IN THE UNITED STATES DISTRICT COURT
DISTRICT OF DELAWARE

NOKIA CORPORATION, AND NOKIA TECHNOLOGIES OY **Plaintiff,** **v.** **AMAZON.COM, INC., AND AMAZON.COM SERVICES, LLC.** **Defendants.**	**Civil Action No. 23-cv-1232-UNA**

FIRST AMENDED COMPLAINT

Plaintiffs Nokia Corporation and Nokia Technologies Oy ("Nokia") files this First Amended Complaint against Amazon.com, Inc., and Amazon.com Services, LLC, ("Amazon" or "Defendants"), and alleges as follows:

NATURE OF THE ACTION

1. Nokia's patent portfolio includes claims essential to decoding video according to the H.264 Advanced Video Coding Standard ("H.264") and the H.265 High Efficiency Video Coding Standard ("H.265") promulgated by the International Telecommunications Union ("ITU"). The H.264 and H.265 Standards are some of the most widely used video decoding standards in the world. Nokia's patents also include claims relating to encoding video.

2. Amazon's unlicensed end-user products (which support and implement, for example, H.264 and H.265 decoding), including without limitation tablets, digital media players, televisions, cameras, and voice assistants (the "Accused Products"), infringe Nokia's Asserted Patents (defined below).

3. Nokia is a leading innovator that has contributed greatly to the development of contemporary standards technologies. Nokia seeks a declaration that it has negotiated in good

AMAZON-1031
8,204,134

faith towards a license with Amazon and complied with any applicable intellectual property right ("IPR") policies, Nokia's relevant standard development organization declarations, and any applicable laws.

4. Nokia helped to pioneer the development of modern video coding technology and has one of the strongest video coding patent portfolios in the world. Nokia's patented inventions allow video to be transmitted and received over communications networks, such as Wi-Fi or cellular networks, with high quality and dramatically lower bandwidth requirements, and minimize the amount of data it takes to receive and store these videos on mobile devices, such as mobile phones, laptop computers, and tablet computers. For example, Nokia's patents include claims essential to decoding video according to the H.264 and H.265 Standards.

5. Amazon currently benefits and has benefitted greatly from Nokia's innovations, which among other things enable Amazon products to stream and capture high quality video more efficiently and effectively.

6. Dozens of companies have taken licenses to Nokia's essential patent claims at rates that are reasonable and non-discriminatory. Yet, despite receiving multiple offers from Nokia, Amazon has refused to take a license to any of Nokia's essential patent claims, including to Nokia's H.264 and H.265 essential decoding patent claims. Amazon's failure to negotiate in good faith to reach an agreement on terms for a license to Nokia's standard essential patents for the relevant standards (including Nokia's patented H.264 and H.265 technology) has forced Nokia to institute this lawsuit.

PARTIES

7. Plaintiff Nokia Corporation is a foreign corporation organized under the laws of Finland, located at Karakaari 7, FIN-02610, Espoo, Finland.

8. Plaintiff Nokia Tech is a foreign corporation organized under the laws of Finland, with its principal place of business at Karakaari 7, FIN-02610, Espoo, Finland. Nokia Tech is a wholly-owned subsidiary of Nokia Corporation ("Nokia Corp."), and is the sole owner by assignment of all right, title, and interest in U.S. Patent Nos. 7,532,808; 8,204,134; 7,724,818; 10,536,714; 11,805,267; 8,077,991; 8,050,321; 7,480,254; 8,996,693; 9,473,602; 8,918,741 (the "Asserted Patents").

9. Amazon.com, Inc. is a Delaware corporation with a principal place of business at 410 Terry Avenue North, Seattle, Washington 98109. On information and belief, Amazon.com, Inc. operates the e-commerce website "Amazon.com," which sells the Accused Products.

10. Amazon.com Services, LLC is a Delaware limited liability company with a principal place of business at 410 Terry Avenue North, Seattle, Washington 98109. It is a wholly owned subsidiary of Amazon.com, and, on information and belief, makes and sells the Accused Products.

JURISDICTION AND VENUE

11. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1332

12. Complete diversity exists. Nokia Corporation and Nokia Technologies Oy are foreign corporations organized under the laws of Finland. Amazon.com, Inc. is a Delaware Corporation, and Amazon.com Services, LLC is wholly owned subsidiary of Amazon.com, Inc.

13. The amount in controversy exceeds $75,000.

14. Moreover, this Court has exclusive subject matter jurisdiction over the patent infringement claims in this case under 28 U.S.C. §§ 1331 and 1338, and over the non-patent claims under 28 U.S.C. §§ 1367, 2201, and 2202, as the non-patent claims are so related to the patent infringement claims that they form part of the same case or controversy under Article III of the United States Constitution.

15. This Court has general personal jurisdiction over Amazon by virtue of its incorporation in the State of Delaware. Amazon has appointed a registered agent for service of process, Corporation Service Company, 251 Little Falls Drive, Wilmington, Delaware 19808.

16. This Court has specific personal jurisdiction over Amazon because Amazon has committed acts of infringement in this District.

17. In addition, Amazon maintains a regular and established place of business within this District. For example, and without limitation, Amazon has maintained a regular and established place of business with offices and/or other facilities located at 1025 Boxwood Rd., Wilmington, DE 19804. At 3.8 million square feet, it is the largest Amazon fulfilment center in the United States. Ex. 1, https://www.delawareonline.com/story/money/business/2021/09/21/amazon-opens-mega-warehouse-delaware/8347000002/. Amazon additionally maintains offices in this District including at 560 Merrimac Ave 1437, Middletown, Delaware 19709 and 820 Federal School Lane, New Castle, Delaware 19720.

18. Venue is proper in this District pursuant to 28 U.S.C. §§ 1391 and 1400(b). For example, venue is proper as to Amazon in this District because Amazon is incorporated in this District.

NOKIA'S INVESTMENT IN STANDARDS AND RESULTING PATENTS

19. Nokia has consistently been one of the major contributors to wireless communication, video standards, and related technologies that enable many features that are commonplace and expected of today's consumer electronics.

20. By the mid-1990s, Nokia was developing its own proprietary video technologies, referred to as the MobiVideo Codec. In early 1998, the Video Coding Experts Group ("VCEG")

of the International Telecommunication Union-Telecommunication ("ITU-T") issued a call for proposals on a project called H.26L, the "L" standing for "long term."

21. The development of H.26L eventually led to ITU-T Recommendation H.264 Advanced Video Coding for Generic Audiovisual Services ("the H.264 Standard"). Thereafter, work began on the successor to the H.264 Standard, which published as ITU-T Recommendation H.265 High Efficiency Video Coding ("the H.265 Standard"). Nokia, a video coding innovator, contributed numerous innovations to the development of both the H.264 and H.265 Standards. In addition, Nokia has developed many other video coding technologies.

22. Over the last few decades, internet traffic has evolved from simple, text-based interfaces to a plethora of media, including video. As technology has evolved, the importance and use of video has skyrocketed. Video coding technologies, including the H.264 and H.265 Standards, are crucial to the development and evolution of modern communication particularly as video traffic has become an increasingly outsized share of total consumer Internet traffic.

23. The H.264 and H.265 Standards enable efficient and reliable video decoding in millions of devices, including tablets and televisions. The H.264 and H.265 Standards reduce the amount of data needed to decode digital video and are the two most prominent video decoding standards in the world. These advances in video coding technology were made possible by the work of Nokia and other video coding innovators.

24. The H.264 Standard, first released in 2003, was designed to decode high quality video using lower bit rates than previous standards. The H.264 Standard is flexible enough to implement across a variety of applications, networks, and systems and offers vastly improved performance over previous standards, such as MPEG-2 and MPEG-4 Part 2.

25. The H.265 Standard, first released in 2013, built on the H.264 Standard in several key respects. The H.265 Standard enables consumers to decode video with even less bandwidth than before and to decode higher quality video in higher resolutions.

26. In particular, over the past five years, video has become the main form of internet traffic, coinciding with, for example, the rise in popularity of internet and social media apps. Video was estimated to be 82% of global consumer internet traffic in 2022.

27. Nokia Corp. and its wholly owned subsidiaries have cumulatively invested over €140 billion in research and development relating to, for example, mobile communications and video coding technologies and, because of this commitment, currently owns more than 20,000 patents worldwide. Many of these patents have standard essential claims.

NOKIA'S COMPLIANCE WITH PATENT POLICIES AND NOKIA'S RELEVANT DECLARATIONS

28. Nokia participates in several standard development organizations ("SDOs"), such as the ITU, the European Telecommunications Standards Institute ("ETSI"), and the Institute of Electrical and Electronics Engineers ("IEEE"). SDOs have adopted IPR policies governing the licensing of essential patent claims.

29. Nokia timely notified standard development participants that Nokia may obtain patents on its contributions, including by submitting Patent Statement and Licensing Declarations in which Nokia declared in good faith that it is prepared to grant licenses to the essential claims of the relevant patents consistent with the obligations of the relevant SDOs.

A. The ITU and the H.264 and H.265 Standardization Process

30. Certain claims of the Asserted Patents relate to the H.264 and H.265 Standards developed by the ITU.

31. The ITU and the International Standards Organization ("ISO") jointly published a standard referred to as "H.264," "MPEG-4 part 10," or "Advanced Video Coding." The H.264 Standard development process was initiated by VCEG and finalized by the Joint Video Team ("JVT"), which was a collaborative effort between VCEG and the Moving Picture Experts Group ("MPEG").

32. Following publication of the H.264 Standard, the JVT began work on the H.265 Standard. The H.265 Standard, which is also known as "MPEG-H Part 2" or "High Efficiency Video Coding," represents the next step for video quality and coding efficiency after the widely successful H.264 Standard.

33. The ITU was formed in 1865 at the International Telegraph Convention and, in 1947, it became a specialized agency of the United Nations, responsible for issues that concern information and communication technologies. The ITU handles a variety of matters and thus is organized into various sectors. One of the sectors is Telecommunication Standardization or "ITU-T." The mission of ITU-T is to ensure efficient and timely production of standards related to the field of telecommunications. The standards developed by ITU-T are referred to as "Recommendations."

34. ITU-T members come together and propose technological solutions for inclusion in the draft Recommendations. The goal is to draft Recommendations that incorporate the best available technology in order to ensure that the standards are a high quality.

35. The contributions that are ultimately included in a Recommendation are often covered by one or more patent claims and thus the ITU developed the Common Patent Policy in order to assist with usage of patented technologies in its standards.

36. The ITU published Guidelines for compliance with the implementation of the Common Patent Policy. The Guidelines explain that the Common Patent Policy "was drafted in its operative part as a checklist, covering the three different cases which may arise if a Recommendation | Deliverable requires licenses for Patents to be practiced or implemented, fully or partly." [*"Guidelines for Implementation of the Common Patent Policy for ITU-T/ITURIISOIIEC,"* ITU, Rev. 4 (Dec. 16, 2022) https://www.itu.int/itudoc/itu-t/patents/policy/guide.pdf].

37. The Common Patent Policy states:

> 2. If a Recommendation | Deliverable is developed and such information as referred to in paragraph 1 has been disclosed, three different situations may arise:
>
> 2.1 The patent holder is willing to negotiate licences free of charge with other parties on a non-discriminatory basis on reasonable terms and conditions. Such negotiations are left to the parties concerned and are performed outside ITU-T/ITU-R/ISO/IEC.
>
> 2.2 The patent holder is willing to negotiate licences with other parties on a non-discriminatory basis on reasonable terms and conditions. Such negotiations are left to the parties concerned and are performed outside ITU-T/ITU-R/ISO/IEC.
>
> 2.3 The patent holder is not willing to comply with the provisions of either paragraph 2.1 or paragraph 2.2; in such case, the Recommendation | Deliverable shall not include provisions depending on the patent.
>
> 3. Whatever case applies (2.1, 2.2 or 2.3), the patent holder has to provide a written statement to be filed at ITU-TSB, ITU-BR or the offices of the CEOs of ISO or IEC, respectively, using the appropriate "Patent Statement and Licensing Declaration" form. This statement must not include additional provisions, conditions, or any other exclusion clauses in excess of what is provided for each case in the corresponding boxes of the form.

[*"Common Patent Policy for ITU-TIITU-RIISOIIEC,"* ITU (2022), https://www.itu.int/en/ITU-T/ipr/Pages/policy.aspx].

38. The Guidelines define the term "Patent" to be "those claims contained in and identified by patents, utility models and other similar statutory rights based on inventions

(including applications for any of these) solely to the extent that any such claims are essential to the implementation of a Recommendation | Deliverable. Essential patents are patents that would be required to implement a specific Recommendation | Deliverable." [*"Common Patent Policy for ITU-TIITU-RIISOIIEC,"* ITU (2022), https://www.itu.int/en/ITU-T/ipr/Pages/policy.aspx]. The definition of "Patent" provided by the Guidelines is mirrored in the Patent Statement and Licensing Declaration Form that is completed by patent holders who may have patent claims essential to the H.264 or H.265 standards. The Patent Statement and Licensing Declaration Form states that identifying specific patents on the form is optional but not required. The ITU thus deems "essential" only patent claims that are essential or necessary for implementation of a specific Recommendation.

39. The H.264 Recommendation specifies the implementation of decoders and specifically defines the "decoding process" as "[t]he process specified in this Recommendation | International Standard that reads a *bitstream* and derives *decoded pictures* from it." [Recommendation ITU-T H.264]. It does not, however, specify the implementation of encoders. The H.264 Recommendation defines "encoding process" as "[a] process, not specified in this Recommendation | International Standard, that produces a *bitstream* conforming to this Recommendation | International Standard." *Id*.

40. Similarly, the H.265 Recommendation only specifies the implementation of decoders. *See* [Recommendation ITU-T H.265] (defining (i) "decoding process" as "[t]he process specified in this Specification that reads a *bitstream* and derives *decoded pictures* from it" and (ii) "encoding process" as "[a] process not specified in this Specification that produces a *bitstream* conforming to this Specification.").

B. Nokia's Compliance with the ITU Common Patent Policy and Nokia's Relevant Declarations

41. Nokia protects its investments in research and development with intellectual property. Nokia owns many patents related to video decoding technology, and it continues to develop and secure intellectual property as it innovates in this industry. By voluntarily contributing its research and development innovations to the standard-setting process at the ITU—through technical contributions in standardization meetings—Nokia has a large number of patent claims essential to the H.264 and H.265 Standards. Industry members attending the standardization meetings chose to adopt Nokia's technology into the standards because of its benefits and merit.

42. Nokia has committed that it is prepared to grant licenses to any patent claims essential to the H.264 and H.265 Standards on reasonable and non-discriminatory (RAND) terms and conditions.

43. Consistent with the ITU Common Patent Policy, Nokia timely notified standard development participants that Nokia may obtain patents on its contributions, including by submitting Patent Statement and Licensing Declarations to the ITU in which Nokia declares in good faith that it is prepared to grant licenses to the essential claims of the relevant patents on RAND terms and conditions.

C. Nokia's Negotiation with Amazon

44. Nokia has been negotiating with Amazon in good faith to license various standard essential patent ("SEP") claims since 2009. During this time, Amazon has sold millions of infringing products and offered services that infringe Nokia's patents to millions of subscribers, yet Amazon has not taken a license to any of Nokia's standard essential patent claims. Nokia has at all times been prepared to grant a license to Amazon under its standard essential patent claims.

45. The negotiations between the parties initially focused on cellular and Wi-Fi technologies, but shifted to Nokia's patent portfolio relating to the H.264 and H.265 Standards ("Nokia's Video Patents") after Amazon reduced its sales of cellular devices and increased its use of video technologies.

46. In April 2015, Nokia notified Amazon that Amazon was infringing Nokia's patents essential to the H.264 standard ("Nokia's H.264 Patents"). Nokia notified Amazon of its established industry rate for its H.264 decoding portfolio, which had already been accepted by other companies.

47. Given the parties' years of negotiations on cellular and Wi-Fi technologies, Nokia attempted to finalize an agreement with Amazon relating to cellular and Wi-Fi essential patent claims before turning to Nokia's H.264 Patents. However, despite Nokia's good faith efforts, Amazon would not agree to a license.

48. In August, 2020, Nokia sent Amazon a list of its Video Patents and extended an offer that included a license to Nokia's Video Patents, Wi-Fi patents, and cellular patents. Nokia's offer was a lump sum structure, including a past release and license. Given Amazon's reduction of its cellular product business, Nokia's offer also included a license for Nokia's cellular patents capped at particular number of units. Nokia calculated its offer based on Nokia's standard per unit rates for its Video Patents. Over 50 companies had previously licensed Nokia's Video Patents at this rate.

49. Over the next five months, Nokia repeatedly followed up with Amazon, but Nokia's offer was never accepted.

50. In March 2021, Nokia made a new offer and provided Amazon with a spreadsheet showing exactly how Nokia calculated its offer, based on Nokia's established rates for its Video

Patents. Nokia also explained that because Prime Video is one of the largest streaming services in the world, and because Amazon Web Services ("AWS") provides video-related services to a significant number of video streamers, a license to Nokia's Video Patents for all Amazon services would cost far more than Nokia's prior lump sum offer. Thereafter, discussions proceeded about an agreement that would cover only Amazon end-user products.

51. After many more rounds of negotiations, on October 21, 2022, Nokia made a counteroffer that appeared to bridge the gap between the parties. Nokia offered a license to Nokia's Video Patents and cellular SEPs for Amazon end-user devices for 5 years, plus certain grant-back licenses to Nokia and release provisions, among other provisions. Consistent with Nokia's understanding of the prior discussions, Nokia's offer did not include a license for Prime Video, AWS, or other services.

52. The parties appeared close to finalizing a deal. Nokia sent several drafts of the proposed documents in November and December, and on December 21, 2022, Nokia agreed to go back to its management for final approval and execution of the deal. Nokia's negotiator emailed Amazon stating "[o]nce Amazon's contact info is added to Section F and you confirm the correct contracting party, we believe this is ready for Amazon's signature." Nokia sent Amazon an executable copy. This final executable version of a license did not include any rights for Amazon Prime Video or Amazon Web Services.

53. However, the December 2022 license was never executed. Nokia continued to negotiate in good faith to reach an agreement given the prolonged negotiations and that Amazon had yet to pay a single royalty. On March 20, 2023, Nokia extended a revised version of the compromise offer, which maintained the same payment amount, and added provisions relating to certain AWS services.

54. Given the parties inability to reach an agreement on a lump sum arrangement that included a license to Nokia's Video Patents, Wi-Fi patents, and cellular essential patent claims, Nokia decided to make Amazon separate running royalty offers for Amazon's video-related products. Specifically, on July 19, 2023, Nokia sent Amazon an offer for a license to Nokia's Video Patents for Amazon end-user devices at Nokia's well-established rates. Nokia also sent Amazon a list of anonymized licenses showing other companies that have agreed to these same rates.

55. On October 24, 2023, Nokia sent Amazon an expanded list of anonymized licenses showing that a large number of companies have agreed to Nokia's well-established rates.

56. Then, on October 25, 2023, Nokia sent Amazon an offer for a license to Nokia's Video Patents for Amazon's streaming services, including Amazon Prime Video, Freevee, and Twitch. Nokia's offer is supported by, for example, Nokia's running royalty agreements referenced above. Nokia also sent Amazon lists of Nokia's Video Patents and identified Amazon's products, including the Accused Products, which infringe Nokia's Video Patents.

57. Amazon has not accepted any of Nokia's offers. To this day, Amazon has not paid a single royalty for its infringement despite Nokia's good faith efforts to negotiate.

58. Amazon's actions as an unwilling licensee, its refusal to negotiate in good faith, and its continued unauthorized use of Nokia's patents have prompted Nokia to seek the relief detailed in this Complaint.

THE NOKIA ASSERTED PATENTS

59. Nokia complied with any applicable marking requirements under 35 U.S.C. § 287(a) at least because the asserted method claims do not require marking and/or there is nothing to mark.

A. U.S. Patent No. 7,532,808 ("the '808 Patent")

60. The '808 Patent, entitled "Method for Coding Motion in a Video Sequence" issued on May 12, 2009, to inventor Jani Lainema. The '808 Patent issued from U.S. Patent Application No. 10/390,549, filed on March 14, 2003, and claims priority to U.S. Provisional Application No. 60/365,072, filed on March 15, 2002. The '808 Patent expires on December 11, 2025. A true and correct copy of the '808 Patent is attached as Exhibit 2.

61. The '808 Patent is not directed to merely an abstract idea or any patent-ineligible concept. Instead, the '808 Patent is directed to novel and unconventional improvements to motion-compensated prediction in the field of digital video coding. The '808 Patent provides improvements over prior motion compensated prediction and video compression techniques that result in substantial benefits to motion prediction, video compression, video quality, and video playback. These substantial benefits are enjoyed by users of the Accused Products when, for example, watching video over the Internet.

62. A digital video sequence is a sequence of still images with "the illusion of motion being created by displaying consecutive images of the sequence on after the other at a relatively fast rate." '808 Patent at 1:15-19. These still images are referred to as frames. "Each frame of an uncompressed digital video sequence comprises an array of image pixels." *Id*. at 1:32-33. Frames in commonly used video formats may have millions of pixels.

63. The '808 Patent describes that video frames in a given digital video sequence may contain various forms of redundancy. *Id.* at 2:36-46. "Temporal redundancy" refers to the fact that "objects appearing in one frame of a sequence are likely to appear in subsequent frames." *Id*.

64. As the '808 Patent explains, "motion-compensated prediction" can take advantage of temporal redundancy to "predict" the image content of some frames from "one or more other frames in the sequence, known as 'reference frames.'" *Id.* at 3:15-18. Predictions can be achieved

by tracking the motion of objects or regions of an image between a given frame and one or more reference frames. *Id.* at 3:18-23.

65. Prior to the ’808 Patent, some motion-compensated prediction techniques involved assigning “coding modes” to “macroblocks” (a region of 16x16 image pixels in the original image). *See id*. at 1:64-2:6. One such coding mode was referred to as “SKIP” mode. SKIP mode was assigned to macroblocks that could be copied from a reference frame without using or having to take into account motion-compensated prediction. ’808 Patent at 10:64-67. SKIP mode prior to the ’808 Patent provided benefits in certain scenarios without motion from frame to frame.

66. As explained in the ’808 Patent, “it is necessary for a corresponding video decoder to be aware of that coding mode in order for it to correctly decode the received information relating to the macroblock in question.” ’808 Patent at 11:20-24. “Therefore, an indication of the coding mode assigned to each macroblock is provided in the video bit-stream.” ’808 Patent at 11:24-27. The indication is transmitted using a variable length codeword, where “the shortest codeword is used to represent the coding mode that is statistically most likely to occur.” ’808 Patent at 11:27-32.

67. However, SKIP mode could not effectively address problems with certain types of redundancy within video sequences—for example, global and regional motion, such as might occur when phenomena like panning or zooming are present in a video sequence. *Id*. at 12:41-47. For example, redundancies may occur in a video sequence when footage is captured by a video camera moving horizontally from fixed position or when translational motion occurs, such as when a volleyball moves overhead across a court. Prior motion-compensated prediction techniques could not efficiently or effectively handle these scenarios. For example, in the prior H.263+ video coding standard, this global motion scenario was addressed by using a highly

complex global motion compensation technique that required the decoder to rely on additional information. *Id*. at 12:48-13:30. This prior solution was computationally intensive and less efficient. *Id*.

68. The ’808 Patent overcame these technical challenges in the prior systems by inventing an improved skip coding mode. The ’808 Patent’s improved skip coding mode can address certain scenarios with motion (and/or without motion) without the need for additional motion data For example, the ’808 Patent teaches that the skip coding mode is associated with either a zero (non-active) motion vector or a non-zero (active motion vector), where the decision is made by analyzing the motion of other macroblocks or sub-blocks in a region surrounding the macroblock to be coded. ’808 Patent at 14:23-32. Therefore, for example, “SKIP mode macroblocks can adapt to the motion in the region surrounding them, enabling global or regional motion to [be] taken account of in an efficient manner.” *Id*. at 14:48-51.

69. The assigned motion vector can then be used by the decoder, for example, to form a prediction for the given macroblock with respect to a reference frame. These unconventional solutions allow a decoder to, for example, reliably and efficiently decode video sequences with a drastically reduced amount of information. Because the ’808 Patent inventions use the surrounding macroblocks or sub-blocks to determine the assignment of the motion vector for the skip coding mode for an image segment, there is no need for the video decoder to use additional information in order to decode certain types of motion. *Id*. at 14:52-64.

70. The ’808 Patent therefore provides specific technological improvements to the functionality and capabilities of video coding technology that, for example, “not only provides an improvement in coding efficiency in the presence of global motion . . . but also enables regional motion to be represented in an efficient manner.” *Id*. at 14:14-22.

71. The novel solutions of the ’808 Patent, including redefining skip coding mode to adapt to the motion of surrounding regions, were not well-understood, routine, or conventional, nor were they simply comprised of well-understood, routine, and conventional activities previously known to the industry.

72. On information and belief, Amazon directly infringes at least Claim 7 of the ’808 Patent through its manufacture, sale for importation, importation, use, and sale after importation of one or more of its Accused Products.

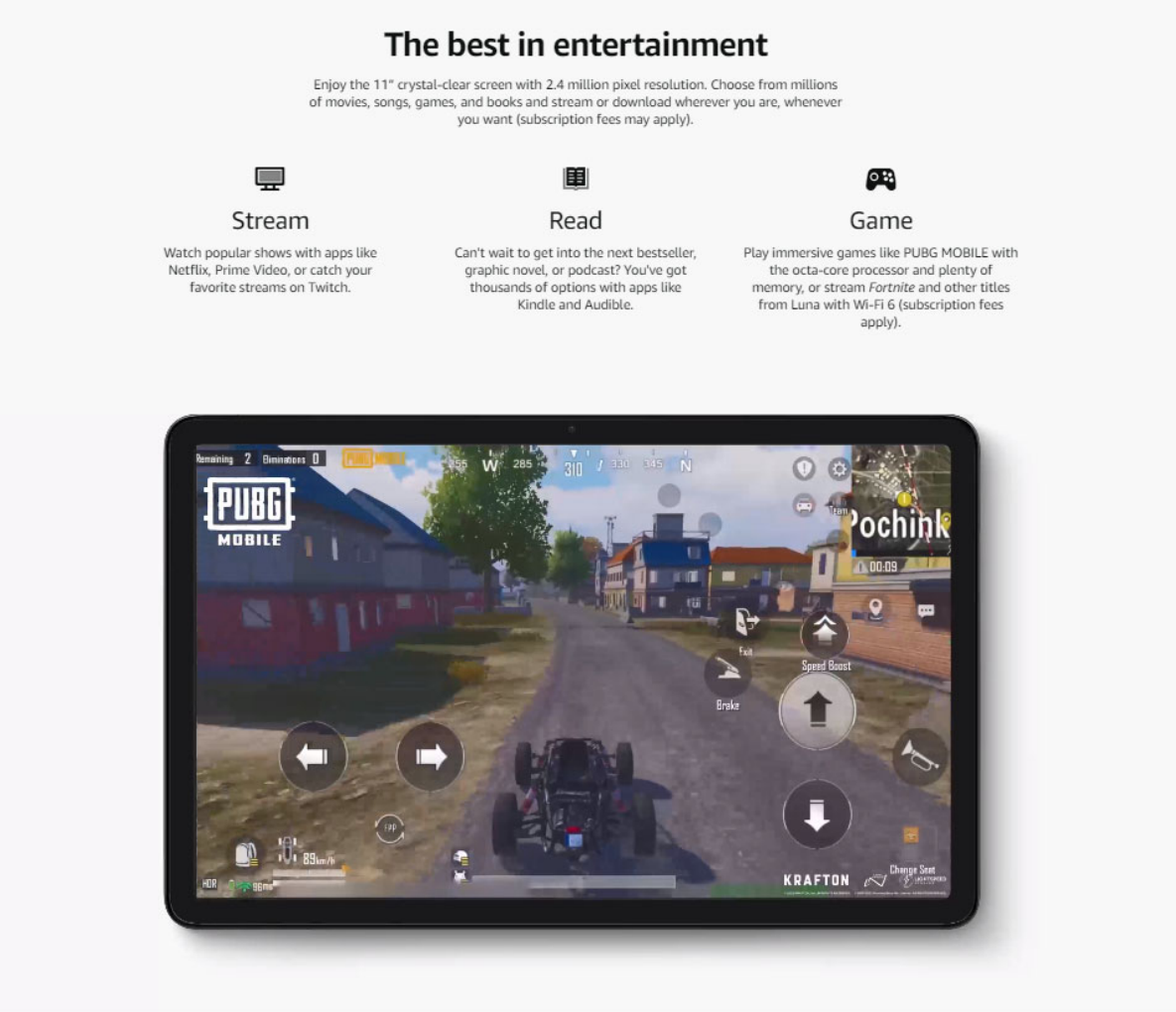
73. Because at least Claim 7 of the ’808 Patent is essential to the H.264 Standard, the Accused Products’ incorporation of the H.264 Standard infringes the decoding claims of the ’808 Patent.

74. As just one example of Amazon’s infringement, Amazon manufactures and sells tablets with graphics processing units that decode H.264-compliant video. An example of an Amazon tablet Accused Product is the Amazon Fire Max 11 tablet, which is capable of decoding H.264-compliant video.

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
VIDEO FEATURES	**Low Latency Video**	Supported
	H.264 DRM	Supported
	H.265 DRM	Supported
	OpenGL	ES 3.2

Source: https://developer.amazon.com/docs/fire-tablets/ft-device-specifications-firehd-models.html

75. Additionally, Amazon instructs and encourages users to use the Amazon Accused Products in a manner that infringes at least Claim 7 of the '808 Patent by advertising the products' ability to stream and watch video:



Source: https://www.amazon.com/dp/B0B1VQ1ZQY?tag=googhydr-20&hvadid=659647565932&hvpos=&hvnetw=g&hvrand=12846244274520147119&hvpone=&hvptwo=&hvqmt=e&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=21176&hvtargid=kwd-2078604219526&ref=pd_sl_24r6yas0m1_e&th=1

76. Additionally, on information and belief, Amazon publishes customer reviews of the Amazon Accused Products that show its customers actually use the Amazon Accused Products to stream and watch video, and that customers choose the tablet specifically for its video streaming capabilities:

XRyche

★★★★★ **A surprisingly capable budget/low mid-range tablet focused on video entertainment.**

Reviewed in the United States on August 9, 2023

Digital Storage Capacity: 64 GB | Offer Type: With Lockscreen Ads | Color: Gray | Style: Amazon Fire Max 11 | **Verified Purchase**

Full disclosure.....I went from a Fire HD 8 (2020) (Tablet is still working btw and has been relegated to the closet shelf as a back-up.) tablet to this so the bias should be obvious. Regardless this tablet seems to be brighter and more vivid than my previous Fire tablet, the resolution is obviously better as well as it being much more powerful. It can even play some games more advanced than Candy Crush and such.

Now with that being said.....this tablet is NOT, by any means, a "productivity" tablet. It is mid-range budget tablet that is capable of performing some light productivity tasks. This tablet is also NOT an IPad competitor in any way, shape or form either. What it is is a seemingly well built Amazon-centric budget mid-range entertainment tablet which is what I am looking for (Minus the Amazon-centric part which I can overlook since there are methods to get around this. P.S. If Amazon put a stop to these methods I would never buy a Fire tablet.).

As far as the price goes though I would not pay a cent over 200 USD for this tablet. It simply isn't worth it, not for a budget/low-end mid-range tablet with a forked, obsolete and gimped Android OS. Luckily I only paid 150 USD on Prime Day and paying only 30 USD a month over a 5 month period using Amazon's interest-free financing service they offer on a lot of their branded products. Going this route this tablet is worth the price.

Juilianna

★★★★★ **just WOW**

Reviewed in the United States on July 29, 2023

Digital Storage Capacity: 128 GB | Offer Type: Without Lockscreen Ads | Color: Gray | Style: Amazon Fire Max 11 | **Verified Purchase**

Ok...old woman (here again!) First, I must say, I have many Fire products. the old Fire HDX is my all time favorite, and I hoard them.still use them,..i love the size, quality, and it is MY PREFERED device. BUT...i have an iPad mini, which is the next fav, and a few others.

I got this on a whim (and to help prolong the lives of my old HDX's) because it sounded pretty good, and the price was great. I LOVE IT!

I've played around with it for a week or so now...Lots of time on my hands now, so I read a lot, lots of Brit mystery viewing, reading the Post and Times, playing Queen Bee...ha. point being I use it quite a bit. The battery lasts VERY long...at least the 10 hours or more. The quality of the videos is EXCELLENT!!!!!! I am veryyy pleased with that!! It doesn't stutter like a few of my Fire products, which is great. Fast!! Highly recommend it

Cons-- yeah, but they're just personal. It's a large device and awkward for my small hands. If there were a 7 inch of this quality, I'd have 3 of them....no lie. It does take a little time to charge tho....ah well.

seriously thinking about the keyboard...we'll see.

Helpful | Report

Source: https://www.amazon.com/product-reviews/B0B1VQ1ZQY/ref=cm_cr_arp_d_viewopt_kywd?ie=UTF8&filterByStar=five_star&reviewerType=all_reviews&pageNumber=1&filterByKeyword=video#reviews-filter-bar

77. As another example of Amazon's infringement, Amazon manufactures and sells media players with graphics processing units that decode H.264-compliant video. An example of such an Accused Product is the Amazon Fire TV Stick 4K Max, which Amazon advertises is capable of decoding H.264-compliant video.

