IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

NL GIKEN INC., Plaintiff, v. APPLE INC., Defendant.	**DEMAND FOR JURY TRIAL** C.A. No. 24-13-MN

AMENDED COMPLAINT AND JURY DEMAND

Under Federal Rule of Civil Procedure 15(a)(1), Plaintiff NL Giken Inc. ("NL Giken") files this Amended Complaint, which amends NL Giken's complaint for patent infringement (D.I. 1, the "Original Complaint") against Defendant Apple Inc. ("Apple").

NATURE OF SUIT

1. This is a civil action for patent infringement under the laws of the United States, 35 U.S.C. § 1, et seq.

2. Apple has infringed and continues to infringe one or more claims of U.S. Patent Nos. 8,497,910 ("the '910 patent"); 8,482,617 ("the '617 patent"); 10,592,547 ("the '547 patent"), 8,094,236 ("the '236 patent"), 9,319,615 ("the '615 patent"), 8,643,784 ("the '784 patent"), 9,948,968 ("the '968 patent"), and 10,764,422 ("the '422 patent") (collectively, the "Asserted Patents") at least by making, using, selling, offering for sale, and importing into the United States computing devices and/or services that infringe one or more claims of each of the Asserted Patents.

3. NL Giken is the legal owner by assignment of the entire right, title, and interest in and to the Asserted Patents, which were duly and legally issued by the United States Patent and

Trademark Office. NL Giken seeks monetary damages and injunctive relief to address past and ongoing infringement of its valuable patent portfolio.

THE PARTIES

4. Plaintiff NL Giken is a Japanese corporation, with a place of business at 1-17-9, Ozone, Toyonaka-Shi, Osaka, Japan.

5. Defendant Apple is a corporation organized under the laws of the State of California, with a place of business at 1 Apple Park Way, Cupertino, CA 95014. Apple is a publicly traded company that may be served through its registered agent for service, CT Corporation Trust Company, 1209 Orange Street, Wilmington, Delaware 19801.

JURISDICTION AND VENUE

6. This action arises under the patent laws of the United States, Title 35 of the United States Code. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).

7. This Court has both general and personal jurisdiction over Apple. Apple has committed acts within this District giving rise to this action and has established minimum contacts with this forum such that the exercise of jurisdiction over Apple would not offend traditional notions of fair play and substantial justice.

8. Among other things, Apple has employees and operates a retail store at 125 Christiana Mall, Newark, DE 19702. *See* https://www.apple.com/retail/christianamall/ (last accessed Dec. 7, 2023); https://www.christianamall.com/en/directory/apple-8718.html (last accessed Dec. 7, 2023). Apple's retail store at 125 Christiana Mall sells and offers for sale products and services that infringe the Asserted Patents. On information and belief, the Apple retail store at 125 Christiana Mall sells more infringing products and services than any other Apple retail store in the United States. *See* Alan Farnham and Mark Mooney, Apple's (AAPL)

Delaware Store Claims Title for Selling Most iPhones, ABC NEWS (Nov. 12, 2013, 6:14 AM), https://abcnews.go.com/Business/applesdelaware-store-claims-title-selling-iphones/story?id=20650009.

9. In addition, Apple, directly and through subsidiaries and intermediaries (including distributors, retailers, franchisees, and others), has regularly committed and continues to commit acts of patent infringement in this District, by, among other things, making, using, testing, offering for sale, selling, licensing, and/or importing products and/or services that infringe the Asserted Patents. *See, e.g.*, https://locate.apple.com/sales/.

10. Venue is proper in this District under 28 U.S.C. §§ 1391 and 1400(b). Apple has a physical presence in this District and, upon information and belief, has committed acts of direct and indirect infringement in this District by, among other things, making, using, testing, offering to sell, selling, licensing, and/or importing products and/or services that infringe the Asserted Patents. Venue is also proper based on the facts alleged in the foregoing paragraphs, which NL Giken incorporates as if fully set forth herein.

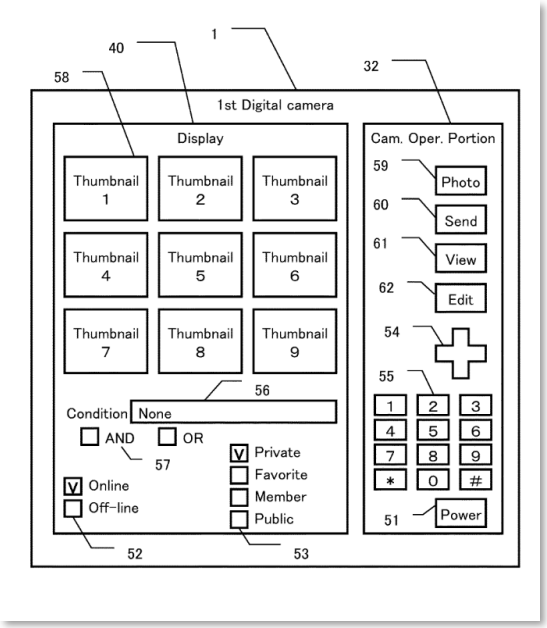
FACTUAL BACKGROUND

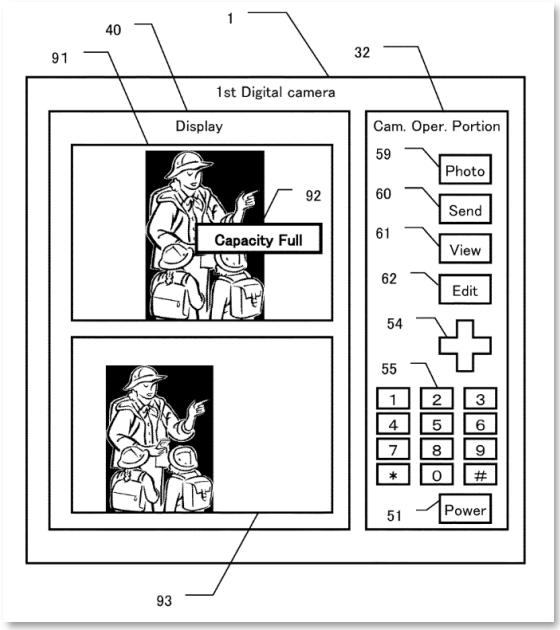
NL Giken's Patented Technologies

11. Masahide Tanaka has over four decades of experience developing technology, using his physics background and his experience in computing devices and software to think long, hard, and deeply about upcoming problems in the field and how they might be solved. His efforts led him to recognize certain technological problems years or even decades before others, and to arrive at unique and superior solutions to those problems that predicted how the industry would later address those concerns. Mr. Tanaka developed a number of inventions in the period 2006-09. Mr. Tanaka founded NL Giken to develop and license those inventions. This

technology is protected in the United States by the Asserted Patents, among others, as well as many other patents and patent applications in the U.S. and Japan.

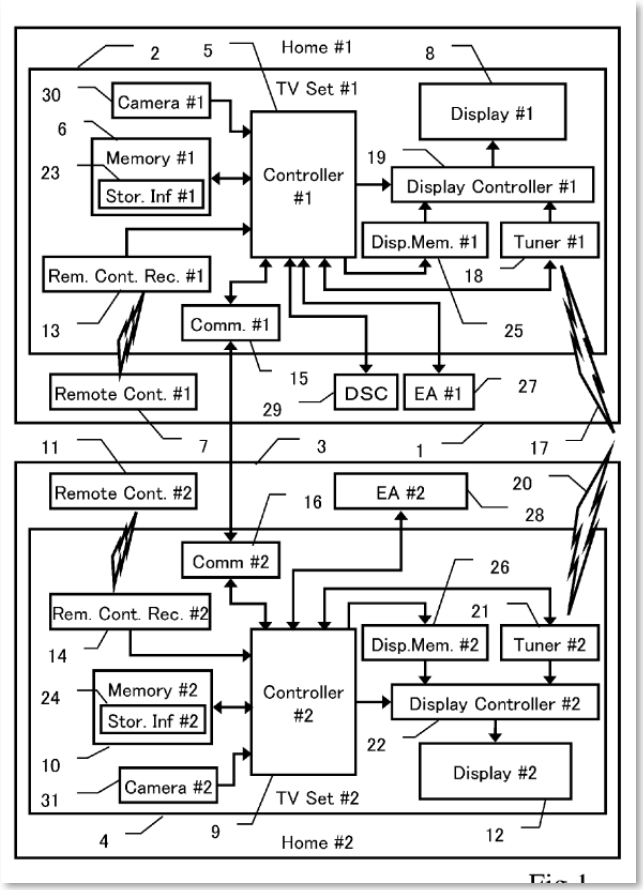
12. Among Mr. Tanaka's inventions are those relating to cameras and other devices that increase available memory by backing up full-size original photos to an external location and retaining on the camera smaller, lower-resolution versions—a thumbnail image and an intermediate-sized image. Doing so preserves memory space on the device while still allowing access to the full-sized and intermediate-size images as needed. Mr. Tanaka also recognized the value of providing an indicator that shows information on whether there is room for additional photos, and of overwriting and editing image data on the camera or other device in connection with the externally located image. Various features of these inventions are claimed in the '910, '617, and '547 patents, among others.





'910 patent, Figs. 4 and 7.

13. Others of Mr. Tanaka's inventions relate to a television and other devices that can communicate with other devices so that multiple people can watch content together. Various features of these inventions are claimed in the '236 and '615 patents, among others.



'236 patent, Fig. 1.

14. A third area of Mr. Tanaka's inventions relates to an appliance, such as a smartwatch or smartphone, which determines whether a key has been operated in an abnormal manner, such as to signal an emergency. If so, a signal is sent in response to the abnormal operation, such as a signal indicating an emergency. Various features of these inventions are claimed in the '784 patent, among others.

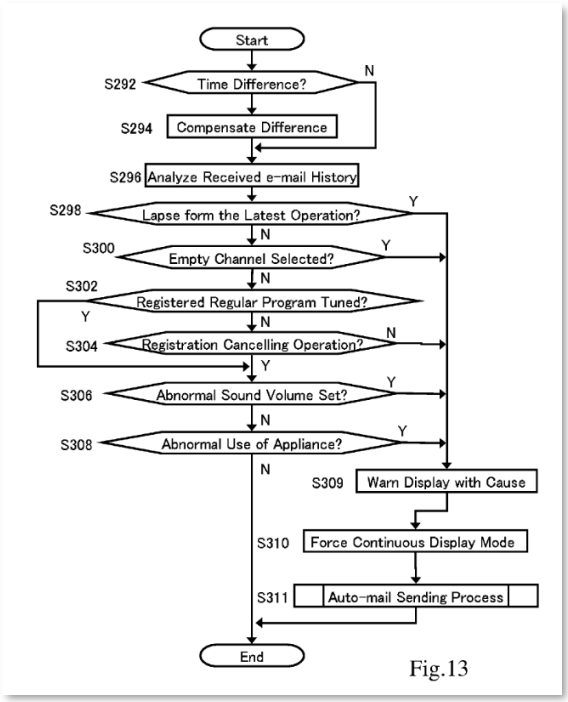


Fig.13

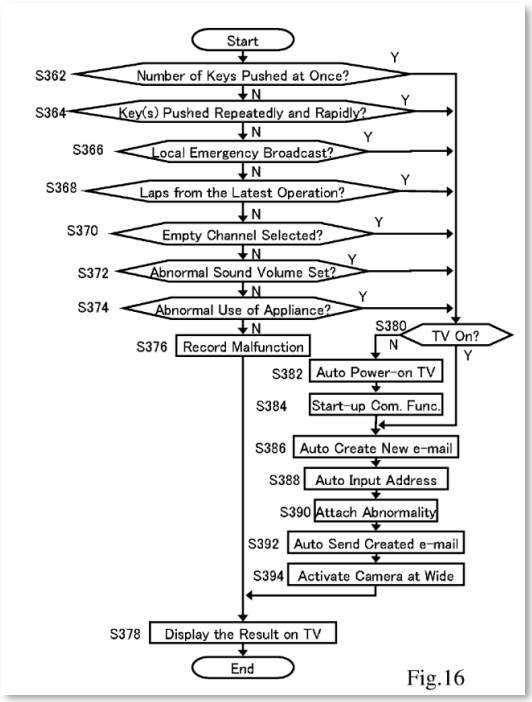


Fig.16

'784 patent, Figs. 13 and 16.

