directed to systems and methods for parametric, model-based geometric frame partitioning that enable video encoders/decoders to represent and code image regions using curves or segment-based models rather than conventional tree-structured block partitions. Ex. 1 (’435 Patent) at 1:50-64. This approach allows the coding system to more precisely

match natural geometric boundaries in video imagery, thereby improving coding efficiency. *Id.*

35. Prior to the invention, major video coding standards (e.g., MPEG-2, H.263, MPEG-4 AVC/H.264) relied on block-based and tree-structured partitioning such as 16×16 macroblocks subdivided into 16×8 , 8×16 , 8×8 , and further 4×4 partitions. *Id.* at 1:65-2:17. FIG. 1 (below) of the patent illustrates these hierarchical block structures. Such partitions could not efficiently capture geometric features such as edges, contours, or oriented textures, resulting in suboptimal prediction and increased bitrate. *Id.* at 2:14-17, 43-47. The specification also surveys multiple “prior art approaches” using diagonal partitions or zigzag patterns (e.g., FIGS. 2A–3), and discusses their limitations of only offering coarse, fixed-orientation edges and lack explicit geometric information coding. *Id.* at 3:4-4:54.



36. To overcome these deficiencies, the '435 Patent introduces parametric geometric

models that define partitions using curves or line segments based on encoded parameters rather than fixed block shapes. *Id.* at 6:45-56. These models generate partitions that better approximate actual object boundaries in video frames. *Id.* Figures 5-7 show examples of partitions defined by parametric functions, while Figures 16-19 describe searching for and encoding the optimal geometric model type and parameters. The system supports both inter-mode and intra-mode geometric partitioning (FIGS. 18A-18B), allowing flexible use across different prediction types.

37. The '435 Patent enables unified encoding and decoding of geometric partitions that adapt to natural video features, improving prediction accuracy and reducing bitrate. The inclusion of precision-scalable parameters allows the system to adjust geometric detail according to target compression efficiency. *Id.* at Fig. 24. By embedding model type, geometric parameters, and predictor information directly into the encoded bitstream, both encoder and decoder apply a consistent, geometry-aware processing pipeline across transform, motion compensation, intra prediction, and filtering. *See, e.g., id.* at FIG. 9,11.

38. These technical improvements are embodied in the claims, which recite, for example, operations to generate partition boundaries based on parametric models, encode or decode model parameters, perform prediction using geometry-aware partitions, and incorporate geometric extensions into transform, entropy coding, and filtering. *See, e.g. id.* at Claim 1. The claimed combinations provide a specific technical solution to the known inefficiencies of block-based partitioning: they allow encoding systems to “capture the geometric structure” of two-dimensional visual data with higher fidelity and lower coding cost. The detailed algorithms, flowcharts, and examples in the specification demonstrate possession of the invention and provide sufficient guidance for one skilled in the art to implement the system without undue experimentation.

The '734 Patent

39. U.S. Patent No. 12,149,734 (“the ’734 Patent”), entitled “Generalized bi-prediction for video coding with reduced coding complexity,” issued on November 19, 2024, and names Yan Zhang, Xiaoyu Xiu, Yuwen He, and Yan Yeas the inventors. The ’734 Patent is attached as Exhibit 2.

40. InterDigital VC Holdings, Inc. owns all rights, title, and interest in the ’734 Patent, and holds all substantial rights pertinent to this suit, including the right to sue and recover for all past, current, and future infringement.

41. The ’734 Patent is valid and enforceable and directed to patentable subject matter.

42. The ’734 Patent is directed to systems and methods for improving video encoding and decoding by using generalized bi-prediction (“GBi”), a technique that adaptively combines two reference prediction blocks with optimized weights to enhance coding efficiency while reducing computational complexity. Ex. 2 (’734 Patent) at Abstract; 1:42–67. GBi refines conventional bi-prediction by introducing selectable weight pairs that allow the encoder and decoder to generate a more accurate prediction signal, particularly under conditions of rapid luminance change or varying reference-picture quality. *Id.* at 3:45–67; 4:1–9.

43. Prior to the invention, block-based hybrid video codecs such as H.264/AVC and HEVC relied on fixed or limited bi-prediction mechanisms that were suboptimal for blocks with differing temporal distances, quality levels, or illumination conditions. *Id.* at 3:57–4:4. Conventional approaches either used a simple 0.5/0.5 averaging of two prediction blocks or used weighted prediction schemes that had to be signaled at slice-level or that required expensive block-level optimization. *Id.* at 3:61–4:28.

44. To overcome these limitations, the ’734 Patent introduces a generalized bi-prediction framework that adaptively restricts or expands the available weight options based on

characteristics of the current picture, reference pictures, and current block. *Id.* at 6:48–67; 7:1–30; Fig. 9. The GBi engine determines allowable weights using metrics such as the temporal layer (TL), quantization parameter (QP), temporal distances to reference pictures, and similarity metrics between uni-prediction signals. *Id.* at 6:58:7-65. When the reference prediction signals are similar, GBi automatically prunes the weight set—reducing overhead and computation—whereas more weight options are permitted when quality differences justify finer-grained selection. *Id.* at 6:15-25; 9:30-67.

45. These technical advancements are reflected in the claims, which recite, for example, selecting a number of bi-prediction weights based on temporal distances. *Id.* at Claim 7. The specification demonstrates that the inventors possessed the claimed subject matter and enables implementation in decoders without undue experimentation.