Video codecs	• **Dolby Vision**. Dolby Vision support for Profile 4-MEL, 5, 8, 9. (Up to Level 9 for profiles 5 and 8. Up to Level 5 for Profile 9.) • **H.265 (HEVC)**. Hardware accelerated up to 3840x2160p (4K) @ 60fps, 35 Mbps, Main 10 Profile Level 5.1, Color space 8-bit and 10-bit input with HDR10, HDR10+, and HLG. • **H.264**. Hardware accelerated up to 3840x2160p (4K) @ 60fps, 20 Mbps, High 10 Profile Level 5.2 • **H.263**. Hardware accelerated up to 1080p @ 30fps, 6 Mbps, Profile 0 Level 70 • **VP8**. Supported up to 1080p 30fps. Baseline profile, non-secure • **VP9**. Hardware accelerated up to 4K @ 60fps, Profile 2 up to 30 Mbps • **MPEG-2**. Hardware accelerated up to 1080p @ 60fps • **MPEG-4**. Up to 1080p @ 30fps, Simple and Advanced Simple Profiles Level 5, non-secure • **AV1**. Hardware accelerated up to 3840x2160p (4K) @60fps, 100Mbps, Main Profile Level 5.1, Color space 8-bit and 10-bit input with HDR10, HDR10+, and HLG.

Source: https://developer.amazon.com/docs/fire-tv/device-specifications-fire-tv-streaming-media-player.html

78. Additionally, Amazon instructs and encourages users to use the Amazon Accused Products in a manner that infringes at least Claim 7 of the '808 Patent by advertising the products' ability to stream and watch video:

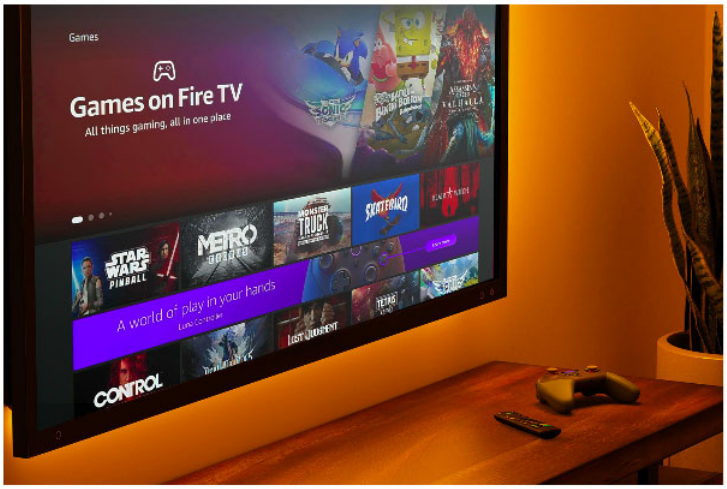
Watch live TV and free TV

Stream live TV, including news and sports, with subscriptions to Hulu+ Live TV, SLING TV, YouTube TV, and others. Plus, watch movies and TV shows for free with ad-supported apps like Pluto TV, Amazon Freevee, and more.

TV is just the beginning

Fire TV is always getting smarter with new Alexa skills and voice functionality. View live camera feeds, check the weather, order a pizza, and stream music. Learn more about compatible smart home devices.

"Alexa, show the nursery."



Games on Fire TV

No matter what kind of gaming you're into, Games on Fire TV has you covered. Play games like you stream movies with Amazon Luna or download games from the Appstore. If you're an Amazon Prime member, you can play a rotating selection of games free on Luna.

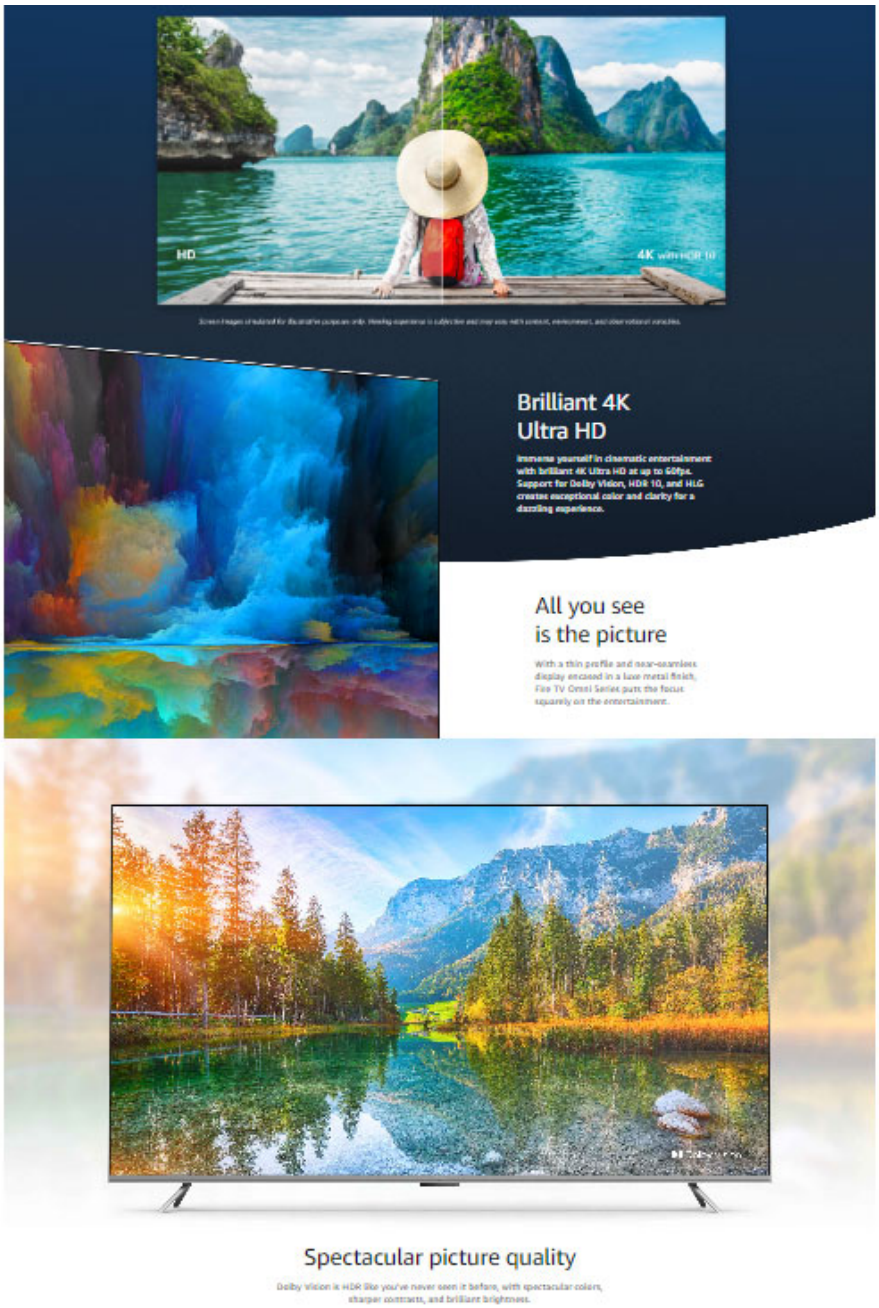
Source: https://www.amazon.com/dp/B08XVYZ1Y5?th=1

79. As an additional example of Amazon's infringement, Amazon manufactures and sells televisions with graphics processing units that decode H.264-compliant video. An example of an Amazon television Accused Product is the Amazon Fire TV, is capable of decoding H.264-compliant video.

Video codecs	• **Dolby-Vision** - Resolutions/frame rates: Up to UHD@60 - Profiles: 4-MEL, 5, 8, 9, and 10 - Codecs: AVC (profile 9), HEVC (profile 4-MEL, 5 and 8), AV1 (profile 10) - OTT four-character codes: hvc1, dvh1, hev1, dvhe, avc1 - Dolby Vision box types: dvcC, dvvC - Adaptive streaming formats: DASH, HLS, HLS using fMP4 • **H.265 HEVC** - Max Resolution: 2160p - Min Profile: Version 1, Main, Main 10, 10-bit support Min - Level: 5.1, Main Tier - Max frame rate: 720p @ 60fps, 1080p @ 60fps, 2160p @ 60fps - Secure (PlayReady and Widevine DRMs) and clear (non-secure) contexts - Support for dynamic resolution switch down to or up from lower resolution - Number of reference frames required will be based on level, profile, and resolution. Refer to Profiles (High Efficiency Video Coding) - Color Space: Rec. 601 & Rec. 709 (secure or unsecure), Rec. 2020 • **H.264 AVC** - Secure or un-secure - Max Resolution: 2160p - Min Profile/Level: Main Profile @ Level 5.1, High Profile @ Level 5.1 - Max frame rate: 720p @ 60fps, 1080p @ 30fps, 1080p @ 60fps, 2160p @ 30fps, 2160p @ 30fps (limited support) - Secure (PlayReady and Widevine DRMs) and clear (non-secure) contexts - Support for dynamic resolution switch down to or up from lower resolution - Number of reference frames required will be based on level, profile, and resolution. Refer to Levels (Advanced Video Coding)

Source: https://developer.amazon.com/docs/fire-tv/device-specifications-fire-tv-edition-smart-tv-na.html

80. Additionally, Amazon instructs and encourages users to use the Amazon Accused Products in a manner that infringes at least Claim 7 of the '808 Patent by advertising the products' ability to decode video:



Source: https://www.amazon.com/dp/B09N6F9NV3?tag=googhydr-20&hvadid=652064394383&hvpos=&hvnetw=g&hvrand=8222494941552910 24&hvpone=&hvptwo=&hvqmt=e&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=21176&hvtargid=kwd-1982381309656&ref=pd_sl_8awf5tywn2_e

81. Additionally, on information and belief, Amazon publishes customer reviews of the Amazon Accused Products that show its customers actually use the Amazon Accused Products to stream and watch video:

This is not a ginger ale!

★★★★★ **high-quality smart TV with an immersive viewing experience**

Reviewed in the United States on July 17, 2023

Size: 50-inch | Configuration: TV only | **Verified Purchase**

If you're looking for a feature-packed television that seamlessly integrates with your smart home devices and provides stunning picture quality, this TV is an excellent choice.

The first thing that impressed me about this smart TV is its picture quality. The 4K Ultra HD resolution delivers crystal-clear and vibrant visuals, bringing your favorite movies, TV shows, and streaming content to life. The colors are rich and accurate, and the contrast is excellent, providing a truly immersive viewing experience. Whether you're watching action-packed movies or enjoying nature documentaries, the picture quality of this TV is truly impressive.

Male in Atlanta

★★★★☆ **Impressive Tech, But There's a Catch!**

Reviewed in the United States on June 15, 2023

Size: 55-inch | Configuration: TV only | **Verified Purchase**

Hey all! Let's talk about the Amazon Fire TV 55" Omni Series. It's a strong contender in the Smart TV market, scoring a solid 4 out of 5 stars from me.

The picture quality on this 4K UHD TV is stunning, honestly, it's like being at the movies. Everything is crisp, vibrant and immersive, which is perfect for my binge-watching sessions!

One of the standout features is the hands-free Alexa. It's pretty cool being able to control your TV with voice commands. However, and this is where it loses a star, every time I switch on the TV, I have to physically select the Fire user profile with the remote. Kinda defeats the purpose of hands-free convenience, right? A bit of a bugbear for me.

The rest of the Fire interface is user-friendly, though, with easy access to Prime Video, Netflix, Disney+, and more. It's a breeze to navigate, once you get past the initial hiccup.

As for value, you're getting a lot of bang for your buck here. The price is reasonable when you consider the picture quality and smart features, minus that one little annoyance.

So there you have it. A pretty fantastic TV that needs to work out one small kink. If you can live with the manual profile selection issue, it's definitely a great choice. Four stars from me!

105 people found this helpful

Helpful | Report

Source: https://www.amazon.com/product-reviews/B09N6F9NV3/ref=cm_cr_arp_d_show_all?ie=UTF8&reviewerType=all_reviews&pageNumber=1#reviews-filter-bar

82. Amazon knowingly and intentionally induces users of one or more of the Amazon Accused Products to directly infringe at least Claim 7 of the ’808 Patent by encouraging, instructing, and aiding one or more persons in the United States, including Amazon employees who test and operate Amazon Accused Products at the direction of Amazon, to make, use (including testing those devices and methods), sell, or offer to sell one or more Amazon Accused Products, during or after such article’s importation into the United States, in a manner that infringes the ’808 Patent.

83. For example, as seen in the Amazon publications above, Amazon advertises the Amazon Fire Tablet, Amazon Fire Stick 4K and Amazon Fire TV on its website so that consumers may purchase and use the product, thus inducing its customers to also infringe the ’808 Patent. On information and belief, Amazon also advertises other Amazon end user products that infringe the ’808 Patent on its website for consumer purchase.

84. On information and belief, Amazon was aware of the ’808 Patent or acted with willful blindness as to the existence of the ’808 Patent at least as a result of the filing and service of this complaint. Nokia notified Amazon that it was infringing the ’808 Patent in at least April 2015.

85. On information and belief, Amazon contributes to the infringement of at least Claim 7 of the ’808 Patent by offering to sell or selling and/or importing a patented component or material and/or apparatus used to practice a patented process, constituting a material part of the inventions, knowing the same to be especially made or especially adapted for use in an infringement and not a staple article or commodity of commerce suitable for substantial non-infringing use.

86. A claim chart that applies Claim 7 of the ’808 Patent to the Amazon Accused Products is attached as Exhibit 13. The H.264 Standard referenced in this claim chart can be found in Exhibit 24.

B. U.S. Patent No. 8,204,134 (“the ’134 Patent”)

87. The ’134 Patent, titled “Grouping of Image Frames in Video Coding” issued on June 19, 2012, to inventor Miska Hannuksela. The ’134 Patent issued from U.S. Patent Application No. 2006/0120464 filed on June 8, 2006, and claims priority to Finnish Patent Application No. 20020127, filed on January 23, 2002. The ’134 Patent expires on January 21, 2028. A true and correct copy of the ’134 Patent is attached as Exhibit 3.

88. The ’134 Patent is not directed to merely an abstract idea or any patent-ineligible concept. Instead, the ’134 Patent provides improvements over prior video decoding techniques that result in substantial benefits to video decompression, video quality, and video playback. These substantial benefits are enjoyed by users of the Accused Products when, for example, watching video over the Internet.

89. “The video files in multimedia files comprise a great number of still image frames, which are displayed rapidly in succession (of typically 15 to 30 frames per s) to create an impression of a moving image.” ’134 Patent at 1:54–58. Because these files contain such a high number of frames per second, “the information comprised by consecutively displayed image frames is typically largely similar.” *Id*. at 1:62–64. This high amount of redundancy means that “to reduce the amount of data in video files, the image data can be compressed into a smaller form.” *Id*. at 2:5–6. One way to achieve this compression is to eliminate frames from the bitstream, which “removal from the video sequence does not degrade the quality of subsequent images.” *Id*. at 2:50–51. Compression of the bitstream is essential when streaming because “the transmission of the multimedia data and/or the data contents are controlled by making sure that the bit rate of the transmission substantially corresponds to the playback rate of the terminal device, or, if the telecommunications network used in the transmission causes a bottleneck in data transfer, by making sure that the bit rate of the transmission substantially corresponds to the bandwidth available in the telecommunications network.” *Id*. at 1:34–42.

90. “The simplest means for the streaming server to control the bit rate is to leave out [frames] having a high information content from the transmission.” *Id*. at 3:26–29. However, this can cause issues for the decoder because “the frames are typically numbered according to an arithmetical series.” *Id*. at 3:19–20. Therefore, when frames are removed or inserted, “the

receiving terminal may therefor interpret the deviating image numbering as a signal of lost image frames and start unnecessary actions to reconstruct the image frames suspected as lost or to request a re-transmission thereof." *Id*. at 4:4–7.

91. For example, the inventor of the '134 Patent recognized that "there [was] no process for informing the decoder a reason for the removal" of image frames. *Id*. at 4:13–14 Because of this, "if a plural number of image frames are removed, the receiving terminal may unnecessarily interpret these intentional removals as protocol errors." *Id*. at 4:15–17. The '134 Patent discloses improved techniques that "enable the decoder to take into account the image frames the encoder has intentionally removed." *Id*. at 4:22–24. In doing so, the decoder may appropriately configure a buffer memory to "provide the number of image frames corresponding to the discontinuities in the numbering of the image frames." *Id*. at 4:49–51.

92. This is advantageous as it "provides the decoder with the information, which gaps in the image frame numbering are intentional, whereby the decoder does not start unnecessary error correction actions" and "the buffer memories of the encoder and the decoder can be kept in synchronism, which enables a fluent operation of the process of reference picture selection." *Id*. at 4:66–5:4. The '134 Patent therefore improves the decoding of digital video, whereby decoders can receive bitstreams with intentionally omitted frames and maintain appropriately configured decoder buffer memory. The inventions of the '134 Patent have the benefits of allowing more fluid video playback and preventing unnecessary error protocols in video playback.

93. On information and belief, Amazon directly infringes at least Claim 1 of the '134 Patent through its manufacture, sale for importation, importation, use, and sale after importation of one or more of its Accused Products.

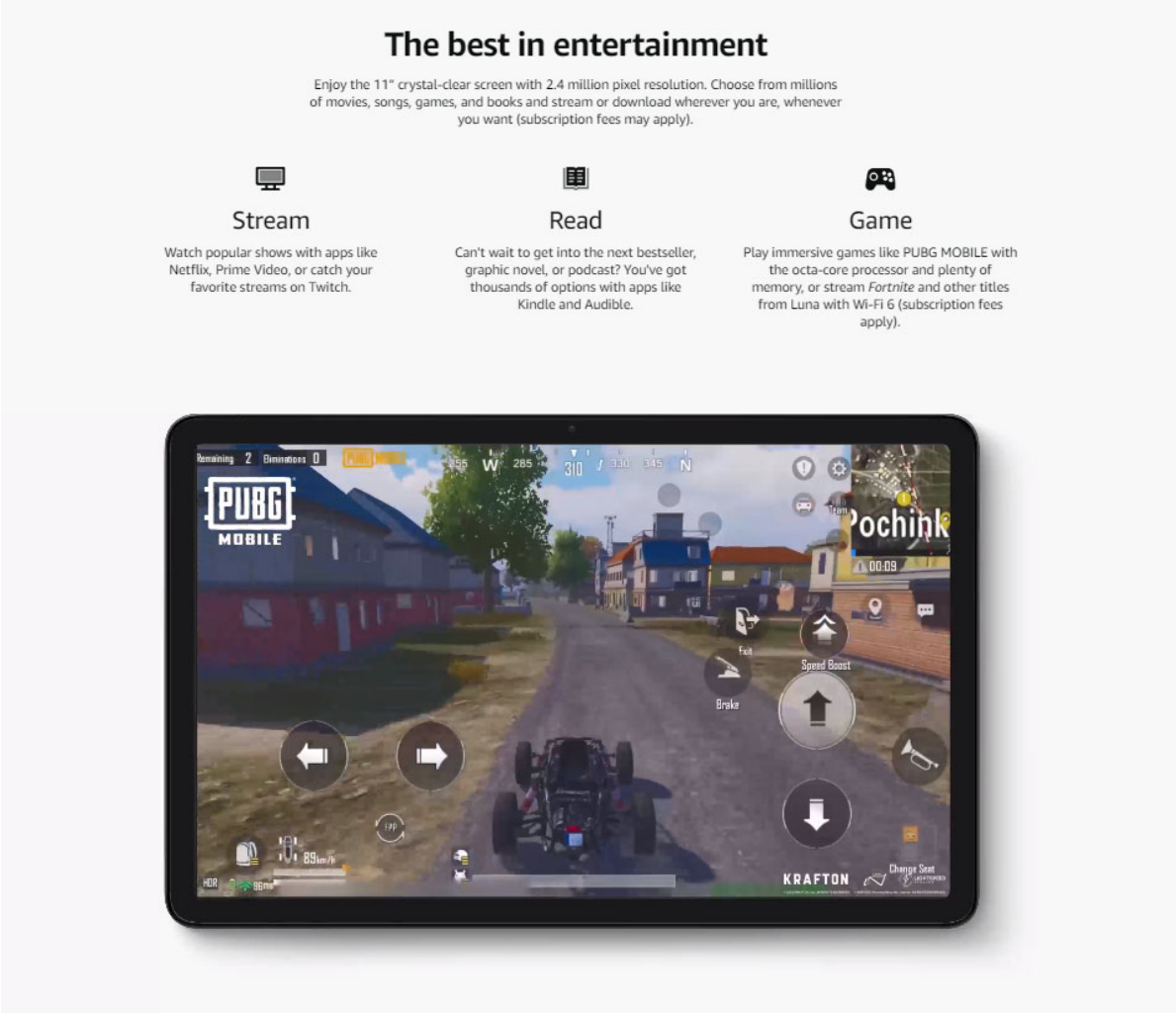
94. Because at least Claim 1 of the ’134 Patent is essential to the H.264 Standard, the Accused Products’ incorporation of the H.264 Standard infringes Claim 1 of the ’134 Patent.

95. As just one example of Amazon’s infringement, Amazon manufactures and sells tablets with graphics processing units that decode H.264-compliant video. An example of an Amazon tablet Accused Product is the Amazon Fire Max 11 tablet, which is capable of decoding H.264-compliant video.

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
VIDEO FEATURES	**Low Latency Video**	Supported
	H.264 DRM	Supported
	H.265 DRM	Supported
	OpenGL	ES 3.2

Source: https://developer.amazon.com/docs/fire-tablets/ft-device-specifications-firehd-models.html

96. Additionally, Amazon instructs and encourages users to use the Amazon Accused Products in a manner that infringes at least Claim 1 of the ’134 Patent by advertising the products’ ability to stream and watch video:



Source: https://www.amazon.com/dp/B0B1VQ1ZQY?tag=googhydr-20&hvadid=659647565932&hvpos=&hvnetw=g&hvrand=12846244274520147119&hvpone=&hvptwo=&hvqmt=e&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=21176&hvtargid=kwd-2078604219526&ref=pd_sl_24r6yas0m1_e&th=1

97. Additionally, on information and belief, Amazon publishes customer reviews of the Amazon Accused Products that show its customers actually use the Amazon Accused Products to stream and watch video, and that customers choose the tablet specifically for its video streaming capabilities:

XRyche

★★★★★ **A surprisingly capable budget/low mid-range tablet focused on video entertainment.**

Reviewed in the United States on August 9, 2023

Digital Storage Capacity: 64 GB | Offer Type: With Lockscreen Ads | Color: Gray | Style: Amazon Fire Max 11 | **Verified Purchase**

Full disclosure.....I went from a Fire HD 8 (2020) (Tablet is still working btw and has been relegated to the closet shelf as a back-up.) tablet to this so the bias should be obvious. Regardless this tablet seems to be brighter and more vivid than my previous Fire tablet, the resolution is obviously better as well as it being much more powerful. It can even play some games more advanced than Candy Crush and such.

Now with that being said.....this tablet is NOT, by any means, a "productivity" tablet. It is mid-range budget tablet that is capable of performing some light productivity tasks. This tablet is also NOT an IPad competitor in any way, shape or form either. What it is is a seemingly well built Amazon-centric budget mid-range entertainment tablet which is what I am looking for (Minus the Amazon-centric part which I can overlook since there are methods to get around this. P.S. If Amazon put a stop to these methods I would never buy a Fire tablet.).

As far as the price goes though I would not pay a cent over 200 USD for this tablet. It simply isn't worth it, not for a budget/low-end mid-range tablet with a forked, obsolete and gimped Android OS. Luckily I only paid 150 USD on Prime Day and paying only 30 USD a month over a 5 month period using Amazon's interest-free financing service they offer on a lot of their branded products. Going this route this tablet is worth the price.

Juilianna

★★★★★ **just WOW**

Reviewed in the United States on July 29, 2023

Digital Storage Capacity: 128 GB | Offer Type: Without Lockscreen Ads | Color: Gray | Style: Amazon Fire Max 11 | **Verified Purchase**

Ok...old woman (here again!) First, I must say, I have many Fire products. the old Fire HDX is my all time favorite, and I hoard them.still use them,..i love the size, quality, and it is MY PREFERED device. BUT...i have an iPad mini, which is the next fav, and a few others.

I got this on a whim (and to help prolong the lives of my old HDX's) because it sounded pretty good, and the price was great. I LOVE IT!

I've played around with it for a week or so now...Lots of time on my hands now, so I read a lot, lots of Brit mystery viewing, reading the Post and Times, playing Queen Bee...ha. point being I use it quite a bit. The battery lasts VERY long...at least the 10 hours or more. The quality of the videos is EXCELLENT!!!!!! I am veryyy pleased with that!! It doesn't stutter like a few of my Fire products, which is great. Fast!! Highly recommend it

Cons-- yeah, but they're just personal. It's a large device and awkward for my small hands. If there were a 7 inch of this quality, I'd have 3 of them....no lie. It does take a little time to charge tho....ah well.

seriously thinking about the keyboard...we'll see.

Helpful | Report

Source: https://www.amazon.com/product-reviews/B0B1VQ1ZQY/ref=cm_cr_arp_d_viewopt_kywd?ie=UTF8&filterByStar=five_star&reviewerType=all_reviews&pageNumber=1&filterByKeyword=video#reviews-filter-bar

98. As another example of Amazon's infringement, Amazon manufactures and sells media players with graphics processing units that decode H.264-compliant video. An example of such a media player Accused Product is the Amazon Fire TV Stick 4K Max, which Amazon advertises is capable of decoding H.264-compliant video.

Video codecs	• **Dolby Vision**. Dolby Vision support for Profile 4-MEL, 5, 8, 9. (Up to Level 9 for profiles 5 and 8. Up to Level 5 for Profile 9.) • **H.265 (HEVC)**. Hardware accelerated up to 3840x2160p (4K) @ 60fps, 35 Mbps, Main 10 Profile Level 5.1, Color space 8-bit and 10-bit input with HDR10, HDR10+, and HLG. • **H.264**. Hardware accelerated up to 3840x2160p (4K) @ 60fps, 20 Mbps, High 10 Profile Level 5.2 • **H.263**. Hardware accelerated up to 1080p @ 30fps, 6 Mbps, Profile 0 Level 70 • **VP8**. Supported up to 1080p 30fps. Baseline profile, non-secure • **VP9**. Hardware accelerated up to 4K @ 60fps, Profile 2 up to 30 Mbps • **MPEG-2**. Hardware accelerated up to 1080p @ 60fps • **MPEG-4**. Up to 1080p @ 30fps, Simple and Advanced Simple Profiles Level 5, non-secure • **AV1**. Hardware accelerated up to 3840x2160p (4K) @60fps, 100Mbps, Main Profile Level 5.1, Color space 8-bit and 10-bit input with HDR10, HDR10+, and HLG.

Source: https://developer.amazon.com/docs/fire-tv/device-specifications-fire-tv-streaming-media-player.html

99. Additionally, Amazon instructs and encourages users to use the Amazon Accused Products in a manner that infringes at least Claim 1 of the '134 Patent by advertising the products' ability to stream and watch video:

Watch live TV and free TV

Stream live TV, including news and sports, with subscriptions to Hulu+ Live TV, SLING TV, YouTube TV, and others. Plus, watch movies and TV shows for free with ad-supported apps like Pluto TV, Amazon Freevee, and more.

TV is just the beginning

Fire TV is always getting smarter with new Alexa skills and voice functionality. View live camera feeds, check the weather, order a pizza, and stream music. Learn more about compatible smart home devices.

"Alexa, show the nursery."

Games on Fire TV

No matter what kind of gaming you're into, Games on Fire TV has you covered. Play games like you stream movies with Amazon Luna or download games from the Appstore. If you're an Amazon Prime member, you can play a rotating selection of games free on Luna.

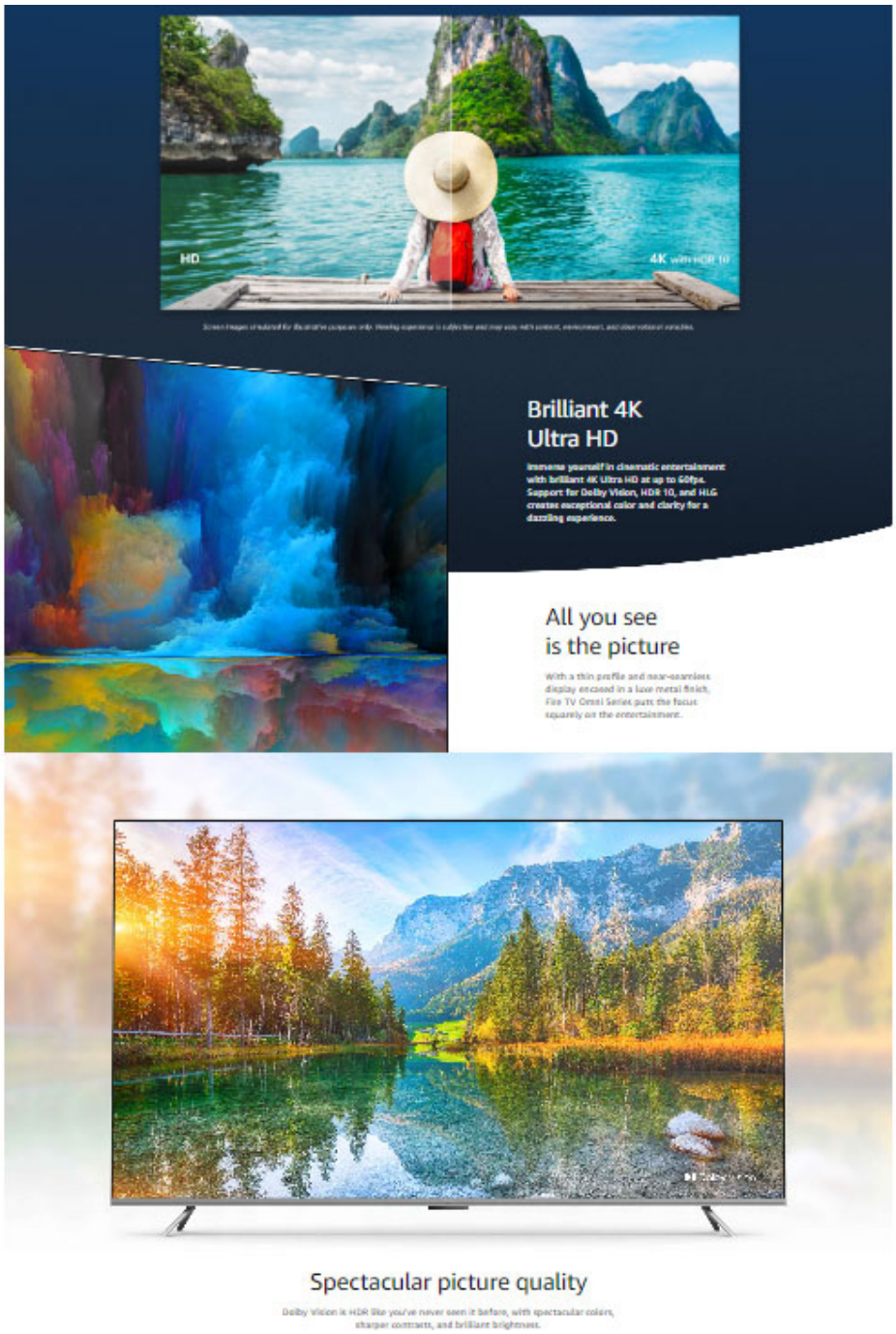
Source: https://www.amazon.com/dp/B08XVYZ1Y5?th=1

100. As an additional example of Amazon's infringement, Amazon manufactures and sells televisions with graphics processing units that decode H.264-compliant video. An example of an Amazon television Accused Product is the Amazon Fire TV, which is capable of decoding H.264-compliant video.

Video codecs	• **Dolby-Vision** - Resolutions/frame rates: Up to UHD@60 - Profiles: 4-MEL, 5, 8, 9, and 10 - Codecs: AVC (profile 9), HEVC (profile 4-MEL, 5 and 8), AV1 (profile 10) - OTT four-character codes: hvc1, dvh1, hev1, dvhe, avc1 - Dolby Vision box types: dvcC, dvvC - Adaptive streaming formats: DASH, HLS, HLS using fMP4 • **H.265 HEVC** - Max Resolution: 2160p - Min Profile: Version 1, Main, Main 10, 10-bit support Min - Level: 5.1, Main Tier - Max frame rate: 720p @ 60fps, 1080p @ 60fps, 2160p @ 60fps - Secure (PlayReady and Widevine DRMs) and clear (non-secure) contexts - Support for dynamic resolution switch down to or up from lower resolution - Number of reference frames required will be based on level, profile, and resolution. Refer to Profiles (High Efficiency Video Coding) - Color Space: Rec. 601 & Rec. 709 (secure or unsecure), Rec. 2020 • **H.264 AVC** - Secure or un-secure - Max Resolution: 2160p - Min Profile/Level: Main Profile @ Level 5.1, High Profile @ Level 5.1 - Max frame rate: 720p @ 60fps, 1080p @ 30fps, 1080p @ 60fps, 2160p @ 30fps, 2160p @ 30fps (limited support) - Secure (PlayReady and Widevine DRMs) and clear (non-secure) contexts - Support for dynamic resolution switch down to or up from lower resolution - Number of reference frames required will be based on level, profile, and resolution. Refer to Levels (Advanced Video Coding)

Source: https://developer.amazon.com/docs/fire-tv/device-specifications-fire-tv-edition-smart-tv-na.html

101. Additionally, Amazon instructs and encourages users to use the Amazon Accused Products in a manner that infringes at least Claim 1 of the '134 Patent by advertising the products' ability to decode video:



Source: https://www.amazon.com/dp/B09N6F9NV3?tag=googhydr-20&hvadid=652064394383&hvpos=&hvnetw=g&hvrand=8222494941552910 24&hvpone=&hvptwo=&hvqmt=e&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=21176&hvtargid=kwd-1982381309656&ref=pd_sl_8awf5tywn2_e

102. Additionally, on information and belief, Amazon publishes customer reviews of the Amazon Accused Products that show its customers actually use the Amazon Accused Products to stream and watch video:

This is not a ginger ale!

