IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF GEORGIA

NOKIA TECHNOLOGIES OY, **Plaintiff,** **v.** **HISENSE COMPANY LTD. AND HISENSE USA CORPORATION,** **Defendants.**	**Civil Action No.** **ORIGINAL COMPLAINT**

ORIGINAL COMPLAINT

Plaintiff Nokia Technologies Oy ("Nokia," or "Plaintiff") files this Original Complaint against Hisense Company Ltd. and Hisense USA Corporation ("Hisense" or "Defendants") and allege 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 ("H.264") and H.265 High Efficiency Video Coding ("H.265") Standards 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.

2. Hisense's unlicensed products (which support and implement, for example, H.264 and H.265 decoding), including without limitation televisions ("Accused Products"), infringe Nokia's Asserted Patents (defined below).

SNAP-1022
Snap Inc. v. Nokia Tech. Oy
IPR2025-01263

3. Nokia is a leading innovator in video coding technology with 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.

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

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

PARTIES

6. Plaintiff Nokia Technologies Oy ("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. 10,536,714; 11,805,267; 8,050,321; 9,036,701; and 7,532,808 (the "Asserted Patents").

7. On information and belief, Hisense Company Limited is a corporation organized under the laws of China, with a principal place of business at 17 Donghai Xi Road, Qingdao, 266071, China.

8. On information and belief, Hisense USA Corporation is a corporation organized under the laws of Georgia, with its principal place of business at 7310 McGinnis Ferry Road, Suwanee, GA 30024.

JURISDICTION AND VENUE

9. This Court has exclusive subject matter jurisdiction over the patent infringement claims in this case under 28 U.S.C. §§ 1331 and 1338.

10. This Court has supplemental jurisdiction over all claims other than the patent infringement claims in this case under 28 U.S.C. § 1367(a).

11. This Court has jurisdiction over Counts VI (Declaratory Judgment that Nokia Negotiated in Good Faith Toward a License with Hisense and Complied with its RAND Commitments) and Count VII (Breach of Hisense's Obligation to Negotiate in Good Faith Toward a License with Nokia) under 28 U.S.C. §§ 2201 and 2202. An actual controversy over Counts VI and VII exists between the parties to this case.

12. This Court has personal jurisdiction over Defendants because they have, directly and/or through agents and/or intermediaries, committed acts and continue to commit acts of patent infringement, including within Georgia, giving rise to this action and have established minimum contacts with Georgia such that the exercise of jurisdiction would not offend traditional notions of fair play and substantial justice. Defendants, directly and/or indirectly at least through agents and intermediaries, have committed and continue to commit acts of infringement in this District by, among other things, making, using, selling, offering to sell, and importing the Accused Products.

13. On information and belief, Defendants regularly conduct business in Georgia, including in this District, and purposefully avail themselves of the privileges of conducting business in Georgia and this District. In particular, on information and belief, Defendants, and/or their agents and/or intermediaries, make, use, import, offer for sale, sell, and/or advertise their products and affiliated services in Georgia and this District, including but not limited to the Accused Products, sufficient to give rise to jurisdiction. On information and belief, Defendants have placed and continue to place Accused Products into the stream of commerce, via an established distribution channel, with the knowledge and/or understanding that such products are sold in the United States, including in Georgia, and specifically including in this District.

14. On information and belief, Defendants derive substantial revenue from the sale of Accused Products distributed within Georgia, including within this District, and/or expect or should reasonably expect their actions to have consequences in Georgia. In addition, on information and belief, Defendants knowingly induce, and continue to knowingly induce, infringement of the Asserted Patents within Georgia and within this District by offering for sale, selling, and/or contracting with others to market Accused Products with the intent to facilitate infringing use of the products by others and by creating and/or disseminating product information and other materials providing instruction for infringing use.

15. Defendants' infringing activity has led to foreseeable harm and injury to Nokia.

16. Venue is proper under 28 U.S.C. § 1391 and 28 U.S.C. § 1400(b). Defendant Hisense Company Ltd. does not reside in the United States, and thus venue is appropriate in this District under 28 U.S.C. § 1391(c)(3). In addition to the facts set forth above, Defendant Hisense USA Corporation has committed acts of infringement in this District and has a regular and established place of business in this District, including at least because it conducts business at least through its principal place of business and office located in this District at 7310 McGinnis Ferry Road, Suwanee, GA 30024.