The '606 Patent

46. U.S. Patent No. 12,143,606 (“the ’606 Patent”), entitled “Methods and apparatus for improved intra chroma encoding and decoding,” issued on November 12, 2024, and names Qian Xu, Yunfei Zheng, Xiaoan Lu, Peng Yin, and Joel Sole as the inventors. The ’606 Patent is attached as Exhibit 3.

47. InterDigital VC Holdings, Inc. owns all rights, title, and interest in the ’606 Patent, and holds all substantial rights pertinent to this suit, including the right to sue and recover for all past, current, and future infringement.

48. The ’606 Patent is valid and enforceable and directed to patentable subject matter.

49. The ’606 Patent is directed to systems and methods for improving intra chroma encoding and decoding in block-based video codecs, enabling encoders and decoders to more efficiently predict and represent chroma components using partition structures and prediction modes specifically tailored for chroma. Ex. 3 (’606 Patent) at Abstract. Conventional hybrid video

codecs such as H.264/AVC supported multiple prediction partitions for luma but provided limited, fixed partitions for chroma, resulting in suboptimal coding efficiency. *Id.* at 1:41-43. The invention addresses this deficiency by introducing a broader and more flexible set of chroma partition types that differ from the luma partition types, enabling more accurate representation of chroma textures while reducing residual energy. *Id.* at Abstract.

50. For example, the '606 Patent introduces a set of chroma partition types distinct from the luma partition types, enabling finer-grained and more adaptive representation of chroma data. *Id.* at Abstract; 3:31-59. The invention includes a decoder configured to support multiple chroma partition types that have been selected independently from the luma partition used for the same region. *Id.* at 3:31-59; Figs. 3, 5, 6. The expanded chroma partitioning framework enhances the ability of playback devices to accurately reconstruct chroma content by performing partition-specific parsing, mode selection, and prediction operations. *Id.* at Fig. 7 (steps 820–890), Fig. 9 (steps 910–970).

51. Through this architecture, the '606 Patent improves intra chroma prediction accuracy and lowers bit-rate requirements while maintaining or improving visual quality. *Id.* at Abstract; 6:6-12. These technical advancements are reflected in the claims, which recite, for example, decoding a picture with intra chroma partition types that are different from the luma partition types, selecting a chroma prediction mode for each chroma partition, and generating syntax elements that identify the chroma partition and chroma mode. *Id.* at Claim 14. The ordered combination of elements—chroma-specific partition structures, block-level mode selection, and partition/mode signaling—constitutes a specific, technical solution to inefficiencies in chroma decoding within digital video codecs. The specification demonstrates possession of the claimed subject matter and enables a skilled artisan to implement the improved intra chroma decoding

techniques without undue experimentation.

The '338 Patent

52. U.S. Patent No. 8,149,338 (“the ’338 Patent”), entitled “Method and apparatus for color decision metadata generation,” issued on April 3, 2012, and names Eric Carl Rehm, Joshua Pines, Pierre Ollivier, Jan Van Rooy, and David J. Bancroft as the inventors. The ’338 Patent is attached as Exhibit 4.

53. InterDigital VC Holdings, Inc. owns all rights, title, and interest in the ’338 Patent, and holds all substantial rights pertinent to this suit, including the right to sue and recover for all past, current, and future infringement.

54. The ’338 Patent is valid and enforceable and directed to patentable subject matter.

55. The ’338 Patent is directed to systems and methods for generating and using metadata that specifies the number, type, order, timing, and spatial applicability of color correction operations for image data representing a sequence of moving images. Ex. 4 (’338 Patent) at Abstract.

56. Prior to the invention, preserving color adjustments across multiple editing and display devices was difficult because different devices lack a consistent way to communicate and reproduce color corrections due to varying technical capabilities. *Id.* 1:21-27 As a result, directors’ and colorists’ creative decisions were not preserved consistently, particularly when color corrections were applied differently across time segments or only to specific regions of frames. *Id.*

57. To address these deficiencies, the ’338 Patent introduces metadata structures that define (1) how many color correction operations should be applied, (2) which types of correctors should be used, (3) the order of their application, and (4) the temporal, spatial, or spatio-temporal segments to which each correction applies. *Id.* at Tables 1–4. This metadata enables a rendering device to determine “how many color correction operations are to be performed and in what order,”

and then to apply those operations at the specified times and locations. *Id.* at Abstract; 11:1–20; Fig. 7.

58. These technical advancements are reflected in the claims, which recite, for example, (1) determine “a number of color correction operations to be performed in response to received metadata” and (2) “performing . . . the color correction operations . . . a specified region of an image selected from image data used for rendering a sequence of images.” *Id.* at Claim 7. The ordered combination of metadata, structured corrector definitions, temporal/region segmentation, and controlled application of operations constitutes a specific, technical solution to the longstanding problem of inconsistent color correction across video workflows. The specification demonstrates possession and provides sufficient detail to enable implementation without undue experimentation.

COUNT I: INFRINGEMENT OF THE ’435 PATENT

59. InterDigital incorporates the allegations of all of the foregoing paragraphs as if fully restated herein.

60. Amazon has infringed and continues to infringe the ’435 Patent, literally and/or under the doctrine of equivalents, in violation of 35 U.S.C. § 271, by making, using, selling, and/or offering for sale in the United States or importing into the United States infringing products and/or services, including at least the AV1 Accused Instrumentalities⁵, and/or inducing others to do the same. Amazon derives revenue from the activities relating to the AV1 Accused Instrumentalities.

