

October 24, 2022

VIA EDIS

The Honorable Lisa R. Barton
Secretary
U.S. International Trade Commission
500 E Street, SW
Washington, D.C. 20436

Re: In the Matter of Certain Video Processing Devices and Components Thereof, Inv. No. 337-TA-__

Dear Secretary Barton:

Complainant DivX, LLC submits the following documents in support of its request that the Commission commence an investigation pursuant to Section 337 of the Tariff Act of 1930, as amended, in view of Commission's Temporary Change to Filing Procedures, dated March 19, 2020:

1. One (1) electronic copy of the verified Complaint, pursuant to Commission Rule 210.8(a)(1)(i), and 210.12(a).
2. One (1) electronic copy of the public exhibits to the Complaint, pursuant to Commission Rule 210.8(a)(1)(i), and 201.12(a)(9), including:
 - a. One (1) electronic copy of the certified versions of the United States Patent No. 8,832,297 ("the 297 patent"); United States Patent No. 7,295,673 ("the 673 patent"); United States Patent No. 10,225,588 ("the 588 patent"); United States Patent No. 11,102,553 ("the 553 patent"); United States Patent No. 11,050,808 ("the 808 patent"); identified as Exhibits 1-5 to the Complaint;
 - b. One (1) electronic copy of the certified assignment records for the Asserted Patents identified as Exhibits 6-32 to the Complaint.
3. A CD, marked as Physical Exhibit 59, containing video as supporting public exhibit to the Complaint, pursuant to Commission Rule 210.8(a).
4. A CD, marked as Physical Exhibit 98, containing video as supporting public exhibit to the Complaint, pursuant to Commission Rule 210.8(a).
5. A CD, marked as Physical Exhibit 99, containing video as supporting public exhibit to the Complaint, pursuant to Commission Rule 210.8(a).
6. One (1) electronic copy of the Confidential Exhibits 42, 43, 76, 77, 78, 79, 90, 93 and 96 to the Complaint, pursuant to Commission Rule 210.12(a)(9)(ii).

7. One (1) electronic copy (on an external digital media) of the certified versions of the prosecution histories for the Asserted Patents identified as Appendices A, B, C, D, and E to the Complaint, pursuant to Commission Rule 210.12(c)(1).
8. One (1) electronic copy (on an external digital media) of the patents and technical references mentioned in the prosecution histories of the Asserted Patents identified as Appendices F, G, H, I, and J to the Complaint, pursuant to Commission Rule 210.12(c)(2).
9. An original physical sample of Amazon Fire Stick marked as Physical Exhibit 100 to the Complaint, pursuant to Commission Rule 210.12 (b).
10. One (1) electronic copy of DivX's letter and certification requesting confidential treatment of Confidential Exhibits 42, 43, 76, 77, 78, 79, 90, 93 and 96 (Rules 201.6(b) and 210.5(d)).
11. A Statement on the Public Interest regarding the remedial orders sought by the Complainant, pursuant to 210.8(b).

Thank you for your attention to this matter. Please contact the undersigned if there are any questions pertaining to this submission.

Hon. Lisa R. Barton

October 24, 2022

Page 3

Respectfully submitted,

TENSEGRITY LAW GROUP



Matthew D. Powers

Paul T. Ehrlich

William P. Nelson

Natasha M. Saputo

Daniel M. Radke

Jerome Ma

TENSEGRITY LAW GROUP, LLP

555 Twin Dolphin Drive, Suite 650

Redwood Shores, CA 94065

Telephone: (650) 802-6000

Facsimile: (650) 802-6001

Email:

matthew.powers@tensegritylawgroup.com

paul.ehrlich@tensegritylawgroup.com

william.nelson@tensegritylawgroup.com

natasha.saputo@tensegritylawgroup.com

Daniel.Radke@tensegritylawgroup.com

jerome.ma@tensegritylawgroup.com

Azra M. Hadzimehmedovic

Ronald J. Pabis

Stephen K. Shahida

TENSEGRITY LAW GROUP, LLP

8260 Greensboro Drive, Suite 260

McLean, VA 22102

Telephone: (703) 940-5033

Facsimile: (650) 802-6001

Email:

azra@tensegritylawgroup.com

ron.pabis@tensegritylawgroup.com

Stephen.Shahida@tensegritylawgroup.com

Attorneys for Complainant, DivX, LLC.