I. NOKIA'S INVESTMENT IN VIDEO CODING STANDARDS AND RESULTING PATENT CLAIMS

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

18. 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."

19. 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 these video decoding standards. In addition, Nokia has developed many other video coding technologies.

20. 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.

21. The H.264 and H.265 Standards enable efficient and reliable video decoding in millions of devices, including computers. 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.

22. 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.

23. 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.

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

25. Nokia Corp., together with its wholly owned subsidiaries, has cumulatively invested billions of dollars in research and development relating to mobile communications and video coding technologies and, because of this commitment, currently owns more than 20,000 patents worldwide. These include many patents, including some of the Asserted Patents, with claims essential to the H.264 and H.265 Standards.

II. NOKIA'S COMPLIANCE WITH THE ITU COMMON PATENT POLICY AND NOKIA'S RELEVANT DECLARATIONS

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

26. Certain claims of Nokia's patents relate to the H.264 and H.265 Standards.

27. 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"). The H.264 Standard development process was initiated by Video Coding Experts Group ("VCEG") and finalized by the Joint Video Team ("JVT"), which was a collaborative effort between VCEG and the Moving Picture Experts Group ("MPEG").

28. Following publication of the H.264 Standard, the Joint Collaborative Team on Video Coding ("JCT-VC") 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.

29. 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."

30. Within 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 to ensure that the standards are of a high quality. The H.264 and H.265 Standards described above are detailed in the H.264 and H.265 Recommendations.

31. 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 to assist with usage of patented technologies in its standards.

32. The ITU published Guidelines for Implementation of the Common Patent Policy ("the Guidelines"). 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].

33. 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].

34. 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." [*"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]. 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.

35. 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." Ex. 1 at 6 [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*.

36. Similarly, the H.265 Recommendation only specifies the implementation of decoders. *See* Ex. 2 at 5 [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

37. 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.

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

39. Consistent with the ITU Common Patent Policy, Nokia timely notified standard setting 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 Negotiations with Hisense

40. Nokia first informed Hisense of its extensive portfolio of standard-essential patent claims in a letter dated July 1, 2016.

41. Nokia has been negotiating with Hisense in a good faith effort to license Nokia's H.264- and H.265-related patents ("Nokia's Video Patents") since 2018. In that time, Hisense has sold millions of infringing products but has paid no royalties. Nokia has made offers to Hisense consistent with licenses agreed to by over 50 companies, but the parties have been unable to reach agreement.

42. On or around May 19, 2021, Nokia provided Hisense with further notice of infringement of Nokia's patents with claims that are essential to the H.264 and/or H.265 standards. Additional patent lists were provided on January 13, 2022.

43. Subsequent to Nokia providing notice of its patents to Hisense, Hisense explained to Nokia that an association called CTU would negotiate a license on its behalf and on behalf of other Chinese TV manufacturers. Nokia complied with this request to advance otherwise fruitless negotiations by negotiating with CTU from May 2021 to June 2024. In retrospect, however, this shift away from Hisense to the CTU provided nothing but further delay and obstruction.

44. As recently as February 18, 2025, Nokia sent Hisense lists of patents with claims relating to H.264 and H.265 decoding. Nokia also provided Hisense with exemplary H.265 decoding claim charts and extended multiple license offers to Hisense. For instance, in both February and March 2025, Nokia sent Hisense license offers covering its patent claims relating to decoding H.264- and H.265-compliant video.

45. To date, Hisense has not accepted any of Nokia's license offers or paid a single royalty for its infringement of Nokia's Video Patents despite Nokia's good faith efforts to negotiate. Hisense's continued unauthorized use of Nokia's patents has prompted Nokia to seek the relief detailed in this Complaint.

III. NOKIA ASSERTED PATENTS

46. 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. 10,536,714 ("the '714 Patent")

47. 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 1.

48. 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 Hisense's products when, for example, watching video over the Internet.