★★★★★ **high-quality smart TV with an immersive viewing experience**

Reviewed in the United States on July 17, 2023

Size: 50-inch | Configuration: TV only | **Verified Purchase**

If you're looking for a feature-packed television that seamlessly integrates with your smart home devices and provides stunning picture quality, this TV is an excellent choice.

The first thing that impressed me about this smart TV is its picture quality. The 4K Ultra HD resolution delivers crystal-clear and vibrant visuals, bringing your favorite movies, TV shows, and streaming content to life. The colors are rich and accurate, and the contrast is excellent, providing a truly immersive viewing experience. Whether you're watching action-packed movies or enjoying nature documentaries, the picture quality of this TV is truly impressive.

Male in Atlanta

★★★★☆ **Impressive Tech, But There's a Catch!**

Reviewed in the United States on June 15, 2023

Size: 55-inch | Configuration: TV only | **Verified Purchase**

Hey all! Let's talk about the Amazon Fire TV 55" Omni Series. It's a strong contender in the Smart TV market, scoring a solid 4 out of 5 stars from me.

The picture quality on this 4K UHD TV is stunning, honestly, it's like being at the movies. Everything is crisp, vibrant and immersive, which is perfect for my binge-watching sessions!

One of the standout features is the hands-free Alexa. It's pretty cool being able to control your TV with voice commands. However, and this is where it loses a star, every time I switch on the TV, I have to physically select the Fire user profile with the remote. Kinda defeats the purpose of hands-free convenience, right? A bit of a bugbear for me.

The rest of the Fire interface is user-friendly, though, with easy access to Prime Video, Netflix, Disney+, and more. It's a breeze to navigate, once you get past the initial hiccup.

As for value, you're getting a lot of bang for your buck here. The price is reasonable when you consider the picture quality and smart features, minus that one little annoyance.

So there you have it. A pretty fantastic TV that needs to work out one small kink. If you can live with the manual profile selection issue, it's definitely a great choice. Four stars from me!

105 people found this helpful

Helpful | Report

Source: https://www.amazon.com/product-reviews/B09N6F9NV3/ref=cm_cr_arp_d_show_all?ie=UTF8&reviewerType=all_reviews&pageNumber=1#reviews-filter-bar

103. Amazon knowingly and intentionally induces users of one or more of its Amazon Accused Products to directly infringe at least Claim 1 of the ’134 Patent by encouraging, instructing, and aiding one or more persons in the United States, including Amazon employees who test and operate Amazon Accused Products at the direction of Amazon, to make, use (including testing those devices and methods), sell, or offer to sell one or more of their respective Amazon Accused Products, during or after such article’s importation into the United States, in a manner that infringes the ’134 Patent.

104. For example, as seen in the Amazon publications above, Amazon advertises the Amazon Fire Tablet, Amazon Fire Stick 4K and Amazon Fire TV on its website so that consumers may purchase and use the product, thus inducing its customers to also infringe Claim 1 of the ’134 Patent. On information and belief, Amazon also advertises other Amazon products that infringe Claim 1 of the ’134 Patent on its website for consumer purchase.

105. On information and belief, Amazon was aware of the ’134 Patent or acted with willful blindness as to the existence of the ’134 Patent at least as a result of the filing and service of this complaint. Nokia notified Amazon that it was infringing the ’134 Patent in at least April 2015.

106. On information and belief, Amazon contributes to the infringement of at least Claim 1 of the ’134 Patent by offering to sell or selling and/or importing a patented component or material and/or apparatus used to practice a patented process, constituting a material part of the inventions, knowing the same to be especially made or especially adapted for use in an infringement and not a staple article or commodity of commerce suitable for substantial non-infringing use.

107. A claim chart that applies Claim 1 of the ’134 Patent to the Amazon Accused Products is attached as Exhibit 14. The H.264 Standard referenced in this claim chart can be found in Exhibit 24.

C. U.S. Patent No. 7,724,818 (“the ’818 Patent”)

108. Nokia owns by assignment the entire right, title, and interest in and to the ’818 Patent, entitled “Method for Coding Sequences of Pictures,” issued on May 25, 2010, to inventors Miska Hannuksela and Ye-Kui Wang. The ’818 Patent issued from U.S. Application No. 10/426,928, filed on April 30, 2003, and expires on May 6, 2026. A true and correct copy of the ’818 Patent is attached as Exhibit 4.

109. The ’818 Patent is not directed to merely an abstract idea or any patent-ineligible concept. Instead, the ’818 Patent provides improvements over conventional video coding techniques that result in substantial benefits to video decompression, video quality, and video playback. These substantial benefits are enjoyed by users of the Accused Products when, for example, watching video over the Internet.

110. A coded picture consists of one or more slices, and a slice consists of macroblocks of pixel values. ’818 Patent at 1:51-55. Conventional video coding standards before the ’818 Patent specified a structure for a bitstream that consisted of several layers, including a sequence layer, picture layer, slice layer, and macroblock layer. *Id*. at 2:6-13. These conventional video coding standards also included the use of headers in the bitstream at the slice layer and below. *Id*. at 2:49-51. However, the data at the picture level and sequence level were included in a single parameter set structure instead of using headers. *Id*. at 2:51-56. Each instance of a parameter set included a unique identifier, and each slice header included a reference to a parameter set identifier so that the decoder could use the parameter values of the identified parameter set when decoding the slice. *Id*. at 2:56-59.

111. Prior to the ’818 Patent, one significant problem with the single parameter set structure was that many sequence-level parameters remain unchanged over parameter sets and are repeated. *Id*. at 6:54-57. In order to be able to change picture parameters (such as the picture size) without having to receive an updated parameter set synchronously with the packet stream, decoders maintained multiple parameter sets either pre-defined or transmitted at the beginning of a session. *Id*. at 3:5-21. Receiving the multiple parameter sets at the beginning of a session with repetitive information was overburdening and caused latency and reliability issues. *Id*. at 3:17-24. Further, since the parameter sets were transmitted frequently to accommodate changes in users

watching video, the redundant transmission was inefficient and very costly from a bit-rate point of view. *Id*. at 3:24-29.

112. The ’818 Patent overcame these technical challenges in the prior systems by splitting the parameter set structure and inventing multiple parameter set structures that could be nested according to the persistency and target of parameters, including a sequence parameter set and a picture parameter set. *Id*. at 4:3-5, 4:15-19. The ’818 Patent employs the unconventional solution of receiving parameter values that may change in every slice or will likely change in every picture in a slice header, including parameter values that will likely remain unchanged in multiple pictures in a picture parameter set, and including parameter values that are not allowed to change in a sequence parameter set. *Id*. at 4:24-28.

113. The ’818 Patent therefore provides a specific technological improvement to the functionality and capabilities of video decoding technology that results in increased compression efficiency and significant reduction in transmission bit-rate. *Id*. at 3:56-58, 6:50-59.

114. Conventional technology prior to the ’818 Patent did not recognize that video coding parameters may change at different rates and that some parameters may change much more frequently than others. Conventional technology prior to the ’818 Patent was not capable of utilizing parameter values with multiple parameter set structures according to the persistency and target of parameters, including a sequence parameter set and a picture parameter set.

115. The ’818 Patent recognizes and solves these specific technological problems with the conventional technology at the time. The ’818 Patent’s ability to recognize parameter values in a sequence parameter set for a sequence of pictures, parameter values in a picture parameter set for a picture, and at least one picture parameter value in a slice header, the picture parameter

value remaining unchanged at least in all slice headers of one picture, was a significant advancement over existing technology.

116. The novel solution of the ’818 Patent, including recognizing parameter values in a sequence parameter set for a sequence of pictures, parameter values in a picture parameter set for a picture, and at least one picture parameter value in a slice header, the picture parameter value remaining unchanged at least in all slice headers of one picture, was not well-understood, routine, or conventional, nor was it simply comprised of well-understood, routine, and conventional activities previously known to the industry. Furthermore, the ordered combination of elements, including recognizing parameter values in a sequence parameter set for a sequence of pictures, parameter values in a picture parameter set for a picture, and at least one picture parameter value in a slice header, the picture parameter value remaining unchanged at least in all slice headers of one picture, was not well-understood, routine, or conventional.

117. On information and belief, Amazon directly infringes at least Claim 6 of the ’818 Patent through its manufacture, sale for importation, importation, use, and sale after importation of one or more of the Accused Products.

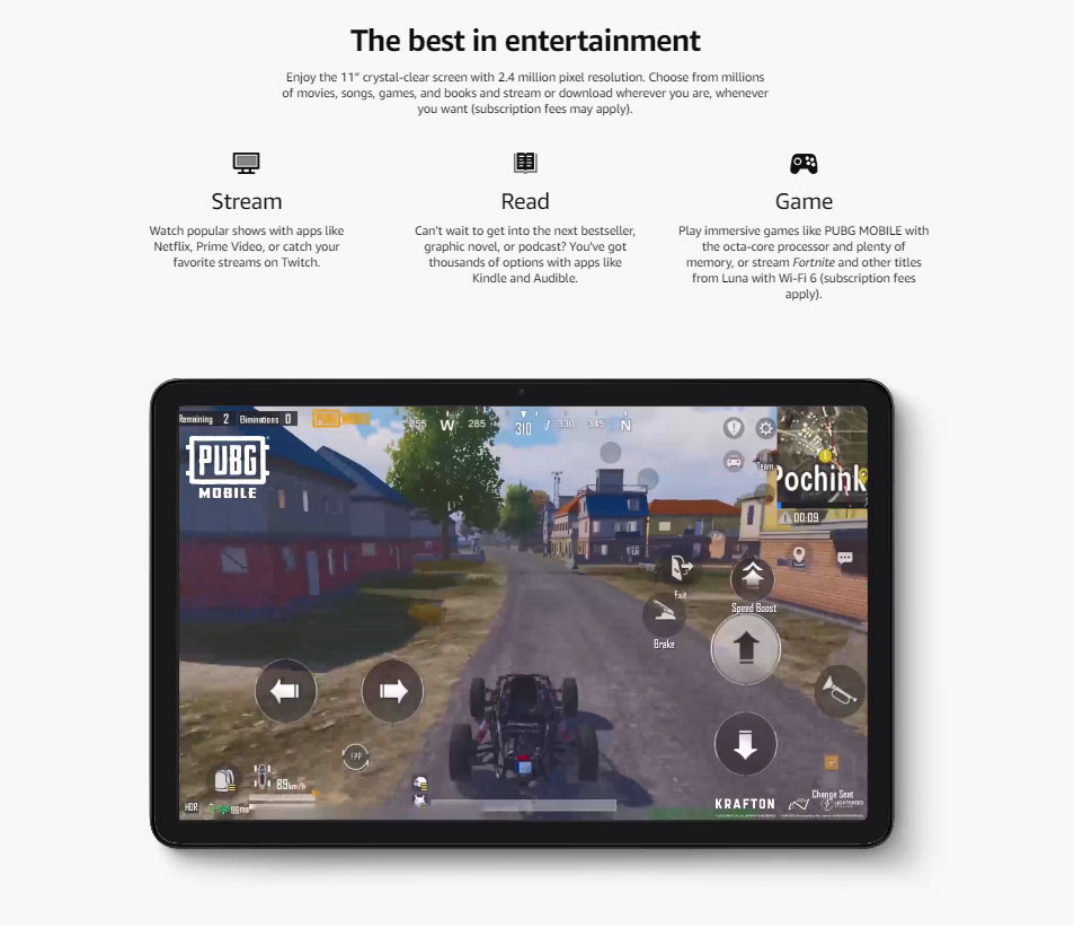
118. Because, for example, at least Claim 6 of the ’818 Patent are essential to the H.264 and H.265 Standards, the Amazon Accused Products’ incorporation of the H.264 and H.265 Standards infringes at least Claim 6 of the ’818 Patent.

119. As just one example of Amazon’s infringement, Amazon manufactures and sells tablets with graphics processing units that decode H.264 and H.265-compliant video. An example of an Amazon tablet Accused Product is the Amazon Fire Max 11 tablet, which is capable of decoding H.264 and H.265-compliant video.

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
VIDEO FEATURES	**Low Latency Video**	Supported
	H.264 DRM	Supported
	H.265 DRM	Supported
	OpenGL	ES 3.2

Source: https://developer.amazon.com/docs/fire-tablets/ft-device-specifications-firehd-models.html

120. Additionally, Amazon instructs and encourages users to use the Amazon Accused Products in a manner that infringes at least Claim 6 of the '818 Patent by advertising the products' ability to stream and watch video:



Source: https://www.amazon.com/dp/B0B1VQ1ZQY?tag=googhydr-20&hvadid=659647565932&hvpos=&hvnetw=g&hvrand=12846244274520147119&hvpone=&hvptwo=&hvqmt=e&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=21176&hvtargid=kwd-2078604219526&ref=pd_sl_24r6yas0m1_e&th=1

121. Additionally, on information and belief, Amazon publishes customer reviews of the Amazon Accused Products that show its customers actually use the Amazon Accused Products to stream video, and that customers choose the Amazon Tablet Accused Products specifically for their video streaming capabilities:

XRyche

★★★★★ **A surprisingly capable budget/low mid-range tablet focused on video entertainment.**

Reviewed in the United States on August 9, 2023

Digital Storage Capacity: 64 GB | Offer Type: With Lockscreen Ads | Color: Gray | Style: Amazon Fire Max 11 | **Verified Purchase**

Full disclosure.....I went from a Fire HD 8 (2020) (Tablet is still working btw and has been relegated to the closet shelf as a back-up.) tablet to this so the bias should be obvious. Regardless this tablet seems to be brighter and more vivid than my previous Fire tablet, the resolution is obviously better as well as it being much more powerful. It can even play some games more advanced than Candy Crush and such.

Now with that being said.....this tablet is NOT, by any means, a "productivity" tablet. It is mid-range budget tablet that is capable of performing some light productivity tasks. This tablet is also NOT an IPad competitor in any way, shape or form either. What it is is a seemingly well built Amazon-centric budget mid-range entertainment tablet which is what I am looking for (Minus the Amazon-centric part which I can overlook since there are methods to get around this. P.S. If Amazon put a stop to these methods I would never buy a Fire tablet.).

As far as the price goes though I would not pay a cent over 200 USD for this tablet. It simply isn't worth it, not for a budget/low-end mid-range tablet with a forked, obsolete and gimped Android OS. Luckily I only paid 150 USD on Prime Day and paying only 30 USD a month over a 5 month period using Amazon's interest-free financing service they offer on a lot of their branded products. Going this route this tablet is worth the price.

Juilianna

★★★★★ **just WOW**

Reviewed in the United States on July 29, 2023

Digital Storage Capacity: 128 GB | Offer Type: Without Lockscreen Ads | Color: Gray | Style: Amazon Fire Max 11 | **Verified Purchase**

Ok...old woman (here again!) First, I must say, I have many Fire products. the old Fire HDX is my all time favorite, and I hoard them.still use them,..i love the size, quality, and it is MY PREFERED device. BUT...i have an iPad mini, which is the next fav, and a few others.

I got this on a whim (and to help prolong the lives of my old HDX's) because it sounded pretty good, and the price was great. I LOVE IT!

I've played around with it for a week or so now...Lots of time on my hands now, so I read a lot, lots of Brit mystery viewing, reading the Post and Times, playing Queen Bee...ha. point being I use it quite a bit. The battery lasts VERY long...at least the 10 hours or more. The quality of the videos is EXCELLENT!!!!!! I am veryyy pleased with that!! It doesn't stutter like a few of my Fire products, which is great. Fast!! Highly recommend it

Cons-- yeah, but they're just personal. It's a large device and awkward for my small hands. If there were a 7 inch of this quality, I'd have 3 of them....no lie. It does take a little time to charge tho....ah well.

seriously thinking about the keyboard...we'll see.

Helpful | Report

Source: https://www.amazon.com/product-reviews/B0B1VQ1ZQY/ref=cm_cr_arp_d_viewopt_kywd?ie=UTF8&filterByStar=five_star&reviewerType=all_reviews&pageNumber=1&filterByKeyword=video#reviews-filter-bar

122. As another example of Amazon's infringement, Amazon manufactures and sells media players with graphics processing units that decode H.264 and H.265-compliant video. An example of such a media player Accused Product is the Amazon Fire TV Stick 4K Max, which Amazon advertises is capable of decoding H.264 and H.265-compliant video.

Video codecs	• **Dolby Vision**. Dolby Vision support for Profile 4-MEL, 5, 8, 9. (Up to Level 9 for profiles 5 and 8. Up to Level 5 for Profile 9.) • **H.265 (HEVC)**. Hardware accelerated up to 3840x2160p (4K) @ 60fps, 35 Mbps, Main 10 Profile Level 5.1, Color space 8-bit and 10-bit input with HDR10, HDR10+, and HLG. • **H.264**. Hardware accelerated up to 3840x2160p (4K) @ 60fps, 20 Mbps, High 10 Profile Level 5.2 • **H.263**. Hardware accelerated up to 1080p @ 30fps, 6 Mbps, Profile 0 Level 70 • **VP8**. Supported up to 1080p 30fps. Baseline profile, non-secure • **VP9**. Hardware accelerated up to 4K @ 60fps, Profile 2 up to 30 Mbps • **MPEG-2**. Hardware accelerated up to 1080p @ 60fps • **MPEG-4**. Up to 1080p @ 30fps, Simple and Advanced Simple Profiles Level 5, non-secure • **AV1**. Hardware accelerated up to 3840x2160p (4K) @60fps, 100Mbps, Main Profile Level 5.1, Color space 8-bit and 10-bit input with HDR10, HDR10+, and HLG.

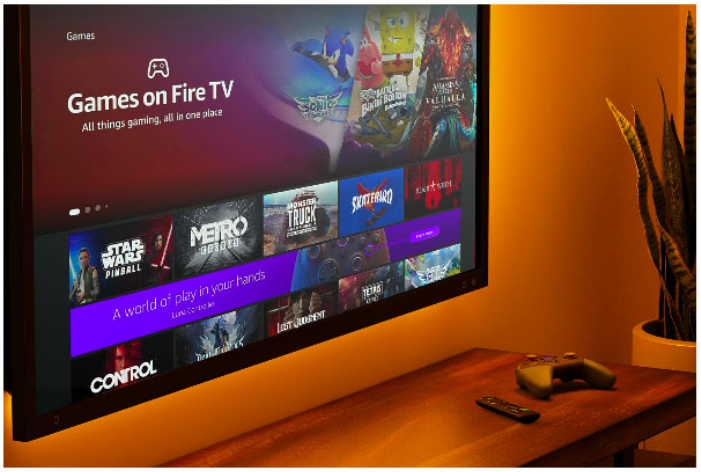
Source: https://developer.amazon.com/docs/fire-tv/device-specifications-fire-tv-streaming-media-player.html

123. Additionally, Amazon instructs and encourages users to use the Amazon Accused Products in a manner that infringes at least Claim 6 of the '818 Patent by advertising the products' ability to stream and watch video:

TV is just the beginning

Fire TV is always getting smarter with new Alexa skills and voice functionality. View live camera feeds, check the weather, order a pizza, and stream music. Learn more about compatible smart home devices.

"Alexa, show the nursery."



Games on Fire TV

No matter what kind of gaming you're into, Games on Fire TV has you covered. Play games like you stream movies with Amazon Luna or download games from the Appstore. If you're an Amazon Prime member, you can play a rotating selection of games free on Luna.

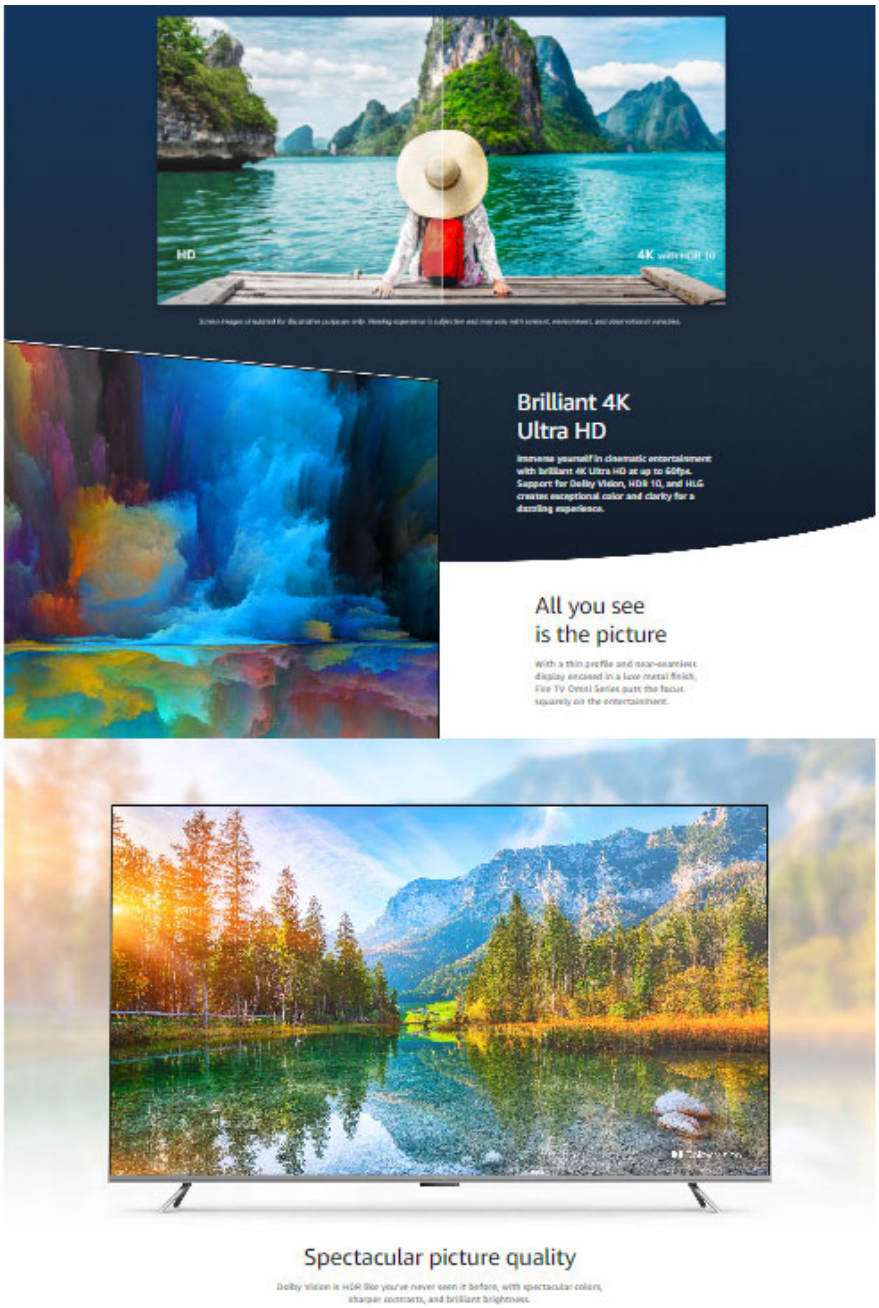
Source: https://www.amazon.com/dp/B08XVYZ1Y5?th=1

124. As an additional example of Amazon's infringement, Amazon manufactures and sells televisions with graphics processing units that decode H.264 and H.265-compliant video. An example of an Amazon television Accused Product is the Amazon Fire TV, which is capable of decoding H.264 and H.265-compliant video.

Video codecs	• **Dolby-Vision** - Resolutions/frame rates: Up to UHD@60 - Profiles: 4-MEL, 5, 8, 9, and 10 - Codecs: AVC (profile 9), HEVC (profile 4-MEL, 5 and 8), AV1 (profile 10) - OTT four-character codes: hvc1, dvh1, hev1, dvhe, avc1 - Dolby Vision box types: dvcC, dvvC - Adaptive streaming formats: DASH, HLS, HLS using fMP4 • **H.265 HEVC** - Max Resolution: 2160p - Min Profile: Version 1, Main, Main 10, 10-bit support Min - Level: 5.1, Main Tier - Max frame rate: 720p @ 60fps, 1080p @ 60fps, 2160p @ 60fps - Secure (PlayReady and Widevine DRMs) and clear (non-secure) contexts - Support for dynamic resolution switch down to or up from lower resolution - Number of reference frames required will be based on level, profile, and resolution. Refer to Profiles (High Efficiency Video Coding) - Color Space: Rec. 601 & Rec. 709 (secure or unsecure), Rec. 2020 • **H.264 AVC** - Secure or un-secure - Max Resolution: 2160p - Min Profile/Level: Main Profile @ Level 5.1, High Profile @ Level 5.1 - Max frame rate: 720p @ 60fps, 1080p @ 30fps, 1080p @ 60fps, 2160p @ 30fps, 2160p @ 30fps (limited support) - Secure (PlayReady and Widevine DRMs) and clear (non-secure) contexts - Support for dynamic resolution switch down to or up from lower resolution - Number of reference frames required will be based on level, profile, and resolution. Refer to Levels (Advanced Video Coding)
	• **AV1**. Supported

Source: https://developer.amazon.com/docs/fire-tv/device-specifications-fire-tv-edition-smart-tv-na.html

125. Additionally, Amazon instructs and encourages users to use the Amazon Accused Products in a manner that infringes at least Claim 6 of the '818 Patent by advertising the products' ability to decode video:



Source: https://www.amazon.com/dp/B09N6F9NV3?tag=googhydr-20&hvadid=652064394383&hvpos=&hvnetw=g&hvrand=8222494941552910 24&hvpone=&hvptwo=&hvqmt=e&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=21176&hvtargid=kwd-1982381309656&ref=pd_sl_8awf5tywn2_e

126. Additionally, on information and belief, Amazon publishes customer reviews of the Amazon Accused Products that show its customers actually use the Amazon Accused Products to stream and watch video:

This is not a ginger ale!

★★★★★ **high-quality smart TV with an immersive viewing experience**

Reviewed in the United States on July 17, 2023

Size: 50-inch | Configuration: TV only | **Verified Purchase**

If you're looking for a feature-packed television that seamlessly integrates with your smart home devices and provides stunning picture quality, this TV is an excellent choice.

The first thing that impressed me about this smart TV is its picture quality. The 4K Ultra HD resolution delivers crystal-clear and vibrant visuals, bringing your favorite movies, TV shows, and streaming content to life. The colors are rich and accurate, and the contrast is excellent, providing a truly immersive viewing experience. Whether you're watching action-packed movies or enjoying nature documentaries, the picture quality of this TV is truly impressive.

Male in Atlanta

★★★★☆ **Impressive Tech, But There's a Catch!**

Reviewed in the United States on June 15, 2023

Size: 55-inch | Configuration: TV only | **Verified Purchase**

Hey all! Let's talk about the Amazon Fire TV 55" Omni Series. It's a strong contender in the Smart TV market, scoring a solid 4 out of 5 stars from me.

The picture quality on this 4K UHD TV is stunning, honestly, it's like being at the movies. Everything is crisp, vibrant and immersive, which is perfect for my binge-watching sessions!

One of the standout features is the hands-free Alexa. It's pretty cool being able to control your TV with voice commands. However, and this is where it loses a star, every time I switch on the TV, I have to physically select the Fire user profile with the remote. Kinda defeats the purpose of hands-free convenience, right? A bit of a bugbear for me.

The rest of the Fire interface is user-friendly, though, with easy access to Prime Video, Netflix, Disney+, and more. It's a breeze to navigate, once you get past the initial hiccup.

As for value, you're getting a lot of bang for your buck here. The price is reasonable when you consider the picture quality and smart features, minus that one little annoyance.

So there you have it. A pretty fantastic TV that needs to work out one small kink. If you can live with the manual profile selection issue, it's definitely a great choice. Four stars from me!

105 people found this helpful

Helpful | Report

Source: https://www.amazon.com/product-reviews/B09N6F9NV3/ref=cm_cr_arp_d_show_all?ie=UTF8&reviewerType=all_reviews&pageNumber=1#reviews-filter-bar

127. Amazon knowingly and intentionally induces users of one or more of the Amazon Accused Products to directly infringe at least Claim 6 of the ’818 Patent by encouraging, instructing, and aiding one or more persons in the United States, including Amazon employees who test and operate Amazon Accused Products at the direction of Amazon, to make, use (including testing those devices and methods), sell, or offer to sell one or more Amazon Accused Products, during or after such article’s importation into the United States, in a manner that infringes the ’818 Patent.

128. For example, as seen in the Amazon publications above, Amazon advertises the Amazon Fire Tablet, Amazon Fire Stick 4K Max and Amazon Fire TV on its website so that consumers may purchase and use the product, thus inducing its customers to also infringe the ’818 Patent. On information and belief, Amazon also advertises other Amazon products that infringe the ’818 Patent on its website for consumer purchase.

129. On information and belief, Amazon was aware of the ’818 Patent or acted with willful blindness as to the existence of the ’818 Patent at least as a result of the filing and service of this complaint. Nokia notified Amazon that it was infringing the ’818 Patent in at least April 2015.

130. On information and belief, Amazon contributes to the infringement of at least Claim 6 of the ’818 Patent by offering to sell or selling and/or importing a patented component or material and/or apparatus used to practice a patented process, constituting a material part of the inventions, knowing the same to be especially made or especially adapted for use in an infringement and not a staple article or commodity of commerce suitable for substantial non-infringing use.

131. Claim charts that apply Claim 6 of the ’818 Patent to the Amazon Accused Products are attached as Exhibits 15A and 15B. The H.265 Standard referenced in Exhibit 15A can be found in Exhibit 24. The H.264 Standard referenced in Exhibit 15B can be found in Exhibit 25.

D. U.S. Patent No. 10,536,714 (“the ’714 Patent”)

132. Nokia owns by assignment the entire right, title, and interest in and to the ’714 Patent entitled “Method for Coding and an apparatus” issued on January 14, 2020, to inventors Mehmet Oguz Bici, Jani Lainema, and Kemal Ugur. The ’714 Patent issued from U.S. Patent Application No. 16/356,733, filed on March 18, 2019, which is a continuation of application No.

15/681,725, filed on August 21, 2017 (now U.S. Patent No. 10,237,574), which is a continuation of application No. 15/426,822, filed on February 7, 2017 (now U.S. Pat. No. 9,743,105), which is a continuation of application No. 13/666,680, filed on November 1, 2012 (now U.S. Patent No. 9,571,833), which claims priority to U.S. Provisional Application No. 61/555,703, filed on November 4, 2011. The '714 Patent expires on November 1, 2032. A true and correct copy of the '714 Patent is attached as Exhibit 5.

133. Per 19 CFR § 210.12(a)(9)(vi), the following is a non-technical description of the '714 Patent.

134. The '714 Patent is not directed to merely an abstract idea or any patent-ineligible concept. Instead, the '714 Patent provides improvements over conventional video coding motion compensation techniques that result in substantial benefits to video compression, video quality, and video playback. These substantial benefits are enjoyed by users of the Accused Products when, for example, watching video over the Internet. Encoders compress video into a representation suitable for storage or transmission. '714 Patent at 1:32-36. Decoders can decompress the compressed representation into viewable form. *Id*. As described in the '714 Patent, decoders reconstruct output video by applying a prediction mechanism "using the motion or spatial information … stored in the compressed representation of the image" and prediction error decoding "the inverse operation of the prediction error coding to recover the quantized prediction error signal in the spatial domain." *Id*. at 2:4-12. The decoder "may also apply additional filtering processes in order to improve the quality of the output video." *Id*. at 2:16-18.

135. Typical encoders encode video information in two phases. In the first phase, pixel values can be predicted, for example, by motion compensation mechanisms, which involve finding and indicating an area in one of the previously coded video frames that corresponds

closely to the block being coded. *Id*. at 1:43-49. Additionally, pixel values can be predicted via by spatial mechanisms, which involve using the pixel values around the block to be coded in a specified manner. *Id*. at 1:49-52. The second phase involves coding the prediction error (*i.e.*, the difference between the predicted block of pixels and the original block of pixels), which involves transforming the difference in pixel values using a specified transform (*e.g.*, a Discrete Cosine Transform (DCT) or a variant thereof), quantizing the coefficients, and entropy coding the quantized coefficients. *Id*. at 1:58-64.

136. As described in the '714 Patent, motion information is indicated by motion vectors associated with each motion compensated image block. *Id*. at 2:59-65. One method used by conventional systems to create the predicted motion vectors was to calculate them in a predefined way, for example by calculating the median of the motion vectors of the adjacent blocks. *Id*. at 2:67-3:4. Another method used by conventional systems was to generate a list or a set of candidate predictions from blocks in the current frame and/or co-located or other blocks in temporal reference pictures and signaling the chosen candidate as the motion vector prediction. *Id*. at 3:5-9.

137. Prior to the '714 Patent, one significant problem was that after a list of the motion vector prediction candidates was generated, some of the motion vector prediction candidates may have the same motion information, which created redundancy. *Id*. at 3:66-4:3. Another problem arose when temporal motion vector prediction information was unavailable, for example, due to loss of a reference frame. *Id*. at 4:3-7. Conventional technology could not address whether the temporal motion vector prediction candidates in the list should be removed. *Id*. Therefore, methods that determined the inclusion or removal of motion vector prediction candidates based on comparing motion information with temporal motion vector prediction, resulted in the false

assignment of motion vector prediction candidates, which caused degradation in picture quality. *Id*. at 4:7-15.

138. The ’714 Patent overcame these technical challenges in the prior systems by inventing a method that recognized that the size of the motion vector prediction candidates list could be reduced and associated signaling cost could be reduced by eliminating motion vector prediction candidates based on the geometry of the region being predicted and by using a limited number of candidate comparisons. *Id*. at 4:19-39. The ’714 Patent employs the unconventional solution of obtaining spatial candidates from the motion information of spatial neighbor blocks, for example, and performing a limited number of motion information comparisons between candidate pairs to remove the redundant candidates rather than comparing every available candidate pair, which reduces complexity and redundancy. *Id*. at 4:19-39.

139. The ’714 Patent therefore provides specific technological improvements to the functionality and capabilities of video decoding and encoding technologies that result in reduced complexity and improved prediction accuracy, which in turn reduces the information to be transmitted and received. *Id*. at 4:20-23, 8:24-27.