October 24, 2022

VIA EDIS

The Honorable Lisa R. Barton
Secretary
U.S. International Trade Commission
500 E Street, SW
Washington, D.C. 20436

Re: In the Matter of Certain Video Processing Devices and Components Thereof, Inv. No. 337-TA-

Dear Secretary Barton:

Tensegrity Law Group LLP represents Complainant DivX, LLC ("DivX") in the matter of the above referenced Complaint, which is being filed pursuant to Section 337 of the Tariff Act of 1930, as amended, 19 U. S. C. § 1337. Under Commission Rules 201.6(b) and 210.5(d), DivX respectfully requests confidential treatment of the information contained in Confidential Exhibits 42, 43, 76, 77, 78, 79, 90, 93 and 96 to the verified Enforcement Complaint.

The information contained in Confidential Exhibits 42, 43, 76, 77, 78, 79, 90, 93 and 96 qualifies as confidential information pursuant to 19 C.F.R. § 201.6 in that it discloses proprietary commercial information, proprietary commercial relationships, and/or proprietary business information that is not otherwise publicly available, and because the disclosure of such information would cause substantial harm to DivX and/or third parties, and would also impair the Commission's ability in the future to obtain such types of information in performance of its statutory function.

I certify, under penalty of perjury, that the proprietary confidential commercial information, proprietary commercial relationships, and/or proprietary business information present in this exhibit is not reasonably available to the public, and thus warrants confidential treatment.

Hon. Lisa R. Barton

October 24, 2022

Page 2

Respectfully submitted,

TENSEGRITY LAW GROUP



Matthew D. Powers

Paul T. Ehrlich

William P. Nelson

Natasha M. Saputo

Daniel M. Radke

Jerome Ma

TENSEGRITY LAW GROUP, LLP

555 Twin Dolphin Drive, Suite 650

Redwood Shores, CA 94065

Telephone: (650) 802-6000

Facsimile: (650) 802-6001

Email:

matthew.powers@tensegritylawgroup.com

paul.ehrlich@tensegritylawgroup.com

william.nelson@tensegritylawgroup.com

natasha.saputo@tensegritylawgroup.com

Daniel.Radke@tensegritylawgroup.com

jerome.ma@tensegritylawgroup.com

Azra M. Hadzimehmedovic

Ronald J. Pabis

Stephen K. Shahida

TENSEGRITY LAW GROUP, LLP

8260 Greensboro Drive, Suite 260

McLean, VA 22102

Telephone: (703) 940-5033

Facsimile: (650) 802-6001

Email:

azra@tensegritylawgroup.com

ron.pabis@tensegritylawgroup.com

Stephen.Shahida@tensegritylawgroup.com

Attorneys for Complainant, DivX, LLC.

**UNITED STATES INTERNATIONAL TRADE COMMISSION
WASHINGTON, D.C.**

In the Matter of

**CERTAIN VIDEO PROCESSING
DEVICES AND COMPONENTS
THEREOF**

Investigation No. 337-TA-_____

**COMPLAINANT DIVX, LLC'S
STATEMENT CONCERNING THE PUBLIC INTEREST**

Complainant DivX, LLC (“DivX” or “Complainant”) hereby submits this Statement Regarding the Public Interest. 19 C.F.R. § 210.8(b). As discussed more fully below, the issuance of the relief requested in this Investigation will have no meaningful impact on the public health, safety, or welfare conditions in the United States, competitive conditions in the United States economy, the production of like or directly competitive articles in the United States, or United States consumers. DivX is seeking remedies against the following proposed respondents: Amazon.com, Inc. and VIZIO, Inc. (collectively, “Proposed Respondents”).