49. 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.

50. 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.

51. As described in the '714 Patent, motion information is indicated by motion vectors associated with each motion compensated image block that represent

the displacement of the image block in the picture to be encoded or decoded. *Id*. at 2:59-65. Motion vectors can be explicitly signaled or predicted from previously coded information. One method used by conventional systems to determine motion vectors was to predict 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 was to generate a list or a set of candidate predictions from blocks in the current frame and/or co-located blocks, or other blocks in temporal reference pictures and signaling the chosen candidate as the motion vector prediction. *Id*. at 3:5-9.

52. 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 was the computational complexity of creating such a list.

53. 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 computational complexity associated with exhaustive comparison ameliorated by determining to include or exclude motion vector prediction candidates based on a non-exhaustive comparison to other candidates determined based on the location of the block associated with the candidate under consideration. *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 before adding them to a motion vector candidate list rather than comparing every available candidate pair, which reduces complexity and redundancy. *Id*. at 4:19-39. The ’714 Patent also enables a reduction of computational complexity in creating motion vector prediction candidate lists. *Id*. at 4:20-23.

54. 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 needed to be transmitted and received for successful playback of video. *Id*. at 4:20-23, 8:24-27.

55. Conventional technology prior to the ’714 Patent was not capable of, for example, determining a subset of spatial motion vector prediction candidates based on a location of the block associated with the 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 possible candidate pair from the set of spatial motion vector prediction candidates.

56. The ’714 Patent recognizes and solves these specific technological problems that plagued the conventional technology at the time. The ’714 Patent’s ability to determine a subset of 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.

57. The novel solution of the ’714 Patent, including determining a subset of 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 of each possible candidate 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.

B. U.S. Patent No. 11,805,267 ("the '267 Patent")

58. 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 Ugur, 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. 0,432,693), 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 2.

59. 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 Hisense's products when, for example, watching video over the Internet.

60. Encoders compress video into representations suitable for storage or transmission. '267 Patent at 1:26-33. Decoders can decompress the compressed video representations into viewable form. *Id*. One compression technique used to reduce the size of an encoded bitstream is called "Motion Compensated Prediction (MCP)." *Id*. at 2:20-34. In MCP, a prediction for a current frame is formed using a previously coded frame or using multiple previously coded frames. *Id*. 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 2:35-51.

61. 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 3:41-55.

62. Prior to the ’267 Patent, one significant problem was that the accumulation of rounding errors in bi-directional prediction degraded coding efficiency. *Id*. at 3:56-65. 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*. However, such prior methods had shortcomings, at least because they 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.

63. The ’267 Patent overcame 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 36-43, 6:51-57. Additionally, 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 and any residual data. *Id*. at 14:51-59, 15:14-24, 16:14-24.

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

65. 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.

66. The '267 Patent recognizes and solves these specific technological problems with the conventional video coding 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.

67. 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.

C. U.S. Patent No. 8,050,321 ("the '321 Patent")

68. 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. 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 3.

69. 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.

70. 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.

71. 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.

72. 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 starting in the middle of a video stream as an unintentional loss of image frames and unnecessarily try to reconstruct the image frames suspected as lost. *Id*. at 11:20-25.

73. 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.

74. 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 likely to cause unsatisfactory image quality and therefore require retransmission or picture refresh. *Id*. at 4:64-5:5.

75. 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, and resetting the identifier values for indicated first image frames of independent sequences.

76. The ’321 Patent recognizes and solves these specific technological problems that plagued 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.

77. 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.

D. U.S. Patent No. 9,036,701 ("the '701 Patent")

78. The '701 Patent, entitled "Method and Apparatus for Providing Complexity Balanced Entropy Coding," issued on May 19, 2015, to inventors Jani Lainema, Kemal Ugur, and Antti Olli Hallapuro. The '701 Patent issued from U.S. Patent Application No. 13/192,111, filed on July 27, 2011, and claims priority to U.S. Provisional Application No. 61/368,316, filed on July 28, 2010. The '701 Patent expires on April 28, 2032. A true and correct copy of the '701 Patent is attached as Exhibit 4.