61. As illustrated in Exhibit 5, Amazon infringes at least Claim 1 of the ’435 Patent by

⁵ AV1 Accused Instrumentalities includes all Amazon devices capable of decoding AV1 content including at least the following: Fire TV Stick HD; Fire TV Stick 4K Max; Fire TV Stick 4K Plus; Fire TV Stick 4K Select; Fire TV Cube; Fire TV 2-Series; Fire TV 4-Series; Fire TV Omni QLED Series; Fire TV Omni Mini-LED Series; Fire Max 11; Echo Show 8; Echo Show 11; Echo Show 15; and Echo Show 21.

enabling AV1 decoding on the AV1 Accused Instrumentalities.

62. Amazon took the above actions intending to infringe and/or cause infringing acts by others. For example, Amazon advertises its devices as being able to decode and playback AV1 content.

Content formats supported	Video: Dolby Vision, HDR 10, HDR10+, HLG, H.265, H.264, VP9, AV1; Audio: xHE-AAC, AAC-LC, AAC+, eAAC+, AAC-ELD, MP3, AMR-NB, FLAC, PCM/WAV, Vorbis, Dolby AC3, eAC3 (Dolby Digital Plus), Dolby Atmos (EC3_JOC), Dolby AC4, Dolby MAT, Dolby TrueHD pass-through, MPEG-H pass-through, DTS passthrough, DTS-HD passthrough (basic profile); Photo: JPEG, PNG, GIF, BMP
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Source: Amazon, *Amazon Fire TV Stick 4K Plus* (newest model), https://www.amazon.com/dp/B0F7Z4QZTT?ref=amzdvp_ucc_dp_lod__B0F7Z4QZTT&th=1 (last visited Nov. 6, 2025).

VIDEO CODECS		
H.263		D (HW) baseline, 1080P@60fps
H.264 AVC		D (HW) Constrained Baseline, Main Profile, High profile, L5.0 1080p@60FPS (secure) / 2K@60FPS (non-secure), E (HW)
H.265 HEVC		D(HW) Main Profile, L5.0 1080p@60FPS (secure) / 2K@60FPS (non-secure)
MPEG2		D (HW) Main Profile @High 1080P@60FPS
MPEG4		D (HW) Advanced Simple Profile@L5, Simple Profile@L6 1080P@60FPS
VP8		D (HW)
VP9		D (HW) Profile 0/2 1080P@60FPS (secure) / 2K@60FPS (non-secure)
AV1 with film grain		Supported
VC-1		Not supported

Source: Amazon Developer, *Fire Tablet Specifications: Fire HD Models*, Amazon Developer Documentation (visited Nov. 7, 2025), https://developer.amazon.com/docs/device-specs/ft-device-specifications-firehd-models.html?v=fire11max_2023.

Video codecs	AV1: Hardware accelerated up to 1080p @ 60fps, 20 Mbps, Main Profile Level 4.1 H.265 (HEVC) (High Efficiency Video Coding): Hardware accelerated up to 1080p @ 60fps, 20 Mbps, Main Profile Level 4.1 H.264: Hardware accelerated up to 1080p @ 60fps, or 720p @ 60fps, 20 Mbps, High Profile up to Level 4 H.263: Supported up to 1080p @ 30fps, 6 Mbps, Profile 0 Level 70 VP9: Hardware accelerated up to 1080p @ 60fps, Profile 2 up to 20 Mbps VP8: Supported up to 1080p 30fps. Baseline profile, non-secure MPEG-4: Hardware accelerated up to 1080p @ 60fps MPEG-2: Hardware accelerated up to 1080p @ 60fps
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Source: Amazon Developer, *Device Specifications: Echo Show*, Amazon Developer Documentation (visited Nov. 7, 2025), <https://developer.amazon.com/docs/device-specs/device-specifications-echo-show.html>

63. Amazon has been aware of the '435 Patent and its infringement thereof at least as of the filing of this Complaint.

64. On information and belief, Amazon also actively, knowingly, and intentionally

induces infringement of one or more claims of the '435 Patent under 35 U.S.C. § 271(b) by actively encouraging others to make, use, sell, offer to sell, and/or import in the United States, the AV1 Accused Instrumentalities.

65. Amazon's acts of infringement have caused damage to InterDigital. InterDigital is entitled to recover from Amazon the damages sustained by InterDigital as a result of its wrongful acts in an amount subject to proof at trial.

66. InterDigital provides the foregoing explanation of infringement with regard to an exemplary claim compared to exemplary functionality. InterDigital reserves the right to present additional or alternative explanations of infringement for the claim and functionalities identified below and for other claims and functionalities of the services.

COUNT II: INFRINGEMENT OF THE '734 PATENT

67. InterDigital incorporates the allegations of all of the foregoing paragraphs as if fully restated herein.

68. Amazon has infringed and continues to infringe the '734 Patent, literally and/or under the doctrine of equivalents, in violation of 35 U.S.C. § 271, by making, using, selling, and/or offering for sale in the United States or importing into the United States infringing products and/or services, including at least the AV1 Accused Instrumentalities, and/or inducing others to do the same. Amazon derives revenue from the activities relating to the AV1 Accused Instrumentalities.

69. As illustrated in Exhibit 6, Amazon infringes at least Claim 7 of the '734 Patent by enabling AV1 decoding on the AV1 Accused Instrumentalities.

70. Amazon took the above actions intending to infringe and/or cause infringing acts by others. For example, Amazon advertises its devices as being able to decode and playback AV1 content.