15. A fourth area of Mr. Tanaka's inventions relates to a system and apparatus that receives digital moving image contents (e.g., streaming video) and automatically designates and displays a succeeding part of the contents (e.g., a subsequent streaming video). Various features of these inventions are claimed in the '968 patent, among others.

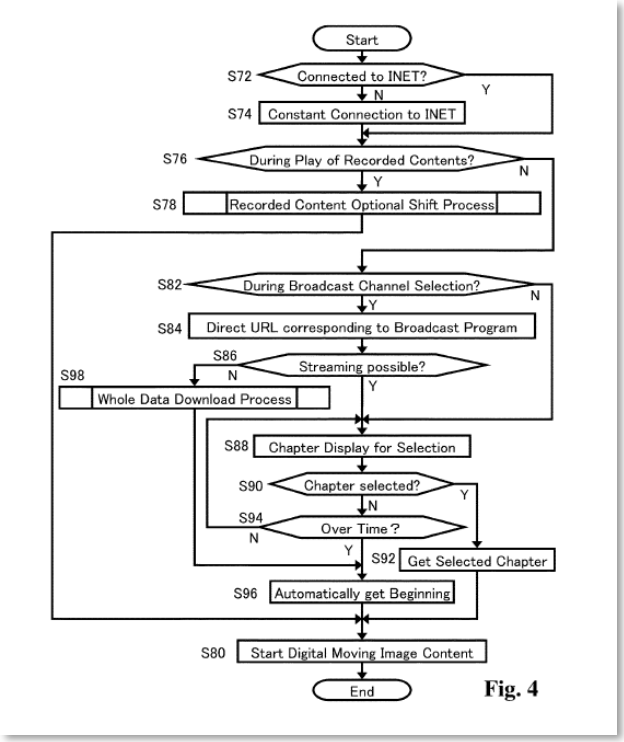
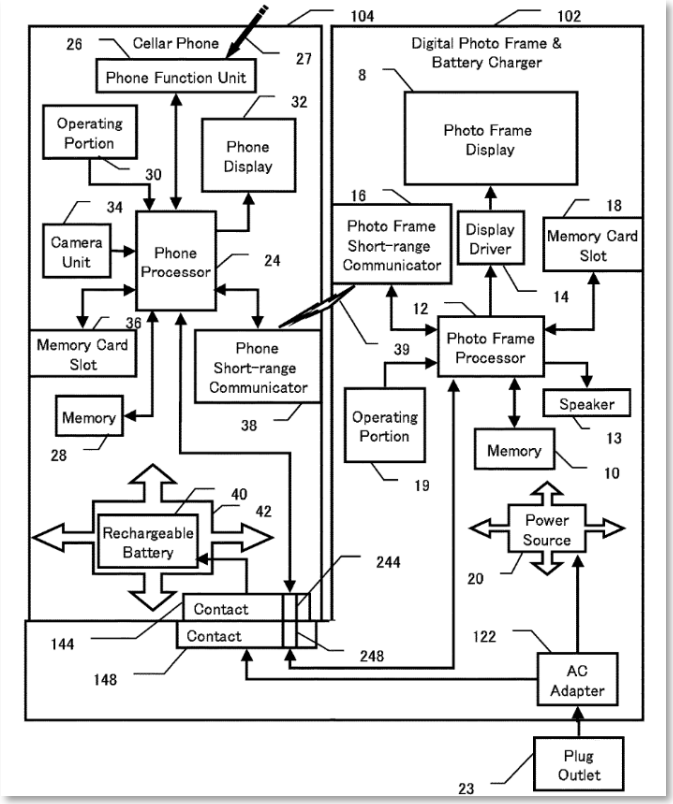


Fig. 4

'968 patent, Fig. 4.

16. A fifth area of Mr. Tanaka's inventions relates to a system and method of transmitting both power and data along wired paths (e.g., those in a cable/connector) between a phone and a digital image display, where the data is not transmitted to the display unless the display is admitted to receive that data (e.g., the phone's user decides to trust the display by clicking "trust this computer" on the phone). Various features of these inventions are claimed in the '422 patent, among others.



'422 patent, Fig. 4.

17. NL Giken's and Mr. Tanaka's investment in innovation has produced a portfolio that includes over 40 issued United States patents, as well as 50 issued Japanese patents.

NL Giken's Asserted Patents

18. This amended complaint focuses on eight NL Giken patents.

19. NL Giken is the current owner by assignment of the entire right, title, and interest in and to the '910 patent titled "Digital camera having communication function." The '910 patent issued on July 30, 2013. The patent is generally directed to cameras and other devices that increase available memory by wirelessly backing up full-size original photos to an external location and retaining on the camera or device two smaller, lower-resolution versions—a thumbnail image and an intermediate-sized image. A copy of the '910 patent is attached as Exhibit A.

20. NL Giken is the current owner by assignment of the entire right, title, and interest in and to the '617 patent titled "Digital camera with communication function." The '617 patent issued on July 9, 2013. The patent is generally directed to cameras and other devices that increase available memory by wirelessly backing up full-size original photos to an external location and retaining on the camera or device two smaller, lower-resolution versions—a thumbnail image and an intermediate-sized image, along with a capacity indicator. A copy of the '617 patent is attached as Exhibit B.

21. NL Giken is the current owner by assignment of the entire right, title, and interest in and to the '547 patent titled "Digital camera with communication function." The '547 patent issued on March 17, 2020. The patent is generally directed to cameras and other devices that store versions of photos both locally and by backing up those photos to an external location, and overwriting and editing image data on the camera or other device in connection with the externally located image. A copy of the '547 patent is attached as Exhibit C.

22. NL Giken is the current owner by assignment of the entire right, title, and interest in and to the '236 patent titled "Television system, television set and remote controller." The '236 patent issued on January 10, 2012. The patent is generally directed to a television and other devices that can communicate with other devices so that multiple people can watch content together. A copy of the '236 patent is attached as Exhibit D.

23. NL Giken is the current owner by assignment of the entire right, title, and interest in and to the '615 patent titled "Television system, television set and remote controller." The '615 patent issued on April 19, 2016. The patent is generally directed to a television and other devices that can communicate with other devices so that multiple people can watch content together. A copy of the '615 patent is attached as Exhibit E.

24. NL Giken is the current owner by assignment of the entire right, title, and interest in and to the '784 patent titled "Television system, television set and remote controller." The '784 patent issued on February 4, 2014. The patent is generally directed to an appliance that determines whether a key has been operated in an abnormal manner, and, if so, sending a signal in response to the abnormal operation. A copy of the '784 patent is attached as Exhibit F.

25. NL Giken is the current owner by assignment of the entire right, title, and interest in and to the '968 patent titled "Digital contents receiving apparatus." The '968 patent issued on April 17, 2018. The patent is generally directed to a system and apparatus that receives digital moving image contents and automatically designates and displays a succeeding part of the contents. A copy of the '968 patent is attached as Exhibit G.

26. NL Giken is the current owner by assignment of the entire right, title, and interest in and to the '422 patent titled "Digital image viewing system, a cellar phone and a digital photo frame." The '422 patent issued on September 1, 2020. The patent is generally directed to a system and method of transmitting both power and data along wired paths between a phone and a digital image display, where the data is not transmitted to the display unless the display is admitted to receive that data. A copy of the '422 patent is attached as Exhibit H.

27. NL Giken has complied with its obligations under 35 U.S.C. § 287 for each of the Asserted Patents.

Apple's Incorporation of NL Giken's Patented Technologies Into Its Devices and Services

28. The allegations provided below are exemplary and without prejudice to NL Giken's infringement contentions. In providing these allegations, NL Giken does not convey or imply any particular claim constructions or the precise scope of the claims. NL Giken's claim

construction contentions regarding the meaning and scope of the claim terms will be provided under the Court's scheduling order and local rules.

29. The infringing products and services include without limitation: iCloud Photos; SharePlay; FaceTime; Apple Watches and iPhones that include an emergency mode and/or SOS mode; Apple TV / Apple TV+; Apple software and hardware capable of transmitting power and data over wired connections; and all Apple software and hardware made, used, offered for sale, sold, or imported from January 2018 going forward that is capable of using or interacting with such services, software, or hardware.

30. The infringing products thus also include, without limitation: iPhone 6 / 6 Plus; iPhone 6S / 6S Plus; iPhone SE (1st); iPhone 7 / 7 Plus; iPhone 8 / 8 Plus; iPhone X; iPhone XS / XS Max; iPhone XR; iPhone 11; iPhone 11 Pro / 11 Pro Max; iPhone SE (2nd); iPhone 12 / 12 Mini; iPhone 12 Pro / 12 Pro Max; iPhone 13 / 13 Mini; iPhone 13 Pro / 13 Pro Max; iPhone SE (3rd); iPhone 14 / 14 Plus; iPhone 14 Pro / 14 Pro Max; iPhone 15 / 15 Plus; iPhone 15 Pro / 15 Pro Max; iPad Air (1st generation); iPad Mini 2; iPad Mini 3; iPad Air 2; iPad Mini 4; iPad Pro (1st generation); iPad (5th generation); iPad Pro (2nd generation); iPad (6th generation); iPad Pro (3rd generation); iPad Mini (5th generation); iPad Air (3rd generation); iPad (7th generation); iPad Pro (4th generation); iPad (8th generation); iPad Air (4th generation); iPad Pro (5th generation); iPad (9th generation); iPad Mini (6th generation); iPad Air (5th generation); iPad Pro (6th generation); iPad (10th generation); Apple iOS 11; Apple iOS 12; iOS 13 / iPadOS 13; Apple iOS 14 / iPadOS 14; Apple iOS 15 / iPadOS 15; Apple iOS 16 / iPadOS 16; Apple iOS 17 / iPadOS 17; Apple TV (3rd generation); Apple TV HD; Apple TV 4K (1st generation); Apple TV 4K (2nd generation); Apple TV 4K (3rd generation); Apple tvOS 9; Apple tvOS 10; Apple tvOS 11; Apple tvOS 12; Apple tvOS 13; Apple tvOS 14; Apple tvOS 15; Apple tvOS 16;

Apple tvOS 17; Apple TV / Apple TV+ app (all generations); MacBook 8; MacBook 9; MacBook 10; MacBook Air; MacBook Pro; MacBook Retina; iMac; iMac Pro; iMac Retina; Mac Mini; Mac Studio; macOS 10; macOS 11; macOS 12; macOS 13; macOS 14; Apple Watch 1st; Apple Watch Series 1; Apple Watch Series 2; Apple Watch Series 3; Apple Watch Series 4; Apple Watch Series 5; Apple Watch SE (1st); Apple Watch Series 6; Apple Watch Series 7; Apple Watch SE (2nd); Apple Watch Series 8; Apple Watch Ultra; Apple Watch Series 9; Apple Watch Ultra 2; Apple watchOS 1; Apple watchOS 2; Apple watchOS 3; Apple watchOS 4; Apple watchOS 5; Apple watchOS 6; Apple watchOS 7; Apple watchOS 8; Apple watchOS 9; Apple watchOS 10 (all together with the prior paragraph, the "Accused Products").

31. The Accused Products are non-limiting examples that were identified based on publicly available information, and NL Giken reserves the right to identify additional infringing activities, products and services, including, for example, on the basis of information obtained during discovery.

32. As detailed below and in Exhibits I-P, each limitation of at least one claim of each of the Asserted Patents is literally present in the Accused Products, or is literally practiced by Apple personnel, agents, or customers who use the Accused Products. To the extent that any limitation is not literally present or practiced, each such limitation is present or practiced under the doctrine of equivalents.

33. Apple has made extensive use of NL Giken's patented technologies, including the technology described and claimed in the Asserted Patents. NL Giken is committed to defending its proprietary and patented technology. NL Giken requests that this Court award it damages sufficient to compensate for Apple's infringement of the Asserted Patents, find this case

exceptional and award NL Giken its attorneys' fees and costs, and grant an injunction against Apple to prevent ongoing infringement of the Asserted Patents.