79. The '701 Patent is not directed to merely an abstract idea or any patent-ineligible concept. Instead, the '701 Patent is directed to novel and unconventional improvements to the process of video coding. The '701 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.

80. When streaming video content, it is "desirable to maintain high levels of capabilities in the most efficient manner possible." '701 Patent at 1:37-50. Because "the pace of expansion of complexity and processing load continues to race forward," "significant usage of mobile electronic device[s] for the services and functions … may typically consume battery power quickly and end up forcing the user to frequently recharge the battery or limit their usage, which degrades the user experience." *Id*. The '701 Patent provides a solution to this increasing complexity using "complexity balanced entropy coding [which] may be employed in order to provide a high level of capability with respect to video coding and decoding while keeping the costs in terms of complexity relatively low." *Id*. at 1:54-60.

81. The '701 Patent achieves a complexity balanced entropy coding system through "divid[ing] syntax elements that may occur in a given bitstream (e.g., a bitstream associated with video content being processed) into categories. *Id*. at 9:51-10:3. In one embodiment, "The first category includes symbols that occur relatively infrequently and the second category includes symbols that occur relatively frequently." *Id*. Thus, "a threshold frequency of occurrence may be defined for symbols and those symbols and those symbols that are expected to occur more frequently than the threshold frequency may be determined to be in the second category while those symbols that are expected to occur less frequently than the threshold frequency may be determined to be in the first category." *Id*.

82. This categorization allows for decreased complexity because "[a]fter categorization has been accomplished … the entropy coding engine 80 may perform binarization and/or entropy coding operations employing different treatment based on the categories defined by the categorizer." *Id*. at 10:4-24. As an example, "for the first category, binarization may be accomplished using a selected binarization technique … followed by a context update and entropy coding with variable bin probabilities." For the second category, for example, "bypass coding may be implemented for a CABAC engine to accomplish the entropy coding." *Id*. Through using these coding techniques, a system can code "each category differently to reduce complexity, the computational complexity as indicated by the number of DCT coefficients, is kept below the desired maximum level by utilizing context adaptive arithmetic coding while bypassing probability estimation for DCT coefficient data for some symbols." *Id*. at 11:23-40.

83. The novel solution of the '701 Patent, including employing a complexity balanced entropy coding system, 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 a frequency of occurrence threshold based on an expected frequency of occurrence of syntax elements in a bit stream, categorizing a plurality of syntax elements of video content into first and second

categories based on the frequency of occurrence threshold, wherein syntax elements which occur greater than the frequency of occurrence threshold are categorized into the first category and syntax elements which occur less than the frequency of occurrence are categorized into the second category, entropy coding symbols that correspond to the first category of syntax elements and that have been subjected to a context update and entropy coding symbols that correspond to the second category of syntax elements and that have bypassed context updating, was not well-understood, routine, or conventional.

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

84. 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 5.

85. 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.

86. 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.

87. 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*.

88. 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.

89. 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.

90. 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 can be 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. At the time of the '808 Patent (during development of what would become the H.264 Standard), SKIP mode was assumed to be the most frequently occurring mode.

91. 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*.

92. 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.

93. 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 how the skip coding mode will operate for a given image segment, there is no need for the video decoder to use additional information in order to decode certain types of motion (or no motion). *Id*. at 14:52-64.

94. 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.

COUNT I: PATENT INFRINGEMENT OF THE '714 PATENT

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

96. Hisense has had knowledge and notice of the '714 Patent and its infringement thereof since at least February 2025, when Nokia provided a claim chart for a related patent. Nokia additionally provided a patent list, including a related patent, and a corresponding list of infringing products in August 2021.

Hisense has also received actual notice of the ’714 Patent as of the date this lawsuit was filed and/or the date this Original Complaint was served upon Hisense.