Content formats supported	Video: Dolby Vision, HDR 10, HDR10+, HLG, H.265, H.264, VP9, AV1;
	Audio: xHE-AAC, AAC-LC, AAC+, eAAC+, AAC-ELD, MP3, AMR-NB, FLAC, PCM/WAV, Vorbis, Dolby AC3, eAC3 (Dolby Digital Plus), Dolby Atmos (EC3_JOC), Dolby AC4, Dolby MAT, Dolby TrueHD pass-through, MPEG-H pass-through, DTS passthrough, DTS-HD passthrough (basic profile);
	Photo: JPEG, PNG, GIF, BMP

Source: Amazon, *Amazon Fire TV Stick 4K Plus* (newest model), https://www.amazon.com/dp/B0F7Z4QZTT?ref=amzdv_ucc_dp_lod__B0F7Z4QZTT&th=1 (last visited Nov. 6, 2025).

VIDEO CODECS		
H.263		D (HW) baseline, 1080P@60fps
H.264 AVC		D (HW) Constrained Baseline, Main Profile, High profile, L5.0 1080p@60FPS (secure) / 2K@60FPS (non-secure), E (HW)
H.265 HEVC		D(HW) Main Profile, L5.0 1080p@60FPS (secure) / 2K@60FPS (non-secure)
MPEG2		D (HW) Main Profile @High 1080P@60FPS
MPEG4		D (HW) Advanced Simple Profile@L5, Simple Profile@L6 1080P@60FPS
VP8		D (HW)
VP9		D (HW) Profile 0/2 1080P@60FPS (secure) / 2K@60FPS (non-secure)
AV1 with film grain		Supported
VC-1		Not supported

Source: Amazon Developer, *Fire Tablet Specifications: Fire HD Models*, Amazon Developer Documentation (visited Nov. 7, 2025), https://developer.amazon.com/docs/device-specs/device-specifications-firehd-models.html?v=fire11max_2023.

Video codecs	AV1: Hardware accelerated up to 1080p @ 60fps, 20 Mbps, Main Profile Level 4.1
	• H.265 (HEVC) (High Efficiency Video Coding): Hardware accelerated up to 1080p @ 60fps, 20 Mbps, Main Profile Level 4.1
	• H.264: Hardware accelerated up to 1080p @ 60fps, or 720p @ 60fps, 20 Mbps, High Profile up to Level 4
	• H.263: Supported up to 1080p @ 30fps, 6 Mbps, Profile 0 Level 70
	• VP9: Hardware accelerated up to 1080p @ 60fps, Profile 2 up to 20 Mbps
	• VP8: Supported up to 1080p 30fps. Baseline profile, non-secure
	• MPEG-4: Hardware accelerated up to 1080p @ 60fps
	• MPEG-2: Hardware accelerated up to 1080p @ 60fps

Source: Amazon Developer, *Device Specifications: Echo Show*, Amazon Developer Documentation (visited Nov. 7, 2025), <https://developer.amazon.com/docs/device-specs/device-specifications-echo-show.html>

71. Amazon has been aware of the '734 Patent and its infringement thereof at least as of the filing of this Complaint.

72. On information and belief, Amazon also actively, knowingly, and intentionally induces infringement of one or more claims of the '734 Patent under 35 U.S.C. § 271(b) by actively encouraging others to make, use, sell, offer to sell, and/or import in the United States, the AV1 Accused Instrumentalities.

73. Amazon's acts of infringement have caused damage to InterDigital. InterDigital is

entitled to recover from Amazon the damages sustained by InterDigital as a result of its wrongful acts in an amount subject to proof at trial.

74. InterDigital provides the foregoing explanation of infringement with regard to an exemplary claim compared to exemplary functionality. InterDigital reserves the right to present additional or alternative explanations of infringement for the claim and functionalities identified below and for other claims and functionalities of the services.

COUNT III: INFRINGEMENT OF THE '606 PATENT

75. InterDigital incorporates the allegations of all of the foregoing paragraphs as if fully restated herein.

76. Amazon has infringed and continues to infringe the '606 Patent, literally and/or under the doctrine of equivalents, in violation of 35 U.S.C. § 271, by making, using, selling, and/or offering for sale in the United States or importing into the United States infringing products and/or services, including at least the AV1 Accused Instrumentalities, and/or inducing others to do the same. Amazon derives revenue from the activities relating to the AV1 Accused Instrumentalities.

77. As illustrated in Exhibit 7, Amazon infringes at least Claim 14 of the '606 Patent by enabling AV1 decoding on the AV1 Accused Instrumentalities.

78. Amazon took the above actions intending to infringe and/or cause infringing acts by others. For example, Amazon advertises its devices as being able to decode and playback AV1 content.

Content formats supported	Video: Dolby Vision, HDR 10, HDR10+, HLG, H.265, H.264, VP9, AV1; Audio: xHE-AAC, AAC-LC, AAC+, eAAC+, AAC-ELD, MP3, AMR-NB, FLAC, PCM/WAV, Vorbis, Dolby AC3, eAC3 (Dolby Digital Plus), Dolby Atmos (EC3_JOC), Dolby AC4, Dolby MAT, Dolby TrueHD pass-through, MPEG-H pass-through, DTS passthrough, DTS-HD passthrough (basic profile); Photo: JPEG, PNG, GIF, BMP
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Source: Amazon, *Amazon Fire TV Stick 4K Plus* (newest model), https://www.amazon.com/dp/B0F7Z4QZTT?ref=amzdv_ucc_dp_lod__B0F7Z4QZTT&th=1

(last visited Nov. 6, 2025).