COUNT I

(Infringement of U.S. Patent No. 8,947,910)

34. NL Giken incorporates by reference and realleges all the foregoing paragraphs of the Amended Complaint as if fully set forth herein.

Apple's Direct Infringement

35. Apple has directly infringed and continues to directly infringe, literally and/or equivalently, one or more claims of the '910 patent, including at least claim 1, including by importing, using, selling, and offering for sale in the United States the Accused Products.

36. For example, and without limitation, Apple's devices including its iPhones and iPads with their preinstalled iCloud Photos application are digital cameras that meet each and every limitation of claim 1 either literally or under the doctrine of equivalents, as set forth in Exhibit I and incorporated here.

Apple's Knowledge of the '910 Patent

37. Since at least as early as the filing of the Original Complaint, Apple has known of the '910 patent.

Apple's Induced Infringement

38. Since at least as early as the filing of the Original Complaint, Apple has known that the Accused Products infringe at least claim 1 of the '910 patent.

39. Since at least as early as the filing of the Original Complaint, Apple has known that the Accused Products infringe at least claim 1 of the '910 patent when used by customers or other users, when imported by others, and when sold or offered for sale by third parties, such as Best Buy. *See, e.g.*, https://www.bestbuy.com/site/brands/apple/pcmcat128500050005.c?id

=pcmcat128500050005. For example, a search of Apple's website of sales locations for all Apple products in or near the 19702 ZIP code for Newark, Delaware returns 99 results, only one of which is an Apple Store located in Christiana Mall, while the remaining 98 are third-party Apple resellers located in or near Delaware. *See* https://locate.apple.com/sales?pt=all&lat=39.61539077758789&lon=-75.74433135986328&address=19702.

40. Since at least as early as the filing of the Original Complaint, Apple has induced infringement and continues to induce infringement by actively encouraging third-party resellers to directly infringe at least claim 1 of the '910 patent by facilitating resellers' sales and offers for sale of the Accused Products and has actively encouraged such sales and offers for sale. According to Apple's 2023 10-K statement, Apple "employs a variety of indirect distribution channels, such as third-party cellular network carriers, wholesalers, retailers and resellers" which accounts for 63% of total net sales, Apple "depends on the performance of carriers, wholesalers, retailers and other resellers," and Apple "has invested and will continue to invest in programs to enhance reseller sales, including staffing selected resellers' stores with [Apple's] employees and contractors, and improving product placement displays. These programs can require a substantial investment while not assuring return or incremental sales." https://d18rn0p25nwr6d.cloudfront.net/CIK-0000320193/faab4555-c69b-438a-aaf7-e09305f87ca3.pdf (pages 2 and 10-11).

41. Since at least as early as the filing of the Original Complaint, Apple has induced infringement and continues to induce infringement by actively encouraging customers or other users to directly infringe at least claim 1 of the '910 patent. Apple has provided with the Accused Products and on the apple.com website, user manuals, product documentation, and advertising materials that induce customers or others to use the Accused Products in a manner

that infringes at least claim 1 of the '910 patent. For example, Apple's support website touts the availability of different sizes of photos. *See* https://support.apple.com/en-us/HT205703. As another example, Apple's user guide for the iPhone touts the benefits of iCloud's Photos application. *See, e.g.*, https://support.apple.com/guide/iphone/use-icloud-iphde0f868fd/17.0/ios/17.0; https://support.apple.com/guide/iphone/set-up-or-join-an-icloud-shared-photo-library-iph28ac9ea81/17.0/ios/17.0.

Apple's Contributory Infringement

42. Since at least as early as the filing of the Original Complaint, Apple has contributorily infringed at least claim 1 of the '910 patent by selling and offering to sell within the United States the Apple's devices including its iPhones and iPads with their preinstalled iCloud Photos application, which manages storage of photos and videos.

43. Apple's devices including its iPhones and iPads with their preinstalled iCloud Photos application, which manages storage of photos and videos are not a staple article or a commodity of commerce with substantial noninfringing uses. This feature is designed, configured, and adapted to work with Apple devices. This feature has no substantial purpose other than as part of infringing devices and is accordingly not a staple article or a commodity of commerce.

44. This feature is a material part of the invention of at least claim 1 of the '910 patent.

45. Since at least as early as the filing of the Original Complaint, Apple has known of the '910 patent and has known that Apple's devices including its iPhones and iPads with their preinstalled iCloud Photos application, which manages storage of photos and videos are especially made or adapted for use in a manner that infringes at least claim 1 of the '910 patent.

46. The foregoing description of Apple's infringement is based on publicly available information. NL Giken reserves the right to modify this description, including, for example, on the basis of information about the Accused Products that it obtains during discovery.

47. NL Giken has been and is being irreparably harmed, and has incurred and will continue to incur damages, as a result of Apple's infringement of the '910 patent.

48. Apple's infringement of the '910 patent has damaged and continues to damage NL Giken in an amount yet to be determined, but no less than a reasonable royalty.

COUNT II

(Infringement of U.S. Patent No. 8,482,617)

49. NL Giken incorporates by reference and realleges all the foregoing paragraphs of the Amended Complaint as if fully set forth herein.

Apple's Direct Infringement

50. Apple has directly infringed and continues to directly infringe, literally and/or equivalently, one or more claims of the '617 patent, including at least claim 1, including by importing, using, selling, and offering for sale in the United States the Accused Products.

51. For example, and without limitation, Apple's devices including its iPhones and iPads with their preinstalled iCloud Photos application are digital cameras that meet each and every limitation of claim 1 either literally or under the doctrine of equivalents, as set forth in Exhibit J and incorporated here.

Apple's Knowledge of the '617 Patent

52. Since at least as early as the filing of the Original Complaint, Apple has known of the '617 patent.

Apple's Induced Infringement

53. Since at least as early as the filing of the Original Complaint, Apple has known that the Accused Products infringe at least claim 1 of the '617 patent.

54. Since at least as early as the filing of the Original Complaint, Apple has known that the Accused Products infringe at least claim 1 of the '617 patent when used by customers or other users, when imported by others, and when sold or offered for sale by third parties, such as Best Buy. *See, e.g.*, https://www.bestbuy.com/site/brands/apple/pcmcat128500050005.c?id=pcmcat128500050005. For example, a search of Apple's website of sales locations for all Apple products in or near the 19702 ZIP code for Newark, Delaware returns 99 results, only one of which is an Apple Store located in Christiana Mall, while the remaining 98 are third-party Apple resellers located in or near Delaware. *See* https://locate.apple.com/sales?pt=all&lat=39.61539077758789&lon=-75.74433135986328&address=19702.

55. Since at least as early as the filing of the Original Complaint, Apple has induced infringement and continues to induce infringement by actively encouraging third-party resellers to directly infringe at least claim 1 of the '617 patent by facilitating resellers' sales and offers for sale of the Accused Products and has actively encouraged such sales and offers for sale. According to Apple's 2023 10-K statement, Apple "employs a variety of indirect distribution channels, such as third-party cellular network carriers, wholesalers, retailers and resellers" which accounts for 63% of total net sales, Apple "depends on the performance of carriers, wholesalers, retailers and other resellers," and Apple "has invested and will continue to invest in programs to enhance reseller sales, including staffing selected resellers' stores with [Apple's] employees and contractors, and improving product placement displays. These programs can require a substantial investment while not assuring return or incremental sales."

https://d18rn0p25nwr6d.cloudfront.net/CIK-0000320193/faab4555-c69b-438a-aaf7-e09305f87ca3.pdf (pages 2 and 10-11).

56. Since at least as early as the filing of the Original Complaint, Apple has induced infringement and continues to induce infringement by actively encouraging customers or other users to directly infringe at least claim 1 of the '617 patent. Apple has provided with the Accused Products and on the apple.com website, user manuals, product documentation, and advertising materials that induce customers or others to use the Accused Products in a manner that infringes at least claim 1 of the '617 patent. For example, Apple's support website touts the availability of different sizes of photos. *See* https://support.apple.com/en-us/HT205703. As another example, Apple's user guide for the iPhone touts the benefits of iCloud's Photos application. *See, e.g.*, https://support.apple.com/guide/iphone/use-icloud-iphde0f868fd/17.0/ios/17.0; https://support.apple.com/guide/iphone/set-up-or-join-an-icloud-shared-photo-library-iph28ac9ea81/17.0/ios/17.0.

Apple's Contributory Infringement

57. Since at least as early as the filing of the Original Complaint, Apple has contributorily infringed at least claim 1 of the '617 patent by selling and offering to sell within the United States Apple's devices including its iPhones and iPads with their preinstalled iCloud Photos application, which manages storage of photos and videos.

58. Apple devices including iPhones and iPads with their preinstalled iCloud Photos application, which manages storage of photos and videos are not a staple article or a commodity of commerce with substantial noninfringing uses. This feature is designed, configured, and adapted to work with Apple devices. This feature has no substantial purpose other than as part of infringing devices and is accordingly not a staple article or a commodity of commerce.

59. This feature is a material part of the invention of at least claim 1 of the '617 patent.

60. Since at least as early as the filing of the Original Complaint, Apple has known of the '617 patent and has known that Apple's devices including its iPhones and iPads with their preinstalled iCloud Photos application, which manages storage of photos and videos are especially made or adapted for use in a manner that infringes at least claim 1 of the '617 patent.

61. The foregoing description of Apple's infringement is based on publicly available information. NL Giken reserves the right to modify this description, including, for example, on the basis of information about the Accused Products that it obtains during discovery.

62. NL Giken has been and is being irreparably harmed, and has incurred and will continue to incur damages, as a result of Apple's infringement of the '617 patent.

63. Apple's infringement of the '617 patent has damaged and continues to damage NL Giken in an amount yet to be determined, but no less than a reasonable royalty.

COUNT III

(Infringement of U.S. Patent No. 10,592,547)

64. NL Giken incorporates by reference and realleges all the foregoing paragraphs of the Amended Complaint as if fully set forth herein.

Apple's Direct Infringement

65. Apple has directly infringed and continues to directly infringe, literally and/or equivalently, one or more claims of the '547 patent, including at least claim 20, including by importing, using, selling, and offering for sale in the United States the Accused Products.

66. For example, and without limitation, Apple's devices including its iPhones and iPads with their preinstalled iCloud Photos application are digital cameras that meet each and

every limitation of claim 20 either literally or under the doctrine of equivalents, as set forth in Exhibit K and incorporated here.

Apple's Knowledge of the '547 Patent

67. Since at least as early as the filing of the Original Complaint, Apple has known of the '547 patent.

Apple's Induced Infringement

68. Since at least as early as the filing of the Original Complaint, Apple has known that the Accused Products infringe at least claim 20 of the '547 patent.

69. Since at least as early as the filing of the Original Complaint, Apple has known that the Accused Products infringe at least claim 20 of the '547 patent when used by customers or other users, when imported by others, and when sold or offered for sale by third parties, such as Best Buy. *See, e.g.*, https://www.bestbuy.com/site/brands/apple/pcmcat128500050005.c?id=pcmcat128500050005. For example, a search of Apple's website of sales locations for all Apple products in or near the 19702 ZIP code for Newark, Delaware returns 99 results, only one of which is an Apple Store located in Christiana Mall, while the remaining 98 are third-party Apple resellers located in or near Delaware. *See* https://locate.apple.com/sales?pt=all&lat=39.61539077758789&lon=-75.74433135986328&address=19702.

70. Since at least as early as the filing of the Original Complaint, Apple has induced infringement and continues to induce infringement by actively encouraging third-party resellers to directly infringe at least claim 20 of the '547 patent by facilitating resellers' sales and offers for sale of the Accused Products and has actively encouraged such sales and offers for sale. According to Apple's 2023 10-K statement, Apple "employs a variety of indirect distribution channels, such as third-party cellular network carriers, wholesalers, retailers and resellers" which accounts for 63% of total net sales, Apple "depends on the performance of carriers, wholesalers,

retailers and other resellers," and Apple "has invested and will continue to invest in programs to enhance reseller sales, including staffing selected resellers' stores with [Apple's] employees and contractors, and improving product placement displays. These programs can require a substantial investment while not assuring return or incremental sales." https://d18rn0p25nwr6d.cloudfront.net/CIK-0000320193/faab4555-c69b-438a-aaf7-e09305f87ca3.pdf (pages 2 and 10-11).