97. Hisense 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 one or more claims of the ’714 Patent.

98. Hisense 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.

99. Hisense also indirectly infringes 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 (b), by inducing infringement by others, such as Hisense’s customers and end-users, in this District and elsewhere in the United States. For example, Hisense’s customers and end-users directly infringe through their use of the inventions claimed in the ’714 Patent. Hisense 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 another example, Hisense instructs and encourages its users to use Hisense products to stream and watch video. *See* https://www.hisense-usa.com/televisions/hisense-43-class-a7-series-4k-wide-color-gamut-google-tv-43a7n. As a result of Hisense's inducement, Hisense's customers and end-users use the Accused Products in the way Hisense intends and directly infringe the '714 Patent. Hisense 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.

100. Hisense 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. Hisense'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 Hisense'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 Hisense to be

especially made or especially adapted for use in infringement of the ’714 Patent. Hisense 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.

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

102. Hisense’s infringement of the ’714 Patent has damaged and will continue to damage Nokia.

103. A claim chart that applies claim 9 of the ’714 Patent to the Accused Products is attached as Exhibit 9. The H.265 Standard referenced in the claim chart is attached as Exhibit 7.

COUNT II: PATENT INFRINGEMENT OF THE ’267 PATENT

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

105. Hisense has had knowledge and notice of the ’267 Patent and its infringement thereof since at least February 2025, when Nokia provided Hisense with a claim chart for a related patent in July 2021. Additionally, Nokia disclosed a related patent among a patent list and corresponding list of infringing Hisense products in August 2021.

106. Hisense has also received actual notice of the ’267 Patent as of the date this lawsuit was filed and/or the date this Original Complaint was served on Hisense.

107. Hisense 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 one or more claims of the ’267 Patent.

108. Hisense 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.

109. Hisense also indirectly infringes 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 (b), by inducing infringement by others, such as Hisense’s customers and end-users, in this District and elsewhere in the United States. For example, Hisense’s customers and end-users directly infringe through their use of the inventions claimed in the ’267 Patent. Hisense 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 another example, Hisense instructs and encourages its users to use Hisense products to stream and watch video. *See* https://www.hisense-usa.com/televisions/hisense-43-class-a7-series-4k-wide-color-gamut-google-tv-43a7n. As a result of Hisense's inducement, Hisense's customers and end-users use the Accused Products in the way Hisense intends and directly infringe the '267 Patent. Hisense 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.

110. Hisense 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. Hisense'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 Hisense'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 Hisense to be

especially made or especially adapted for use in infringement of the ’267 Patent. Hisense 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.

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

112. Hisense’s infringement of the ’267 Patent has damaged and will continue to damage Nokia.

113. Claim charts that apply claim 19 of the ’267 Patent to the Accused Products are attached as Exhibits 10 and 11. The H.265 Standard referenced in the claim charts is attached as Exhibit 7. The AV1 Specification referenced in the claim charts is attached as Exhibit 8.

COUNT III: PATENT INFRINGEMENT OF THE ’321 PATENT

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

115. Hisense has had knowledge and notice of the ’321 Patent and its infringement thereof since at least February 2025, when Nokia identified the patent to Hisense. Nokia informed Hisense that it was infringing the ’321 Patent when Nokia disclosed the ’321 Patent among a patent list and corresponding list of

infringing Hisense products provided to Hisense in July 2020, and again in August 2021. Nokia additionally provided claim charts for the '321 Patent in May 2021 and again in March 2022. Hisense has also received actual notice of the '321 Patent as of the date this lawsuit was filed and/or the date this Original Complaint was served upon Hisense.

116. Hisense 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 one or more claims of the '321 Patent.

117. Hisense 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.

118. Hisense also indirectly infringes 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 (b), by inducing infringement by others, such as Hisense's customers and end-users, in this District and elsewhere in the United States. For example, Hisense's customers and end-users directly infringe through their use of the inventions claimed in the '321 Patent. Hisense 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 another example, Hisense instructs and encourages its users to use Hisense products to stream and watch video. *See* https://www.hisense-usa.com/televisions/hisense-43-class-a7-series-4k-wide-color-gamut-google-tv-43a7n. As a result of Hisense's inducement, Hisense's customers and end-users use the Accused Products in the way Hisense intends and directly infringe the '321 Patent. Hisense 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.

119. Hisense 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. Hisense'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 Hisense'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 Hisense to be especially made or especially adapted for use in infringement of the ’321 Patent. Hisense 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.