140. Conventional technology prior to the ’714 Patent was not capable of selecting spatial motion vector prediction candidates based on a location of the block associated with a first spatial motion vector prediction candidate or determining to include or exclude the first spatial motion vector prediction candidate in the motion vector prediction list based on comparing motion information of the first spatial motion vector prediction candidate with motion information of a limited number of other spatial motion vector prediction candidates without making a comparison of each pair from the set of spatial motion vector prediction candidates.

141. The ’714 Patent recognizes and solves these specific technological problems with the conventional technology at the time. The ’714 Patent’s ability to determine spatial motion vector prediction candidates based on a location of the block associated with a first spatial motion vector prediction candidate and ability to determine to include or exclude the first spatial motion vector prediction candidate in the motion vector prediction list based on comparing motion information of the first spatial motion vector prediction candidate with motion information of a limited number of other spatial motion vector prediction candidates without making a comparison of each pair from the set of spatial motion vector prediction candidates was a significant advancement over existing technology.

142. The novel solution of the ’714 Patent, including determining spatial motion vector prediction candidates based on a location of the block associated with a first spatial motion vector prediction candidate and determining to include or exclude the first spatial motion vector prediction candidate in the motion vector prediction list based on comparing motion information of the first spatial motion vector prediction candidate with motion information of a limited number of other spatial motion vector prediction candidates without making a comparison of each pair from the set of spatial motion vector prediction candidates, was not well-understood, routine, or conventional, nor was it simply comprised of well-understood, routine, and conventional activities previously known to the industry. Furthermore, the ordered combination of elements, including determining spatial motion vector prediction candidates based on a location of the block associated with a first spatial motion vector prediction candidate and determining to include or exclude the first spatial motion vector prediction candidate in the motion vector prediction list based on comparing motion information of the first spatial motion vector prediction candidate with motion information of a limited number of other spatial motion vector prediction candidates

without making a comparison of each pair from the set of spatial motion vector prediction candidates, was not well-understood, routine, or conventional.

143. On information and belief, Amazon directly infringes at least Claim 9 of the ’714 Patent through its manufacture, sale for importation, importation, use, and sale after importation of one or more of the Accused Products.

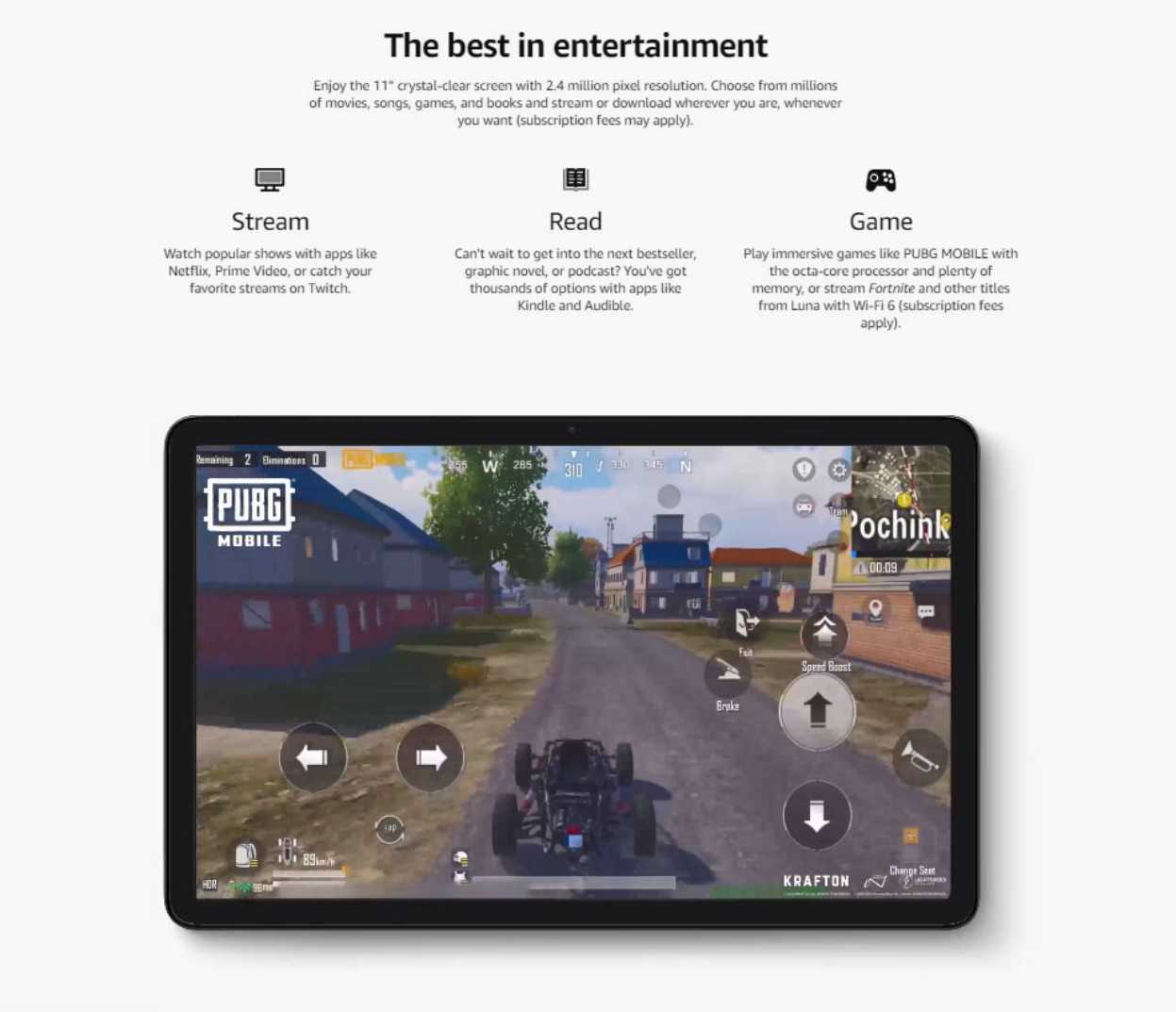
144. Because at least Claim 9 of the ’714 Patent is essential to the H.265 Standard, the Accused Products’ incorporation of the H.265 Standard infringes at least Claim 9 of the ’714 Patent.

145. As just one example of Amazon’s infringement, Amazon manufactures and sells tablets with graphics processing units that decode H.265-compliant video. An example of an Amazon tablet Accused Product is the Amazon Fire Max 11 tablet, which is capable of decoding H.265-compliant video.

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
VIDEO FEATURES	**Low Latency Video**	Supported
	H.264 DRM	Supported
	H.265 DRM	Supported
	OpenGL	ES 3.2

Source: https://developer.amazon.com/docs/fire-tablets/ft-device-specifications-firehd-models.html

146. Additionally, Amazon instructs and encourages users to use the Amazon Accused Products in a manner that infringes at least Claim 9 of the '714 Patent by advertising the products' ability to stream and watch video:



Source: https://www.amazon.com/dp/B0B1VQ1ZQY?tag=googhydr-20&hvadid=659647565932&hvpos=&hvnetw=g&hvrand=12846244274520147119&hvpone=&hvptwo=&hvqmt=e&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=21176&hvtargid=kwd-2078604219526&ref=pd_sl_24r6yas0m1_e&th=1

147. Additionally, on information and belief, Amazon publishes customer reviews of the Amazon Accused Products that show its customers actually use the Amazon Accused Products to stream and watch video, and that customers choose the Amazon Tablet Accused Products specifically for their video streaming capabilities:

XRyche

★★★★★ **A surprisingly capable budget/low mid-range tablet focused on video entertainment.**

Reviewed in the United States on August 9, 2023

Digital Storage Capacity: 64 GB | Offer Type: With Lockscreen Ads | Color: Gray | Style: Amazon Fire Max 11 | **Verified Purchase**

Full disclosure.....I went from a Fire HD 8 (2020) (Tablet is still working btw and has been relegated to the closet shelf as a back-up.) tablet to this so the bias should be obvious. Regardless this tablet seems to be brighter and more vivid than my previous Fire tablet, the resolution is obviously better as well as it being much more powerful. It can even play some games more advanced than Candy Crush and such.

Now with that being said.....this tablet is NOT, by any means, a "productivity" tablet. It is mid-range budget tablet that is capable of performing some light productivity tasks. This tablet is also NOT an IPad competitor in any way, shape or form either. What it is is a seemingly well built Amazon-centric budget mid-range entertainment tablet which is what I am looking for (Minus the Amazon-centric part which I can overlook since there are methods to get around this. P.S. If Amazon put a stop to these methods I would never buy a Fire tablet.).

As far as the price goes though I would not pay a cent over 200 USD for this tablet. It simply isn't worth it, not for a budget/low-end mid-range tablet with a forked, obsolete and gimped Android OS. Luckily I only paid 150 USD on Prime Day and paying only 30 USD a month over a 5 month period using Amazon's interest-free financing service they offer on a lot of their branded products. Going this route this tablet is worth the price.

Juilianna

★★★★★ **just WOW**

Reviewed in the United States on July 29, 2023

Digital Storage Capacity: 128 GB | Offer Type: Without Lockscreen Ads | Color: Gray | Style: Amazon Fire Max 11 | **Verified Purchase**

Ok...old woman (here again!) First, I must say, I have many Fire products. the old Fire HDX is my all time favorite, and I hoard them.still use them,..i love the size, quality, and it is MY PREFERED device. BUT...i have an iPad mini, which is the next fav, and a few others.

I got this on a whim (and to help prolong the lives of my old HDX's) because it sounded pretty good, and the price was great. I LOVE IT!

I've played around with it for a week or so now...Lots of time on my hands now, so I read a lot, lots of Brit mystery viewing, reading the Post and Times, playing Queen Bee...ha. point being I use it quite a bit. The battery lasts VERY long...at least the 10 hours or more. The quality of the videos is EXCELLENT!!!!!! I am veryyy pleased with that!! It doesn't stutter like a few of my Fire products, which is great. Fast!! Highly recommend it

Cons-- yeah, but they're just personal. It's a large device and awkward for my small hands. If there were a 7 inch of this quality, I'd have 3 of them....no lie. It does take a little time to charge tho....ah well.

seriously thinking about the keyboard...we'll see.

Helpful | Report

Source: https://www.amazon.com/product-reviews/B0B1VQ1ZQY/ref=cm_cr_arp_d_viewopt_kywd?ie=UTF8&filterByStar=five_star&reviewerType=all_reviews&pageNumber=1&filterByKeyword=video#reviews-filter-bar

148. As another example of Amazon's infringement, Amazon manufactures and sells media players with graphics processing units that decode H.265-compliant video. An example of such a media player Accused Product is the Amazon Fire TV Stick 4K Max, which Amazon advertises is capable of decoding H.265-compliant video.

Video codecs	• **Dolby Vision**. Dolby Vision support for Profile 4-MEL, 5, 8, 9. (Up to Level 9 for profiles 5 and 8. Up to Level 5 for Profile 9.) • **H.265 (HEVC)**. Hardware accelerated up to 3840x2160p (4K) @ 60fps, 35 Mbps, Main 10 Profile Level 5.1, Color space 8-bit and 10-bit input with HDR10, HDR10+, and HLG. • **H.264**. Hardware accelerated up to 3840x2160p (4K) @ 60fps, 20 Mbps, High 10 Profile Level 5.2 • **H.263**. Hardware accelerated up to 1080p @ 30fps, 6 Mbps, Profile 0 Level 70 • **VP8**. Supported up to 1080p 30fps. Baseline profile, non-secure • **VP9**. Hardware accelerated up to 4K @ 60fps, Profile 2 up to 30 Mbps • **MPEG-2**. Hardware accelerated up to 1080p @ 60fps • **MPEG-4**. Up to 1080p @ 30fps, Simple and Advanced Simple Profiles Level 5, non-secure • **AV1**. Hardware accelerated up to 3840x2160p (4K) @60fps, 100Mbps, Main Profile Level 5.1, Color space 8-bit and 10-bit input with HDR10, HDR10+, and HLG.

Source: https://developer.amazon.com/docs/fire-tv/device-specifications-fire-tv-streaming-media-player.html

149. Additionally, Amazon instructs and encourages users to use the Amazon Accused Products in a manner that infringes at least Claim 9 of the '714 Patent by advertising the products' ability to stream and watch video:

Watch live TV and free TV

Stream live TV, including news and sports, with subscriptions to Hulu+ Live TV, SLING TV, YouTube TV, and others. Plus, watch movies and TV shows for free with ad-supported apps like Pluto TV, Amazon Freevee, and more.

TV is just the beginning

Fire TV is always getting smarter with new Alexa skills and voice functionality. View live camera feeds, check the weather, order a pizza, and stream music. Learn more about compatible smart home devices.

"Alexa, show the nursery."

Games on Fire TV

No matter what kind of gaming you're into, Games on Fire TV has you covered. Play games like you stream movies with Amazon Luna or download games from the Appstore. If you're an Amazon Prime member, you can play a rotating selection of games free on Luna.

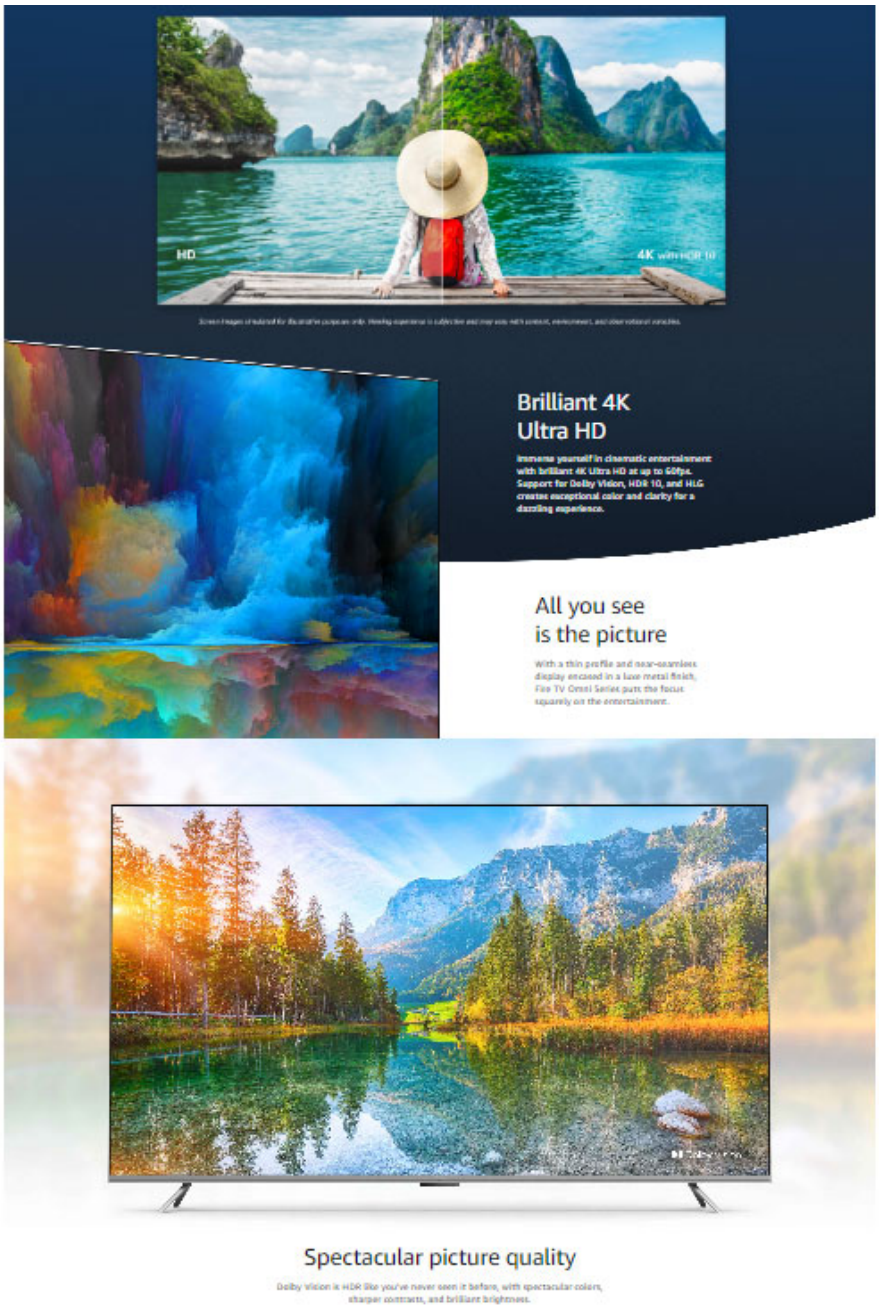
Source: https://www.amazon.com/dp/B08XVYZ1Y5?th=1

150. As an additional example of Amazon's infringement, Amazon manufactures and sells televisions with graphics processing units that decode H.265-compliant video. An example of an Amazon television Accused Product is the Amazon Fire TV, is capable of decoding H.265-compliant video.

Video codecs	• **Dolby-Vision** - Resolutions/frame rates: Up to UHD@60 - Profiles: 4-MEL, 5, 8, 9, and 10 - Codecs: AVC (profile 9), HEVC (profile 4-MEL, 5 and 8), AV1 (profile 10) - OTT four-character codes: hvc1, dvh1, hev1, dvhe, avc1 - Dolby Vision box types: dvcC, dvvC - Adaptive streaming formats: DASH, HLS, HLS using fMP4 • **H.265 HEVC** - Max Resolution: 2160p - Min Profile: Version 1, Main, Main 10, 10-bit support Min - Level: 5.1, Main Tier - Max frame rate: 720p @ 60fps, 1080p @ 60fps, 2160p @ 60fps - Secure (PlayReady and Widevine DRMs) and clear (non-secure) contexts - Support for dynamic resolution switch down to or up from lower resolution - Number of reference frames required will be based on level, profile, and resolution. Refer to Profiles (High Efficiency Video Coding) - Color Space: Rec. 601 & Rec. 709 (secure or unsecure), Rec. 2020 • **H.264 AVC** - Secure or un-secure - Max Resolution: 2160p - Min Profile/Level: Main Profile @ Level 5.1, High Profile @ Level 5.1 - Max frame rate: 720p @ 60fps, 1080p @ 30fps, 1080p @ 60fps, 2160p @ 30fps, 2160p @ 30fps (limited support) - Secure (PlayReady and Widevine DRMs) and clear (non-secure) contexts - Support for dynamic resolution switch down to or up from lower resolution - Number of reference frames required will be based on level, profile, and resolution. Refer to Levels (Advanced Video Coding)
	• **AV1**. Supported

Source: https://developer.amazon.com/docs/fire-tv/device-specifications-fire-tv-edition-smart-tv-na.html

151. Additionally, Amazon instructs and encourages users to use the Amazon Accused Products in a manner that infringes at least Claim 9 of the '714 Patent by advertising the products' ability to decode video:



Source: https://www.amazon.com/dp/B09N6F9NV3?tag=googhydr-20&hvadid=652064394383&hvpos=&hvnetw=g&hvrand=8222494941552910 24&hvpone=&hvptwo=&hvqmt=e&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=21176&hvtargid=kwd-1982381309656&ref=pd_sl_8awf5tywn2_e

152. Additionally, on information and belief, Amazon publishes customer reviews of the Amazon Accused Products that show its customers actually use the Amazon Accused Products to stream and watch video:

This is not a ginger ale!

★★★★★ **high-quality smart TV with an immersive viewing experience**

Reviewed in the United States on July 17, 2023

Size: 50-inch | Configuration: TV only | **Verified Purchase**

If you're looking for a feature-packed television that seamlessly integrates with your smart home devices and provides stunning picture quality, this TV is an excellent choice.

The first thing that impressed me about this smart TV is its picture quality. The 4K Ultra HD resolution delivers crystal-clear and vibrant visuals, bringing your favorite movies, TV shows, and streaming content to life. The colors are rich and accurate, and the contrast is excellent, providing a truly immersive viewing experience. Whether you're watching action-packed movies or enjoying nature documentaries, the picture quality of this TV is truly impressive.

Male in Atlanta

★★★★☆ **Impressive Tech, But There's a Catch!**

Reviewed in the United States on June 15, 2023

Size: 55-inch | Configuration: TV only | **Verified Purchase**

Hey all! Let's talk about the Amazon Fire TV 55" Omni Series. It's a strong contender in the Smart TV market, scoring a solid 4 out of 5 stars from me.

The picture quality on this 4K UHD TV is stunning, honestly, it's like being at the movies. Everything is crisp, vibrant and immersive, which is perfect for my binge-watching sessions!

One of the standout features is the hands-free Alexa. It's pretty cool being able to control your TV with voice commands. However, and this is where it loses a star, every time I switch on the TV, I have to physically select the Fire user profile with the remote. Kinda defeats the purpose of hands-free convenience, right? A bit of a bugbear for me.

The rest of the Fire interface is user-friendly, though, with easy access to Prime Video, Netflix, Disney+, and more. It's a breeze to navigate, once you get past the initial hiccup.

As for value, you're getting a lot of bang for your buck here. The price is reasonable when you consider the picture quality and smart features, minus that one little annoyance.

So there you have it. A pretty fantastic TV that needs to work out one small kink. If you can live with the manual profile selection issue, it's definitely a great choice. Four stars from me!

105 people found this helpful

Helpful | Report

Source: https://www.amazon.com/product-reviews/B09N6F9NV3/ref=cm_cr_arp_d_show_all?ie=UTF8&reviewerType=all_reviews&pageNumber=1#reviews-filter-bar

153. Amazon knowingly and intentionally induces users of one or more of the Amazon Accused Products to directly infringe at least Claim 9 of the ’714 Patent by encouraging, instructing, and aiding one or more persons in the United States, including Amazon employees who test and operate Amazon Accused Products at the direction of Amazon, to make, use (including testing those devices and methods), sell, or offer to sell one or more Amazon Accused Products, during or after such article’s importation into the United States, in a manner that infringes the ’714 Patent.

154. For example, as seen in the Amazon publications above, Amazon advertises the Amazon Fire Tablet, Amazon Fire Stick 4K Max and Amazon Fire TV on its website so that

consumers may purchase and use the product, thus inducing its customers to also infringe the ’714 Patent. On information and belief, Amazon also advertises other Amazon products that infringe the ’714 Patent on its website for consumer purchase.

155. On information and belief, Amazon was aware of the ’714 Patent or acted with willful blindness as to the existence of the ’714 Patent at least as a result of the filing and service of this complaint. Nokia notified Amazon that it was infringing the ’714 Patent at least as of October 24, 2023.

156. On information and belief, Amazon contributes to the infringement of Claim 9 of the ’714 Patent by offering to sell or selling and/or importing a patented component or material and/or apparatus used to practice a patented process, constituting a material part of the inventions, knowing the same to be especially made or especially adapted for use in an infringement and not a staple article or commodity of commerce suitable for substantial non-infringing use.

157. A claim chart that applies Claim 9 of the ’714 Patent to the Amazon Accused Products is attached as Exhibit 16. The H.265 Standard referenced in Exhibit 16 can be found in Exhibit 25.

E. U.S. Patent No. 11,805,267 (“the ’267 Patent”)

158. Nokia owns by assignment the entire right, title, and interest in and to the ’267 Patent entitled “Motion Prediction in Video Coding” issued on October 31, 2023, to inventors Kemal Ugar, Jani Lainema, and Antti Hallapuro. The ’267 Patent issued from U.S. Patent Application No. 21/281,869, filed on May 24, 2021. The ’267 Patent is a continuation of application No. 16/729,974, filed on Dec. 30, 2019 (now Pat. No. 11,019,354), which is a continuation of application No. 15/876,495, filed on Jan. 22, 2018 (now Pat. No. 10,523,960), which is a continuation of application No. 15/490,469, filed on Apr. 18, 2017, (now Pat. No. 9,877,037), which is a continuation of application No. 15/250,124, filed on Aug. 29, 2016, (now

Pat. No. 9,628,816), which is a continuation of application No. 13/344,893, filed on Jan. 6, 2012, (now Pat. No. 9,432,693), which claims priority to U.S. Provisional Application No. 61/430,694, filed on Jan. 7, 2011. The ’267 Patent expires on January 6, 2032. A true and correct copy of the ’267 Patent is attached as Exhibit 6.

159. The ’267 Patent is not directed to merely an abstract idea or any patent-ineligible concept. Instead, the ’267 Patent provides improvements over conventional video coding techniques that result in substantial benefits to video compression, video quality, and video playback. These substantial benefits are enjoyed by users of the Accused Products when, for example, watching video over the Internet.

160. Encoders compress video into a representation suitable for storage or transmission. ’267 Patent at 1:26-27. Decoders can decompress the compressed video representation into viewable form. *Id* at 1:28-29. One compression technique used to reduce the size of an encoded bitstream is called “Motion Compensated Prediction (MCP).” *Id*. at 2:20-22. In MCP, a prediction for a current frame is formed using a previously coded frame or using multiple previously coded frames. *Id* 2:22-23. An example of a frame that is predicted using multiple previously coded frames is called a “B-picture.” B-pictures are bi-predicted (or bi-directional prediction) pictures which use two other pictures as reference pictures, or two prediction blocks within one reference picture. *Id*. at 2:43-45.

161. As described in the ’267 Patent, in bi-prediction, the prediction signal of the block may be formed by averaging two motion compensated prediction blocks, followed by either up or down rounding, which may introduce rounding errors. *Id*. at 3:51-55.

162. Prior to the ’267 Patent, one significant problem was that the accumulation of rounding errors in bi-directional prediction degraded the coding efficiency. *Id*. at 3:56-57.

Conventional technology attempted to remove or decrease this rounding error accumulation by signaling whether rounding up or rounding down was used or, alternatively, by alternating the usage of the rounding up and rounding down for each frame. *Id* at 3:57-63. However, such prior methods increased the complexity of the process, as two separate code branches were required and the motion estimation routines in the encoder had to be doubled for both cases of rounding and truncating. *Id*. at 4:21-25.

163. The ’267 Patent overcame these technical challenges in the prior systems by inventing a method of maintaining the prediction signals at a higher precision during the prediction calculation and then reducing the precision after the two or more prediction signals have been combined with each other. *Id*. at 4:29-35. The ’267 Patent employs the unconventional solution of maintaining a higher accuracy until the prediction signals have been combined to obtain the bi-prediction or multi-prediction signal, which eliminates the need for including a rounding direction indicator in the bitstream or the added complexity of alternating the rounding directions between frames. *Id*. at 4:36-43, 6:51-57. With the invention of the ’267 Patent, the encoder can transmit residual data based on the difference between the combined prediction and the block of pixels, and the decoder can reconstruct the block of pixels based on the combined prediction. *Id*. at 14:51-59, 15:14-24, 16:14-35.

164. The ’267 Patent therefore provides a specific technological improvement to the functionality and capabilities of video coding technology that results in increased efficiency and significant reduction in the information to be transmitted and received. *Id*. at 7:31-38.

165. Conventional technology prior to the ’267 Patent was not capable of reducing the accumulation of rounding errors in bi-prediction or multi-prediction without signaling the rounding offset or using different methods for rounding for different frames. *Id*. at 6:51-57.

166. The ’267 Patent recognizes and solves these specific technological problems with the conventional technology at the time. The ’267 Patent’s ability to obtain a first prediction and a second prediction, each having a precision which is higher than the precision of the reference pixel values, and after combining the first prediction and the second prediction, decreasing the precision of said combined prediction by shifting bits of the combined prediction to the right such that the residual data in the bitstream is based on the difference between the combined prediction and the block of pixels, and such that the combined prediction is used by the decoder to reconstruct the block of pixels, was a significant advancement over existing technology.

167. The novel solution of the ’267 Patent, including obtaining a first prediction and a second prediction, each having a precision which is higher than the precision of the reference pixel values, and after adding the first prediction and the second prediction with a rounding value, decreasing the precision of said combined prediction by shifting bits of the combined prediction to the right such that the residual data in the bitstream is based on the difference between the combined prediction and the block of pixels, and such that the combined prediction is used by the decoder to reconstruct the block of pixels, was not well-understood, routine, or conventional, nor was it simply comprised of well-understood, routine, and conventional activities previously known to the industry. Furthermore, the ordered combination of elements, including obtaining a first prediction and a second prediction, each having a precision which is higher than the precision of the reference pixel values, and after adding the first prediction and the second prediction with a rounding value, decreasing the precision of said combined prediction by shifting bits of the combined prediction to the right such that the residual data in the bitstream is based on the difference between the combined prediction and the block of pixels, and such that the combined

prediction is used by the decoder to reconstruct the block of pixels, was not well-understood, routine, or conventional.

168. On information and belief, Amazon directly infringes at least Claim 19 of the ’267 Patent through its manufacture, sale for importation, importation, use, and sale after importation of one or more of its Accused Products.

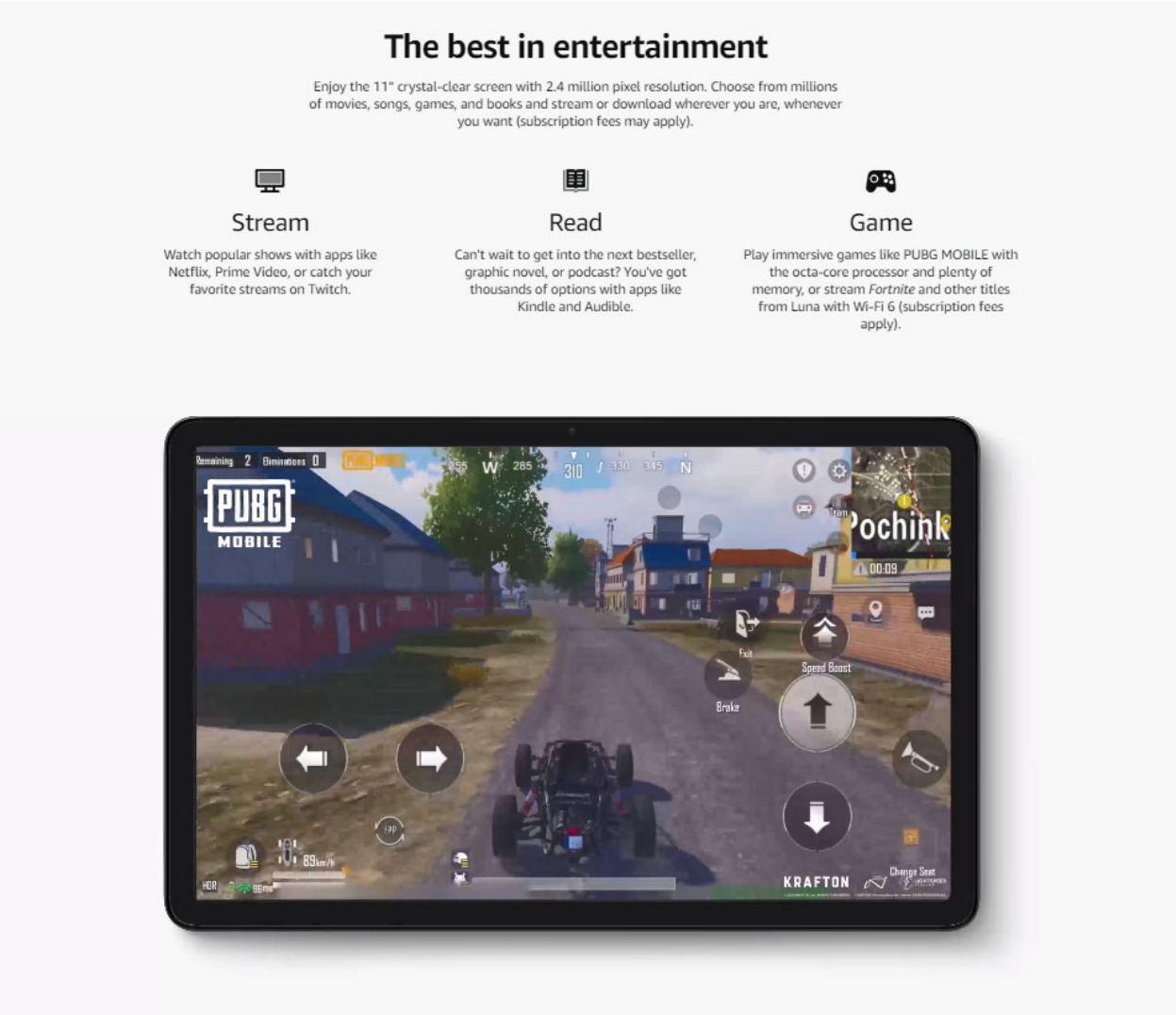
169. Because at least Claim 19 of the ’267 Patent is essential to the H.265 Standard for decoding, the Accused Products’ incorporation of the H.265 Standard the ’267 Patent.

170. As just one example of Amazon’s infringement, Amazon manufactures and sells tablets with graphics processing units that decode H.265-compliant video. An example of an Amazon tablet Accused Product is the Amazon Fire Max 11 tablet, which is capable of decoding H.265-compliant video.

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
VIDEO FEATURES	**Low Latency Video**	Supported
	H.264 DRM	Supported
	H.265 DRM	Supported
	OpenGL	ES 3.2

Source: https://developer.amazon.com/docs/fire-tablets/ft-device-specifications-firehd-models.html

171. Additionally, Amazon instructs and encourages users to use the Amazon Accused Products in a manner that infringes at least Claim 19 of the '267 Patent by advertising the products' ability to stream and watch video:



Source: https://www.amazon.com/dp/B0B1VQ1ZQY?tag=googhydr-20&hvadid=659647565932&hvpos=&hvnetw=g&hvrand=12846244274520147119&hvpone=&hvptwo=&hvqmt=e&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=21176&hvtargid=kwd-2078604219526&ref=pd_sl_24r6yas0m1_e&th=1

172. Additionally, on information and belief, Amazon publishes customer reviews of the Amazon Accused Products that show its customers actually use the Amazon Accused Products

to stream video, and that customers choose Amazon Tablet Accused Products specifically for their video streaming capabilities:

XRyche

★★★★★ **A surprisingly capable budget/low mid-range tablet focused on video entertainment.**

Reviewed in the United States on August 9, 2023

Digital Storage Capacity: 64 GB | Offer Type: With Lockscreen Ads | Color: Gray | Style: Amazon Fire Max 11 | **Verified Purchase**

Full disclosure.....I went from a Fire HD 8 (2020) (Tablet is still working btw and has been relegated to the closet shelf as a back-up.) tablet to this so the bias should be obvious. Regardless this tablet seems to be brighter and more vivid than my previous Fire tablet, the resolution is obviously better as well as it being much more powerful. It can even play some games more advanced than Candy Crush and such.