71. Since at least as early as the filing of the Original Complaint, Apple has induced infringement and continues to induce infringement by actively encouraging customers or other users to directly infringe at least claim 20 of the '547 patent. Apple has provided with the Accused Products and on the apple.com website, user manuals, product documentation, and advertising materials that induce customers or others to use the Accused Products in a manner that infringes at least claim 20 of the '547 patent. For example, Apple's support website touts the ability to edit photos across multiple devices and users. *See* https://support.apple.com/guide/icloud/what-you-can-do-with-icloud-and-photos-mm8b32f3ae27/1.0/icloud/1.0. As another example, Apple's user guide for the iPhone touts the benefits of iCloud's Photos application. *See, e.g.*, https://support.apple.com/guide/iphone/use-icloud-iphde0f868fd/17.0/ios/17.0; https://support.apple.com/guide/iphone/set-up-or-join-an-icloud-shared-photo-library-iph28ac9ea81/17.0/ios/17.0.

Apple's Contributory Infringement

72. Since at least as early as the filing of the Original Complaint, Apple has contributorily infringed at least claim 20 of the '547 patent by selling and offering to sell within the United States the Apple's devices including its iPhones and iPads with their preinstalled iCloud Photos application, which manages storage of photos and videos.

73. Apple devices including iPhones and iPads with their preinstalled iCloud Photos application, which manages storage of photos and videos are not a staple article or a commodity of commerce with substantial noninfringing uses. This feature is designed, configured, and adapted to work with Apple devices. This feature has no substantial purpose other than as part of infringing devices and is accordingly not a staple article or a commodity of commerce.

74. This feature is a material part of the invention of at least claim 20 of the '547 patent.

75. Since at least as early as the filing of the Original Complaint, Apple has known of the '547 patent and has known that Apple's devices including its iPhones and iPads with their preinstalled iCloud Photos application, which manages storage of photos and videos are especially made or adapted for use in a manner that infringes at least claim 20 of the '547 patent.

76. The foregoing description of Apple's infringement is based on publicly available information. NL Giken reserves the right to modify this description, including, for example, on the basis of information about the Accused Products that it obtains during discovery.

77. NL Giken has been and is being irreparably harmed, and has incurred and will continue to incur damages, as a result of Apple's infringement of the '547 patent.

78. Apple's infringement of the '547 patent has damaged and continues to damage NL Giken in an amount yet to be determined, but no less than a reasonable royalty.

COUNT IV

(Infringement of U.S. Patent No. 8,094,236)

79. NL Giken incorporates by reference and realleges all the foregoing paragraphs of the Amended Complaint as if fully set forth herein.

Apple's Direct Infringement

80. Apple has directly infringed and continues to directly infringe, literally and/or equivalently, one or more claims of the '236 patent, including at least claim 1, including by importing, using, selling, and offering for sale in the United States the Accused Products.

81. For example, and without limitation, Apple's devices including its Apple TVs, iPhones, iPads, laptops, MacBooks, and iMacs/Macs with their preinstalled SharePlay and FaceTime capabilities with video-streaming applications that meet each and every limitation of claim 1 either literally or under the doctrine of equivalents, as set forth in Exhibit L and incorporated here.

Apple's Knowledge of the '236 Patent

82. Since at least as early as the filing of the Original Complaint, Apple has known of the '236 patent.

Apple's Induced Infringement

83. Since at least as early as the filing of the Original Complaint, Apple has known that the Accused Products infringe at least claim 1 of the '236 patent.

84. Since at least as early as the filing of the Original Complaint, Apple has known that the Accused Products infringe at least claim 1 of the '236 patent when used by customers or other users, when imported by others, and when sold or offered for sale by third parties, such as Best Buy. *See, e.g.*, https://www.bestbuy.com/site/brands/apple/pcmcat128500050005.c?id=pcmcat128500050005. For example, a search of Apple's website of sales locations for all Apple products in or near the 19702 ZIP code for Newark, Delaware returns 99 results, only one of which is an Apple Store located in Christiana Mall, while the remaining 98 are third-party Apple resellers located in or near Delaware. *See* https://locate.apple.com/sales?pt=all&lat=39.61539077758789&lon=-75.74433135986328&address=19702.

85. Since at least as early as the filing of the Original Complaint, Apple has induced infringement and continues to induce infringement by actively encouraging third-party resellers to directly infringe at least claim 1 of the '236 patent by facilitating resellers' sales and offers for sale of the Accused Products and has actively encouraged such sales and offers for sale. According to Apple's 2023 10-K statement, Apple "employs a variety of indirect distribution channels, such as third-party cellular network carriers, wholesalers, retailers and resellers" which accounts for 63% of total net sales, Apple "depends on the performance of carriers, wholesalers, retailers and other resellers," and Apple "has invested and will continue to invest in programs to enhance reseller sales, including staffing selected resellers' stores with [Apple's] employees and contractors, and improving product placement displays. These programs can require a substantial investment while not assuring return or incremental sales." https://d18rn0p25nwr6d.cloudfront.net/CIK-0000320193/faab4555-c69b-438a-aaf7-e09305f87ca3.pdf (pages 2 and 10-11).

86. Since at least as early as the filing of the Original Complaint, Apple has induced infringement and continues to induce infringement by actively encouraging customers or other users to directly infringe at least claim 1 of the '236 patent. Apple has provided with the Accused Products and on the apple.com website, user manuals, product documentation, and advertising materials that induce customers or others to use the Accused Products in a manner that infringes at least claim 1 of the '236 patent. For example, Apple's website touts the use and value of SharePlay and FaceTime on various Apple devices. *See* https://www.apple.com/apple-tv-4k/. As another example, Apple's user guide for the iPhone touts the benefits of SharePlay and FaceTime. *See, e.g.*, https://support.apple.com/guide/iphone/shareplay-watch-listen-play-iphb657eb791/ios.

87. The foregoing description of Apple's infringement is based on publicly available information. NL Giken reserves the right to modify this description, including, for example, on the basis of information about the Accused Products that it obtains during discovery.

88. NL Giken has been and is being irreparably harmed, and has incurred and will continue to incur damages, as a result of Apple's infringement of the '236 patent.

89. Apple's infringement of the '236 patent has damaged and continues to damage NL Giken in an amount yet to be determined, but no less than a reasonable royalty.

COUNT V

(Infringement of U.S. Patent No. 9,319,615)

90. NL Giken incorporates by reference and realleges all the foregoing paragraphs of the Amended Complaint as if fully set forth herein.

Apple's Direct Infringement

91. Apple has directly infringed and continues to directly infringe, literally and/or equivalently, one or more claims of the '615 patent, including at least claim 1, including by importing, using, selling, and offering for sale in the United States the Accused Products.

92. For example, and without limitation, Apple's devices including its Apple TVs, iPads, iPhones, laptops, MacBooks, and iMacs/Macs with their preinstalled SharePlay and FaceTime capabilities with video-streaming applications that meet each and every limitation of claim 1 either literally or under the doctrine of equivalents, as set forth in Exhibit M and incorporated here.

Apple's Knowledge of the '615 Patent

93. Since at least as early as the filing of the Original Complaint, Apple has known of the '615 patent.

Apple's Induced Infringement

94. Since at least as early as the filing of the Original Complaint, Apple has known that the Accused Products infringe at least claim 1 of the '615 patent.

95. Since at least as early as the filing of the Original Complaint, Apple has known that the Accused Products infringe at least claim 1 of the '615 patent when used by customers or other users, when imported by others, and when sold or offered for sale by third parties, such as Best Buy. *See, e.g.*, https://www.bestbuy.com/site/brands/apple/pcmcat128500050005.c?id=pcmcat128500050005. For example, a search of Apple's website of sales locations for all Apple products in or near the 19702 ZIP code for Newark, Delaware returns 99 results, only one of which is an Apple Store located in Christiana Mall, while the remaining 98 are third-party Apple resellers located in or near Delaware. *See* https://locate.apple.com/sales?pt=all&lat=39.61539077758789&lon=-75.74433135986328&address=19702.

96. Since at least as early as the filing of the Original Complaint, Apple has induced infringement and continues to induce infringement by actively encouraging third-party resellers to directly infringe at least claim 1 of the '615 patent by facilitating resellers' sales and offers for sale of the Accused Products and has actively encouraged such sales and offers for sale. According to Apple's 2023 10-K statement, Apple "employs a variety of indirect distribution channels, such as third-party cellular network carriers, wholesalers, retailers and resellers" which accounts for 63% of total net sales, Apple "depends on the performance of carriers, wholesalers, retailers and other resellers," and Apple "has invested and will continue to invest in programs to enhance reseller sales, including staffing selected resellers' stores with [Apple's] employees and contractors, and improving product placement displays. These programs can require a substantial investment while not assuring return or incremental sales."

https://d18rn0p25nwr6d.cloudfront.net/CIK-0000320193/faab4555-c69b-438a-aaf7-e09305f87ca3.pdf (pages 2 and 10-11).

97. Since at least as early as the filing of the Original Complaint, Apple has induced infringement and continues to induce infringement by actively encouraging customers or other users to directly infringe at least claim 1 of the '615 patent. Apple has provided with the Accused Products and on the apple.com website, user manuals, product documentation, and advertising materials that induce customers or others to use the Accused Products in a manner that infringes at least claim 1 of the '615 patent. For example, Apple's website touts the use and value of SharePlay and FaceTime on various Apple devices. *See* https://www.apple.com/apple-tv-4k/. As another example, Apple's user guide for the iPhone touts the benefits of SharePlay and FaceTime. *See, e.g.*, https://support.apple.com/guide/iphone/shareplay-watch-listen-play-iphb657eb791/ios.

98. The foregoing description of Apple's infringement is based on publicly available information. NL Giken reserves the right to modify this description, including, for example, on the basis of information about the Accused Products that it obtains during discovery.

99. NL Giken has been and is being irreparably harmed, and has incurred and will continue to incur damages, as a result of Apple's infringement of the '615 patent.

100. Apple's infringement of the '615 patent has damaged and continues to damage NL Giken in an amount yet to be determined, but no less than a reasonable royalty.

COUNT VI

(Infringement of U.S. Patent No. 8,643,784)

101. NL Giken incorporates by reference and realleges all the foregoing paragraphs of the Amended Complaint as if fully set forth herein.

Apple's Direct Infringement

102. Apple has directly infringed and continues to directly infringe, literally and/or equivalently, one or more claims of the '784 patent, including at least claim 11, including by importing, using, selling, and offering for sale in the United States the Accused Products.

103. For example and without limitation, Apple's devices including its Apple Watches and iPhones that have emergency SOS and/or emergency call functions (including, but not limited to, iPhone 14, iPhone 14 Pro, iPhone 15, or iPhone 15 Pro with iOS 16.1 or later versions, Apple Watch Series 5, Apple Watch SE, Apple Watch Series 6, Apple Watch Series 7, Apple Watch Series 8, or Apple Watch Series 9) that meet each and every limitation of claim 11 either literally or under the doctrine of equivalents, as set forth in Exhibit N and incorporated here.

Apple's Knowledge of the '784 Patent

104. Since at least as early as the filing of the Original Complaint, Apple has known of the '784 patent.

Apple's Induced Infringement

105. Since at least as early as the filing of the Original Complaint, Apple has known that the Accused Products infringe at least claim 11 of the '784 patent.