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

121. Hisense’s infringement of the ’321 Patent has damaged and will continue to damage Nokia.

122. Claim charts that apply claim 8 of the ’321 Patent to the Accused Products are attached as Exhibits 12, 13, and 14. The H.264 Standard referenced in the claim charts is attached as Exhibit 6. The H.265 Standard referenced in the claim charts is attached as Exhibit 7. The AV1 Specification referenced in the claim charts is attached as Exhibit 8.

COUNT IV: PATENT INFRINGEMENT OF THE ’701 PATENT

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

124. Hisense has had knowledge and notice of the ’701 Patent and its infringement thereof since at least February 2025, when Nokia identified the patent to Hisense. Nokia informed Hisense that it was infringing the ’701 Patent when Nokia disclosed the ’701 Patent among a patent list and corresponding list of infringing Hisense products provided to Hisense in July 2020, and again in August 2021. Nokia additionally provided claim charts for the ’701 Patent in May 2021 and again in March 2022. Hisense has also received actual notice of the ’701 Patent as of the date this lawsuit was filed and/or the date this Original Complaint was served upon Hisense.

125. Hisense infringes, contributes to the infringement of, and/or induces infringement of the ’701 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 ’701 Patent.

126. Hisense 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 ’701 Patent literally and/or under the Doctrine of Equivalents, in violation of 35 U.S.C. § 271.

127. Hisense also indirectly infringes the ’701 Patent by way of inducement and/or contributory infringement, literally or under the doctrine of equivalents in violation of 35 U.S.C. § 271 (b), by inducing infringement by others, such as

Hisense's customers and end-users, in this District and elsewhere in the United States. For example, Hisense's customers and end-users directly infringe through their use of the inventions claimed in the '701 Patent. Hisense 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 another example, Hisense instructs and encourages its users to use Hisense products to stream and watch video. *See* https://www.hisense-usa.com/televisions/hisense-43-class-a7-series-4k-wide-color-gamut-google-tv-43a7n. As a result of Hisense's inducement, Hisense's customers and end-users use the Accused Products in the way Hisense intends and directly infringe the '701 Patent. Hisense has performed and continues to perform these affirmative acts with knowledge of the '701 Patent and with the intent, or willful blindness, that the induced acts directly infringe the '701 Patent.

128. Hisense also indirectly infringes the '701 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.

Hisense'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 Hisense's customers' and end-users' use of the Accused Products, such that the '701 Patent is directly infringed. The accused components within the Accused Products are material to the invention of the '701 Patent, are not staple articles or commodities of commerce, have no substantial non-infringing uses, and are known by Hisense to be especially made or especially adapted for use in infringement of the '701 Patent. Hisense has performed and continues to perform these affirmative acts with knowledge of the '701 Patent and with intent, or willful blindness, that they cause the direct infringement of the '701 Patent.

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

130. Hisense's infringement of the '701 Patent has damaged and will continue to damage Nokia.

131. A claim chart that applies claim 1 of the '701 Patent to the Accused Products is attached as Exhibit 15. The H.265 Standard referenced in the claim chart is attached as Exhibit 7.

COUNT V: PATENT INFRINGEMENT OF THE '808 PATENT

132. Hisense has had knowledge and notice of the '808 Patent and its infringement thereof since at least February 2025, when Nokia identified the patent to Hisense. Nokia informed Hisense that it was infringing the '808 Patent when Nokia disclosed the '808 Patent among a patent list and corresponding list of infringing Hisense products provided to Hisense in July 2020, and again in August 2021. Nokia additionally provided claim charts for the '808 Patent in May 2021 and again in March 2022. Hisense has also received actual notice of the '808 Patent as of the date this lawsuit was filed and/or the date this Original Complaint was served upon Hisense.

133. Hisense 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 one or more claims of the '808 Patent.

134. Hisense 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.

135. Hisense also indirectly infringes 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 (b), by inducing infringement by others, such as Hisense's customers and end-users, in this District and elsewhere in the United States. For example, Hisense's customers and end-users directly infringe through their use of the inventions claimed in the '808 Patent. Hisense 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 another example, Hisense instructs and encourages its users to use Hisense products to stream and watch video. *See* https://www.hisense-usa.com/televisions/hisense-43-class-a7-series-4k-wide-color-gamut-google-tv-43a7n. As a result of Hisense's inducement, Hisense's customers and end-users use the Accused Products in the way Hisense intends and directly infringe the '808 Patent. Hisense 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.