VIDEO CODECS	H.263	D (HW) baseline, 1080P@60fps
	H.264 AVC	D (HW) Constrained Baseline, Main Profile, High profile, L5.0 1080p@60FPS (secure) / 2K@60FPS (non-secure), E (HW)
	H.265 HEVC	D(HW) Main Profile, L5.0 1080p@60FPS (secure) / 2K@60FPS (non-secure)
	MPEG2	D (HW) Main Profile @High 1080P@60FPS
	MPEG4	D (HW) Advanced Simple Profile@L5, Simple Profile@L6 1080P@60FPS
	VP8	D (HW)
	VP9	D (HW) Profile 0/2 1080P@60FPS (secure) / 2K@60FPS (non-secure)
	AV1 with film grain	Supported
	VC-1	Not supported

Source: Amazon Developer, *Fire Tablet Specifications: Fire HD Models*, Amazon Developer Documentation (visited Nov. 7, 2025), https://developer.amazon.com/docs/device-specs/ft-device-specifications-firehd-models.html?v=fire11max_2023.

Video codecs	AV1: Hardware accelerated up to 1080p @ 60fps, 20 Mbps, Main Profile Level 4.1
	H.265 (HEVC) (High Efficiency Video Coding): Hardware accelerated up to 1080p @ 60fps, 20 Mbps, Main Profile Level 4.1
	H.264: Hardware accelerated up to 1080p @ 60fps, or 720p @ 60fps, 20 Mbps, High Profile up to Level 4
	H.263: Supported up to 1080p @ 30fps, 6 Mbps, Profile 0 Level 70
	VP9: Hardware accelerated up to 1080p @ 60fps, Profile 2 up to 20 Mbps
	VP8: Supported up to 1080p 30fps. Baseline profile, non-secure
	MPEG-4: Hardware accelerated up to 1080p @ 60fps
	MPEG-2: Hardware accelerated up to 1080p @ 60fps

Source: Amazon Developer, *Device Specifications: Echo Show*, Amazon Developer Documentation (visited Nov. 7, 2025), <https://developer.amazon.com/docs/device-specs/device-specifications-echo-show.html>

79. Amazon has been aware of the '606 Patent and its infringement thereof at least as of the filing of this Complaint.

80. On information and belief, Amazon also actively, knowingly, and intentionally induces infringement of one or more claims of the '606 Patent under 35 U.S.C. § 271(b) by actively encouraging others to make, use, sell, offer to sell, and/or import in the United States, the AV1 Accused Instrumentalities.

81. Amazon's acts of infringement have caused damage to InterDigital. InterDigital is entitled to recover from Amazon the damages sustained by InterDigital as a result of its wrongful acts in an amount subject to proof at trial.

82. InterDigital provides the foregoing explanation of infringement with regard to an exemplary claim compared to exemplary functionality. InterDigital reserves the right to present

additional or alternative explanations of infringement for the claim and functionalities identified below and for other claims and functionalities of the services.

COUNT IV: INFRINGEMENT OF THE '338 PATENT

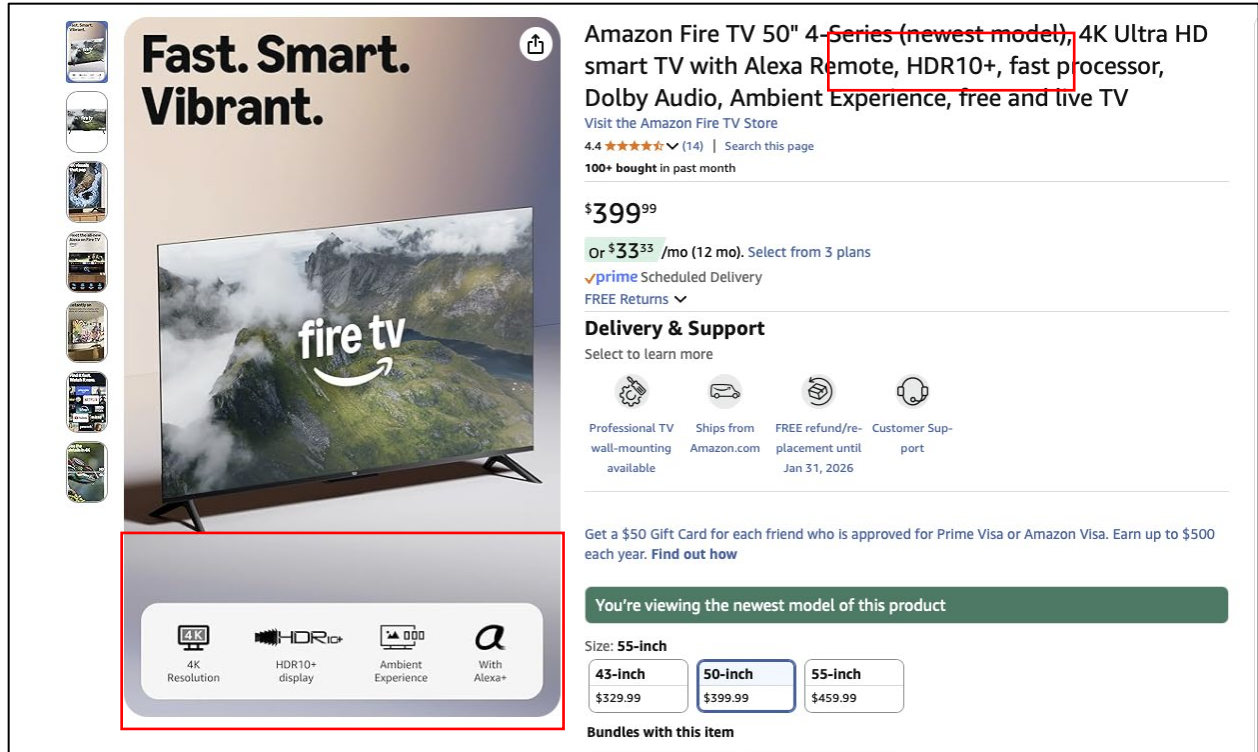
83. InterDigital incorporates the allegations of all of the foregoing paragraphs as if fully restated herein.