106. Since at least as early as the filing of the Original Complaint, Apple has known that the Accused Products infringe at least claim 11 of the '784 patent when used by customers or other users, when imported by others, and when sold or offered for sale by third parties, such as Best Buy. *See, e.g.*, https://www.bestbuy.com/site/brands/apple/pcmcat128500050005.c?id=pcmcat128500050005. For example, a search of Apple's website of sales locations for all Apple products in or near the 19702 ZIP code for Newark, Delaware returns 99 results, only one of which is an Apple Store located in Christiana Mall, while the remaining 98 are third-party Apple

resellers located in or near Delaware. *See* https://locate.apple.com/sales?pt=all&lat=39.61539077758789&lon=-75.74433135986328&address=19702.

107. Since at least as early as the filing of the Original Complaint, Apple has induced infringement and continues to induce infringement by actively encouraging third-party resellers to directly infringe at least claim 11 of the '784 patent by facilitating resellers' sales and offers for sale of the Accused Products and has actively encouraged such sales and offers for sale. According to Apple's 2023 10-K statement, Apple "employs a variety of indirect distribution channels, such as third-party cellular network carriers, wholesalers, retailers and resellers" which accounts for 63% of total net sales, Apple "depends on the performance of carriers, wholesalers, retailers and other resellers," and Apple "has invested and will continue to invest in programs to enhance reseller sales, including staffing selected resellers' stores with [Apple's] employees and contractors, and improving product placement displays. These programs can require a substantial investment while not assuring return or incremental sales." https://d18rn0p25nwr6d.cloudfront.net/CIK-0000320193/faab4555-c69b-438a-aaf7-e09305f87ca3.pdf (pages 2 and 10-11).

108. Since at least as early as the filing of the Original Complaint, Apple has induced infringement and continues to induce infringement by actively encouraging customers or other users to directly infringe at least claim 11 of the '784 patent. Apple has provided with the Accused Products and on the apple.com website, user manuals, product documentation, and advertising materials that induce customers or others to use the Accused Products in a manner that infringes at least claim 11 of the '784 patent. For example, Apple's support website touts the ability to call emergency services from an Apple Watch or the iPhone using unique key

presses of the device's side button. *See* https://support.apple.com/en-us/105063; https://support.apple.com/en-us/HT206983; https://support.apple.com/en-us/HT208076.

109. The foregoing description of Apple's infringement is based on publicly available information. NL Giken reserves the right to modify this description, including, for example, on the basis of information about the Accused Products that it obtains during discovery.

110. NL Giken has been and is being irreparably harmed, and has incurred and will continue to incur damages, as a result of Apple's infringement of the '784 patent.

111. Apple's infringement of the '784 patent has damaged and continues to damage NL Giken in an amount yet to be determined, but no less than a reasonable royalty.

COUNT VII

(Infringement of U.S. Patent No. 9,948,968)

112. NL Giken incorporates by reference and realleges all the foregoing paragraphs of the Amended Complaint as if fully set forth herein.

Patentability Under 35 U.S.C. § 101

113. Like other validity issues, a patent is presumed eligible under 35 U.S.C. §101, and can only be found ineligible by clear and convincing evidence. The '968 patent is patentable under 35 U.S.C. § 101. It is not directed to an abstract idea. It provides specific solutions to technical problems. It also involves unconventional combinations of components, such that it does not preempt the technological field.

Field of the Invention

A. Inventions Necessarily Rely on Existing Technologies.

114. There are myriad choices and interaction techniques known to be employable when creating new user experiences in streaming. The existence of these techniques, a.k.a. technologies, is akin to the existence of raw physical building materials. Like building a house,

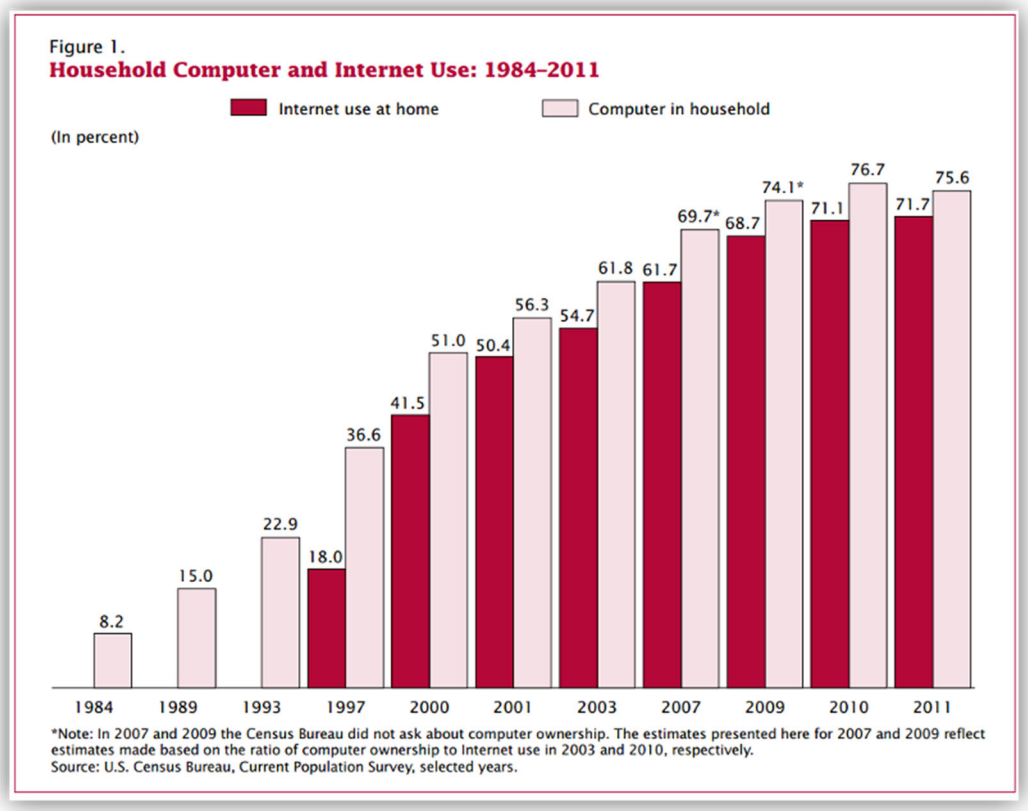
certain technologies lend themselves to certain types of use. Similarly, certain technologies draw designers of software systems into using them in particular combinations. Simply knowing that various technologies exist that can be used for a variety of purposes is not enough to motivate, inspire, or enable someone to combine such techniques in new ways. Still, it important to understand that digital content reception and streaming innovations should not be treated differently from innovations based on physical technologies not built using software and computer hardware. The field of innovations in the digital contents distribution space is one in which significant patentable advances can be, and have been, made. The proverb "standing on the shoulders of giants" applies in this field as in many others, in that new discoveries are made by building on previous discoveries.

B. The Science of Streaming

115. The '968 patent relates generally to the field of "a digital contents receiving apparatus." '968 patent at 1:18-21. While "various digital contents receiving apparatus have been proposed," the '968 patent relates in particular to "digital moving image contents, which have been provided by television stations through digital airwaves." '968 patent at 1:25-29. Such digital images may also be provided by "server stations through the internet," and may be "downloaded" or "enjoyed through internet in real time by means of streaming technology." *Id.* at 1:36-43.

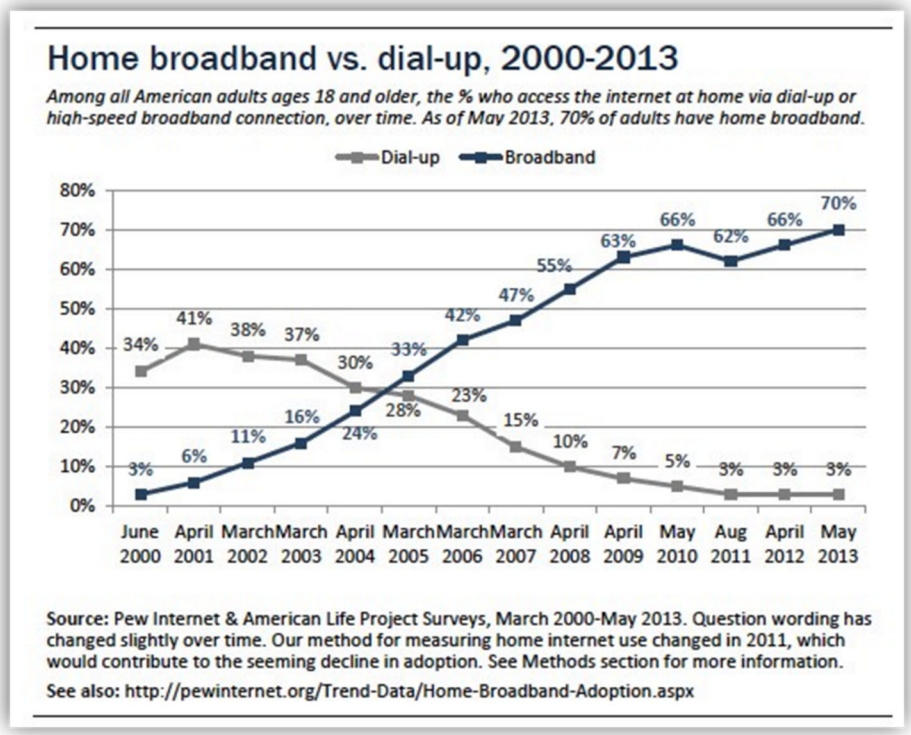
116. The years leading up to the time of the invention (September 2008) were a time of significant change for networked computing in general, and streaming in particular. In the late 1990s, less than half of U.S. households had a computer, fewer than that had internet access, and those that did had only slow dial-up connections. But by 2007, computer ownership had increased substantially. Almost seven in ten households had a computer, and access to the

internet had more than tripled to nearly 62%. The following chart illustrates how home computer and internet use increased between 1984 and 2011:



117. Broadband internet access also became much more widely available during this period. Of those households that had internet access in 2000, virtually all had "dial-up" connections, meaning that users were not always connected to the internet, but instead had to form a connection to an internet service provider over their phone line to connect to the internet at a particular time. Such connections would take up their phone line during the time that the user wanted to be connected to the internet. In addition, the phone company or internet provider would usually charge a per-minute fee to keep the connection active. The following graph confirms that as of 2000, only 3% of American households had broadband internet connections, while 34% had dial-up connections. But by April 2008, the numbers had more than flipped: 55%

of households had broadband internet access, while only 7% had dial-up connections. Those trends continued in the following years, with 70% of households having broadband connections by 2013 and only 3% dial-up connections:



118. The rapid penetration of broadband internet in the mid-2000s allowed streaming of large multimedia files, which had previously only been available by slow download via dial-up—or impossible at a practical level given the size of the files. But this new world of streaming technology, which was becoming more popular with consumers in the mid-2000s when the '968 patent was invented, came with a downside: "the increase of options may enrich the world of digital contents receiving apparatuses, it puts ordinary and majority of users, who cannot fully appreciate them, into confusion at the same time." '968 patent at 1:54-57. Unlike a bookstore or a library where a reader could easily see where the next book in a series is, the profusion of options and locations in distributed computer networks in general—and streaming in particular—created (often too) many possibilities for where the next piece of related content would be.

119. This problem interacted with a different, new one: the battle for viewer eyeballs. By 2007 early streamers such as Netflix were seeking to move into video streaming but potential subscribers faced many choices in possible sources for viewership. Keeping a consumer's limited time and interest focused on a particular source of video was important to the streamer's business model—whether subscription or advertising-based. Keeping viewer's attention on viewing further content could be make or break for such companies. This problem is also sometimes called "drinking from the firehose." Potential viewers are overwhelmed with options, and need some way of finding the related content they are searching for with the tools they had in the 2000s.

120. These problems were also exacerbated by the rise of smartphones connected to the internet in the mid- and late 2000s. Apple introduced the first iPhone in January 2007, with the Apple App Store launching in July 2008. Not to be outdone, Google launched the first Android-based smartphone in September 2008, with the Google Play app store (then known as Android Market) available to consumers the following month. These smartphones were immediate hits, but came with many options for users to locate media to consume. For example, the Apple App Store had tens of thousands of apps available at launch in 2008, with the number climbing into the hundreds of thousands within a few years and reaching into the millions today. Android followed a similar trajectory, launching with tens of thousands of apps in 2008, climbing into the hundreds of thousands within a few years and millions today. Apple passed 60 billion app downloads by 2013, while Google Play had 3 billion downloads by 2011 and 50 billion by 2013. And these same app stores also became available on iPads, other tablets, and other devices withing a few years of 2007-08. When faced with a huge number of options (thousands to millions of apps, billions of downloads) consumers faced significant new

difficulties and confusion in finding content related to what they had already enjoyed ('968 patent at 1:54-57), while providers of such content likewise faced significant new difficulties in keeping those consumers' attention.