136. Hisense 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. Hisense'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 Hisense'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 Hisense to be especially made or especially adapted for use in infringement of the '808 Patent. Hisense 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.

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

138. Hisense's infringement of the '808 Patent has damaged and will continue to damage Nokia.

139. A claim chart that applies claim 7 of the '808 Patent to the Accused Products is attached as Exhibit 16. The H.264 Standard referenced in the claim chart is attached as Exhibit 6.

COUNT VI: DECLARATORY JUDGMENT THAT NOKIA HAS NEGOTIATED IN GOOD FAITH TOWARD A LICENSE WITH HISENSE AND COMPLIED WITH ITS RAND COMMITMENTS

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

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

142. Nokia has voluntarily declared to ITU that it is prepared to grant licenses to its essential H.264 and H.265 patent claims on a worldwide, non-discriminatory basis and on reasonable terms and conditions.

143. Nokia has at all times been prepared and willing to grant a license to Hisense under its essential patent claims. To that end, Nokia has negotiated in good faith with Hisense since at least 2021. During that time, Nokia provided Hisense with lists of patents having claims essential to the H.264 and H.265 Standards and exemplary H.265 decoding claim charts. Nokia also identified Hisense end user devices that infringe Nokia's H.264 and/or H.265 essential patent claims.

144. A dispute exists between Nokia and Hisense concerning whether Nokia has negotiated in good faith toward a license with Hisense and complied with the ITU Common Patent Policy and Nokia's relevant Patent Statement and Licensing

Declarations, as well as applicable laws. There is a case or controversy of sufficient immediacy, reality, and ripeness to warrant the issuance of a declaratory judgment.

145. Nokia seeks a declaration that Nokia has negotiated in good faith toward a license with Hisense and has complied with its obligations under the ITU Common Patent Policy and Nokia's relevant Patent Statement and Licensing Declarations.

COUNT VII: BREACH OF HISENSE'S OBLIGATION TO NEGOTIATE IN GOOD FAITH TOWARD A LICENSE WITH NOKIA

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

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

148. There is a dispute between Nokia and Hisense concerning whether Hisense has complied with its obligation to negotiate in good faith toward concluding a license to the essential claims of the Asserted Patents. This controversy is of sufficient immediacy, reality, and ripeness to warrant the issuance of a declaratory judgment.

149. Nokia is entitled to a declaratory judgment that Hisense has not complied with its obligation to act in good faith during its negotiations with Nokia, in regard to RAND terms for a license to the parties' essential patent claims, and as a consequence, that Hisense has repudiated and forfeited its ability to claim rights as a third-party beneficiary of Nokia's RAND commitments to ITU to the extent applicable to the essential claims of Nokia's patents.

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

ATTORNEYS' FEES

151. 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 Hisense infringes claims of the Asserted Patents;

II. adjudge and declare that Hisense's infringement of claims of the Asserted Patents was willful, and that Hisense'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 Hisense 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 necessary (a) Nokia is adjudicated to have complied with its commitment to the ITU that it be prepared to grant licenses to its essential patent claims on reasonable, and non-discriminatory terms; or (b) Hisense 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 Hisense and any entities in active concert with Hisense 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 toward concluding a license with Hisense and complied with its obligations under the relevant standard development organization IPR policies and commitments under

Nokia's relevant standard development organization declarations, as well as applicable laws;

XI. adjudge and declare that Hisense failed to negotiate in good faith toward concluding 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: April 7, 2025

/s/ Coby S. Nixon

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LOCAL RULE 7.1D CERTIFICATION

The undersigned hereby certifies that the foregoing was prepared in Times New Roman, 14-point front, in compliance with Local Rule 5-1(C).

Dated: April 7, 2025

/s/Coby S. Nixon
Coby S. Nixon

Counsel for Plaintiff
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