Now with that being said.....this tablet is NOT, by any means, a "productivity" tablet. It is mid-range budget tablet that is capable of performing some light productivity tasks. This tablet is also NOT an IPad competitor in any way, shape or form either. What it is is a seemingly well built Amazon-centric budget mid-range entertainment tablet which is what I am looking for (Minus the Amazon-centric part which I can overlook since there are methods to get around this. P.S. If Amazon put a stop to these methods I would never buy a Fire tablet.).

As far as the price goes though I would not pay a cent over 200 USD for this tablet. It simply isn't worth it, not for a budget/low-end mid-range tablet with a forked, obsolete and gimped Android OS. Luckily I only paid 150 USD on Prime Day and paying only 30 USD a month over a 5 month period using Amazon's interest-free financing service they offer on a lot of their branded products. Going this route this tablet is worth the price.

Juilianna

★★★★★ **just WOW**

Reviewed in the United States on July 29, 2023

Digital Storage Capacity: 128 GB | Offer Type: Without Lockscreen Ads | Color: Gray | Style: Amazon Fire Max 11 | **Verified Purchase**

Ok...old woman (here again!) First, I must say, I have many Fire products. the old Fire HDX is my all time favorite, and I hoard them.still use them,..i love the size, quality, and it is MY PREFERED device. BUT...i have an iPad mini, which is the next fav, and a few others.

I got this on a whim (and to help prolong the lives of my old HDX's) because it sounded pretty good, and the price was great. I LOVE IT!

I've played around with it for a week or so now...Lots of time on my hands now, so I read a lot, lots of Brit mystery viewing, reading the Post and Times, playing Queen Bee...ha. point being I use it quite a bit. The battery lasts VERY long...at least the 10 hours or more. The quality of the videos is EXCELLENT!!!!!! I am veryyy pleased with that!! It doesn't stutter like a few of my Fire products, which is great. Fast!! Highly recommend it

Cons-- yeah, but they're just personal. It's a large device and awkward for my small hands. If there were a 7 inch of this quality, I'd have 3 of them....no lie. It does take a little time to charge tho....ah well.

seriously thinking about the keyboard...we'll see.

Helpful | Report

Source: https://www.amazon.com/product-reviews/B0B1VQ1ZQY/ref=cm_cr_arp_d_viewopt_kywd?ie=UTF8&filterByStar=five_star&reviewerType=all_reviews&pageNumber=1&filterByKeyword=video#reviews-filter-bar

173. As another example of Amazon's infringement, Amazon manufactures and sells media players with graphics processing units that decode H.265-compliant video. An example of such a media player Accused Product is the Amazon Fire TV Stick 4K Max, which Amazon advertises is capable of decoding H.265-compliant video.

Video codecs	• **Dolby Vision**. Dolby Vision support for Profile 4-MEL, 5, 8, 9. (Up to Level 9 for profiles 5 and 8. Up to Level 5 for Profile 9.) • **H.265 (HEVC)**. Hardware accelerated up to 3840x2160p (4K) @ 60fps, 35 Mbps, Main 10 Profile Level 5.1, Color space 8-bit and 10-bit input with HDR10, HDR10+, and HLG. • **H.264**. Hardware accelerated up to 3840x2160p (4K) @ 60fps, 20 Mbps, High 10 Profile Level 5.2 • **H.263**. Hardware accelerated up to 1080p @ 30fps, 6 Mbps, Profile 0 Level 70 • **VP8**. Supported up to 1080p 30fps. Baseline profile, non-secure • **VP9**. Hardware accelerated up to 4K @ 60fps, Profile 2 up to 30 Mbps • **MPEG-2**. Hardware accelerated up to 1080p @ 60fps • **MPEG-4**. Up to 1080p @ 30fps, Simple and Advanced Simple Profiles Level 5, non-secure • **AV1**. Hardware accelerated up to 3840x2160p (4K) @60fps, 100Mbps, Main Profile Level 5.1, Color space 8-bit and 10-bit input with HDR10, HDR10+, and HLG.

Source: https://developer.amazon.com/docs/fire-tv/device-specifications-fire-tv-streaming-media-player.html

174. Additionally, Amazon instructs and encourages users to use the Amazon Accused Products in a manner that infringes at least Claim 19 of the '267 Patent by advertising the products' ability to stream and watch video:

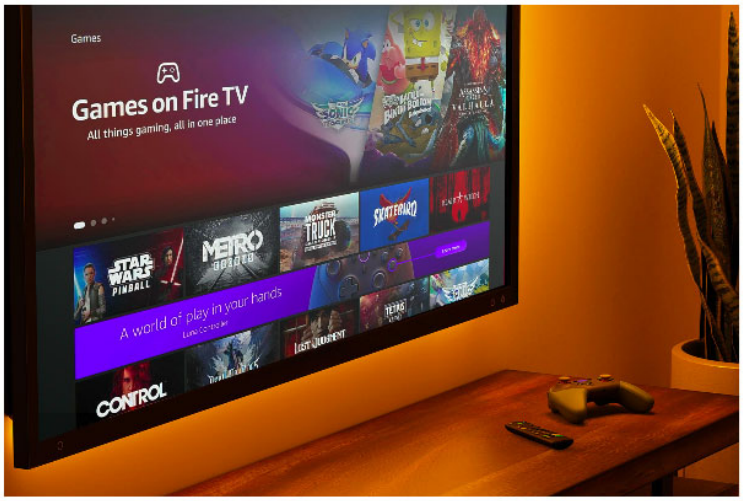
Watch live TV and free TV

Stream live TV, including news and sports, with subscriptions to Hulu+ Live TV, SLING TV, YouTube TV, and others. Plus, watch movies and TV shows for free with ad-supported apps like Pluto TV, Amazon Freevee, and more.

TV is just the beginning

Fire TV is always getting smarter with new Alexa skills and voice functionality. View live camera feeds, check the weather, order a pizza, and stream music. Learn more about compatible smart home devices.

"Alexa, show the nursery."



Games on Fire TV

No matter what kind of gaming you're into, Games on Fire TV has you covered. Play games like you stream movies with Amazon Luna or download games from the Appstore. If you're an Amazon Prime member, you can play a rotating selection of games free on Luna.

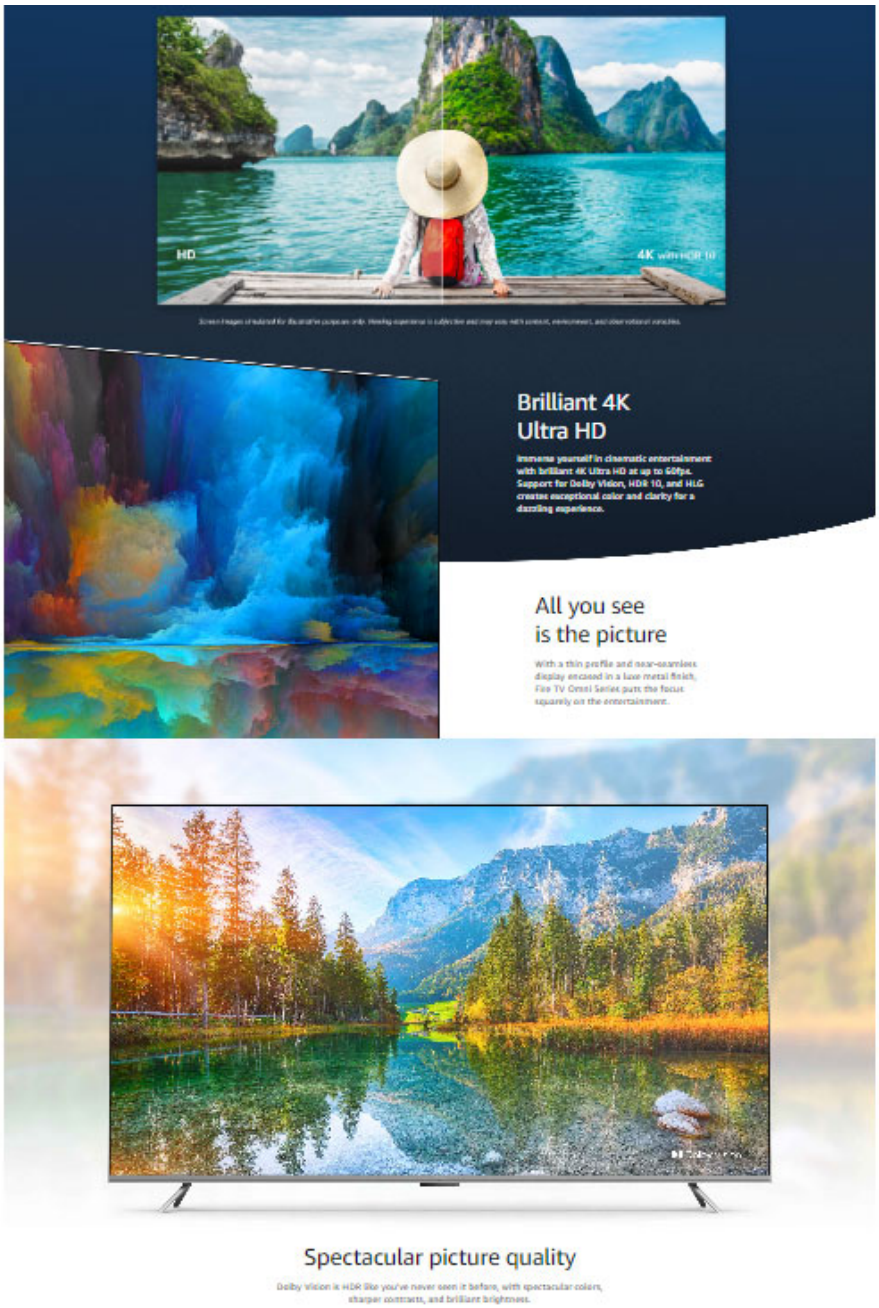
Source: https://www.amazon.com/dp/B08XVYZ1Y5?th=1

175. As an additional example of Amazon's infringement, Amazon manufactures and sells televisions with graphics processing units that decode H.265-compliant video. An example of an Amazon television Accused Product is the Amazon Fire TV, is capable of decoding H.265-compliant video.

Video codecs	• **Dolby-Vision** - Resolutions/frame rates: Up to UHD@60 - Profiles: 4-MEL, 5, 8, 9, and 10 - Codecs: AVC (profile 9), HEVC (profile 4-MEL, 5 and 8), AV1 (profile 10) - OTT four-character codes: hvc1, dvh1, hev1, dvhe, avc1 - Dolby Vision box types: dvcC, dvvC - Adaptive streaming formats: DASH, HLS, HLS using fMP4 • **H.265 HEVC** - Max Resolution: 2160p - Min Profile: Version 1, Main, Main 10, 10-bit support Min - Level: 5.1, Main Tier - Max frame rate: 720p @ 60fps, 1080p @ 60fps, 2160p @ 60fps - Secure (PlayReady and Widevine DRMs) and clear (non-secure) contexts - Support for dynamic resolution switch down to or up from lower resolution - Number of reference frames required will be based on level, profile, and resolution. Refer to Profiles (High Efficiency Video Coding) - Color Space: Rec. 601 & Rec. 709 (secure or unsecure), Rec. 2020 • **H.264 AVC** - Secure or un-secure - Max Resolution: 2160p - Min Profile/Level: Main Profile @ Level 5.1, High Profile @ Level 5.1 - Max frame rate: 720p @ 60fps, 1080p @ 30fps, 1080p @ 60fps, 2160p @ 30fps, 2160p @ 30fps (limited support) - Secure (PlayReady and Widevine DRMs) and clear (non-secure) contexts - Support for dynamic resolution switch down to or up from lower resolution - Number of reference frames required will be based on level, profile, and resolution. Refer to Levels (Advanced Video Coding)

Source: https://developer.amazon.com/docs/fire-tv/device-specifications-fire-tv-edition-smart-tv-na.html

176. Additionally, Amazon instructs and encourages users to use the Amazon Accused Products in a manner that infringes at least Claim 19 of the '267 Patent by advertising the products' ability to decode video:



Source: https://www.amazon.com/dp/B09N6F9NV3?tag=googhydr-20&hvadid=652064394383&hvpos=&hvnetw=g&hvrand=8222494941552910 24&hvpone=&hvptwo=&hvqmt=e&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=21176&hvtargid=kwd-1982381309656&ref=pd_sl_8awf5tywn2_e

177. Additionally, on information and belief, Amazon publishes customer reviews of the Amazon Accused Products that show its customers actually use the Amazon Accused Products to stream video:

This is not a ginger ale!

★★★★★ **high-quality smart TV with an immersive viewing experience**

Reviewed in the United States on July 17, 2023

Size: 50-inch | Configuration: TV only | **Verified Purchase**

If you're looking for a feature-packed television that seamlessly integrates with your smart home devices and provides stunning picture quality, this TV is an excellent choice.

The first thing that impressed me about this smart TV is its picture quality. The 4K Ultra HD resolution delivers crystal-clear and vibrant visuals, bringing your favorite movies, TV shows, and streaming content to life. The colors are rich and accurate, and the contrast is excellent, providing a truly immersive viewing experience. Whether you're watching action-packed movies or enjoying nature documentaries, the picture quality of this TV is truly impressive.

Male in Atlanta

★★★★☆ **Impressive Tech, But There's a Catch!**

Reviewed in the United States on June 15, 2023

Size: 55-inch | Configuration: TV only | **Verified Purchase**

Hey all! Let's talk about the Amazon Fire TV 55" Omni Series. It's a strong contender in the Smart TV market, scoring a solid 4 out of 5 stars from me.

The picture quality on this 4K UHD TV is stunning, honestly, it's like being at the movies. Everything is crisp, vibrant and immersive, which is perfect for my binge-watching sessions!

One of the standout features is the hands-free Alexa. It's pretty cool being able to control your TV with voice commands. However, and this is where it loses a star, every time I switch on the TV, I have to physically select the Fire user profile with the remote. Kinda defeats the purpose of hands-free convenience, right? A bit of a bugbear for me.

The rest of the Fire interface is user-friendly, though, with easy access to Prime Video, Netflix, Disney+, and more. It's a breeze to navigate, once you get past the initial hiccup.

As for value, you're getting a lot of bang for your buck here. The price is reasonable when you consider the picture quality and smart features, minus that one little annoyance.

So there you have it. A pretty fantastic TV that needs to work out one small kink. If you can live with the manual profile selection issue, it's definitely a great choice. Four stars from me!

105 people found this helpful

Helpful | Report

Source: https://www.amazon.com/product-reviews/B09N6F9NV3/ref=cm_cr_arp_d_show_all?ie=UTF8&reviewerType=all_reviews&pageNumber=1#reviews-filter-bar

178. Amazon knowingly and intentionally induces users of one or more of the Amazon Accused Products to directly infringe at least Claim 19 of the ’267 Patent by encouraging, instructing, and aiding one or more persons in the United States, including Amazon employees who test and operate Amazon Accused Products at the direction of Amazon, to make, use (including testing those devices and methods), sell, or offer to sell one or more Amazon Accused Products, during or after such article’s importation into the United States, in a manner that infringes the ’267 Patent.

179. For example, as seen in the Amazon publications above, Amazon advertises the Amazon Fire Tablet, Amazon Fire Stick 4K and Amazon Fire TV on its website so that consumers

may purchase and use the product, thus inducing its customers to also infringe the ’267 Patent. On information and belief, Amazon also advertises other Amazon products that infringe the ’267 Patent on its website for consumer purchase.

180. On information and belief, Amazon was aware of the ’267 Patent or acted with willful blindness as to the existence of the ’267 Patent at least as a result of the filing and service of this complaint. Nokia additionally notified Amazon it was infringing related patents at least as of October 24, 2023.

181. On information and belief, Amazon contributes to the infringement of at least Claim 19 of the ’267 Patent by offering to sell or selling and/or importing a patented component or material and/or apparatus used to practice a patented process, constituting a material part of the inventions, knowing the same to be especially made or especially adapted for use in an infringement and not a staple article or commodity of commerce suitable for substantial non-infringing use.

182. A claim chart that applies Claim 19 of the ’267 Patent to the Amazon Accused Products is attached as Ex. 17. The H.265 Standard referenced in this claim chart can be found in Exhibit 25.

F. U.S. Patent No. 8,077,991 (“the ’991 Patent”)

183. The ’991 Patent, entitled “Spatially Enhanced Transform Coding,” was issued on December 13, 2011, to inventor Jani Lainema. The ’991 Patent issued from U.S. Patent Application Serial No. 12/101,019, filed on April 10, 2008. The ’991 Patent expires on October 12, 2030. A true and correct copy of the ’991 Patent is attached hereto as Exhibit 7.

184. The ’991 Patent is not directed to merely an abstract idea or any patent-ineligible concept. Instead, the ’991 Patent provides improvements over conventional video coding techniques that result in substantial benefits to video decompression, video quality, and video

playback. These substantial benefits are enjoyed by users of the Accused Products when, for example, watching video over the Internet.

185. As described in the ’991 Patent, typical decoders reconstruct video by applying prediction mechanisms and prediction error decoding. ’991 Patent at 1:49-54. For example, the decoder “sums up the prediction and prediction error signals (i.e., the pixel values) to form the output video frame.” *Id*. at 1: 56-59. Typical encoders compress video information in two phases. In the first phase, pixel values can be predicted, for example, by motion compensation mechanisms, which involve finding and indicating an area in one of the previously coded video frames that corresponds closely to the block being coded. *Id*. at 1:29-34. Additionally, pixel values can be predicted via by spatial mechanisms, which involve using the pixel values around the block to be coded in a specified manner. *Id*. at 1:35-37. The second phase involves coding the prediction error (*i.e.*, the difference between the predicted block of pixels and the original block of pixels), which involves transforming the difference in pixel values using a specified transform (*e.g.*, a Discrete Cosine Transform (DCT) or a variant thereof), quantizing the coefficients, and entropy coding the quantized coefficients. *Id*. at 1:37-44.

186. Prior to the ’991 Patent, one significant problem was that transform coding was only efficient under certain circumstances. More specifically, when the prediction error values were less correlated with one another, the transform coding performance deteriorated and caused suboptimal performance. *Id*. at 2:29-38.

187. The ’991 Patent overcame these technical challenges in the prior systems by inventing a novel method of using both transform coding and spatial coding to construct the prediction error signal. *Id*. at 2:64-3:2. The ’991 Patent employs the unconventional solution of performing both transform coding and spatial coding to allow for the efficient spatial

representation of those components of the prediction error signal of the same image block that are not well correlated with the transform basis functions (such as certain types of sensor noise, high frequency texture and edge information). *Id*. at 3:18-21, 3:6-12.

188. The ’991 Patent therefore provides a specific technological improvement to the functionality and capabilities of video coding technology that results in increased efficiency and video quality. *Id*. at 3:35-37. For instance, the ’991 Patent describes an example where four scalar values are to be coded, in which the invention of the ’991 Patent results in compression efficiency improvement, as the signal is represented by a single transform coefficient and a single spatial sample instead of four transform coefficients. *Id*. at 4:44-58.

189. Conventional technology prior to the ’991 Patent was not capable of using both transform coding and spatial coding to construct the prediction error signal to allow for the efficient spatial representation of those components of the prediction error signal of the same image block that are not well correlated with the transform basis functions.

190. The ’991 Patent recognizes and solves these specific technological problems with the conventional technology at the time. The ’991 Patent’s techniques for performing transform coding to the difference signal, performing spatial coding to the difference signal, and joining the two representations to form a coded prediction error signal was a significant advancement over existing technology. The ’991 Patent’s techniques for receiving a coded prediction error signal including transform coefficients and spatial samples, decoding the transformed coefficients into decoded transform information, decoding the plurality of spatial samples into decoded spatial information, and adding the decoded transform information, the decoded spatial information, and a reconstructed prediction of a block of data, thereby forming a decoded representation of the block of data are likewise a significant advancement over existing technology.

191. The novel solution of the ’991 Patent, including receiving a coded prediction error signal, decoding the plurality of transformed coefficient, decoding the plurality of spatial samples, and adding the decoded transform information, the decoded spatial information and a reconstructed prediction of the block of data, was not well-understood, routine, or conventional, nor was it simply comprised of well-understood, routine, and conventional activities previously known to the industry. Furthermore, the ordered combination of elements, including performing transform coding to the difference signal, performing spatial coding to the difference signal, and joining the two representations to form a coded prediction error signal, was not well-understood, routine, or conventional.

192. On information and belief, Amazon directly infringes at least Claim 22 of the ’991 Patent through its manufacture, sale for importation, importation, use, and sale after importation of one or more of its Accused Products.

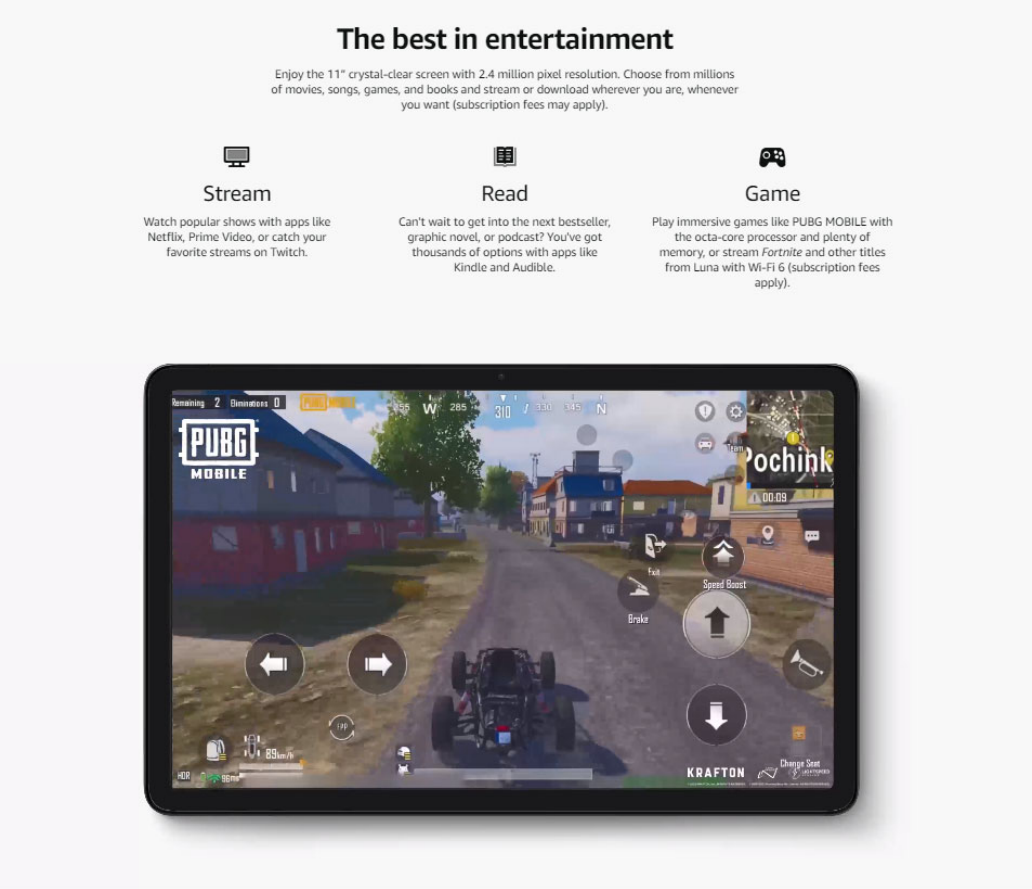
193. Because at least Claim 22 of the ’991 Patent is essential to the H.265 Standard, the Accused Products’ incorporation of the H.265 Standard infringes the ’991 Patent.

194. As just one example of Amazon’s infringement, Amazon manufactures and sells tablets with graphics processing units that decode H.265-compliant video. An example of an Amazon tablet Accused Product is the Amazon Fire Max 11 tablet, which is capable of decoding H.265-compliant video.

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
VIDEO FEATURES	**Low Latency Video**	Supported
	H.264 DRM	Supported
	H.265 DRM	Supported
	OpenGL	ES 3.2

Source: https://developer.amazon.com/docs/fire-tablets/ft-device-specifications-firehd-models.html

195. Additionally, Amazon instructs and encourages users to use the Amazon Accused Products in a manner that infringes at least Claim 22 the ’991 Patent by advertising the products’ ability to stream and watch video:



Source: https://www.amazon.com/dp/B0B1VQ1ZQY?tag=googhydr-20&hvadid=659647565932&hvpos=&hvnetw=g&hvrand=12846244274520147119&hvpone=&hvptwo=&hvqmt=e&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=21176&hvtargid=kwd-2078604219526&ref=pd_sl_24r6yas0m1_e&th=1

196. Additionally, on information and belief, Amazon publishes customer reviews of the Amazon Accused Products that show its customers actually use the Amazon Accused Products to stream video, and that customers choose Amazon Tablet Accused Products specifically for their video streaming capabilities:

XRyche

★★★★★ **A surprisingly capable budget/low mid-range tablet focused on video entertainment.**

Reviewed in the United States on August 9, 2023

Digital Storage Capacity: 64 GB | Offer Type: With Lockscreen Ads | Color: Gray | Style: Amazon Fire Max 11 | **Verified Purchase**

Full disclosure.....I went from a Fire HD 8 (2020) (Tablet is still working btw and has been relegated to the closet shelf as a back-up.) tablet to this so the bias should be obvious. Regardless this tablet seems to be brighter and more vivid than my previous Fire tablet, the resolution is obviously better as well as it being much more powerful. It can even play some games more advanced than Candy Crush and such.

Now with that being said.....this tablet is NOT, by any means, a "productivity" tablet. It is mid-range budget tablet that is capable of performing some light productivity tasks. This tablet is also NOT an IPad competitor in any way, shape or form either. What it is is a seemingly well built Amazon-centric budget mid-range entertainment tablet which is what I am looking for (Minus the Amazon-centric part which I can overlook since there are methods to get around this. P.S. If Amazon put a stop to these methods I would never buy a Fire tablet.).

As far as the price goes though I would not pay a cent over 200 USD for this tablet. It simply isn't worth it, not for a budget/low-end mid-range tablet with a forked, obsolete and gimped Android OS. Luckily I only paid 150 USD on Prime Day and paying only 30 USD a month over a 5 month period using Amazon's interest-free financing service they offer on a lot of their branded products. Going this route this tablet is worth the price.

Juilianna

★★★★★ **just WOW**

Reviewed in the United States on July 29, 2023

Digital Storage Capacity: 128 GB | Offer Type: Without Lockscreen Ads | Color: Gray | Style: Amazon Fire Max 11 | **Verified Purchase**

Ok...old woman (here again!) First, I must say, I have many Fire products. the old Fire HDX is my all time favorite, and I hoard them.still use them,..i love the size, quality, and it is MY PREFERED device. BUT...i have an iPad mini, which is the next fav, and a few others.

I got this on a whim (and to help prolong the lives of my old HDX's) because it sounded pretty good, and the price was great. I LOVE IT!

I've played around with it for a week or so now...Lots of time on my hands now, so I read a lot, lots of Brit mystery viewing, reading the Post and Times, playing Queen Bee...ha. point being I use it quite a bit. The battery lasts VERY long...at least the 10 hours or more. The quality of the videos is EXCELLENT!!!!!! I am veryyy pleased with that!! It doesn't stutter like a few of my Fire products, which is great. Fast!! Highly recommend it

Cons-- yeah, but they're just personal. It's a large device and awkward for my small hands. If there were a 7 inch of this quality, I'd have 3 of them....no lie. It does take a little time to charge tho....ah well.

seriously thinking about the keyboard...we'll see.

Helpful | Report

Source: https://www.amazon.com/product-reviews/B0B1VQ1ZQY/ref=cm_cr_arp_d_viewopt_kywd?ie=UTF8&filterByStar=five_star&reviewerType=all_reviews&pageNumber=1&filterByKeyword=video#reviews-filter-bar

197. As another example of Amazon's infringement, Amazon manufactures and sells streaming devices with graphics processing units that decode H.265-compliant video. An example of such a media player Accused Product is the Amazon Fire TV Stick 4K Max, which Amazon advertises is capable of decoding H.265-compliant video.

Video codecs	• **Dolby Vision**. Dolby Vision support for Profile 4-MEL, 5, 8, 9. (Up to Level 9 for profiles 5 and 8. Up to Level 5 for Profile 9.) • **H.265 (HEVC)**. Hardware accelerated up to 3840x2160p (4K) @ 60fps, 35 Mbps, Main 10 Profile Level 5.1, Color space 8-bit and 10-bit input with HDR10, HDR10+, and HLG. • **H.264**. Hardware accelerated up to 3840x2160p (4K) @ 60fps, 20 Mbps, High 10 Profile Level 5.2 • **H.263**. Hardware accelerated up to 1080p @ 30fps, 6 Mbps, Profile 0 Level 70 • **VP8**. Supported up to 1080p 30fps. Baseline profile, non-secure • **VP9**. Hardware accelerated up to 4K @ 60fps, Profile 2 up to 30 Mbps • **MPEG-2**. Hardware accelerated up to 1080p @ 60fps • **MPEG-4**. Up to 1080p @ 30fps, Simple and Advanced Simple Profiles Level 5, non-secure • **AV1**. Hardware accelerated up to 3840x2160p (4K) @60fps, 100Mbps, Main Profile Level 5.1, Color space 8-bit and 10-bit input with HDR10, HDR10+, and HLG.

Source: https://developer.amazon.com/docs/fire-tv/device-specifications-fire-tv-streaming-media-player.html

198. Additionally, Amazon instructs and encourages users to use the Amazon Accused Products in a manner that infringes at least Claim 22 of the '991 Patent by advertising the products' ability to stream and watch video:

TV is just the beginning

Fire TV is always getting smarter with new Alexa skills and voice functionality. View live camera feeds, check the weather, order a pizza, and stream music. Learn more about compatible smart home devices.

"Alexa, show the nursery."

Games on Fire TV

No matter what kind of gaming you're into, Games on Fire TV has you covered. Play games like you stream movies with Amazon Luna or download games from the Appstore. If you're an Amazon Prime member, you can play a rotating selection of games free on Luna.

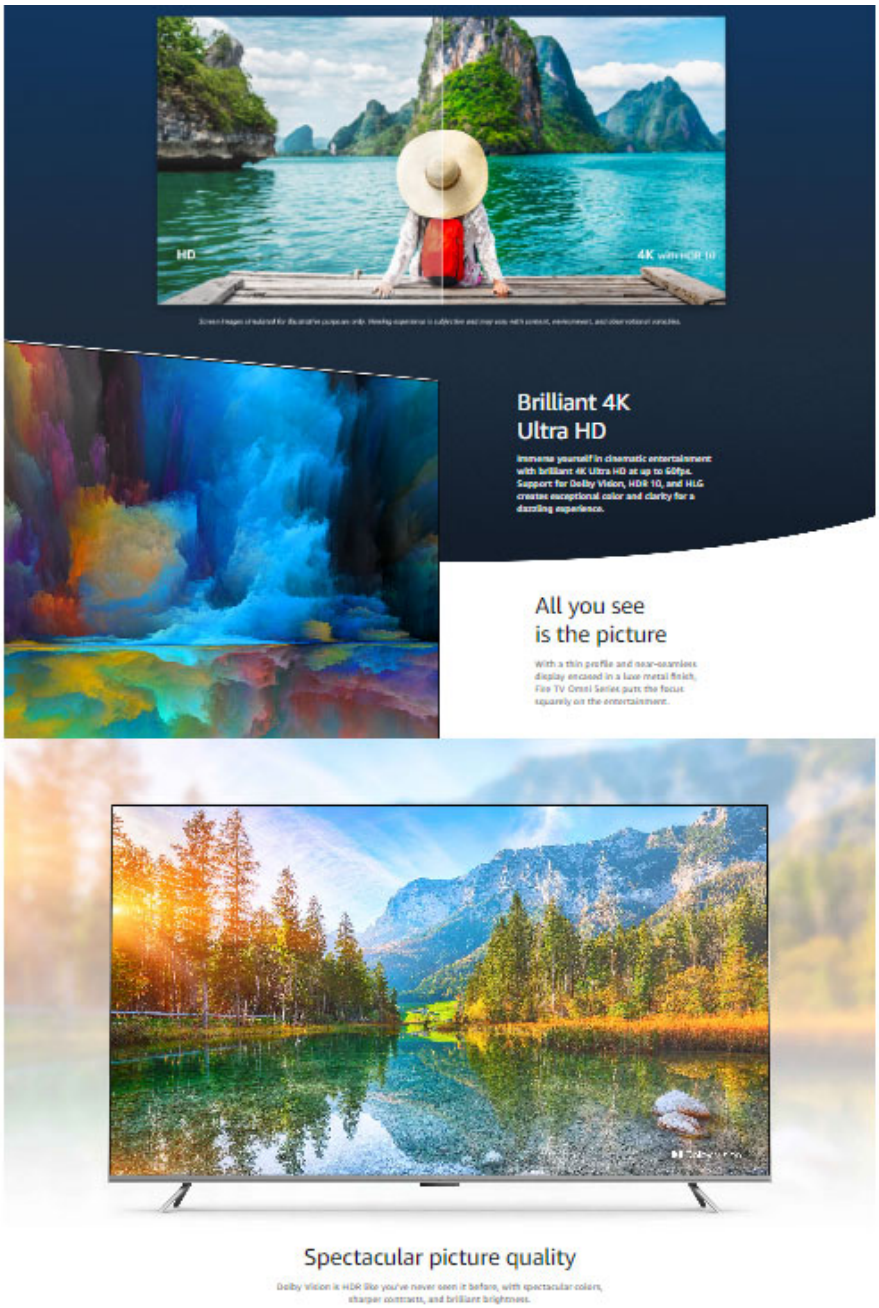
Source: https://www.amazon.com/dp/B08XVYZ1Y5?th=1

199. As an additional example of Amazon's infringement, Amazon manufactures and sells televisions with graphics processing units that decode H.265-compliant video. An example of an Amazon television Accused Product is the Amazon Fire TV, is capable of decoding H.265-compliant video.