121. Importantly, none of these specific technical issues existed in the same way outside the specific technological computer context that was developing in the mid-2000s with broadband computer access and streaming content. For example, in the prior technology of brick-and-mortar video rental stores, like Blockbuster, or at local libraries, consumers wishing to find either related content to what they had previously watched (or new content) had to physically travel from their homes to a different location, and once there faced only limited choices on constrained shelf space. Similarly, Netflix was sending DVDs through the mail in the late 1990s and early 2000s. By contrast, the abundance of potential media sources in broadband and via smartphones let consumers search for related or new content by the click of a mouse or a button press of the remote.

122. In the context of these issues around the time of the invention, the inventor of the '968 patent, Masahide Tanaka, developed several specific improvements in computer capabilities and functionality that were not well-understood, routine, and conventional. As discussed further below, while a number of inventions are discussed in the '968 specification, the specific invention claimed in the '968 patent concerns a particular receiving apparatus and designation software controller configured to "automatically designate" a "succeeding part" (e.g., the next episode) of a "digital moving image contents" (e.g., a video) so as to "display" that next episode to the viewer. *See, e.g.*, '968 patent, claim 1; *see also* '968 patent, Fig. 4, steps S78-96; 1:54-67; 3:30-4:6; 6:2-5; 10:56-67; 11:17-59.

123. This "play the next episode" invention neatly resolves both of the new problems

discussed above with streaming technology. It reduces user "confusion" due to the "increase of options" by putting the next episode of the contents front and center before the viewer. '968 patent at 1:54-59. It also helps a streaming provider in the "battle for eyeballs" by keeping the viewer locked into that streamer and viewing the next episode of the contents.

C. The Post-Invention Value of "Play Next Episode" Functionality

124. New trends in broadband internet availability, and the resulting changes in video streaming behavior and consumption by viewers, began to emerge around and after the time of the invention. However, the value of the invention was shown both by the slowly-developing realization of its importance by various streaming providers, and its tremendous importance to them once they implemented it.

125. The history of Netflix—the pioneering and preeminent video streaming service in the United States—shows the value of the '968 patent's insight. Netflix was founded in 1997, initially as a DVD-by-mail service. But fulfilling its name, by 2007 Netflix launched a streaming video service, among the earliest in the U.S., which it continued to develop over the following years. In 2010, Netflix acquired rights to stream the first three seasons of *Breaking Bad*, allowing viewers to "binge-watch" the story up to that point. This choice helped save the show from cancellation, and when season five premiered, the audience had more than doubled from its previous outing. *Breaking Bad* is generally believed to be the first television show to have this "Netflix effect."

126. Netflix began moving into original content distribution in 2011, and acquired the rights to the Norwegian drama *Lilyhammer* in 2012. Netflix shifted away from the traditional broadcast model of weekly episode premiers, instead releasing the entire first season in February 2012. Netflix followed that same release model with its first "Netflix Original" production, the remake of *House of Cards*, releasing all of season 1 in February 2013. Netflix continued that

release strategy in the following years, through today, as have several other streamers. This business model of releasing seasons all at once, along with making multiple seasons and episodes of past shows available, gives audiences what they want when they want it. But it runs straight into the difficulty of letting viewers find the next episode of the television show, a difficulty the '968 patent foresaw.

127. Despite being around since 1997 and involved in streaming since 2007, Netflix did not begin developing its "play next episode" functionality until 2011-12. The software was tested throughout that period, and then rolled out in stages over the next several years, with a full launch on all Netflix services only in 2016. Hence Netflix did not even begin developing this feature until fifteen years after its founding, at least four to five years after it started streaming, and did not fully roll it out for almost a decade after launching its streaming service.

128. Yet this feature is claimed as the single most important one in Netflix's history in increasing customer retention and hours watched, helping it win the battle for eyeballs. This functionality had the largest impact in Netflix's history on customer retention and hours watched. This functionality massively increased hours watched, by far the biggest increase of any feature Netflix ever tested. This functionality was so powerful that the developer felt the need to say "Sorry?" for how much it affects viewer's habits and helped keep them locked into watching Netflix.

The '968 Patent Is Directed to Eligible Subject Matter.

A. The '968 Patent Discloses a Technological Improvement in Digital Moving Image Reception.

129. The claims of the '968 patent are not directed to an abstract idea, such as bookmarking digital content. Such a characterization of the claims would be over-abstract, and too simplified of what the claims actually entail.

130. At the time of the invention, as discussed above, users were facing a genuinely new problem due to the "increase of options" in the "world of digital contents" as compared to physical video rental stores, such that users "could not fully appreciate" how to find related content like the next episode of related content and suffered "confusion" as a result. '968 patent at 1:54-57. Streamers like Netflix were likewise facing a new problem with the "battle for eyeballs," where any way to effectively increase and keep viewers and increase watch time could make or break the company. In 2008 there were thus "many demands for improvements of… digital contents receiving apparatuses" to address these concerns. '968 patent at 1:57-59.

131. Rather than an abstract idea such as bookmarking, the invention relates to a receiving apparatus, system, and method that enables a user to find the next episode in streaming media in a digital data stream from multiple sites and sources available over a network such as the internet. '968 patent, Abstract; 1:16-20; 6:26-40; 11:13-59. The '968 patent is directed to a complex set of inter-related components to give the user the ability to locate the next episode in a networked data stream. *Id.* This complex apparatus (as claimed in, for example, claim 1) includes at least five hardware and software components.[1] *Id.*

132. First, the apparatus includes a "processor" that executes instructions "to designate a part of the digital moving image contents" from a provider, where the designation can be either "automatic" or "in response to a manual operation." '968 patent, claim 1. This designation is not a simple or abstract operation, but requires specific information "to designate one of the digital contents in the outside source" as relating to the digital moving image contents the viewer wishes to watch. '968 patent at 2:1-13. The apparatus needs to do so consistently for the rest of

[1] Independent method claim 5 comprises steps using such components, while independent system claim 9 comprises a system including such components.

the invention to work, to avoid a "mismatch." '968 patent at 2:11-13. The designation can also be, for example, "designated with [a] URL [that] is capable of being provided by means of streaming." '968 patent at 11:13-15. Further, the apparatus needs to designate a part either "automatically," such as with information "obtain[ed] from… outside source information" or through the "internet by an automatic link," or in response to a "manual operation for demanding the designated digital content." '968 patent at Abstract; 2:7-10, 45-46; 5:17-20; 12:19-22. A person of ordinary skill in the art in 2008 would have understood these limitations not to require a generic processor, but one especially programed to perform these designation functions. Doing so would have involved significant programming effort to enable automatic designation, whether from URLs or other sources, and separate manual implementation.

133. Second, the apparatus includes a "memory" to keep information necessary for the processor to "automatically designate a succeeding part" of the digital moving image contents, where that part succeeds a "viewed part" of the contents. '968 patent, claim 1. The '968 patent explains that the unit has hardware and software that allows the automatic designation of a succeeding part, for example the next "chapter" of digital moving image contents. The '968 patent discusses this issue in most detail in an embodiment in Figure 4, which is "a flowchart showing the detailed function of [an] optional shift process," such as selecting the next chapter/episode of video contents. '968 patent, Fig. 4 & 4:41-42. Certain particularly relevant portions of Figure 4 are highlighted below:

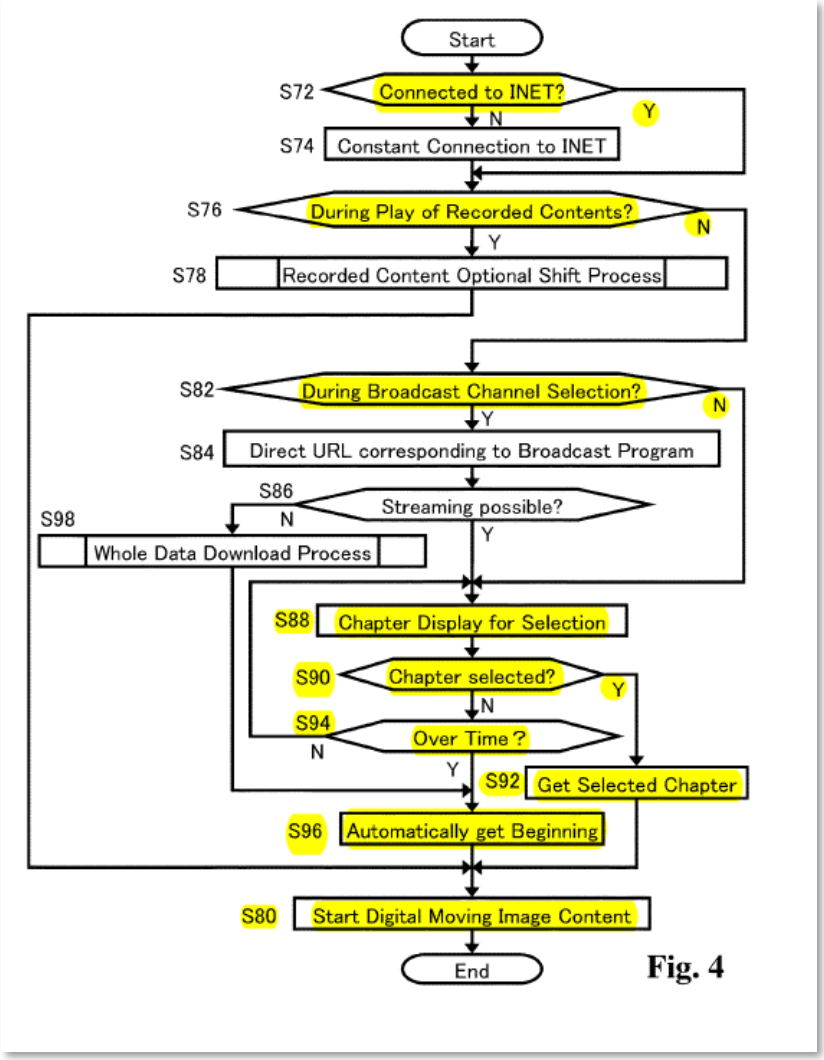


Fig. 4

134. Figure 4 shows a series of steps where the apparatus has connected to the internet, at step S72, but the optional shift process was not started during play of recorded contents in step S76. '968 patent at 10:41-54. Then in step S82, it is "checked whether or not the optional shift operation… is done during broadcast channel selection." *Id.* at 11:4-7. Where the operation was not done during broadcast channel selection (or where it was and streaming from a corresponding URL is possible in step S86), the flow proceeds to step S88, where "the digital moving image content designated by URL is divided into chapters in unit of packet or group of packets and a view format of chapters is displayed on television display 26 for facilitating the

optional shift by means of a selection of the chapter with which the digital moving image content is to start." '968 patent at 11:17-22. These chapters include "chapters of a chaptered digital moving image content," analogous to chapters in a DVD menu of a television show allowing choice of individual episodes. '968 patent at 10:59-67. The memory in this embodiment "automatically designates a succeeding part" of the digital moving image contents (e.g., the next chapter or episode) after the earlier "viewed part" of the contents (e.g., the previous chapter or episode). '968 patent, claim 1.