84. Amazon has infringed and continues to infringe the '338 Patent, literally and/or under the doctrine of equivalents, in violation of 35 U.S.C. § 271, by making, using, selling, and/or offering for sale in the United States or importing into the United States infringing products and/or services, including at least the HDR Accused Instrumentalities⁶, and/or inducing others to do the same. Amazon derives revenue from the activities relating to the HDR Accused Instrumentalities.

85. As illustrated in Exhibit 8, Amazon infringes at least Claim 7 of the '338 Patent by enabling HDR playback on the HDR Accused Instrumentalities.

86. Amazon took the above actions intending to infringe and/or cause infringing acts by its users. For example, Amazon advertises its devices as playing back HDR content and provides instructions on how to play back HDR content.

⁶ HDR Accused Instrumentalities includes all Amazon devices capable of playing back HDR10, HDR10+, or Dolby Vision content including at least the following: Fire TV Stick HD, Fire TV Stick 4K Select, Fire TV Stick 4K Plus, Fire TV Stick 4K Max, Fire TV Cube, Fire TV 2-Series, Fire TV 4-Series, and Fire TV Omni Series.



Fast. Smart. Vibrant.

Amazon Fire TV 50" 4-Series (newest model), 4K Ultra HD smart TV with Alexa Remote, HDR10+, fast processor, Dolby Audio, Ambient Experience, free and live TV

Visit the Amazon Fire TV Store

4.4 ★★★★★ (14) | Search this page

100+ bought in past month

\$399.99

Or **\$33.33** /mo (12 mo). Select from 3 plans

✓prime Scheduled Delivery

FREE Returns

Delivery & Support

Select to learn more

- Professional TV wall-mounting available
- Ships from Amazon.com
- FREE refund/replacement until Jan 31, 2026
- Customer Support

Get a \$50 Gift Card for each friend who is approved for Prime Visa or Amazon Visa. Earn up to \$500 each year. [Find out how](#)

You're viewing the newest model of this product

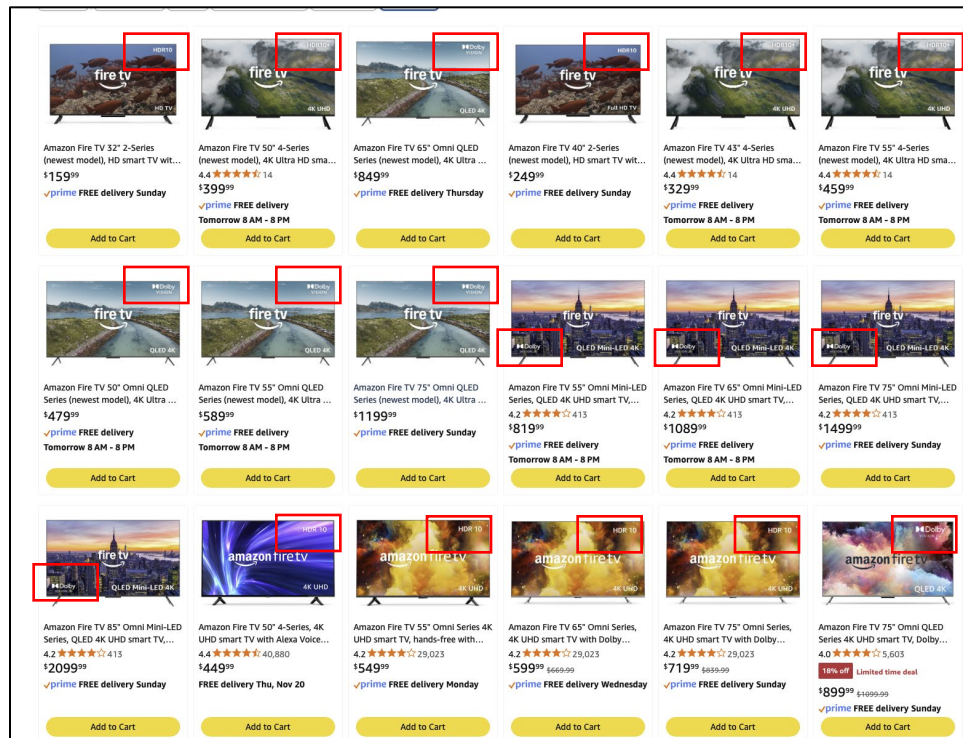
Size: 55-inch

43-inch	50-inch	55-inch
\$329.99	\$399.99	\$459.99

Bundles with this item

4K Resolution, HDR10+ display, Ambient Experience, With Alexa+

Source: Amazon.com, *Amazon Fire TV 4-Series 55" 4K UHD Smart TV* (AMZN) (2025), available at <https://www.amazon.com/dp/B0DFNTKTYN> (last visited Nov. 7, 2025).



A grid of 18 Amazon Fire TV products, each with a red box highlighting the 'Dolby' logo. The products are arranged in three rows of six. Each product card includes the product name, price, and delivery information.