Video codecs	• **Dolby-Vision** - Resolutions/frame rates: Up to UHD@60 - Profiles: 4-MEL, 5, 8, 9, and 10 - Codecs: AVC (profile 9), HEVC (profile 4-MEL, 5 and 8), AV1 (profile 10) - OTT four-character codes: hvc1, dvh1, hev1, dvhe, avc1 - Dolby Vision box types: dvcC, dvvC - Adaptive streaming formats: DASH, HLS, HLS using fMP4 • **H.265 HEVC** - Max Resolution: 2160p - Min Profile: Version 1, Main, Main 10, 10-bit support Min - Level: 5.1, Main Tier - Max frame rate: 720p @ 60fps, 1080p @ 60fps, 2160p @ 60fps - Secure (PlayReady and Widevine DRMs) and clear (non-secure) contexts - Support for dynamic resolution switch down to or up from lower resolution - Number of reference frames required will be based on level, profile, and resolution. Refer to Profiles (High Efficiency Video Coding) - Color Space: Rec. 601 & Rec. 709 (secure or unsecure), Rec. 2020 • **H.264 AVC** - Secure or un-secure - Max Resolution: 2160p - Min Profile/Level: Main Profile @ Level 5.1, High Profile @ Level 5.1 - Max frame rate: 720p @ 60fps, 1080p @ 30fps, 1080p @ 60fps, 2160p @ 30fps, 2160p @ 30fps (limited support) - Secure (PlayReady and Widevine DRMs) and clear (non-secure) contexts - Support for dynamic resolution switch down to or up from lower resolution - Number of reference frames required will be based on level, profile, and resolution. Refer to Levels (Advanced Video Coding)

Source: https://developer.amazon.com/docs/fire-tv/device-specifications-fire-tv-edition-smart-tv-na.html

200. Additionally, Amazon instructs and encourages users to use the Amazon Accused Products in a manner that infringes at least Claim 22 of the '991 Patent by advertising the products' ability to decode video:



Source: https://www.amazon.com/dp/B09N6F9NV3?tag=googhydr-20&hvadid=652064394383&hvpos=&hvnetw=g&hvrand=8222494941552910 24&hvpone=&hvptwo=&hvqmt=e&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=21176&hvtargid=kwd-1982381309656&ref=pd_sl_8awf5tywn2_e

201. Additionally, on information and belief, Amazon publishes customer reviews of the Amazon Accused Products that show its customers actually use the Amazon Accused Products to stream video:

This is not a ginger ale!

★★★★★ **high-quality smart TV with an immersive viewing experience**

Reviewed in the United States on July 17, 2023

Size: 50-inch | Configuration: TV only | **Verified Purchase**

If you're looking for a feature-packed television that seamlessly integrates with your smart home devices and provides stunning picture quality, this TV is an excellent choice.

The first thing that impressed me about this smart TV is its picture quality. The 4K Ultra HD resolution delivers crystal-clear and vibrant visuals, bringing your favorite movies, TV shows, and streaming content to life. The colors are rich and accurate, and the contrast is excellent, providing a truly immersive viewing experience. Whether you're watching action-packed movies or enjoying nature documentaries, the picture quality of this TV is truly impressive.

Male in Atlanta

★★★★☆ **Impressive Tech, But There's a Catch!**

Reviewed in the United States on June 15, 2023

Size: 55-inch | Configuration: TV only | **Verified Purchase**

Hey all! Let's talk about the Amazon Fire TV 55" Omni Series. It's a strong contender in the Smart TV market, scoring a solid 4 out of 5 stars from me.

The picture quality on this 4K UHD TV is stunning, honestly, it's like being at the movies. Everything is crisp, vibrant and immersive, which is perfect for my binge-watching sessions!

One of the standout features is the hands-free Alexa. It's pretty cool being able to control your TV with voice commands. However, and this is where it loses a star, every time I switch on the TV, I have to physically select the Fire user profile with the remote. Kinda defeats the purpose of hands-free convenience, right? A bit of a bugbear for me.

The rest of the Fire interface is user-friendly, though, with easy access to Prime Video, Netflix, Disney+, and more. It's a breeze to navigate, once you get past the initial hiccup.

As for value, you're getting a lot of bang for your buck here. The price is reasonable when you consider the picture quality and smart features, minus that one little annoyance.

So there you have it. A pretty fantastic TV that needs to work out one small kink. If you can live with the manual profile selection issue, it's definitely a great choice. Four stars from me!

105 people found this helpful

Helpful | Report

Source: https://www.amazon.com/product-reviews/B09N6F9NV3/ref=cm_cr_arp_d_show_all?ie=UTF8&reviewerType=all_reviews&pageNumber=1#reviews-filter-bar

202. Amazon knowingly and intentionally induces users of one or more of the Amazon Accused Products to directly infringe at least Claim 22 of the ’991 Patent by encouraging, instructing, and aiding one or more persons in the United States, including Amazon employees who test and operate Amazon Accused Products at the direction of Amazon, to make, use (including testing those devices and methods), sell, or offer to sell one or more Amazon Accused Products, during or after such article’s importation into the United States, in a manner that infringes the ’991 Patent.

203. For example, as seen in the Amazon publications above, Amazon advertises the Amazon Fire Tablet, Amazon Fire Stick 4K, and Amazon Fire TV on its website so that consumers may purchase and use the product, thus inducing its customers to also infringe the ’991 Patent. On information and belief, Amazon also advertises other Amazon products that infringe the ’991 Patent on its website for consumer purchase.

204. On information and belief, Amazon was aware of the ’991 Patent or acted with willful blindness as to the existence of the ’991 Patent at least as a result of the filing and service of this complaint. Nokia information Amazon it was infringing the ’991 Patent at least on October 24, 2023.

205. On information and belief, Amazon contributes to the infringement of at least Claim 22 of the ’991 Patent by offering to sell or selling and/or importing a patented component or material and/or apparatus used to practice a patented process, constituting a material part of the inventions, knowing the same to be especially made or especially adapted for use in an infringement and not a staple article or commodity of commerce suitable for substantial non-infringing use.

206. A claim chart that applies Claim 22 of the ’991 Patent to the Amazon Accused Products is attached as Exhibit 18. The H.265 Standard referenced in this claim chart can be found in Exhibit 25.

G. U.S. Patent No. 8,050,321 (“the ’321 Patent”)

207. The ’321 Patent, entitled “Grouping of Image Frames in Video Coding,” issued on November 1, 2011, to inventor Miska Hannuksela. The ’321 Patent issued from U.S. Patent Application No. 11/338,934, filed on January 25, 2006, and claims priority to U.S. Provisional Application No. No. 10/306,942, filed on November 29, 2002. The ’321 Patent expires on May 19, 2027. A true and correct copy of the ’321 Patent is attached as Exhibit 8.

208. The ’321 Patent is not directed to merely an abstract idea or any patent-ineligible concept. Instead, the ‘321 Patent is directed to novel and unconventional improvements to the process of video coding. The ’321 Patent provides improvements over prior video coding techniques that result in substantial benefits to video compression, video quality, and video playback. These substantial benefits are enjoyed by users of the Accused Products when, for example, watching video over the Internet.

209. Digital video files are comprised of still image frames, which are displayed rapidly in succession to create an impression of a moving image. ’321 Patent at 1:55-58. The image frames typically comprise a number of stationary background objects and few moving objects, such that the information in consecutively displayed image frames is typically largely similar. *Id*. at 1:58-65. Many video coding methods make use of this so-called “temporal redundancy” by using “motion-compensated temporal prediction,” in which the contents of an image frame are predicted from other frames. *Id*. at 2:16-23. Frames that use motion-compensated temporal prediction are also called INTER-frames. *Id*. at 2:27-29. Frames that do not use motion-compensated temporal prediction are also called INTRA-frames or I-frames. *Id*. at 2:23-26.

210. Both INTER-frames and INTRA-frames may be used in the motion-compensated prediction of another frame. However, if a frame that is used in the motion-compensated prediction of another frame is lost or corrupted, the frames dependent on it can no longer be correctly decoded. *Id*. at 2:32-33.

211. For example, prior to the ’321 Patent, one significant problem occurred when a user wanted to stream or browse a video from somewhere other than the beginning of the video (*e.g.*, the user wishes to start from a certain position such as the middle or where the user left off from a previous viewing). *Id*. at 3:62-4:4. Prior systems did not include a numbering scheme that

allowed the decoder to recognize the first I-frame in a sequence of pictures. *Id*. at 11:11-21. Therefore, when streaming or browsing a video file from a point other than the beginning, the decoder would interpret this an unintentional loss of image frames and unnecessarily try to reconstruct the image frames suspected as lost. *Id*. at 11:20-25.

212. The ’321 Patent overcame these technical challenges in the prior systems by inventing a novel independent sequence of image frames that includes an indication of a first picture in an independently decodable group of pictures. *Id*. at 4:16-35. The ’321 Patent employs the unconventional solution of indicating the first picture in an independently decodable group of pictures so that it is possible for the decoder to start decoding from that first picture and continue the decoding process without needing prediction from any image frame prior to that first picture. *Id*. at 4:16-38.

213. The ’321 Patent therefore provides a specific technological improvement to the functionality and capabilities of video decoding technology that results in increased efficiency and improved video playback. For example, the encoder can now enable the decoder to begin decoding from a random point in a video stream without any prediction from any prior picture and without storing any pictures decoded prior to the first picture of the independent sequence in its memory. *Id*. at 4:48-58. For another example, the indication by an encoder of a first picture in an independently decodable group of pictures enables the decoder to identify a loss of a picture that is unlikely to allow satisfactory image quality without retransmission or picture refresh. *Id*. at 4:64-5:5.

214. Conventional technology prior to the ‘321 Patent was not capable of identifying the first image frame of an independent sequence, wherein all motion-compensated temporal prediction references of the independent sequence refer only to image frames within the

independent sequence. The ’321 Patent recognizes and solves these specific technological problems with the conventional technology at the time. The ’321 Patent’s ability to recognize at the decoder an indication of at least one image frame, which is the first image frame, in decoding order, of the independent sequence and to recognize a reset identifier value for the indicated first image frame of the independent sequence was a significant advancement over existing technology.

215. The novel solution of the ’321 Patent, which includes decoding from the video sequence an indication of at least one image frame, which is the first image frame, in decoding order, of the independent sequence and starting the decoding sequence from the first image frame of the independent sequence, was not well-understood, routine, or conventional, nor was it simply comprised of well-understood, routine, and conventional activities previously known to the industry. Furthermore, the ordered combination of elements, including decoding from the video sequence an indication of at least one image frame, which is the first image frame, in decoding order, of the independent sequence and starting the decoding sequence from the indicated first image frame of the independent sequence, was not well-understood, routine, or conventional.

216. On information and belief, Amazon directly infringes at least Claim 8 of the ’321 Patent through its manufacture, sale for importation, importation, use, and sale after importation of one or more of the Accused Products.

217. On information and belief, Amazon directly infringes one or more claims of the ’321 Patent through its manufacture, sale for importation, importation, use, and sale after importation of one or more of the Amazon Accused Products.

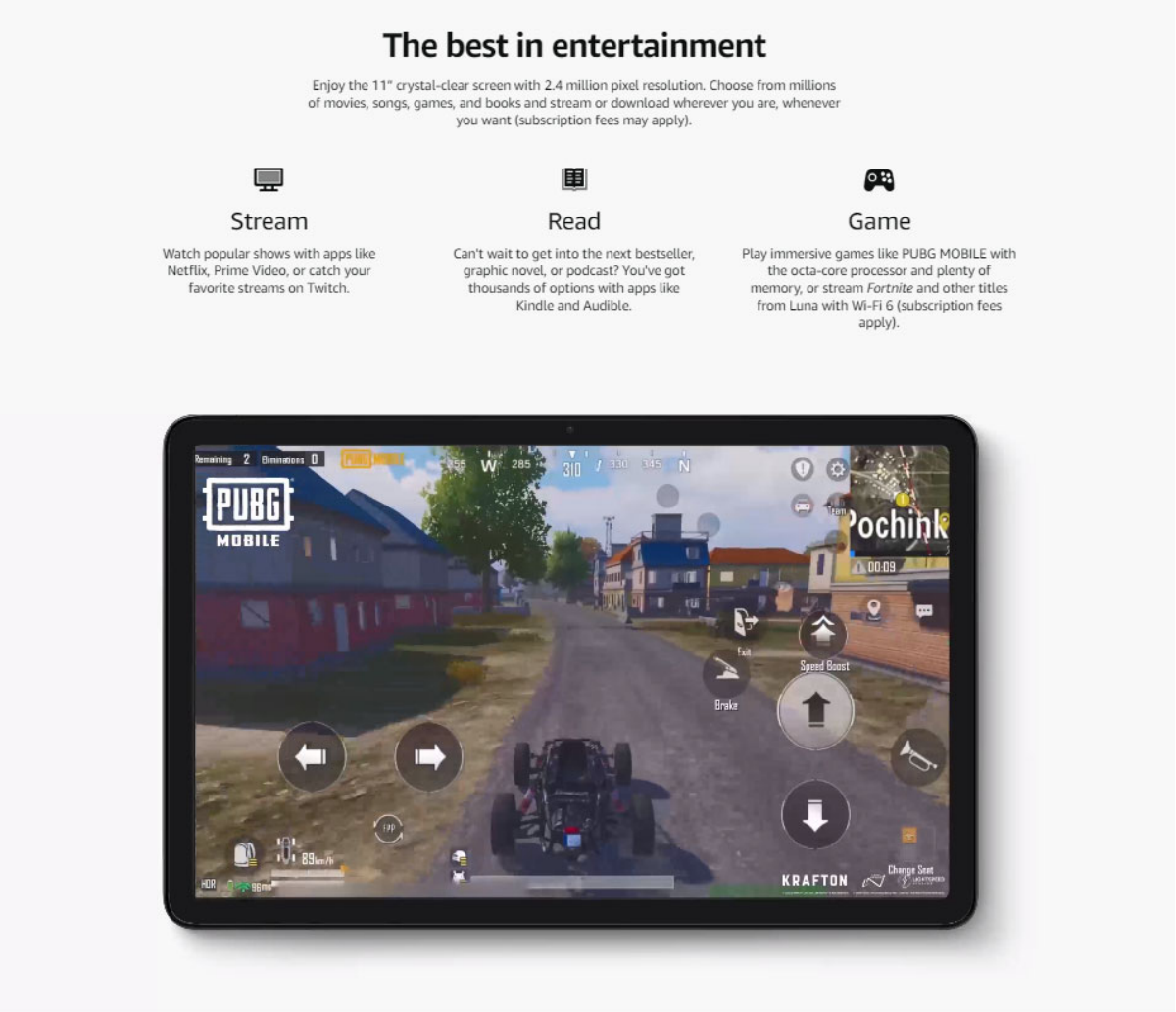
218. Because at least Claim 8 of the ’321 Patent is essential to the H.264 and H.265 Standards, the Amazon Accused Products’ incorporation of the H.264 and H.265 Standards infringes the ’321 Patent.

219. As just one example of Amazon’s infringement, Amazon manufactures and sells tablets with graphics processing units that decode H.264 and H.265-compliant video. An example of an Amazon tablet Accused Product is the Amazon Fire Max 11 tablet, which is capable of decoding H.264 and H.265-compliant video.

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
VIDEO FEATURES	**Low Latency Video**	Supported
	H.264 DRM	Supported
	H.265 DRM	Supported
	OpenGL	ES 3.2

Source: https://developer.amazon.com/docs/fire-tablets/ft-device-specifications-firehd-models.html

220. Additionally, Amazon instructs and encourages users to use the Amazon Accused Products in a manner that infringes at least Claim 8 of the ’321 Patent by advertising the products’ ability to stream and watch video:



Source: https://www.amazon.com/dp/B0B1VQ1ZQY?tag=googhydr-20&hvadid=659647565932&hvpos=&hvnetw=g&hvrand=12846244274520147119&hvpone=&hvptwo=&hvqmt=e&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=21176&hvtargid=kwd-2078604219526&ref=pd_sl_24r6yas0m1_e&th=1

221. Additionally, on information and belief, Amazon publishes customer reviews of the Amazon Accused Products that show its customers actually use the Amazon Accused Products to stream video, and that customers choose the tablet specifically for their video streaming capabilities:

XRyche

★★★★★ **A surprisingly capable budget/low mid-range tablet focused on video entertainment.**

Reviewed in the United States on August 9, 2023

Digital Storage Capacity: 64 GB | Offer Type: With Lockscreen Ads | Color: Gray | Style: Amazon Fire Max 11 | **Verified Purchase**

Full disclosure.....I went from a Fire HD 8 (2020) (Tablet is still working btw and has been relegated to the closet shelf as a back-up.) tablet to this so the bias should be obvious. Regardless this tablet seems to be brighter and more vivid than my previous Fire tablet, the resolution is obviously better as well as it being much more powerful. It can even play some games more advanced than Candy Crush and such.

Now with that being said.....this tablet is NOT, by any means, a "productivity" tablet. It is mid-range budget tablet that is capable of performing some light productivity tasks. This tablet is also NOT an IPad competitor in any way, shape or form either. What it is is a seemingly well built Amazon-centric budget mid-range entertainment tablet which is what I am looking for (Minus the Amazon-centric part which I can overlook since there are methods to get around this. P.S. If Amazon put a stop to these methods I would never buy a Fire tablet.).

As far as the price goes though I would not pay a cent over 200 USD for this tablet. It simply isn't worth it, not for a budget/low-end mid-range tablet with a forked, obsolete and gimped Android OS. Luckily I only paid 150 USD on Prime Day and paying only 30 USD a month over a 5 month period using Amazon's interest-free financing service they offer on a lot of their branded products. Going this route this tablet is worth the price.

Juilianna

★★★★★ **just WOW**

Reviewed in the United States on July 29, 2023

Digital Storage Capacity: 128 GB | Offer Type: Without Lockscreen Ads | Color: Gray | Style: Amazon Fire Max 11 | **Verified Purchase**

Ok...old woman (here again!) First, I must say, I have many Fire products. the old Fire HDX is my all time favorite, and I hoard them.still use them,..i love the size, quality, and it is MY PREFERED device. BUT...i have an iPad mini, which is the next fav, and a few others.

I got this on a whim (and to help prolong the lives of my old HDX's) because it sounded pretty good, and the price was great. I LOVE IT!

I've played around with it for a week or so now...Lots of time on my hands now, so I read a lot, lots of Brit mystery viewing, reading the Post and Times, playing Queen Bee...ha. point being I use it quite a bit. The battery lasts VERY long...at least the 10 hours or more. The quality of the videos is EXCELLENT!!!!!! I am veryyy pleased with that!! It doesn't stutter like a few of my Fire products, which is great. Fast!! Highly recommend it

Cons-- yeah, but they're just personal. It's a large device and awkward for my small hands. If there were a 7 inch of this quality, I'd have 3 of them....no lie. It does take a little time to charge tho....ah well.

seriously thinking about the keyboard...we'll see.

Helpful | Report

Source: https://www.amazon.com/product-reviews/B0B1VQ1ZQY/ref=cm_cr_arp_d_viewopt_kywd?ie=UTF8&filterByStar=five_star&reviewerType=all_reviews&pageNumber=1&filterByKeyword=video#reviews-filter-bar

222. As another example of Amazon's infringement, Amazon manufactures and sells media players with graphics processing units that decode H.264 and H.265-compliant video. An example of such a media player Accused Product is the Amazon Fire TV Stick 4K Max, which Amazon advertises is capable of decoding H.264 and H.265-compliant video.

Video codecs	• **Dolby Vision**. Dolby Vision support for Profile 4-MEL, 5, 8, 9. (Up to Level 9 for profiles 5 and 8. Up to Level 5 for Profile 9.) • **H.265 (HEVC)**. Hardware accelerated up to 3840x2160p (4K) @ 60fps, 35 Mbps, Main 10 Profile Level 5.1, Color space 8-bit and 10-bit input with HDR10, HDR10+, and HLG. • **H.264**. Hardware accelerated up to 3840x2160p (4K) @ 60fps, 20 Mbps, High 10 Profile Level 5.2 • **H.263**. Hardware accelerated up to 1080p @ 30fps, 6 Mbps, Profile 0 Level 70 • **VP8**. Supported up to 1080p 30fps. Baseline profile, non-secure • **VP9**. Hardware accelerated up to 4K @ 60fps, Profile 2 up to 30 Mbps • **MPEG-2**. Hardware accelerated up to 1080p @ 60fps • **MPEG-4**. Up to 1080p @ 30fps, Simple and Advanced Simple Profiles Level 5, non-secure • **AV1**. Hardware accelerated up to 3840x2160p (4K) @60fps, 100Mbps, Main Profile Level 5.1, Color space 8-bit and 10-bit input with HDR10, HDR10+, and HLG.

Source: https://developer.amazon.com/docs/fire-tv/device-specifications-fire-tv-streaming-media-player.html

223. Additionally, Amazon instructs and encourages users to use the Amazon Accused Products in a manner that infringes at least Claim 8 of the '321 Patent by advertising the products' ability to stream and watch video:

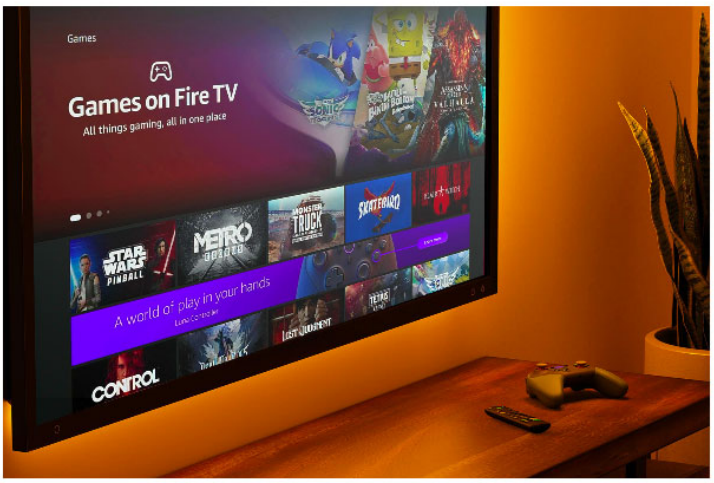
Watch live TV and free TV

Stream live TV, including news and sports, with subscriptions to Hulu+ Live TV, SLING TV, YouTube TV, and others. Plus, watch movies and TV shows for free with ad-supported apps like Pluto TV, Amazon Freevee, and more.

TV is just the beginning

Fire TV is always getting smarter with new Alexa skills and voice functionality. View live camera feeds, check the weather, order a pizza, and stream music. Learn more about compatible smart home devices.

"Alexa, show the nursery."



Games on Fire TV

No matter what kind of gaming you're into, Games on Fire TV has you covered. Play games like you stream movies with Amazon Luna or download games from the Appstore. If you're an Amazon Prime member, you can play a rotating selection of games free on Luna.

Source: https://www.amazon.com/dp/B08XVYZ1Y5?th=1

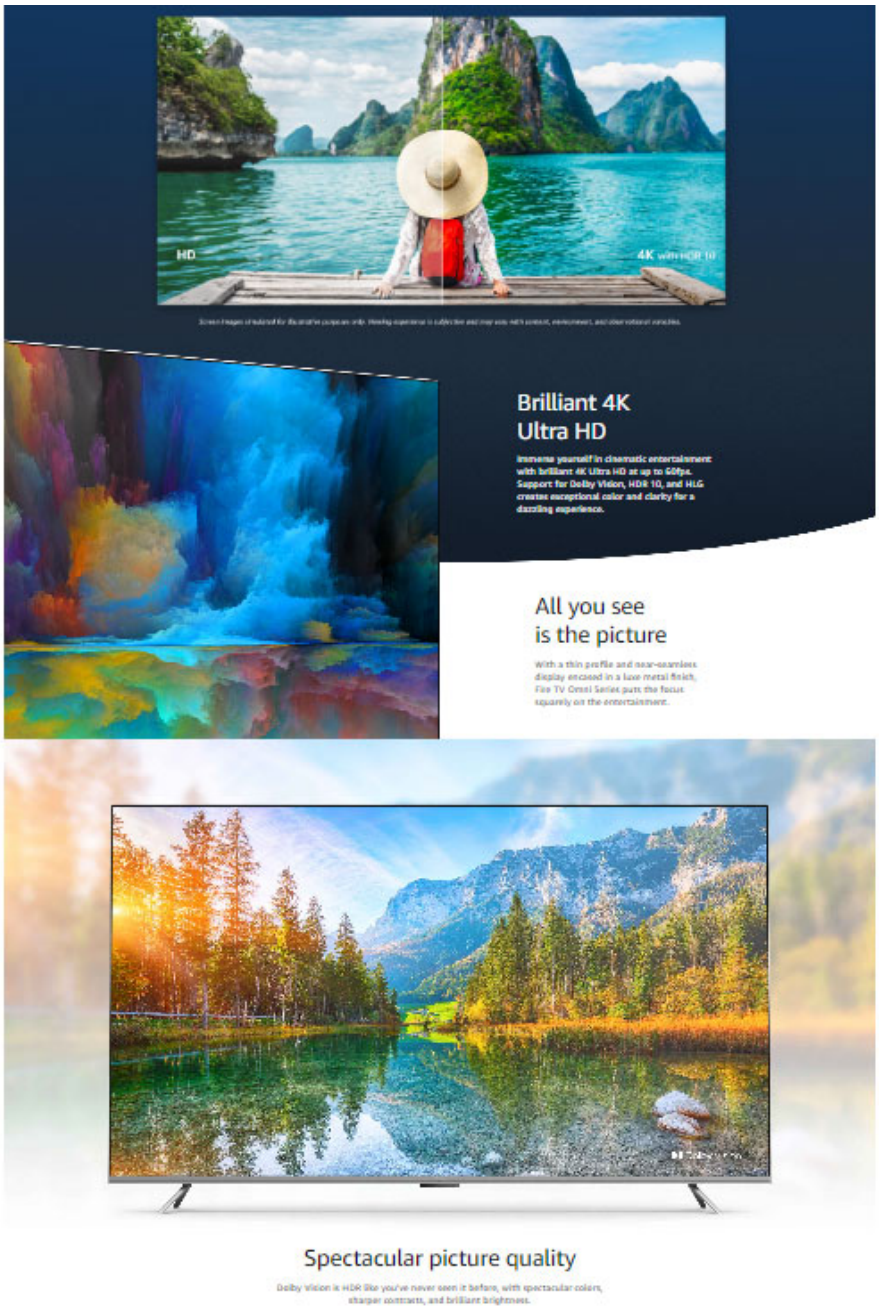
224. As an additional example of Amazon's infringement, Amazon manufactures and sells televisions with graphics processing units that decode H.264 and H.265-compliant video. An example of an Amazon television Accused Product is the Amazon Fire TV, is capable of decoding H.264 and H.265-compliant video.

Video codecs

- **Dolby-Vision**
  - Resolutions/frame rates: Up to UHD@60
  - Profiles: 4-MEL, 5, 8, 9, and 10
  - Codecs: AVC (profile 9), HEVC (profile 4-MEL, 5 and 8), AV1 (profile 10)
  - OTT four-character codes: hvc1, dvh1, hev1, dvhe, avc1
  - Dolby Vision box types: dvcC, dvvC
  - Adaptive streaming formats: DASH, HLS, HLS using fMP4
- **H.265 HEVC**
  - Max Resolution: 2160p
  - Min Profile: Version 1, Main, Main 10, 10-bit support Min
  - Level: 5.1, Main Tier
  - Max frame rate: 720p @ 60fps, 1080p @ 60fps, 2160p @ 60fps
  - Secure (PlayReady and Widevine DRMs) and clear (non-secure) contexts
  - Support for dynamic resolution switch down to or up from lower resolution
  - Number of reference frames required will be based on level, profile, and resolution. Refer to Profiles (High Efficiency Video Coding)
  - Color Space: Rec. 601 & Rec. 709 (secure or unsecure), Rec. 2020
- **H.264 AVC**
  - Secure or un-secure
  - Max Resolution: 2160p
  - Min Profile/Level: Main Profile @ Level 5.1, High Profile @ Level 5.1
  - Max frame rate: 720p @ 60fps, 1080p @ 30fps, 1080p @ 60fps, 2160p @ 30fps, 2160p @ 30fps (limited support)
  - Secure (PlayReady and Widevine DRMs) and clear (non-secure) contexts
  - Support for dynamic resolution switch down to or up from lower resolution
  - Number of reference frames required will be based on level, profile, and resolution. Refer to Levels (Advanced Video Coding)

Source: https://developer.amazon.com/docs/fire-tv/device-specifications-fire-tv-edition-smart-tv-na.html

225. Additionally, Amazon instructs and encourages users to use the Amazon Accused Products in a manner that infringes at least Claim 8 of the '321 Patent by advertising the products' ability to decode video:



Source: https://www.amazon.com/dp/B09N6F9NV3?tag=googhydr-20&hvadid=652064394383&hvpos=&hvnetw=g&hvrand=8222494941552910 24&hvpone=&hvptwo=&hvqmt=e&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=21176&hvtargid=kwd-1982381309656&ref=pd_sl_8awf5tywn2_e

226. Additionally, on information and belief, Amazon publishes customer reviews of the Amazon Accused Products that show its customers actually use the Amazon Accused Products to stream and watch video:

This is not a ginger ale!

★★★★★ **high-quality smart TV with an immersive viewing experience**

Reviewed in the United States on July 17, 2023

Size: 50-inch | Configuration: TV only | **Verified Purchase**

If you're looking for a feature-packed television that seamlessly integrates with your smart home devices and provides stunning picture quality, this TV is an excellent choice.

The first thing that impressed me about this smart TV is its picture quality. The 4K Ultra HD resolution delivers crystal-clear and vibrant visuals, bringing your favorite movies, TV shows, and streaming content to life. The colors are rich and accurate, and the contrast is excellent, providing a truly immersive viewing experience. Whether you're watching action-packed movies or enjoying nature documentaries, the picture quality of this TV is truly impressive.

Male in Atlanta

★★★★☆ **Impressive Tech, But There's a Catch!**

Reviewed in the United States on June 15, 2023

Size: 55-inch | Configuration: TV only | **Verified Purchase**

Hey all! Let's talk about the Amazon Fire TV 55" Omni Series. It's a strong contender in the Smart TV market, scoring a solid 4 out of 5 stars from me.

The picture quality on this 4K UHD TV is stunning, honestly, it's like being at the movies. Everything is crisp, vibrant and immersive, which is perfect for my binge-watching sessions!

One of the standout features is the hands-free Alexa. It's pretty cool being able to control your TV with voice commands. However, and this is where it loses a star, every time I switch on the TV, I have to physically select the Fire user profile with the remote. Kinda defeats the purpose of hands-free convenience, right? A bit of a bugbear for me.

The rest of the Fire interface is user-friendly, though, with easy access to Prime Video, Netflix, Disney+, and more. It's a breeze to navigate, once you get past the initial hiccup.

As for value, you're getting a lot of bang for your buck here. The price is reasonable when you consider the picture quality and smart features, minus that one little annoyance.

So there you have it. A pretty fantastic TV that needs to work out one small kink. If you can live with the manual profile selection issue, it's definitely a great choice. Four stars from me!

105 people found this helpful

Helpful | Report

Source: https://www.amazon.com/product-reviews/B09N6F9NV3/ref=cm_cr_arp_d_show_all?ie=UTF8&reviewerType=all_reviews&pageNumber=1#reviews-filter-bar

227. Amazon knowingly and intentionally induces users of one or more of the Amazon Accused Products to directly infringe at least Claim 8 of the ’321 Patent by encouraging, instructing, and aiding one or more persons in the United States, including Amazon employees who test and operate Amazon Accused Products at the direction of Amazon, to make, use (including testing those devices and methods), sell, or offer to sell one or more Amazon Accused

Products, during or after such article's importation into the United States, in a manner that infringes the '321 Patent.

228. For example, as seen in the Amazon publications above, Amazon advertises the Amazon Fire Tablet, Amazon Fire Stick 4K and Amazon Fire TV on its website so that consumers may purchase and use the product, thus inducing its customers to also infringe the '321 Patent. On information and belief, Amazon also advertises other Amazon products that infringe the '321 Patent on its website for consumer purchase.

229. On information and belief, Amazon was aware of the '321 Patent or acted with willful blindness as to the existence of the '321 Patent at least as a result of the filing and service of this complaint. Nokia notified Amazon that it was infringing the'321 Patent in at least April 2015.

230. On information and belief, Amazon contributes to the infringement of at least Claim 8 of the '321 Patent by offering to sell or selling and/or importing a patented component or material and/or apparatus used to practice a patented process, constituting a material part of the inventions, knowing the same to be especially made or especially adapted for use in an infringement and not a staple article or commodity of commerce suitable for substantial non-infringing use.

231. Claim charts that apply Claim 8 of the '321 Patent to the Amazon Accused Products are attached as Exhibits 19A and 19B. The H.265 Standard referenced in Exhibit 19A can be found in Exhibit 24. The H.264 Standard referenced in Exhibit 19B can be found in Exhibit 25.