135. The viewer may then select the next chapter or a different chapter/episode in step S90. '968 patent at 11:23-26. If a choice is made, the chapter or episode is downloaded at step S92 with "the digital moving image content being instantly started with the selected chapter by means of streaming in step S80 as soon as the corresponding packet is downloaded." '968 patent at 11:27-31. But if no episode is selected the flow goes to step S94 "in which it is checked whether or not the time since the display started in step S88 has past over a limit." '968 patent at 11:37-40. If not, the earlier steps repeat until "the time has past or chapter selection is detected." '968 patent at 11:40-43. If the time limit has passed without a chapter selection in step S94, the apparatus is configured to "automatically" download a relevant packet to start a chapter or episode in step S96. '968 patent at 11:45-59. This chapter can be, for example, "the beginning of the digital moving image content, the digital moving image content being instantly started with the beginning by means of streaming in step S80 as soon as the corresponding packet is downloaded." '968 patent at 11:47-51. Thus this embodiment allows the automatic playing of the next chapter or episode of the video, a feature that Netflix post-invention found had the largest impact in company history on customer retention and hours watched. As with the prior component of the invention, implementing this one involves significant effort to designate where

each episode of the digital moving image contents is in relation to every other part, which episode or episodes have been "viewed," which episode is the "succeeding" one to each "viewed" episode, how these connections change over time as different episodes are viewed, and how to achieve these designations "automatically." '968 patent, claim 1.

136. Third, the apparatus includes a "designation software controller" that is configured to do two things: (a) "control the memory to keep the information in response to a termination of viewing the viewed part," and (b) "control the processor to automatically designate the succeeding part" when viewing resumes. '968 patent, claim 1. As with the prior two limitations, this designation software controller is not an abstract, generic component, but reflects substantial programming work to work out exactly what episode the viewer stopped viewing ('968 patent at Fig. 4, 11:17-22), how to designate the correct next episode (*id*. at 11:23-25), how to correctly make that next part pull up and be available to the viewer (*id*. at 11:25-27), and how to make that next part automatically download or stream (*id*. at 11:27-31). Separately, a person of ordinary skill in the art would also need to engage in significant programming to design and set the timer to either continue the episode selection process if the time to select has not "past over a limit," or to "download the packet corresponding to the beginning of the digital moving image content" (such as automatically playing the next episode) where "the time since the display started in step S88 has past over a limit." '968 patent at 11:36-48. One example would be a countdown timer after one episode concludes where the next episode plays within a certain number of seconds if a user does nothing. And a person of ordinary skill in the art would need to engage in significant programming to make sure the "necessary functions are all automatically carried out even if no further operation will be done." '968 patent at 11:58-59. A

person of ordinary skill in the art also would need the '968 patent's guidance to avoid unnecessary experimentation to achieve the required functionality.

137. Fourth, the apparatus includes a "receiver" of the "designated succeeding part" in response to the "designation by the processor." '968 patent, claim 1. Like the earlier limitations, making this receiver involves substantial hardware and software work to have the receiver properly receive the "designated succeeding part" of the digital moving image contents and to keep track the information from the "designation by the processor" as to how that contents relates to the viewed part of the contents. Indeed, Figure 1 "is a block diagram showing the moving image enjoying system in whole according to a preferred embodiment of this invention," which shows "television set 2 as a receiver of digital contents" with several specific features to enable that reception, including a "television set computer 10 for receiving a digital moving image program content provided by server station 9 through internet 8," a television set processor 12, memory 14 and [an] input/output interface 16" that "serves as a receiver for inputting data of digital moving image program contents stored in data base 32 of server station 9." '968 patent, Fig. 1; 4:33-35; 4:57-5:12. Implementing this claimed functionality on this hardware and software is not generic or abstract, but would instead require specific hardware and software design work to work as claimed.

138. Finally, the apparatus includes a "display" that is configured to display "the succeeding part of the digital moving image contents received by the receiver." '968 patent, claim 1. This element works with all the prior elements, and considered together with them is not abstract. For example, in connection with the embodiment in Figure 1, this limitation requires the display 26 to work in coordination with multiple other components like display driver 24, display memory 28, and tv set computer 10 and server station 9 (and all of their

subcomponents) to properly display the succeeding part of the digital moving image contents received by the receiver. '968 patent, Fig. 1; 5:35-6:11.

139. When considered in the context of the claimed structure and function recited in the claims, a person of ordinary skill in the art would not view the claims of the '968 patent as directed to an abstract or generic idea like bookmarking, or bookmarking digital moving image content and displaying the content from the bookmarked position. Rather, they would be viewed as being directed to a particular improvement to distributing digital moving image contents that uses specific structure and specific functionality to streamline and simplify the user's ability to find and view the next episode of the contents, which the user would otherwise have significant difficulty doing.

140. Further supporting this conclusion is the fact that the phrase "book mark" only ever appears in the '968 specification in a context unrelated to the '968 claims. In connection with a different set of embodiments in Figures 7-8 relating to URLs containing content that may expire, the specification on column 17 says that "download of the content data itself may not be actually carried out provided that the expiration date of the content data on the server is securely confirmed. Instead in this case, information such as [a] 'book mark' necessary for accessing again the content data is merely recorded so that actual download is to be automatically carried out when the expiration date comes close or becomes unclear. According to this application, redundant download of content data can be saved or avoided and at the same time such inexpediency is overcome that 'book marked' content data has been deleted when the data is accessed again for actual download or review." '968 patent at 17:4-15; *see also* Figs. 7-8 & 14:20-15:34 (discussing "expiration date" of URLs). In short, this discussion of "book marks" simply refers to bookmarking websites, such as by internet browsers. It has nothing to do with

bookmarking a time in a video to return to that point for later viewing.

141. It is indeed common in Computer Science to use real-world terms to convey the sense of the word, but to require specialized knowledge, training, and problem-solving skills to provide the functionality in a computer sense. "Bookmark" is one example. A network "protocol" is another. A "library" of common computer processing functions and instructions is yet another. Hence while the '968 specification uses the word "book mark" to convey the word's sense, the reality is that implementing it in a computer context is not a simple matter, and would require specialized knowledge, training, and effort. And as discussed, the sense in which the '968 specification uses "book mark" does not relate to noting a time in a video to return to that point for later viewing.

142. The '968 patent's claims are directed not to generic bookmarking, but instead to a particular improvement to distributing digital moving image contents that uses specific structure and specific functionality to streamline and simplify the user's ability to find and view the next episode. As the claims of the '968 patent improve a specific technical problem through a specific solution, they are not abstract.

B. The '968 Patent Provides Structure and Function That Was Not Well-Understood, Routine, or Conventional.

143. Several aspects of the structure and function claimed by the '968 patent were not well-understood, routine, or conventional as of the patent's priority date. As detailed above, the claims of the '968 patent require specific configurations of a receiving apparatus or system (or an analogous method) that is configured: (a) "to designate a part of the digital moving image contents" from a provider, where the designation is either "automatic" or "in response to a manual operation; (b) to keep information necessary to "automatically designate a succeeding part" of the digital moving image contents, where that part succeeds a "viewed part" of the

contents; (c) a designation software controller configured to "control the memory to keep the information in response to a termination of viewing the viewed part," and "control the processor to automatically designate the succeeding part" when viewing resumes; (d) to receive a "designated succeeding part" in response to the "designation by the processor"; and (e) to display "the succeeding part of the digital moving image contents received by the receiver." These limitations—both individually and as an ordered combination—have an inventive concept.

144. For example, Figure 4 depicts one claimed embodiment, where the apparatus displays a chapter (episode) for selection, and can play the episode if selected or a succeeding chapter (episode) from the beginning if a timer expires. '968 patent, Fig. 4, 11:17-59. It was not intuitive in 2008 to have such an automatic designation and presentation of succeeding content, and it certainly was not routine or common at the time. That is especially true in the context of the changing technology of the mid-2000s, where there had been no similar difficulties in locating the next movie in a series on the shelf at Blockbuster.

145. As discussed above, each limitation provides structure and function requiring significant effort to implement, and was not well-understood, routine, or conventional. To take but one example, the "designation software controller" limitation requires a person of ordinary skill in the art to engage in substantial programming work to design and set the timer to either continue the episode selection process if the time to select has not "past over a limit," or to "download the packet corresponding to the beginning of the digital moving image content" (such as the beginning of the next episode) where "the time since the display started in step S88 has past over a limit." '968 patent at 11:36-48. And a person of ordinary skill in the art would need to engage in significant programming to make sure the "necessary functions are all automatically carried out even if no further operation will be done." '968 patent at 11:58-59. None of these

efforts were required in the prior art "conventional video recorders or DVD recorders," nor in the video rental store or library context. '968 patent at 10:66-67. The '968 specification indeed repeatedly contrasts its invention with prior "conventional" approaches, and how its invention can achieve results not previously possible while remaining almost invisible to users familiar with "conventional television program[s]." *See also* '968 patent at 8:39-45; 15:23-27, 55-59; 16:53-57. This same point applies to the other limitations as well.

146. As also discussed above, the proliferation of viewing options with the proliferation of computers, broadband, smartphones, and apps in the 2000s created "confusion" for users that had not existed before in finding related content, and which required inventive approaches like those in the '968 patent, ones not well-understood, routine, or conventional. '968 patent at 1:54-59. The claimed invention thus represents an improvement to computer functionality itself, with a specific type of designated and succeeding parts of digital moving image contents that improves the way the networked computers transmit and receive digital moving image data to automatically locate and present the next episode of related content. Looked at another way, the '968 invention is necessarily rooted in computer technology (distributed broadband computers) in order to overcome a problem specifically arising in the realm of computer networks (how to locate the next episode of related content in a data stream). The '968 invention also improves the efficiency of using electronic devices by bringing together a limited list of common contents (the designated part/one episode of the digital moving image contents and the succeeding part/next episode) that users are interested in, to let the contents be accessed from the same location, thus increasing speed and useability rather than requiring multiple navigation steps. The claims are directed to an improvement in the functioning of computers.

147. Indeed, if the invention of the '968 patent were abstract, and its implementation well-understood, routine, and conventional in 2008, Netflix would not have taken years post-invention to develop and implement the solution. The play next episode feature had the largest impact in Netflix history on customer retention and hours watched, such that it was by far the biggest increase of any feature Netflix ever tested. That this functionality is the single most important thing the premier streamer ever did to retain viewers and increase hours watched is powerful evidence that the '968 patent's invention was not abstract, well-understood, routine, or conventional, but instead rooted in computer technology in order to overcome a problem specifically arising in the realm of computing.

148. The '968 patent's limitations are not well-understood, routine, or conventional. As discussed above, they are specific configurations of hardware and software that allow streamlining and simplification of a user's ability to find and view the next episode of digital image contents, which would otherwise be quite difficult. The invention thus represents a marked improvement to computer functionality.

149. The components of the '968 patent also are not generic. Any such view would take the components of the claims in isolation, such as a processor or memory, where the limitations as a combination together reflect an unconventional inventive concept.

150. The claims of the '968 patent include an "inventive concept."

C. The '968 Patent Does Not Preempt Any Field.

151. The unconventional claim limitations of the '968 patent do not preempt all bookmarking techniques, nor do they preempt bookmarking digital moving image content and displaying the content from the bookmarked position.

152. Any suggestion that '968 patent preempts any field would rely on an overbroad view of the claims that ignores the specific physical structure and function recited in the claims,

as detailed above. The claims are tethered to the field of streamlining and simplification of a user's ability to find and view the next episode of digital image contents. As such, they do not block the concept of bookmarking across the entire field of digital moving image content.

153. The claims of the '968 patent do not preempt any field.

D. The '968 Patent's Dependent Claims Are Patent-Eligible.

154. As discussed above, the claimed invention is directed to specific apparatus and system having a particular configuration and requirements (and a method of performing analogous steps). '968 patent, claims 1, 5, 9. Dependent claims 2-4, 6-8, and 10-12 recite embodiments comprising particular additional configurations and requirements. Dependent claims 2, 6, and 10 add the limitation of being configured "to designate the part of the digital moving image contents by selecting the provider," wherein that part "is provided by the selected provider." Dependent claims 3, 7, and 11 require being configured to "designate a part of the digital moving image contents provided by the provider by streaming technology in accordance with a program schedule table." Dependent claims 4, 8, and 12 add the limitation of being configured to designate an "optional part" of the digital moving image contents "in response to the manual operation" of the independent claims.