Product Name	Price	Delivery
Amazon Fire TV 32" 2-Series (newest model), HD smart TV with...	\$159.99	prime FREE delivery Sunday
Amazon Fire TV 50" 4-Series (newest model), 4K Ultra HD sma...	\$399.99	prime FREE delivery Tomorrow 8 AM - 8 PM
Amazon Fire TV 65" Omni QLED Series (newest model), 4K Ultra ...	\$849.99	prime FREE delivery Thursday
Amazon Fire TV 40" 2-Series (newest model), HD smart TV wit...	\$249.99	prime FREE delivery Sunday
Amazon Fire TV 43" 4-Series (newest model), 4K Ultra HD sma...	\$329.99	prime FREE delivery Tomorrow 8 AM - 8 PM
Amazon Fire TV 55" 4-Series (newest model), 4K Ultra HD sma...	\$459.99	prime FREE delivery Tomorrow 8 AM - 8 PM
Amazon Fire TV 50" Omni QLED Series (newest model), 4K Ultra ...	\$479.99	prime FREE delivery Tomorrow 8 AM - 8 PM
Amazon Fire TV 55" Omni QLED Series (newest model), 4K Ultra ...	\$589.99	prime FREE delivery Tomorrow 8 AM - 8 PM
Amazon Fire TV 75" Omni QLED Series (newest model), 4K Ultra ...	\$1199.99	prime FREE delivery Sunday
Amazon Fire TV 55" Omni Mini-LED Series, QLED 4K UHD smart TV...	\$819.99	prime FREE delivery Tomorrow 8 AM - 8 PM
Amazon Fire TV 65" Omni Mini-LED Series, QLED 4K UHD smart TV...	\$1089.99	prime FREE delivery Tomorrow 8 AM - 8 PM
Amazon Fire TV 75" Omni Mini-LED Series, QLED 4K UHD smart TV...	\$1499.99	prime FREE delivery Sunday
Amazon Fire TV 85" Omni Mini-LED Series, QLED 4K UHD smart TV...	\$2099.99	prime FREE delivery Sunday
Amazon Fire TV 50" 4-Series, 4K UHD smart TV with Alexa Voice...	\$449.99	FREE delivery Thu, Nov 20
Amazon Fire TV 55" Omni Series 4K UHD smart TV, hands-free with...	\$549.99	prime FREE delivery Monday
Amazon Fire TV 65" Omni Series, 4K UHD smart TV with Dolby...	\$599.99	prime FREE delivery Wednesday
Amazon Fire TV 75" Omni Series, 4K UHD smart TV with Dolby...	\$719.99	prime FREE delivery Sunday
Amazon Fire TV 75" Omni QLED Series 4K UHD smart TV, Dolby...	\$899.99	prime FREE delivery Sunday

Source: Amazon.com, *Fire TV Smart TV Buyer's Guide*, <https://www.amazon.com/firetv/smart-tv-buyers->

[guide](#) (last visited Nov. 7, 2025).

Find your Fire TV streaming device					
					
DEVICE	Fire TV Stick HD	Fire TV Stick 4K Select	Fire TV Stick 4K Plus	Fire TV Stick 4K Max	Fire TV Cube
PRICE	\$19.99 Limited time deal 43% off List Price: \$34.99	\$24.99 Ends in 11:52:15 38% off List Price: \$39.99	\$29.99 Ends in 11:52:15 40% off List Price: \$49.99	\$39.99 Limited time deal 33% off List Price: \$59.99	\$99.99 Limited time deal 29% off List Price: \$139.99
RATINGS	4.7 ★★★★★ (45,384)	3.5 ★★★★★ (202)	4.7 ★★★★★ (91,819)	4.6 ★★★★★ (65,988)	4.5 ★★★★★ (14,858)
BEST FOR	Full HD streaming	Essential 4K streaming	Cinematic 4K streaming	Powerful 4K streaming	The ultimate hands-free 4K streaming experience
SUPPORTED PICTURE QUALITY	1080p Full HD (High Definition)	4K Ultra HD	4K Ultra HD	4K Ultra HD	4K Ultra HD
SUPPORTED VIDEO	HDR10, HDR10+, HLG	HDR10, HDR10+, HLG	Dolby Vision, HDR10, HDR10+, HLG	Dolby Vision, HDR10, HDR10+, HLG	Dolby Vision, HDR10, HDR10+, HLG
SUPPORTED AUDIO	Dolby-encoded audio (HDMI pass-through)	Dolby-encoded audio (HDMI pass-through)	Dolby Atmos audio	Dolby Atmos audio	Dolby Atmos audio
INCLUDED REMOTE	Alexa Voice Remote	Alexa Voice Remote	Alexa Voice Remote	Alexa Voice Remote Enhanced	Alexa Voice Remote Enhanced
STORAGE	8GB	8GB	8GB	16GB	16GB
WIFI SUPPORT & CONNECTIVITY	Wi-Fi 5	Wi-Fi 5	Wi-Fi 6	Wi-Fi 6E	Wi-Fi 6E + Ethernet port
CLOUD GAMING	Amazon Luna	Coming Soon: Amazon Luna, Xbox Game Pass	Amazon Luna, Xbox Game Pass	Amazon Luna, Xbox Game Pass	Amazon Luna, Xbox Game Pass
LIVE VIEW PICTURE-IN-PICTURE			✓	✓	✓
WORKS WITH ALEXA+		Coming soon	✓	✓	✓
HANDS-FREE WITH ALEXA					✓
CONNECT & CONTROL YOUR DEVICES (CABLE BOX, GAME CONSOLE, WEBCAM, ETC.)					✓
FIRE TV AMBIENT EXPERIENCE				✓	

Source: Amazon, *Streaming Media Players*, https://www.amazon.com/firetv/streaming-media-players?ref_=MARS_NAVSTRIPE_desktop_bar_smp (last visited Nov. 6, 2025).