H. U.S. Patent No. 7,480,254 ("the '254 Patent")

232. The '254 Patent, entitled "System, Apparatus, and Method for Providing Multi-Application Support Using a Single Protocol Stack," issued on January, 20, 2009, to inventor Georg Mayer. The '254 Patent issued from U.S. Patent Application No. 10/448,248, filed on May

28, 2003. The ’254 Patent expires on June 7, 2026. A true and correct copy of the ’254 Patent is attached as Exhibit 9.

233. The ’254 Patent is not directed to merely an abstract idea or any patent ineligible concept. Instead the ’254 Patent is directed to novel and unconventional improvements in the field of network communications. The ’254 Patent provides improvements over prior network communications systems that result in more efficient communication and less resource drain on hardware. These substantial benefits are enjoyed by users of the Accused Products when, for example, receiving messages through a network connection.

234. “Computers communicate with each other, and with other electronic devices, over networks ranging from local area networks (LANs) to wide reaching global area networks (GANs) such as the Internet.” ’254 Patent at 1:18-20. Many “devices are being used for a variety of different types of communication.” *Id*. at 1:24-25. Different communications may require different applications on the receiving device to interpret the communications. “[I]n order for multiple applications to be used in this manner, the terminal must determine which application an incoming message should be directed to.” *Id*. at 1:61-63.

235. Existing methods of determining which application to send a message to included “provid[ing] a SIP stack for each of the different applications operating at the terminal” and “distinguish[ing] applications by different port numbers.” *Id*. at 1:63-2:1. However, these methods were “inefficient and utlize[d] a great deal of resources.” *Id*. at 1:66.

236. The ’254 Patent overcame these technical challenges in the prior systems by inventing a novel process for directing messages to various applications running on a device. The inventions disclosed in the ’254 Patent provide “multi-application support on top of a single protocol stack.” *Id*. at 4: 51-52. These benefits are achieved through “incorporating [a] registered

application identifier into the destination address of the terminal." *Id*. at 4:59-60. This method allows for greater compatibility and reduced processing need for communications systems.

237. On information and belief, Amazon directly infringes at least Claim 1 of the '254 Patent through its manufacture, sale for importation, importation, use, and sale after importation of one or more of the Accused Products.

238. On information and belief, Amazon directly infringes at least Claim 1 of the '254 Patent through its manufacture, sale for importation, importation, use, and sale after importation of one or more of the Amazon Accused Products.

239. As just one example of Amazon's infringement, Amazon manufactures and sells tablets that run FireOS as the operating system. FireOS utilizes Amazon Device Messaging to send messages to applications running on specific devices in a manner that infringes at least Claim 1 of the '254 Patent.

Q: On which Amazon devices is ADM supported?

ADM is supported on Fire TV and Fire tablets, except for Kindle Fire (1st Generation). For ADM notifications to appear on Fire TV, you must implement the Fire TV Notifications.

Source: https://developer.amazon.com/docs/adm/faq-adm.html.

240. On information and belief, Amazon was aware of the '254 Patent or acted with willful blindness as to the existence of the '254 Patent at least as a result of the filing and service of this complaint.

241. Additionally, Amazon instructs and encourages users to use the Amazon Accused Products in a manner that infringes at least Claim 1 of the ''254 Patent by requiring Amazon Device Messaging be used to send messages on the Accused Products.

The A3L Messaging SDK is the abstraction library for cloud messaging, which you can use to send messages to your app. It supports Android as well as Fire OS devices. The A3L Messaging SDK has a dependency on Firebase Cloud Messaging (FCM) for Android devices, and Amazon Device Messaging (ADM) for Fire OS devices.

Source: https://developer.amazon.com/docs/a3l-messaging/understanding-a3l-messaging.html.

242. Amazon knowingly and intentionally induces users of one or more of the Amazon Accused Products to directly infringe at least Claim 1 of the '254 Patent by encouraging, instructing, and aiding one or more persons in the United States, including Amazon employees who test and operate Amazon Accused Products at the direction of Amazon, to make, use (including testing those devices and methods), sell, or offer to sell one or more Amazon Accused Products, during or after such article's importation into the United States, in a manner that infringes the '254 Patent.

243. For example, as seen in the Amazon Publications above, Amazon advertises the Amazon Fire Tablet, Amazon Fire Stick 4K, and Amazon Fire TV on its website so that consumers may purchase and use the products, thus inducing its customers to also infringe the '254 Patent. On information and belief, Amazon also advertises other Amazon products that infringe the '254 Patent on its website for consumer purchase.

244. On information and belief, Amazon contributes to the infringement of at least Claim 1 of the '254 Patent by offering to sell or selling and/or importing a patented component or material and/or apparatus used to practice a patented process, constituting a material part of the inventions, knowing the same to be especially made or especially adapted for use in an infringement and not a staple article or commodity of commerce suitable for substantial non-infringing use.

245. A Claim charts that applies Claim 1 of the '254 Patent to the Amazon Accused Products is attached as Exhibit 20.

I. U.S. Patent No. 8,996,693 ("the '693 Patent")

246. The '693 Patent, entitled "Method and Apparatus for Providing Dynamic Stream Processing of Data on Static Analytics," issued on March 31, 2015, to inventors Sergey Boldyrev

and Lauri Aarno Olavi Tarkkala. The ’693 Patent issued from U.S. Patent Application No. 13/621,511, filed on September 17, 2012. The ’693 Patent expires on April 4, 2033. A true and correct copy of the ’693 Patent is attached as Exhibit 11.

247. The ’693 Patent is not directed to merely an abstract idea or any patent ineligible concept. Instead the ’693 Patent is directed to novel and unconventional improvements in the field of computer processing. The ’693 Patent provides improvements over prior processing systems that result in improved processing capabilities and more accurate outputs. These substantial benefits are enjoyed by users, for example, when utilizing various processing elements in the devices.

248. Service providers are continually challenged to develop applications and services, which process and/or utilize various types of data in order to provide accurate information. ’693 Patent at 1:8-14. “Traditionally, data processing and analysis may be implemented via one or more servers” but are segregated based on whether the data is static or dynamic. *Id*. at 1:18-29. Static data can include “data that is collected over long periods of time such as user behavior data, service usage information, etc.” *Id*. at 1:24-26. Dynamic data can include “data [that] is collected as data streams in real-time (e.g., social networking feeds, location tracking feeds, etc.)” *Id*. at 1:27-29.

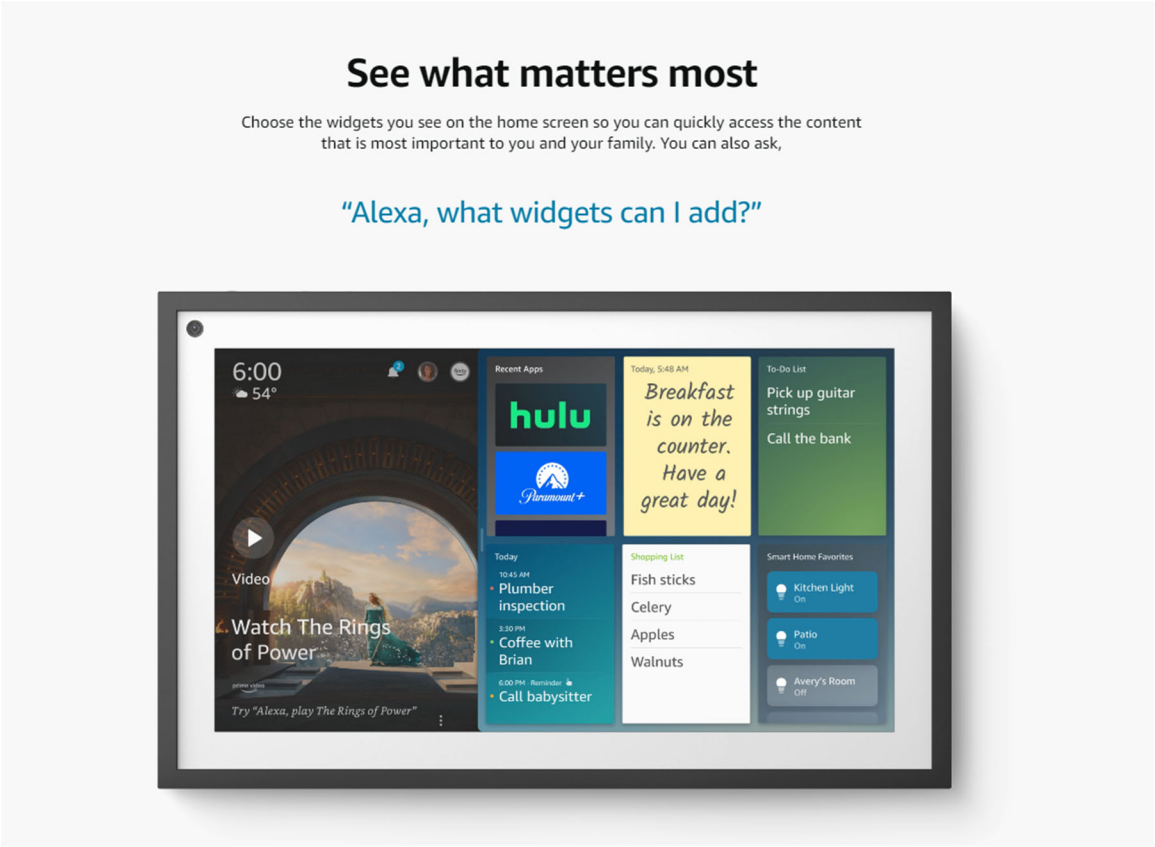
249. Prior to the ’693 Patent, there was “a need for data processing methods to generate comprehensive results that combines the features of slow moving data systems with real-time data systems.” *Id*. at 1: 40-42. The ’693 overcomes this technical need through its inventions, for example, “determining via a processor at least one processing element of at least one dynamic processing mechanism; causing, at least in part, a marshalling via the processor of the at least one processing mechanism; processing of the at least one data object by the at least one static

processing mechanism; and after processing, transferring the at least one data object back to the at least one dynamic processing mechanism back to the at least one dynamic processing mechanism." *Id*. at 25:33-44. The inventions of the '693 Patent thus provide improvements to data processing systems, improving the range of data inputs and accuracy of outputs.

250. On information and belief, Amazon directly infringes at least Claim 1 of the '693 Patent through its manufacture, sale for importation, importation, use, and sale after importation of one or more of the Accused Products.

251. On information and belief, Amazon directly infringes at least Claim 1 of the '693 Patent through its manufacture, sale for importation, importation, use, and sale after importation of one or more of the Amazon Accused Products.

252. As just one example of Amazon's infringement, Amazon manufactures and sells devices enable with Amazon Alexa which use federated learning to enhance Alexa's voice recognition and response capabilities.



Source:

https://www.amazon.com/dp/B0BFZVFG6N/ref=s9_acsd_al_bw_c2_x_1_i?pf_rd_m=ATVPDKIKX0DER&pf_rd_s=merchandised-search-3&pf_rd_r=SX39YPZ919DMZXHA17G1&pf_rd_t=101&pf_rd_p=4d3f892d-9673-4cb3-aa0e-ab4deaa1f568&pf_rd_i=9818047011.

These two topics — privacy protection and fairness — are at the core of *trustworthy machine learning*, an important area of research at Alexa AI. In 2021, we made contributions in the following areas:

- ***Privacy-preserving machine learning***: Differential privacy provides a rigorous way to quantify the privacy of machine learning models. We investigated vulnerabilities presented in the differential-privacy literature and propose computationally efficient mechanisms for protecting against them.
- ***Federated learning***: Federated learning (FL) is a distributed-training technique that keeps customer data on-device. Devices send only model parameter updates to the cloud, not raw data. We studied several FL challenges arising in an industrial setting.

Source: https://www.amazon.science/blog/advances-in-trustworthy-machine-learning-at-alexa-ai.

253. On information and belief, Amazon was aware of the ’693 Patent or acted with willful blindness as to the existence of the ’693 Patent at least as a result of the filing and service of this complaint.

254. Additionally, Amazon instructs and encourages users to use the Amazon Accused Products in a manner that infringes at least Claim 1 of the ’693 Patent by advertising Alexa functionalities on its devices and publishing articles detailing Alexa’s federated learning capabilities.

255. Amazon knowingly and intentionally induces users of one or more of the Amazon Accused Products to directly infringe at least Claim 1 of the ’693 Patent by encouraging, instructing, and aiding one or more persons in the United States, including Amazon employees who test and operate Amazon Accused Products at the direction of Amazon, to make, use

(including testing those devices and methods), sell, or offer to sell one or more Amazon Accused Products, during or after such article's importation into the United States, in a manner that infringes the '693 Patent.

256. For example, as seen in the Amazon Publications above, Amazon advertises infringing products on its website so that consumers may purchase and use the products, thus inducing its customers to also infringe the '693 Patent.

257. On information and belief, Amazon contributes to the infringement of at least Claim 1 of the '693 Patent by offering to sell or selling and/or importing a patented component or material and/or apparatus used to practice a patented process, constituting a material part of the inventions, knowing the same to be especially made or especially adapted for use in an infringement and not a staple article or commodity of commerce suitable for substantial non-infringing use.

258. A Claim charts that applies Claim 1 of the '693 Patent to the Amazon Accused Products is attached as Exhibit 22.

J. U.S. Patent No. 9,473,602 ("the '602 Patent")

259. The '602 Patent, entitled "Portable electronic device," issued on October 18, 2016, to inventor Claus H. Jorgensen. The '602 Patent issued from U.S. Patent Application No. 14/612,712, filed on Feb. 3, 2015. The '602 Patent expires on March 29, 2026. A true and correct copy of the '602 Patent is attached as Exhibit 10.

260. The '602 Patent is not directed to merely an abstract idea or any patent ineligible concept. Instead, the '602 Patent is directed to novel and unconventional improvements in the field of portable electronic device design "and, more particularly, to form factor configuration of a portable electronic device." '602 Patent at 1:18-21. The '602 Patent provides improvements over prior electronic devices that results in a more desirable form factor. These substantial

benefits are enjoyed by users of the Accused Products when operating the portable electronic device.

261. As the ’602 Patent explains, “Ultra thin telephone products have emerged in the market, pioneering a new approach in mechanical architecture for flip-phone designs (also known a clam-shell handset).” *Id.* at 1:23-25. “Priority for these products is mechanical thinness, allowing the feature set and industrial design to be adjusted to suit this goal.” *Id.* at 1:25-28.

262. The ’602 Patent recognized that “There is a desire for an architecture for an ultrathin … product … which can maintain aesthetic balance in proportions, and allow added thickness to avoid a “squeezed” appearance.” *Id.* at 1:35-39. Prior to the ’602 Patent, “conventional telephones [had] the engine located above the battery” which created a device without “a practical design thickness.” *Id.* at 4:2-10.

263. The ’602 Patent overcame these technical challenges in the prior systems by inventing the configuration of a side-by-side engine and battery by using, for example, an engine and a battery that are each less than half of the full width of the device. *Id*. at 3:65-42. The ’602 Patent invented a novel portable electronic apparatus with “an engine section comprising a printed circuit board, a transceiver, a processor and a memory; a battery located adjacent the engine section; and a user input section comprising a keypad located directly above the engine section and the battery.” *Id*. at 1:65-2:5.

264. The ’602 Patent therefore provides specific technological improvements to the functionality and capabilities of form factor design for portable electronic devices, including, for example, “the configuration of the side-by-side engine/battery [which] allows the battery and the engine to have a practical design thickness and still provide a reduced thickness … as compared to conventional flip-phones.” *Id.* at 4:2-7. The keypads are located above the engine section and

the battery, wherein the user input section is located directly opposite the battery without a significant portion of the engine section there between. *Id*. at 4:7-10.

265. The novel solution of the ’602 Patent, including a user input section located above the engine section and a battery, wherein the user input section is located adjacent the battery and the engine section, was not well-understood, routine, or conventional, nor was it simply comprised of well-understood, routine, and conventional activities previously known to the industry. Furthermore, the ordered combination of elements, including a user input section located above the engine section and a battery, wherein the user input section is located adjacent the battery and the engine section, was not well-understood, routine, or conventional. On information and belief, Amazon directly infringes one or more claims of the ’602 Patent through its manufacture, sale for importation, importation, use, and sale after importation of one or more of its Accused Products.

266. As just one example of Amazon’s infringement, Amazon manufactures and sells tablets in a configuration that infringes at least Claim 1 of the ’602 Patent. An example of an Amazon tablet Accused Product is the Amazon Fire HD 8 tablet.

Source: https://www.amazon.com/All-new-Fire-HD-8-tablet/dp/B099Z8HLHT

267. Additionally, Amazon instructs and encourages users to use the Amazon Accused Products in a manner that infringes Claim 1 of the ’602 Patent by, for example, advertising an improved form factor and rear-facing HD camera.

Enhanced performance and portability

Vibrant, fast, and responsive

Enjoy 8″ HD display, now with screen made of strengthened aluminosilicate glass. Includes enhanced hexa-core processor for more responsive performance (up to 30% faster than previous gen).

Great for on-the-go

Up to 13-hour battery life so you can stream content and download videos, music, and books all day. Choose from 32GB or 64GB (add up to 1TB of expandable storage via microSD card). Fire HD 8 is now thinner and lighter (compared to previous gen). Includes USB-C for easy charging. As measured in tumble tests, Fire HD 8 is twice as durable as Apple iPad mini (2021).

Source: https://www.amazon.com/All-new-Fire-HD-8-tablet/dp/B099Z8HLHT

Source: https://www.amazon.com/All-new-Fire-HD-8-tablet/dp/B099Z8HLHT

268. Amazon knowingly and intentionally induces users of one or more of the Amazon Accused Products to directly infringe Claim 1 of the ’602 Patent by encouraging, instructing, and aiding one or more persons in the United States, including Amazon employees who test and operate Amazon Accused Products at the direction of Amazon, to make, use (including testing those devices and methods), sell, or offer to sell one or more Amazon Accused Products, during or after such article’s importation into the United States, in a manner that infringes the ’602 Patent.

269. For example, as seen in the Amazon publications above, Amazon advertises the Amazon Fire Tablet on its website so that consumers may purchase and use the product, thus inducing its customers to also infringe the ’602 Patent. On information and belief, Amazon also advertises other Amazon products that infringe the ’602 Patent on its website for consumer purchase.

270. On information and belief, Amazon was aware of the ’602 Patent or acted with willful blindness as to the existence of the ’602 Patent at least as a result of the filing and service of this complaint.

271. On information and belief, Amazon contributes to the infringement of one or more claims of the ’602 Patent by offering to sell or selling and/or importing a patented component or material and/or apparatus used to practice a patented process, constituting a material part of the inventions, knowing the same to be especially made or especially adapted for use in an infringement and not a staple article or commodity of commerce suitable for substantial non-infringing use.

272. A Claim charts that applies Claim 1 of the ’602 Patent to the Amazon Accused Products is attached as Exhibit 21.

K. U.S. Patent No. 8,918,741 (“the ’741 Patent”)

273. The ’741 Patent, entitled “Unlocking a touch screen device,” issued on December 23, 2014, to inventors Phillip Lindberg and Sami Niemela. The ’741 Patent issued from U.S. Patent Application No. 13/889,750, filed on May 8, 2013. The ’741 Patent expires on June 29, 2027. A true and correct copy of the ’741 Patent is attached as Exhibit 12.

274. The ’741 Patent is not directed to merely an abstract idea or any patent ineligible concept. Instead, the ’741 Patent is directed to novel and unconventional improvements in the field of electronic device functionality and user interfaces. The ’741 Patent provides improvements over prior electronic devices that result in the ability to determine the state, function, or utility of an application while the device in is a locked mode and without fully activating the application. These substantial benefits are enjoyed by users of the Accused Products when, for example, interacting with applications when the device is in a locked state.

275. As the ’741 Patent explains, “Mobile devices, such as mobile communication devices, generally include a variety of applications, including for example Internet communications, instant messaging capabilities, email facilities, web browsing and searching.” ’741 Patent at 1:20-23. “In order to avoid the inadvertent activation of the applications of a device, devices generally includes a locked mode, wherein certain information is displayed, however any user inputs to the device will be ignored in the idle state, except to unlock the device.” *Id.* at 1:23-28. “Typically, unlocking a device can require the manipulation of one or more keys of the device, fingerprint sensors, key combinations and number codes, for example.” *Id.* at 1:28-30.

276. Existing user interfaces provided little flexibility when unlocking a device, as “In most cases, when a device is unlocked, the user interface that is presented is pre-determined by the device.” *Id.* at 1:30-32. Prior to the ’741 Patent, conventional technology was not capable of allowing interaction with applications while the device remained in a locked mode, nor was conventional technology capable of providing direct access or shortcuts to specific applications while in a locked mode. The ’741 Patent also recognized that “[g]iven the variety of applications and application layers that are available [in] such devices, it would be advantageous to be able to easily unlock a device and move directly into a desired user interface or application.” *Id.* at 1:32-37.

277. The ’741 Patent overcame these technical challenges in the prior systems by inventing a novel method and user interface that enables a user to “determine a state, utility, or function of [an] underlying application, without the need to unlock the device or open the application.” *Id*. at 6:56-59. The novel invention of the ’741 Patent allows users to achieve certain benefits of an application “while the device remains in the locked mode.” *Id.* at Claim 11. This

method and user interface also facilitates easier access to application functionality while maintaining the benefits of a locked state.

278. The ’741 Patent therefore provides specific technological improvements to the functionality and capabilities of electronic devices and user interfaces that, for example, “allows the quick activation of high level user interface elements for passive information gathering, while the device remains in locked mode.” *Id*. at 7:11-13. The ’741 Patent also provides specific technological improvements that, for example, “provides the user with the advantage of determining, prior to unlocking a device from an inactive state, an application or set of user interface elements for the device to open up to.” *Id*. at 6:50-53.

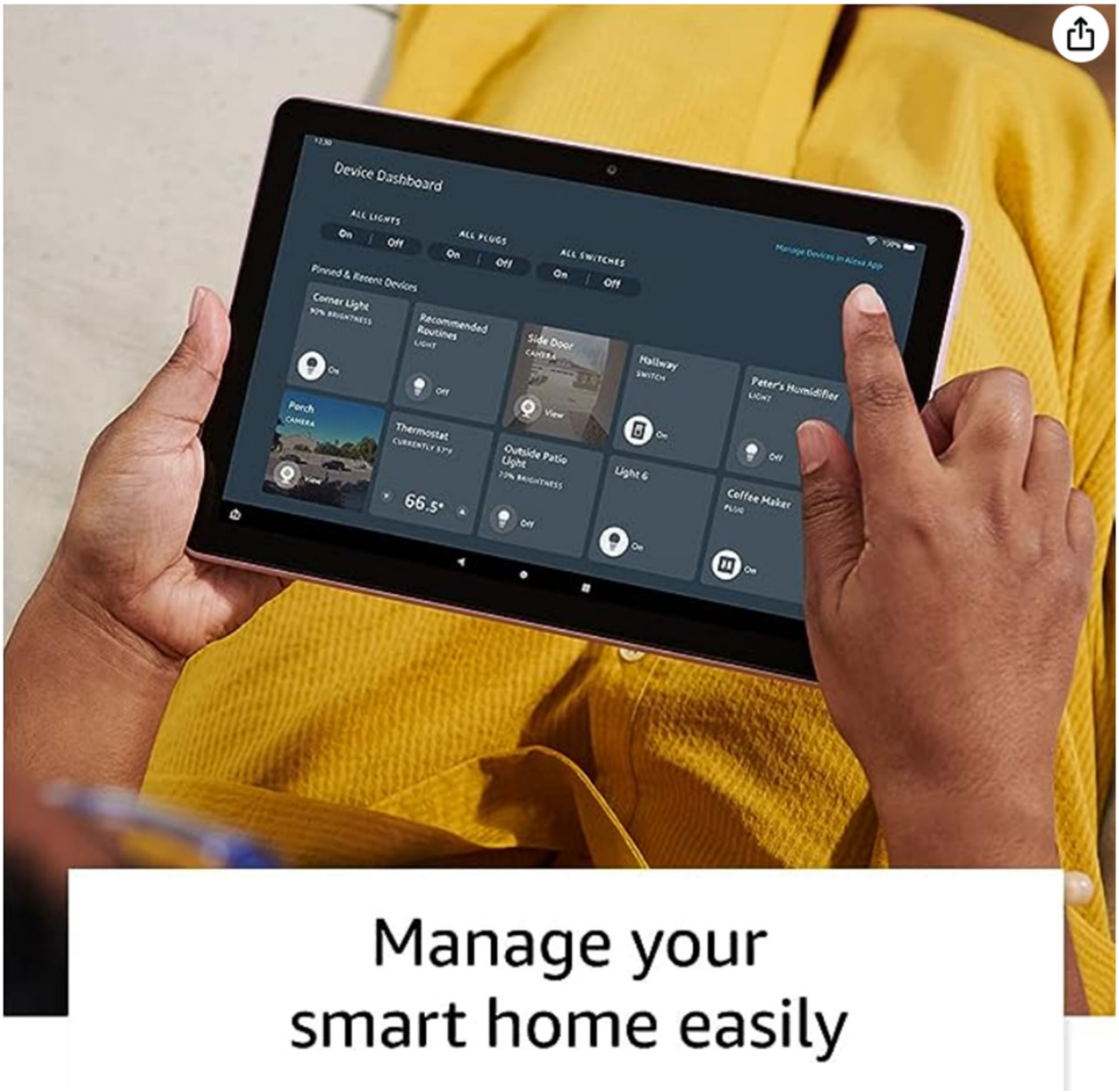
279. The novel solution of the ’741 Patent, including enabling a user to select an object relating to an application while the device remains in locked mode to determine a state, function, or utility of the application without fully activating the application, was not well-understood, routine, or conventional, nor was it simply comprised of well-understood, routine, and conventional activities previously known to the industry. Furthermore, the ordered combination of elements, including displaying an object relating to an application while the device is in locked mode, and enabling a user to select the object to determine a state, function, or utility of the application without fully activating the application while the device remains in locked mode, was not well-understood, routine, or conventional.

280. On information and belief, Amazon directly infringes one or more claims of the ’741 Patent through its manufacture, sale for importation, importation, use, and sale after importation of one or more of its Accused Products.

281. As just one example of Amazon's infringement, Amazon manufactures and sells tablets in a configuration that infringes at least Claim 11 of the '741 Patent. An example of an Amazon tablet Accused Product is the Amazon Fire HD10 Tablet.

Source: https://www.amazon.com/Fire-HD-10-tablet/dp/B08BX7FV5L/ref=sr_1_1?crid=3IPUZZGJZ367S&keywords=amazon+fire+hd10&qid=1697733077&s=amazon-devices&sprefix=amazon+fire+hd10%2Camazon-devices%2C81&sr=1-1

282. Additionally, Amazon instructs and encourages users to use the Amazon Accused Products in a manner that infringes Claim 11 of the '741 Patent by, for example, advertising device dashboard functionality, which is accessible while the tablet is in locked mode.



Source: https://www.amazon.com/Fire-HD-10-tablet/dp/B08BX7FV5L/ref=sr_1_1?crid=3IPUZZGJZ367S&keywords=amazon+fire+hd10&qid=1697733077&s=amazon-devices&sprefix=amazon+fire+hd10%2Camazon-devices%2C81&sr=1-1

283. Amazon knowingly and intentionally induces users of one or more of the Amazon Accused Products to directly infringe Claim 11 of the ’741 Patent by encouraging, instructing, and aiding one or more persons in the United States, including Amazon employees who test and operate Amazon Accused Products at the direction of Amazon, to make, use (including testing

those devices and methods), sell, or offer to sell one or more Amazon Accused Products, during or after such article's importation into the United States, in a manner that infringes the '741 Patent.

284. For example, as seen in the Amazon Publications above, Amazon advertises the Amazon Fire Tablet on its website so that consumers may purchase and use the product, thus inducing its customers to also infringe the '741 Patent. On information and belief, Amazon also advertises other Amazon products that infringe the '741 Patent on its website for consumer purchase.

285. On information and belief, Amazon was aware of the '741 Patent or acted with willful blindness as to the existence of the '741 Patent at least as a result of the filing and service of this complaint.

286. On information and belief, Amazon contributes to the infringement of one or more claims of the '741 Patent by offering to sell or selling and/or importing a patented component or material and/or apparatus used to practice a patented process, constituting a material part of the inventions, knowing the same to be especially made or especially adapted for use in an infringement and not a staple article or commodity of commerce suitable for substantial non-infringing use.

287. A Claim charts that applies Claim 11 of the '741 Patent to the Amazon Accused Products is attached as Exhibit 23.

COUNT I: PATENT INFRINGEMENT OF THE '808 PATENT

288. Nokia incorporates by reference the preceding paragraphs as though fully set forth herein.

289. Amazon has had knowledge and notice of the '808 Patent and its infringement thereof since at least April 2015. Amazon has also received actual notice of the '808 Patent as of

the date this lawsuit was filed and/or the date this First Amended Complaint was served upon Amazon.

290. Amazon infringes, contributes to the infringement of, and/or induces infringement of the ’808 Patent by making, using, selling, offering for sale, and/or importing into the United States products and/or methods covered by at least Claim 7 of the ’808 Patent.

291. Amazon makes, uses, sells, offers for sale, and/or imports the Accused Products in this District and elsewhere in the United States, and thus directly infringes the ’808 Patent literally and/or under the Doctrine of Equivalents, in violation of 35 U.S.C. § 271.

292. Amazon is also indirectly infringing the ’808 Patent by way of inducement and/or contributory infringement, literally or under the doctrine of equivalents, in violation of 35 U.S.C. § 271. Amazon indirectly infringes the ’808 Patent, as provided in 35 U.S.C. § 271(b), by inducing infringement by others, such as Amazon’s customers and end-users, in this District and elsewhere in the United States. For example, Amazon’s customers and end-users directly infringe through their use of the inventions claimed in the ’808 Patent. Amazon induces this direct infringement through its affirmative acts of manufacturing, selling, distributing, and/or otherwise making available the Accused Products, and providing instructions, documentation, and other information to customers and end-users suggesting they use the Accused Products in an infringing manner, including in-store technical support, online technical support, marketing, product manuals, advertisements, online documentation, developer information, and API documentation. As a result of Amazon’s inducement, Amazon’s customers and end-users use the Accused Products in the way Amazon intends and directly infringe the ’808 Patent. Amazon has performed and continues to perform these affirmative acts with knowledge of the ’808 Patent and with the intent, or willful blindness, that the induced acts directly infringe the ’808 Patent.

293. Amazon also indirectly infringes the ’808 Patent, as provided by 35 U.S.C. § 271(c), by contributing to direct infringement committed by others, such as customers and end-users, in this District and elsewhere in the United States. Amazon’s affirmative acts of selling and offering to sell, in this District and elsewhere in the United States, the Accused Products and causing the Accused Products to be manufactured, used, sold, and offered for sale contribute to Amazon’s customers’ and end-users’ use of the Accused Products, such that the ’808 Patent is directly infringed. The accused components within the Accused Products are material to the invention of the ’808 Patent, are not staple articles or commodities of commerce, have no substantial non-infringing uses, and are known by Amazon to be especially made or especially adapted for use in infringement of the ’808 Patent. Amazon has performed and continues to perform these affirmative acts with knowledge of the ’808 Patent and with intent, or willful blindness, that they cause the direct infringement of the ’808 Patent.

294. Upon information and belief, Amazon derives revenue, directly and indirectly, from the activities relating to the Accused Products, including their importation, testing, manufacture, use, sale, and offer for sale.

295. Amazon’s infringement of the ’808 Patent has damaged and will continue to damage Nokia.

COUNT II: PATENT INFRINGEMENT OF THE ’134 PATENT

296. Nokia incorporates by reference the preceding paragraphs as though fully set forth herein.

297. Amazon has had knowledge and notice of the ’134 Patent and its infringement thereof since at least April 2015. Amazon has also received actual notice of the ’134 Patent as of the date this lawsuit was filed and/or the date this First Amended Complaint was served upon Amazon.

298. Amazon infringes, contributes to the infringement of, and/or induces infringement of the ’134 Patent by making, using, selling, offering for sale, and/or importing into the United States products and/or methods covered by at least Claim 1 of the ’134 Patent.

299. Amazon makes, uses, sells, offers for sale, and/or imports the Accused Products in this District and elsewhere in the United States, and thus directly infringes the ’134 Patent literally and/or under the Doctrine of Equivalents, in violation of 35 U.S.C. § 271.

300. Amazon is also indirectly infringing the ’134 Patent by way of inducement and/or contributory infringement, literally or under the doctrine of equivalents, in violation of 35 U.S.C. § 271. Amazon indirectly infringes the ’134 Patent, as provided in 35 U.S.C. § 271(b), by inducing infringement by others, such as Amazon’s customers and end-users, in this District and elsewhere in the United States. For example, Amazon’s customers and end-users directly infringe through their use of the inventions claimed in the ’134 Patent. Amazon induces this direct infringement through its affirmative acts of manufacturing, selling, distributing, and/or otherwise making available the Accused Products, and providing instructions, documentation, and other information to customers and end-users suggesting they use the Accused Products in an infringing manner, including in-store technical support, online technical support, marketing, product manuals, advertisements, online documentation, developer information, and API documentation. As a result of Amazon’s inducement, Amazon’s customers and end-users use the Accused Products in the way Amazon intends and directly infringe the ’134 Patent. Amazon has performed and continues to perform these affirmative acts with knowledge of the ’134 Patent and with the intent, or willful blindness, that the induced acts directly infringe the ’134 Patent.

301. Amazon also indirectly infringes the ’134 Patent, as provided by 35 U.S.C. § 271(c), by contributing to direct infringement committed by others, such as

customers and end-users, in this District and elsewhere in the United States. Amazon's affirmative acts of selling and offering to sell, in this District and elsewhere in the United States, the Accused Products and causing the Accused Products to be manufactured, used, sold, and offered for sale contribute to Amazon's customers' and end-users' use of the Accused Products, such that the '134 Patent is directly infringed. The accused components within the Accused Products are material to the invention of the '134 Patent, are not staple articles or commodities of commerce, have no substantial non-infringing uses, and are known by Amazon to be especially made or especially adapted for use in infringement of the '134 Patent. Amazon has performed and continues to perform these affirmative acts with knowledge of the '134 Patent and with intent, or willful blindness, that they cause the direct infringement of the '134 Patent.