155. All these claims further limit the independent claims from which they depend by reciting additional tangible elements unconnected to any alleged abstract idea, and which further focus the claims to specific inventive applications that were not well-understood, routine, or conventional, and that preempt no field. Taking claims 2, 6, and 10 first, they each require configuration to designate a part of the digital moving image contents by selecting a specific provider, and that the part so designated is in fact provided by that selected provider. Any product or service that is not configured to designate parts by selecting a specific provider and with that provider providing those parts would not literally be covered by these dependent

claims. Similarly, claims require being configured to both designate a part of the digital moving image contents provided by the provider by "streaming technology," and that doing so be "in accordance with a program schedule table." Again, any product or service that is not configured to operate via streaming technology (e.g., entire file downloads) would not literally be covered by these dependent claims, nor would it literally be covered if the provision is not in accordance with a program schedule table. Finally, claims 4, 8, and 12 require being configured to designate an optional part of the digital moving image contents in response to the manual operation. Any product or service that is not configured to designate an optional part in response to a manual operation would not be literally covered by these dependent claims.

156. In short, these dependent claims are even further away from preempting any field than the independent claims from which they depend. And the recitation of tangible elements in these dependent claims confirms that the focus of the claims is the concrete application of a particular configuration and requirements for receiving digital moving images, and is not directed to an abstract idea.

Apple's Direct Infringement

157. Apple has directly infringed and continues to directly infringe, literally and/or equivalently, one or more claims of the '968 patent, including at least claim 1, including by importing, using, selling, and offering for sale in the United States the Accused Products.

158. For example, and without limitation, Apple's devices including its iPhones, iPads, laptops, MacBooks, and iMacs/Macs that use the preinstalled Apple TV+ app to meet each and every limitation of claim 1 either literally or under the doctrine of equivalents, as set forth in Exhibit O and incorporated here.

Apple's Knowledge of the '968 Patent

159. Since at least as early as the filing of the Original Complaint, Apple has known of the '968 patent.

Apple's Induced Infringement

160. Since at least as early as the filing of the Original Complaint, Apple has known that the Accused Products infringe at least claim 1 of the '968 patent.

161. Since at least as early as the filing of the Original Complaint, Apple has known that the Accused Products infringe at least claim 1 of the '968 patent when used by customers or other users, when imported by others, and when sold or offered for sale by third parties, such as Best Buy. *See, e.g.*, https://www.bestbuy.com/site/brands/apple/pcmcat128500050005.c?id=pcmcat128500050005. For example, a search of Apple's website of sales locations for all Apple products in or near the 19702 ZIP code for Newark, Delaware returns 99 results, only one of which is an Apple Store located in Christiana Mall, while the remaining 98 are third-party Apple resellers located in or near Delaware. *See* https://locate.apple.com/sales?pt=all&lat=39.61539077758789&lon=-75.74433135986328&address=19702.

162. Since at least as early as the filing of the Original Complaint, Apple has induced infringement and continues to induce infringement by actively encouraging third-party resellers to directly infringe at least claim 1 of the '968 patent by facilitating resellers' sales and offers for sale of the Accused Products and has actively encouraged such sales and offers for sale. According to Apple's 2023 10-K statement, Apple "employs a variety of indirect distribution channels, such as third-party cellular network carriers, wholesalers, retailers and resellers" which accounts for 63% of total net sales, Apple "depends on the performance of carriers, wholesalers, retailers and other resellers," and Apple "has invested and will continue to invest in programs to enhance reseller sales, including staffing selected resellers' stores with [Apple's] employees and

contractors, and improving product placement displays. These programs can require a substantial investment while not assuring return or incremental sales." https://d18rn0p25nwr6d.cloudfront.net/CIK-0000320193/faab4555-c69b-438a-aaf7-e09305f87ca3.pdf (pages 2 and 10-11).

163. Since at least as early as the filing of the Original Complaint, Apple has induced infringement and continues to induce infringement by actively encouraging customers or other users to directly infringe at least claim 1 of the '968 patent. Apple has provided with the Accused Products and on the apple.com website, user manuals, product documentation, and advertising materials that induce customers or others to use the Accused Products in a manner that infringes at least claim 1 of the '968 patent. For example, Apple's support website touts the ability to automatically play the next episode in a TV series. *See* https://support.apple.com/guide/tv/explore-home-atvbe160da08/17.0/tvos/17.0; https://support.apple.com/guide/tvapp/home-atvb05f2070b/web.

164. Since at least as early as the filing of the Original Complaint, Apple has induced infringement and continues to induce infringement by actively encouraging users of its Apple TV+ app to directly infringe at least claim 1 of the '968 patent by automatically playing the next episode in a TV series on third-party devices running the Apple TV+ app, which Apple has designed to be compatible with third-party devices. For example, Apple encourages subscribers of its Apple TV+ app to use the app on non-Apple smart TVs and streaming devices. https://support.apple.com/guide/tvplus/smart-tvs-and-streaming-devices-apda10aaed81/web

Apple's Contributory Infringement

165. Since at least as early as the filing of the Original Complaint, Apple has contributorily infringed at least claim 1 of the '968 patent by selling and offering to sell within the United States the Apple TV+ app, which automatically plays the next episode in a TV series.

166. Autoplay next episode on the Apple TV+ app is not a staple article or a commodity of commerce with substantial noninfringing uses. Autoplay next episode on the Apple TV+ app is designed, configured, and adapted to work with both Apple devices and third-party devices. Autoplay next episode on the Apple TV+ app has no substantial purpose other than as part of infringing devices and is accordingly not a staple article or a commodity of commerce.

167. Autoplay next episode on the Apple TV+ app is a material part of the invention of at least claim 1 of the '968 patent.

168. Since at least as early as the filing of the Original Complaint, Apple has known of the '968 patent and has known that the autoplay next episode on the Apple TV+ app is especially made or adapted for use in a manner that infringes at least claim 1 of the '968 patent.

169. The foregoing description of Apple's infringement is based on publicly available information. NL Giken reserves the right to modify this description, including, for example, on the basis of information about the Accused Products that it obtains during discovery.

170. NL Giken has been and is being irreparably harmed, and has incurred and will continue to incur damages, as a result of Apple's infringement of the '968 patent.

171. Apple's infringement of the '968 patent has damaged and continues to damage NL Giken in an amount yet to be determined, but no less than a reasonable royalty.

COUNT VIII

(Infringement of U.S. Patent No. 10,764,422)

172. NL Giken incorporates by reference and realleges all the foregoing paragraphs of the Amended Complaint as if fully set forth herein.

Apple's Direct Infringement

173. Apple has directly infringed and continues to directly infringe, literally and/or equivalently, one or more claims of the '422 patent, including at least claim 8, including by importing, using, selling, and offering for sale in the United States the Accused Products.

174. For example, and without limitation, Apple's devices including its iPhones and iPads meet each and every limitation of claim 8 either literally or under the doctrine of equivalents, as set forth in Exhibit P and incorporated here.

Apple's Knowledge of the '422 Patent

175. Since at least as early as the filing of the Original Complaint, Apple has known of the '422 patent.

Apple's Induced Infringement

176. Since at least as early as the filing of the Original Complaint, Apple has known that the Accused Products infringe at least claim 8 of the '422 patent.

177. Since at least as early as the filing of the Original Complaint, Apple has known that the Accused Products infringe at least claim 8 of the '422 patent when used by customers or other users, when imported by others, and when sold or offered for sale by third parties, such as Best Buy. *See, e.g.*, https://www.bestbuy.com/site/brands/apple/pcmcat128500050005.c?id=pcmcat128500050005. For example, a search of Apple's website of sales locations for all Apple products in or near the 19702 ZIP code for Newark, Delaware returns 99 results, only one of which is an Apple Store located in Christiana Mall, while the remaining 98 are third-party Apple resellers located in or near Delaware. *See* https://locate.apple.com/sales?pt=all&lat=39.61539077758789&lon=-75.74433135986328&address=19702.

178. Since at least as early as the filing of the Original Complaint, Apple has induced infringement and continues to induce infringement by actively encouraging third-party resellers

to directly infringe at least claim 8 of the '422 patent by facilitating resellers' sales and offers for sale of the Accused Products and has actively encouraged such sales and offers for sale. According to Apple's 2023 10-K statement, Apple "employs a variety of indirect distribution channels, such as third-party cellular network carriers, wholesalers, retailers and resellers" which accounts for 63% of total net sales, Apple "depends on the performance of carriers, wholesalers, retailers and other resellers," and Apple "has invested and will continue to invest in programs to enhance reseller sales, including staffing selected resellers' stores with [Apple's] employees and contractors, and improving product placement displays. These programs can require a substantial investment while not assuring return or incremental sales." https://d18rn0p25nwr6d.cloudfront.net/CIK-0000320193/faab4555-c69b-438a-aaf7-e09305f87ca3.pdf (pages 2 and 10-11).

179. Since at least as early as the filing of the Original Complaint, Apple has induced infringement and continues to induce infringement by actively encouraging customers or other users to directly infringe at least claim 8 of the '422 patent. Apple has provided with the Accused Products and on the apple.com website, user manuals, product documentation, and advertising materials that induce customers or others to use the Accused Products in a manner that infringes at least claim 8 of the '422 patent. For example, Apple's support website touts the ability to both transfer data from an iPhone to an iPad or Mac and charge the iPhone via USB-C cables. *See* https://support.apple.com/en-euro/105099.

Apple's Contributory Infringement

180. Since at least as early as the filing of the Original Complaint, Apple has contributorily infringed at least claim 8 of the '422 patent by selling and offering to sell within the United States Apple's devices including its iPhones and iPads that can be connected to other devices for purposes of charging and data transfer.

181. Apple's devices including its iPhones and iPads that can be connected to other devices for purposes of charging and data transfer are not a staple article or a commodity of commerce with substantial noninfringing uses. This feature is designed, configured, and adapted to work with Apple devices. This feature has no substantial purpose other than as part of infringing devices and is accordingly not a staple article or a commodity of commerce.

182. This feature is a material part of the invention of at least claim 8 of the '422 patent.

183. Since at least as early as the filing of the Original Complaint, Apple has known of the '422 patent and has known that Apple's devices including its iPhones and iPads that can be connected to other devices for purposes of charging and data transfer are especially made or adapted for use in a manner that infringes at least claim 8 of the '422 patent.

184. The foregoing description of Apple's infringement is based on publicly available information. NL Giken reserves the right to modify this description, including, for example, on the basis of information about the Accused Products that it obtains during discovery.

185. NL Giken has been and is being irreparably harmed, and has incurred and will continue to incur damages, as a result of Apple's infringement of the '422 patent.

186. Apple's infringement of the '422 patent has damaged and continues to damage NL Giken in an amount yet to be determined, but no less than a reasonable royalty.

REQUEST FOR RELIEF

Plaintiff NL Giken respectfully requests that this Court enter judgment as follows:

a. Declaring that Apple has infringed the '910, '617, '547, '236, '615, '784, '968, and '422 patents;

b. Granting a permanent injunction, enjoining Apple and its officers, agents, employees, attorneys, and all other persons acting in concert or participation with

them, from further infringement of the '910, '617, '547, '236, '615, '784, '968, and '422 patents, including but not limited to enjoining the manufacture, sale, offer for sale, importation or use of the Accused Products and any further development of the Accused Products;

c. Awarding NL Giken damages adequate to compensate it for Apple's infringing activities, including supplemental damages for any post-verdict infringement up until entry of the final judgment with an accounting as needed, together with pre-judgment and post-judgment interest on the damages awarded;

d. Awarding enhanced damages in an amount up to treble the amount of compensatory damages as justified under 35 U.S.C. § 284;

e. Finding this to be an exceptional case and awarding NL Giken its attorneys' fees and costs under 35 U.S.C. § 285 as a result of Apple's infringement of the Asserted Patents; and

f. Awarding NL Giken any such other and further relief as the Court deems just and proper.

DEMAND FOR JURY TRIAL

Under Federal Rule of Civil Procedure 38(b), NL Giken demands a trial by jury on all issues so triable.

YOUNG CONAWAY STARGATT & TAYLOR, LLP

Date: March 18, 2024

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CERTIFICATE OF SERVICE

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