Dolby Vision or High Dynamic Range Not Working on Fire TV Smart TV Check your cable connections and verify which video formats the content supports.  1. Check if the content supports Dolby Vision, 4K, or HDR. 2. If the content comes from a connected device: a. Connect the device with an HDMI cable. b. Restart the connected device. c. Set the source device to output Dolby Vision, 4K, or HDR. d. Go to Settings on your Fire TV Smart TV. e. Select Display & Sounds, and then select Picture Settings. f. Select the HDMI input that your device connects to, and then select HDMI Input Mode. g. Change the input mode to Auto or Mode 2 (2.0). 3. Try to restart your Fire TV Smart TV: a. Go to Settings on your Fire TV Smart TV. b. Select My Fire TV or Device & Software. c. Select Restart. 4. Make sure that the app is up to date: a. Go to the Appstore and then search for the app. b. An option to update shows if there's an available update for the app. 5. Reset your Fire TV Smart TV: a. Go to Settings on your Fire TV Smart TV. b. Select My Fire TV or Device & Software. c. Select Reset to Factory Defaults.	Dolby Vision or High Dynamic Range Not Working on Fire TV Devices To troubleshoot issues with Dolby Vision or High Dynamic Range (HDR), use the Audio and Video Diagnostics tool on your Fire TV device. The Audio and Video Diagnostics tool checks the capabilities of connected HDMI devices like your TV, soundbar, or AV receiver. The tool tests your TV's maximum resolution and refresh rate, HDR, and Dolby Vision support. It also detects support for various surround sound standards. Note: The Audio and Video Diagnostics tool isn't available on all Fire TV devices. 1. Check that your equipment supports Dolby Vision or High Dynamic Range (HDR). To check supported audio settings, use the Audio and Video Diagnostics tool: a. Go to Settings on your Fire TV device. b. Select Display & Sounds. c. Select Audio/Video Diagnostics. 2. If your TV supports HDR, but the content you're streaming is in a different format: a. Confirm that your TV supports Dolby Vision or HDR formats by using the test video at the bottom of the page. b. Check that the content supports HDR. c. Go to your TV's picture or input settings and check that the resolution is 4K, HDR, or FHD. Follow the manufacturer's instructions if needed. 3. If the Audio/Video Diagnostics tool doesn't detect the format that you want to use, check your current equipment setup: a. Make sure that your TV supports Dolby Vision or HDR. If you're connecting your Fire TV device to an AV Receiver or soundbar, make sure it's able to pass-through Dolby Vision or HDR formats. b. Sometimes your Fire TV device streams at 1080p 60 Hz for smoother playback if you have a 4K 30 Hz Dolby Vision TV. To set your resolution to 4K 60 Hz, go to Settings on your Fire TV device and then Display & Sounds. For more help, go to: Dolby Vision or High Dynamic Range Not Working on Fire TV Smart TV
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Source: Amazon, *Help & Customer Service*, https://www.amazon.com/gp/help/customer/display.html?ref_=hp_gcs_csd_d2_000_1_TyJkIVATkXXwoG2FB5_DwH7z15n4q&nodeId=TyJkIVATkXXwoG2FB5&qid=1762459769899&sr=1 (left); Amazon, *Help & Customer Service*, https://www.amazon.com/gp/help/customer/display.html?ref_=hp_gcs_csd_d2_000_2_G8GNX2B27JG726AH_DwH7z15n4q&nodeId=G8GNX2B27JG726AH&qid=1762459769899&sr=2 (right) (last visited Nov. 6, 2025).

87. Amazon has been aware of the '338 Patent and its infringement thereof at least as of the filing of this Complaint.

88. On information and belief, Amazon also actively, knowingly, and intentionally induces infringement of one or more claims of the '338 Patent under 35 U.S.C. § 271(b) by actively encouraging others to make, use, sell, offer to sell, and/or import in the United States, the HDR Accused Instrumentalities.

89. Amazon's acts of infringement have caused damage to InterDigital. InterDigital is entitled to recover from Amazon the damages sustained by InterDigital as a result of its wrongful

acts in an amount subject to proof at trial.

90. InterDigital provides the foregoing explanation of infringement with regard to an exemplary claim compared to exemplary functionality. InterDigital reserves the right to present additional or alternative explanations of infringement for the claim and functionalities identified below and for other claims and functionalities of the services.

DEMAND FOR JURY TRIAL

Plaintiff hereby demands a trial by jury of any and all issues triable.

PRAYER FOR RELIEF

WHEREFORE, InterDigital asks this Court for an order granting the following relief:

- A. A judgment in favor of InterDigital that Amazon has infringed, either literally and/or under the doctrine of equivalents, one or more claims of the '435, '734, '606, and '338 Patents;
- B. A judgment and order finding that Amazon's infringement has been willful;
- C. A permanent injunction prohibiting Amazon from further acts of infringement;
- D. An order awarding damages sufficient to compensate InterDigital for Amazon's infringement of the Asserted Patents, but in no event less than a reasonable royalty, including supplemental damages post-verdict, together with pre-judgment and post-judgment interest and costs;
- E. Enhanced damages pursuant to 35 U.S.C. § 284;
- F. A judgment and order declaring that this is an exceptional case within the meaning of 35 U.S.C. § 285 and awarding Plaintiffs their reasonable attorneys' fees against Defendant; and
- G. Any and all other relief as the Court may deem appropriate and just under the circumstances.

Dated: December 18, 2025

Respectfully submitted,

/s/ Alan L. Whitehurst

MCKOOL SMITH, P.C.

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**ATTORNEYS FOR PLAINTIFFS
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VC HOLDINGS, INC., AND
INTERDIGITAL MADISON PATENT
HOLDINGS, SAS**