302. Upon information and belief, Amazon derives revenue, directly and indirectly, from the activities relating to the Accused Products, including their importation, testing, manufacture, use, sale, and offer for sale.

303. Amazon's infringement of the '134 Patent has damaged and will continue to damage Nokia.

COUNT III: PATENT INFRINGEMENT OF THE '818 PATENT

304. Nokia incorporates by reference the preceding paragraphs as though fully set forth herein.

305. Amazon has had knowledge and notice of the '818 Patent and its infringement thereof since at least April 2015. Amazon has also received actual notice of the '818 Patent as of the date this lawsuit was filed and/or the date this First Amended Complaint was served upon Amazon.

306. Amazon infringes, contributes to the infringement of, and/or induces infringement of the ’818 Patent by making, using, selling, offering for sale, and/or importing into the United States products and/or methods covered by at least Claim 6 of the ’818 Patent.

307. Amazon makes, uses, sells, offers for sale, and/or imports the Accused Products in this District and elsewhere in the United States, and thus directly infringes the ’818 Patent literally and/or under the Doctrine of Equivalents, in violation of 35 U.S.C. § 271.

308. Amazon is also indirectly infringing the ’818 Patent by way of inducement and/or contributory infringement, literally or under the doctrine of equivalents, in violation of 35 U.S.C. § 271. Amazon indirectly infringes the ’818 Patent, as provided in 35 U.S.C. § 271(b), by inducing infringement by others, such as Amazon’s customers and end-users, in this District and elsewhere in the United States. For example, Amazon’s customers and end-users directly infringe through their use of the inventions claimed in the ’818 Patent. Amazon induces this direct infringement through its affirmative acts of manufacturing, selling, distributing, and/or otherwise making available the Accused Products, and providing instructions, documentation, and other information to customers and end-users suggesting they use the Accused Products in an infringing manner, including in-store technical support, online technical support, marketing, product manuals, advertisements, online documentation, developer information, and API documentation. As a result of Amazon’s inducement, Amazon’s customers and end-users use the Accused Products in the way Amazon intends and directly infringe the ’818 Patent. Amazon has performed and continues to perform these affirmative acts with knowledge of the ’818 Patent and with the intent, or willful blindness, that the induced acts directly infringe the ’818 Patent.

309. Amazon also indirectly infringes the ’818 Patent, as provided by 35 U.S.C. § 271(c), by contributing to direct infringement committed by others, such as

customers and end-users, in this District and elsewhere in the United States. Amazon's affirmative acts of selling and offering to sell, in this District and elsewhere in the United States, the Accused Products and causing the Accused Products to be manufactured, used, sold, and offered for sale contribute to Amazon's customers' and end-users' use of the Accused Products, such that the '818 Patent is directly infringed. The accused components within the Accused Products are material to the invention of the '818 Patent, are not staple articles or commodities of commerce, have no substantial non-infringing uses, and are known by Amazon to be especially made or especially adapted for use in infringement of the '818 Patent. Amazon has performed and continues to perform these affirmative acts with knowledge of the '818 Patent and with intent, or willful blindness, that they cause the direct infringement of the '818 Patent.

310. Upon information and belief, Amazon derives revenue, directly and indirectly, from the activities relating to the Accused Products, including their importation, testing, manufacture, use, sale, and offer for sale.

311. Amazon's infringement of the '818 Patent has damaged and will continue to damage Nokia.

COUNT IV: PATENT INFRINGEMENT OF THE '714 PATENT

312. Nokia incorporates by reference the preceding paragraphs as though fully set forth herein.

313. Amazon has had knowledge and notice of the '714 Patent and its infringement thereof since at least October 24, 2023. Amazon has also received actual notice of the '714 Patent as of the date this lawsuit was filed and/or the date this First Amended Complaint was served upon Amazon.

314. Amazon infringes, contributes to the infringement of, and/or induces infringement of the ’714 Patent by making, using, selling, offering for sale, and/or importing into the United States products and/or methods covered by at least Claim 9 of the ’714 Patent.

315. Amazon makes, uses, sells, offers for sale, and/or imports the Accused Products in this District and elsewhere in the United States, and thus directly infringes the ’714 Patent literally and/or under the Doctrine of Equivalents, in violation of 35 U.S.C. § 271.

316. Amazon is also indirectly infringing the ’714 Patent by way of inducement and/or contributory infringement, literally or under the doctrine of equivalents, in violation of 35 U.S.C. § 271. Amazon indirectly infringes the ’714 Patent, as provided in 35 U.S.C. § 271(b), by inducing infringement by others, such as Amazon’s customers and end-users, in this District and elsewhere in the United States. For example, Amazon’s customers and end-users directly infringe through their use of the inventions claimed in the ’714 Patent. Amazon induces this direct infringement through its affirmative acts of manufacturing, selling, distributing, and/or otherwise making available the Accused Products, and providing instructions, documentation, and other information to customers and end-users suggesting they use the Accused Products in an infringing manner, including in-store technical support, online technical support, marketing, product manuals, advertisements, online documentation, developer information, and API documentation. As a result of Amazon’s inducement, Amazon’s customers and end-users use the Accused Products in the way Amazon intends and directly infringe the ’714 Patent. Amazon has performed and continues to perform these affirmative acts with knowledge of the ’714 Patent and with the intent, or willful blindness, that the induced acts directly infringe the ’714 Patent.

317. Amazon also indirectly infringes the ’714 Patent, as provided by 35 U.S.C. § 271(c), by contributing to direct infringement committed by others, such as

customers and end-users, in this District and elsewhere in the United States. Amazon's affirmative acts of selling and offering to sell, in this District and elsewhere in the United States, the Accused Products and causing the Accused Products to be manufactured, used, sold, and offered for sale contribute to Amazon's customers' and end-users' use of the Accused Products, such that the '714 Patent is directly infringed. The accused components within the Accused Products are material to the invention of the '714 Patent, are not staple articles or commodities of commerce, have no substantial non-infringing uses, and are known by Amazon to be especially made or especially adapted for use in infringement of the '714 Patent. Amazon has performed and continues to perform these affirmative acts with knowledge of the '714 Patent and with intent, or willful blindness, that they cause the direct infringement of the '714 Patent.

318. Upon information and belief, Amazon derives revenue, directly and indirectly, from the activities relating to the Accused Products, including their importation, testing, manufacture, use, sale, and offer for sale.

319. Amazon's infringement of the '714 Patent has damaged and will continue to damage Nokia.

COUNT V: PATENT INFRINGEMENT OF THE '267 PATENT

320. Nokia incorporates by reference the preceding paragraphs as though fully set forth herein.

321. Amazon has had knowledge and notice of the '267 Patent and its infringement thereof since at least October 31, 2023. Amazon has also received actual notice of the '267 Patent as of the date this lawsuit was filed and/or the date this First Amended Complaint was served upon Amazon.

322. Amazon infringes, contributes to the infringement of, and/or induces infringement of the ’267 Patent by making, using, selling, offering for sale, and/or importing into the United States products and/or methods covered by at least Claim 19 of the ’267 Patent.

323. Amazon makes, uses, sells, offers for sale, and/or imports the Accused Products in this District and elsewhere in the United States, and thus directly infringes the ’267 Patent literally and/or under the Doctrine of Equivalents, in violation of 35 U.S.C. § 271.

324. Amazon is also indirectly infringing the ’267 Patent by way of inducement and/or contributory infringement, literally or under the doctrine of equivalents, in violation of 35 U.S.C. § 271. Amazon indirectly infringes the ’267 Patent, as provided in 35 U.S.C. § 271(b), by inducing infringement by others, such as Amazon’s customers and end-users, in this District and elsewhere in the United States. For example, Amazon’s customers and end-users directly infringe through their use of the inventions claimed in the ’267 Patent. Amazon induces this direct infringement through its affirmative acts of manufacturing, selling, distributing, and/or otherwise making available the Accused Products, and providing instructions, documentation, and other information to customers and end-users suggesting they use the Accused Products in an infringing manner, including in-store technical support, online technical support, marketing, product manuals, advertisements, online documentation, developer information, and API documentation. As a result of Amazon’s inducement, Amazon’s customers and end-users use the Accused Products in the way Amazon intends and directly infringe the ’267 Patent. Amazon has performed and continues to perform these affirmative acts with knowledge of the ’267 Patent and with the intent, or willful blindness, that the induced acts directly infringe the ’267 Patent.

325. Amazon also indirectly infringes the ’267 Patent, as provided by 35 U.S.C. § 271(c), by contributing to direct infringement committed by others, such as

customers and end-users, in this District and elsewhere in the United States. Amazon's affirmative acts of selling and offering to sell, in this District and elsewhere in the United States, the Accused Products and causing the Accused Products to be manufactured, used, sold, and offered for sale contribute to Amazon's customers' and end-users' use of the Accused Products, such that the '267 Patent is directly infringed. The accused components within the Accused Products are material to the invention of the '267 Patent, are not staple articles or commodities of commerce, have no substantial non-infringing uses, and are known by Amazon to be especially made or especially adapted for use in infringement of the '267 Patent. Amazon has performed and continues to perform these affirmative acts with knowledge of the '267 Patent and with intent, or willful blindness, that they cause the direct infringement of the '267 Patent.

326. Upon information and belief, Amazon derives revenue, directly and indirectly, from the activities relating to the Accused Products, including their importation, testing, manufacture, use, sale, and offer for sale.

327. Amazon's infringement of the '267 Patent has damaged and will continue to damage Nokia.

COUNT VI: PATENT INFRINGEMENT OF THE '991 PATENT

328. Nokia incorporates by reference the preceding paragraphs as though fully set forth herein.

329. Amazon has had knowledge and notice of the '991 Patent and its infringement thereof since at least October 24, 2023. Amazon has also received actual notice of the '991 Patent as of the date this lawsuit was filed and/or the date this First Amended Complaint was served upon Amazon.

330. Amazon infringes, contributes to the infringement of, and/or induces infringement of the ’991 Patent by making, using, selling, offering for sale, and/or importing into the United States products and/or methods covered by at least Claim 22 of the ’991 Patent.

331. Amazon makes, uses, sells, offers for sale, and/or imports the Accused Products in this District and elsewhere in the United States, and thus directly infringes the ’991 Patent literally and/or under the Doctrine of Equivalents, in violation of 35 U.S.C. § 271.

332. Amazon is also indirectly infringing the ’991 Patent by way of inducement and/or contributory infringement, literally or under the doctrine of equivalents, in violation of 35 U.S.C. § 271. Amazon indirectly infringes the ’991 Patent, as provided in 35 U.S.C. § 271(b), by inducing infringement by others, such as Amazon’s customers and end-users, in this District and elsewhere in the United States. For example, Amazon’s customers and end-users directly infringe through their use of the inventions claimed in the ’991 Patent. Amazon induces this direct infringement through its affirmative acts of manufacturing, selling, distributing, and/or otherwise making available the Accused Products, and providing instructions, documentation, and other information to customers and end-users suggesting they use the Accused Products in an infringing manner, including in-store technical support, online technical support, marketing, product manuals, advertisements, online documentation, developer information, and API documentation. As a result of Amazon’s inducement, Amazon’s customers and end-users use the Accused Products in the way Amazon intends and directly infringe the ’991 Patent. Amazon has performed and continues to perform these affirmative acts with knowledge of the ’991 Patent and with the intent, or willful blindness, that the induced acts directly infringe the ’991 Patent.

333. Amazon also indirectly infringes the ’991 Patent, as provided by 35 U.S.C. § 271(c), by contributing to direct infringement committed by others, such as

customers and end-users, in this District and elsewhere in the United States. Amazon's affirmative acts of selling and offering to sell, in this District and elsewhere in the United States, the Accused Products and causing the Accused Products to be manufactured, used, sold, and offered for sale contribute to Amazon's customers' and end-users' use of the Accused Products, such that the '991 Patent is directly infringed. The accused components within the Accused Products are material to the invention of the '991 Patent, are not staple articles or commodities of commerce, have no substantial non-infringing uses, and are known by Amazon to be especially made or especially adapted for use in infringement of the '991 Patent. Amazon has performed and continues to perform these affirmative acts with knowledge of the '991 Patent and with intent, or willful blindness, that they cause the direct infringement of the '991 Patent.

334. Upon information and belief, Amazon derives revenue, directly and indirectly, from the activities relating to the Accused Products, including their importation, testing, manufacture, use, sale, and offer for sale.

335. Amazon's infringement of the '991 Patent has damaged and will continue to damage Nokia.

COUNT VII: PATENT INFRINGEMENT OF THE '321 PATENT

336. Nokia incorporates by reference the preceding paragraphs as though fully set forth herein.

337. Amazon has had knowledge and notice of the '321 Patent and its infringement thereof since at least April 2015, when Nokia identified the patent to Amazon. Amazon has also received actual notice of the '321 Patent as of the date this lawsuit was filed and/or the date this First Amended Complaint was served upon Amazon.

338. Amazon infringes, contributes to the infringement of, and/or induces infringement of the ’321 Patent by making, using, selling, offering for sale, and/or importing into the United States products and/or methods covered by at least Claim 8 of the ’321 Patent.

339. Amazon makes, uses, sells, offers for sale, and/or imports the Accused Products in this District and elsewhere in the United States, and thus directly infringes the ’321 Patent literally and/or under the Doctrine of Equivalents, in violation of 35 U.S.C. § 271.

340. Amazon is also indirectly infringing the ’321 Patent by way of inducement and/or contributory infringement, literally or under the doctrine of equivalents, in violation of 35 U.S.C. § 271. Amazon indirectly infringes the ’321 Patent, as provided in 35 U.S.C. § 271(b), by inducing infringement by others, such as Amazon’s customers and end-users, in this District and elsewhere in the United States. For example, Amazon’s customers and end-users directly infringe through their use of the inventions claimed in the ’321 Patent. Amazon induces this direct infringement through its affirmative acts of manufacturing, selling, distributing, and/or otherwise making available the Accused Products, and providing instructions, documentation, and other information to customers and end-users suggesting they use the Accused Products in an infringing manner, including in-store technical support, online technical support, marketing, product manuals, advertisements, online documentation, developer information, and API documentation. As a result of Amazon’s inducement, Amazon’s customers and end-users use the Accused Products in the way Amazon intends and directly infringe the ’321 Patent. Amazon has performed and continues to perform these affirmative acts with knowledge of the ’321 Patent and with the intent, or willful blindness, that the induced acts directly infringe the ’321 Patent.

341. Amazon also indirectly infringes the ’321 Patent, as provided by 35 U.S.C. § 271(c), by contributing to direct infringement committed by others, such as

customers and end-users, in this District and elsewhere in the United States. Amazon's affirmative acts of selling and offering to sell, in this District and elsewhere in the United States, the Accused Products and causing the Accused Products to be manufactured, used, sold, and offered for sale contribute to Amazon's customers' and end-users' use of the Accused Products, such that the '321 Patent is directly infringed. The accused components within the Accused Products are material to the invention of the '321 Patent, are not staple articles or commodities of commerce, have no substantial non-infringing uses, and are known by Amazon to be especially made or especially adapted for use in infringement of the '321 Patent. Amazon has performed and continues to perform these affirmative acts with knowledge of the '321 Patent and with intent, or willful blindness, that they cause the direct infringement of the '321 Patent.

342. Upon information and belief, Amazon derives revenue, directly and indirectly, from the activities relating to the Accused Products, including their importation, testing, manufacture, use, sale, and offer for sale.

343. Amazon's infringement of the '321 Patent has damaged and will continue to damage Nokia.

COUNT VIII: PATENT INFRINGEMENT OF THE '254 PATENT

344. Nokia incorporates by reference the preceding paragraphs as though fully set forth herein.

345. Amazon has received actual notice of the '254 Patent as of the date this lawsuit was filed and/or the date this First Amended Complaint was served upon Amazon.

346. Amazon infringes, contributes to the infringement of, and/or induces infringement of the '254 Patent by making, using, selling, offering for sale, and/or importing into the United States products and/or methods covered by at least Claim 1 of the '254 Patent.

347. Amazon makes, uses, sells, offers for sale, and/or imports the Accused Products in this District and elsewhere in the United States, and thus directly infringes the ’254 Patent literally and/or under the Doctrine of Equivalents, in violation of 35 U.S.C. § 271.

348. Amazon is also indirectly infringing the ’254 Patent by way of inducement and/or contributory infringement, literally or under the doctrine of equivalents, in violation of 35 U.S.C. § 271. Amazon indirectly infringes the ’254 Patent, as provided in 35 U.S.C. § 271(b), by inducing infringement by others, such as Amazon’s customers and end-users, in this District and elsewhere in the United States. For example, Amazon’s customers and end-users directly infringe through their use of the inventions claimed in the ’254 Patent. Amazon induces this direct infringement through its affirmative acts of manufacturing, selling, distributing, and/or otherwise making available the Accused Products, and providing instructions, documentation, and other information to customers and end-users suggesting they use the Accused Products in an infringing manner, including in-store technical support, online technical support, marketing, product manuals, advertisements, online documentation, developer information, and API documentation. As a result of Amazon’s inducement, Amazon’s customers and end-users use the Accused Products in the way Amazon intends and directly infringe the ’254 Patent. Amazon has performed and continues to perform these affirmative acts with knowledge of the ’254 Patent and with the intent, or willful blindness, that the induced acts directly infringe the ’254 Patent.

349. Amazon also indirectly infringes the ’254 Patent, as provided by 35 U.S.C. § 271(c), by contributing to direct infringement committed by others, such as customers and end-users, in this District and elsewhere in the United States. Amazon’s affirmative acts of selling and offering to sell, in this District and elsewhere in the United States, the Accused Products and causing the Accused Products to be manufactured, used, sold, and offered for sale

contribute to Amazon's customers' and end-users' use of the Accused Products, such that the '254 Patent is directly infringed. The accused components within the Accused Products are material to the invention of the '254 Patent, are not staple articles or commodities of commerce, have no substantial non-infringing uses, and are known by Amazon to be especially made or especially adapted for use in infringement of the '254 Patent. Amazon has performed and continues to perform these affirmative acts with knowledge of the '254 Patent and with intent, or willful blindness, that they cause the direct infringement of the '254 Patent.

350. Upon information and belief, Amazon derives revenue, directly and indirectly, from the activities relating to the Accused Products, including their importation, testing, manufacture, use, sale, and offer for sale.

351. Amazon's infringement of the '254 Patent has damaged and will continue to damage Nokia.

COUNT IX: PATENT INFRINGEMENT OF THE '693 PATENT

352. Nokia incorporates by reference the preceding paragraphs as though fully set forth herein.

353. Amazon has also received actual notice of the '693 Patent as of the date this lawsuit was filed and/or the date this First Amended Complaint was served upon Amazon.

354. Amazon infringes, contributes to the infringement of, and/or induces infringement of the '693 Patent by making, using, selling, offering for sale, and/or importing into the United States products and/or methods covered by at least Claim 1 of the '693 Patent.

355. Amazon makes, uses, sells, offers for sale, and/or imports the Accused Products in this District and elsewhere in the United States, and thus directly infringes the '693 Patent literally and/or under the Doctrine of Equivalents, in violation of 35 U.S.C. § 271.

356. Amazon is also indirectly infringing the ’693 Patent by way of inducement and/or contributory infringement, literally or under the doctrine of equivalents, in violation of 35 U.S.C. § 271. Amazon indirectly infringes the ’693 Patent, as provided in 35 U.S.C. § 271(b), by inducing infringement by others, such as Amazon’s customers and end-users, in this District and elsewhere in the United States. For example, Amazon’s customers and end-users directly infringe through their use of the inventions claimed in the ’693 Patent. Amazon induces this direct infringement through its affirmative acts of manufacturing, selling, distributing, and/or otherwise making available the Accused Products, and providing instructions, documentation, and other information to customers and end-users suggesting they use the Accused Products in an infringing manner, including in-store technical support, online technical support, marketing, product manuals, advertisements, online documentation, developer information, and API documentation. As a result of Amazon’s inducement, Amazon’s customers and end-users use the Accused Products in the way Amazon intends and directly infringe the ’693 Patent. Amazon has performed and continues to perform these affirmative acts with knowledge of the ’693 Patent and with the intent, or willful blindness, that the induced acts directly infringe the ’693 Patent.

357. Amazon also indirectly infringes the ’693 Patent, as provided by 35 U.S.C. § 271(c), by contributing to direct infringement committed by others, such as customers and end-users, in this District and elsewhere in the United States. Amazon’s affirmative acts of selling and offering to sell, in this District and elsewhere in the United States, the Accused Products and causing the Accused Products to be manufactured, used, sold, and offered for sale contribute to Amazon’s customers’ and end-users’ use of the Accused Products, such that the ’693 Patent is directly infringed. The accused components within the Accused Products are material to the invention of the ’693 Patent, are not staple articles or commodities of commerce,

have no substantial non-infringing uses, and are known by Amazon to be especially made or especially adapted for use in infringement of the ’693 Patent. Amazon has performed and continues to perform these affirmative acts with knowledge of the ’693 Patent and with intent, or willful blindness, that they cause the direct infringement of the ’693 Patent.

358. Upon information and belief, Amazon derives revenue, directly and indirectly, from the activities relating to the Accused Products, including their importation, testing, manufacture, use, sale, and offer for sale.

359. Amazon’s infringement of the ’693 Patent has damaged and will continue to damage Nokia.

COUNT X: PATENT INFRINGEMENT OF THE ’602 PATENT

360. Nokia incorporates by reference the preceding paragraphs as though fully set forth herein.

361. . Amazon has received actual notice of the ’602 Patent as of the date this lawsuit was filed and/or the date this First Amended Complaint was served on Amazon.

362. Amazon infringes, contributes to the infringement of, and/or induces infringement of the ’602 Patent by making, using, selling, offering for sale, and/or importing into the United States products and/or methods covered by one or more claims of the ’602 Patent.

363. Amazon makes, uses, sells, offers for sale, and/or imports the Accused Products in this District and elsewhere in the United States, and thus directly infringes the ’602 Patent literally and/or under the Doctrine of Equivalents, in violation of 35 U.S.C. § 271.

364. Amazon is also indirectly infringing the claims of the ’602 Patent by way of inducement and/or contributory infringement, literally or under the doctrine of equivalents, in violation of 35 U.S.C. § 271. Amazon indirectly infringes the ’602 Patent, as provided in 35 U.S.C. § 271(b), by inducing infringement by others, such as Amazon’s customers and end-

users, in this District and elsewhere in the United States. For example, Amazon's customers and end-users directly infringe through their use of the inventions claimed in the '602 Patent. Amazon induces this direct infringement through its affirmative acts of manufacturing, selling, distributing, and/or otherwise making available the Accused Products, and providing instructions, documentation, and other information to customers and end-users suggesting they use the Accused Products in an infringing manner, including in-store technical support, online technical support, marketing, product manuals, advertisements, online documentation, developer information, and API documentation. As a result of Amazon's inducement, Amazon's customers and end-users use the Accused Products in the way Amazon intends and directly infringe the '602 Patent. Amazon has performed and continues to perform these affirmative acts with knowledge of the '602 Patent and with the intent, or willful blindness, that the induced acts directly infringe the '602 Patent.

365. Amazon also indirectly infringes the '602 Patent, as provided by 35 U.S.C. § 271(c), by contributing to direct infringement committed by others, such as customers and end-users, in this District and elsewhere in the United States. Amazon's affirmative acts of selling and offering to sell, in this District and elsewhere in the United States, the Accused Products and causing the Accused Products to be manufactured, used, sold, and offered for sale contribute to Amazon's customers' and end-users' use of the Accused Products, such that the '602 Patent is directly infringed. The accused components within the Accused Products are material to the invention of the '602 Patent, are not staple articles or commodities of commerce, have no substantial non-infringing uses, and are known by Amazon to be especially made or especially adapted for use in infringement of the '602 Patent. Amazon has performed and

continues to perform these affirmative acts with knowledge of the ’602 Patent and with intent, or willful blindness, that they cause the direct infringement of the ’602 Patent.

366. Upon information and belief, Amazon derives revenue, directly and indirectly, from the activities relating to the Accused Products, including their importation, testing, manufacture, use, sale, and offer for sale.

367. Amazon’s infringement of the ’602 Patent has damaged and will continue to damage Nokia.

COUNT XI: PATENT INFRINGEMENT OF THE ’741 PATENT

368. Nokia incorporates by reference the preceding paragraphs as though fully set forth herein.

369. Amazon has received actual notice of the ’741 Patent as of the date this lawsuit was filed and/or the date this First Amended Complaint was served upon Amazon.

370. Amazon infringes, contributes to the infringement of, and/or induces infringement of the ’741 Patent by making, using, selling, offering for sale, and/or importing into the United States products and/or methods covered by one or more claims of the ’741 Patent.

371. Amazon makes, uses, sells, offers for sale, and/or imports the Accused Products in this District and elsewhere in the United States, and thus directly infringes the ’741 Patent literally and/or under the Doctrine of Equivalents, in violation of 35 U.S.C. § 271.

372. Amazon is also indirectly infringing the claims of the ’741 Patent by way of inducement and/or contributory infringement, literally or under the doctrine of equivalents, in violation of 35 U.S.C. § 271. Amazon indirectly infringes the ’741 Patent, as provided in 35 U.S.C. § 271(b), by inducing infringement by others, such as Amazon’s customers and end-users, in this District and elsewhere in the United States. For example, Amazon’s customers and end-users directly infringe through their use of the inventions claimed in the ’741 Patent. Amazon

induces this direct infringement through its affirmative acts of manufacturing, selling, distributing, and/or otherwise making available the Accused Products, and providing instructions, documentation, and other information to customers and end-users suggesting they use the Accused Products in an infringing manner, including in-store technical support, online technical support, marketing, product manuals, advertisements, online documentation, developer information, and API documentation. As a result of Amazon's inducement, Amazon's customers and end-users use the Accused Products in the way Amazon intends and directly infringe the '741 Patent. Amazon has performed and continues to perform these affirmative acts with knowledge of the '741 Patent and with the intent, or willful blindness, that the induced acts directly infringe the '741 Patent.

373. Amazon also indirectly infringes the '741 Patent, as provided by 35 U.S.C. § 271(c), by contributing to direct infringement committed by others, such as customers and end-users, in this District and elsewhere in the United States. Amazon's affirmative acts of selling and offering to sell, in this District and elsewhere in the United States, the Accused Products and causing the Accused Products to be manufactured, used, sold, and offered for sale contribute to Amazon's customers' and end-users' use of the Accused Products, such that the '741 Patent is directly infringed. The accused components within the Accused Products are material to the invention of the '741 Patent, are not staple articles or commodities of commerce, have no substantial non-infringing uses, and are known by Amazon to be especially made or especially adapted for use in infringement of the '741 Patent. Amazon has performed and continues to perform these affirmative acts with knowledge of the '741 Patent and with intent, or willful blindness, that they cause the direct infringement of the '741 Patent.

374. Upon information and belief, Amazon derives revenue, directly and indirectly, from the activities relating to the Accused Products, including their importation, testing, manufacture, use, sale, and offer for sale.

375. Amazon's infringement of the '741 Patent has damaged and will continue to damage Nokia.

COUNT XII: DECLARATORY JUDGMENT THAT NOKIA HAS NEGOTIATED IN GOOD FAITH TOWARDS A LICENSE WITH AMAZON AND COMPLIED WITH ANY APPLICABLE IPR POLICIES AND NOKIA'S F/RAND DECLARATIONS

376. Nokia incorporates by reference the preceding paragraphs as though fully set forth herein.

377. Amazon designs, manufactures, and markets products that utilize and comply with one or more technical standards, such as the ITU H.264 and H.265 Standards. Amazon requires a license to Nokia's essential patent claims.

378. Nokia has voluntarily declared that it is prepared to grant licenses to its essential claims on a worldwide, non-discriminatory basis and on reasonable terms and conditions.

379. Nokia has at all times been prepared and willing to grant a license to Amazon under its essential patent claims. For example, Nokia provided Amazon with lists of patents having essential claims and identified the relevant standard sections that are implemented by Amazon's products. Nokia negotiated in good faith with Amazon for years, during which time Nokia made multiple F/RAND offers, and no agreement has been reached.

380. There is a case or controversy of sufficient immediacy, reality, and ripeness to warrant the issuance of a declaratory judgment.

381. Nokia seeks a declaration that it has negotiated in good faith towards a license with Amazon and complied with its obligations under the relevant standard development organization

IPR policies and Nokia's standard development organization declarations, as well as applicable laws.

COUNT XIII: BREACH OF AMAZON'S OBLIGATION TO NEGOTIATE IN GOOD FAITH TOWARDS A LICENSE WITH NOKIA

382. Nokia incorporates by reference the preceding paragraphs as though fully set forth herein.

383. Amazon is obligated to negotiate in good faith with Nokia with regard to a F/RAND license, including for Nokia's patent claims essential to the H.264 and H.265 standards. Amazon has failed to negotiate in good faith with Nokia and thus has breached its obligation. For example, Amazon has delayed negotiations and failed to accept Nokia's offers. Amazon's conduct was unreasonable and did not reflect a sincere interest in timely concluding a license.

384. There is a dispute between Nokia and Amazon concerning whether Amazon has complied with its obligation to negotiate in good faith to the extent applicable to the essential claims of the Asserted Patents, and this controversy is of sufficient immediacy, reality, and ripeness to warrant the issuance of a declaratory judgment.

385. Nokia is entitled to a declaratory judgment that Amazon has not complied with its obligation to act in good faith during its negotiations with Nokia, and as a consequence, that Amazon has repudiated and forfeited its right to claim rights as a third-party beneficiary of Nokia's F/RAND commitments, including to the ITU to the extent applicable to the essential claims of Nokia's patents.

386. In addition to a declaration, Nokia also requests an award of damages for the expenses it has incurred because of Amazon's failure to negotiate in good faith with Nokia.

ATTORNEYS' FEES

387. Nokia is entitled to recover reasonable and necessary attorneys' fees under applicable law.

PRAYER FOR RELIEF

WHEREFORE, Nokia respectfully requests that this Court enter judgment in its favor as follows and afford Nokia the following relief:

I. adjudge and declare that Amazon infringes claims of the Asserted Patents;

II. adjudge and declare that Amazon's infringement of claims of the Asserted Patents was willful, and that Amazon's continued infringement is willful;

III. award Nokia its actual damages;

IV. award Nokia enhanced damages pursuant to 35 U.S.C. § 284;

V. award Nokia pre-judgment and post-judgment interest to the full extent allowed under the law, as well as its costs;

VI. as to claims that are not essential to the H.264 or H.265 Standards, enter an injunction precluding Amazon and any entities in active concert with it from future acts of infringement;

VII. as to claims that are essential to the H.264 or H.265 Standards, to the extent (a) Nokia is adjudicated to have complied with its commitment to ITU that it prepared to grant licenses to its essential patent claims on reasonable, and non-discriminatory terms; or (b) Amazon is adjudicated to have failed to negotiate in good faith with Nokia, and/or is adjudicated to have lost the right to claim benefits under Nokia's relevant Patent Statement and Licensing Declarations; enter an injunction precluding Amazon and any entities in active concert with Amazon from future acts of infringement;

VIII. adjudge and declare that this is an exceptional case and award Nokia its reasonable attorneys' fees pursuant to 35 U.S.C. § 285;

IX. order an accounting of damages for acts of infringement;

X. adjudge and declare that Nokia has negotiated in good faith towards a license with Amazon and complied with its obligations under the relevant standard development organization IPR policies and Nokia's standard development organization declarations, as well as applicable laws;

XI. adjudge and declare that Amazon failed to negotiate in good faith towards a license with Nokia, and has thus lost or forfeited its right to claim third-party beneficiary status, including under Nokia's relevant ITU Patent Statement and Licensing Declarations to the extent applicable to the essential claims of the Asserted Patents;

XII. award Nokia its costs of suit; and

XIII. award such other equitable relief which may be requested and to which Nokia is entitled.

Dated: October 31, 2023

Respectfully submitted,

FARNAN LLP

/s/ Brian E. Farnan

Brian E. Farnan (Bar No. 4089)
Michael J. Farnan (Bar No. 5165)
919 N. Market St. 12th Floor
Wilmington DE 19801
Tel.: (302) 777-0300
bfarnan@farnanlaw.com
mfarnan@farnanlaw.com

MCKOOL SMITH, P.C.

Warren H. Lipschitz*
Alexandra F. Easley*
300 Crescent Ct. Ste. 1200

Dallas, TX 75224
Tel.: (214) 978-4000
wlipschitz@mckoolsmith.com
aeasley@mckoolsmith.com

R. Mitch Verboncoeur*
303 Colorado St Suite 2100
Austin, TX 78701
Tel.: (512) 692-8700
mverboncoeur@mckoolsmith.com

Josh Newcomer*
600 Travis St., Suite 7000
Houston, Texas 77002
Tel.: (713) 485-7300
jnewcomer@mckoolsmith.com

Kevin Burgess*
104 East Houston St., Suite 300
Marshall, Texas 75670
Tel.: (903) 923-9000
kburgess@mckoolsmith.com

ALSTON & BIRD LLP

Theodore Stevenson, III*
2200 Ross Ave. #2300
Dallas, TX 75201
Tel.: (214) 922-3400
ted.stevenson@alston.com

John D. Haynes*
Nicholas T. Tsui*
Shawn Gannon*
1201 West Peachtree Street
Atlanta, GA 30309
Tel.: (404) 881-7000
john.haynes@alston.com
nick.tsui@alston.com
shawn.gannon@alston.com

***Local Civil Rule 83.5 motions for pro hac vice admission forthcoming**