No compelling public interest would prevent the Commission’s issuance of the requested remedial orders. The scope of the requested remedial orders is limited to certain smart televisions, digital tablets, dedicated streaming media and video processing devices and set-top boxes, and components thereof. The affected products consist of certain smart televisions and dedicated video processing devices and components thereof used for consumer entertainment. The requested remedial orders would therefore have no effect on standard (non-smart) TVs and commercial products, such as commercial displays for hospitals and airports, or laptop computers.

Complainant DivX, its licensees, other external streaming media device manufacturers, and other TV manufacturers, such as Element, Roku, Samsung, and LG, include manufacturers inside the U.S, and are more than capable of meeting demand and supplying substitutes for Proposed Respondents' excluded products. As there are other sources of smart TVs and products and methods of enabling digital streaming, there will be no shortage of those products, and no disruption to any of the discrete portions of the relevant markets.

The uses of the accused products, as well as the ample replacement and alternatives to the products, illustrate that the requested remedy does not implicate any public health, safety, or welfare concern. As the requested remedial orders will have no significant impact on the public interest, the interest of preserving the resources of both the parties and the Commission would be best served by not delegating public interest fact-finding to the Administrative Law Judge.

I. THE REQUESTED REMEDIAL ORDERS WILL SERVE THE PUBLIC INTEREST

Granting the requested remedial orders would serve the public interest. The public interest in protecting intellectual property rights is very strong. *Certain Baseband Processor Chips and Chipsets, Transmitter and Receiver (Radio) Chip, Power Control Chips*, Inv. No. 337-TA-543, Comm'n Op. 2007 ITC LEXIS 621 at 240 (June 19, 2007). Further, "preservation of infringing activities of a respondent is not a public interest concern." *See Certain Magnetic Tape Cartridges & Components Thereof*, Inv. No. 337-TA-1058, Comm'n Op. (Pub. Version) at 68-69 (Apr. 10, 2019). The Commission has found that the public interest supports denial of an exclusion order only when articles critical to U.S. health and welfare would be unavailable in the U.S. market were an exclusion order granted. The accused products are not such articles.

II. THE ACCUSED PRODUCTS SERVE NO PUBLIC HEALTH, SAFETY, OR WELFARE PURPOSE

In general, concerns about a negative impact on public health, safety, or welfare have arisen in cases involving pharmaceuticals, essential equipment for medical treatment, or green technology products, such as hybrid cars and solar panels. *See Spansion, Inc. v. U.S. Int'l Trade Comm'n*, 629 F.3d 1331, 1360 (Fed. Cir. 2010). None of these concerns is present here. The accused products are not necessary for any public health, safety, or welfare purpose. In investigations with similar facts, *Integrated Circuits, Chipsets; and Products Containing Same Including Televisions*, Inv. No. 337-TA-786, and *Certain Video Processing Devices, Components Thereof, and Digital Televisions Containing the Same*, 337-TA-1222 and 337-TA-1297, the Commission did not delegate fact finding on the public interest to the ALJ. This Investigation presents no compelling circumstance that would prevent the issuance of remedial measures because: (1) the accused products are entertainment devices that are not necessary to any important health or welfare need; (2) DivX and its licensees already sell articles that directly compete with, and are substitutes for, Proposed Respondents' infringing products; (3) the products sold by DivX and its licensees can fill any void in the market created by the requested remedial order; and (4) the requested order would not exclude standard (non-smart) TVs and commercial products, such as commercial displays for hospitals and airports.

III. THE RELIEF REQUESTED WOULD NOT ADVERSELY AFFECT COMPETITIVE CONDITIONS

Complainant's requested relief would not adversely affect competitive conditions in the U.S. economy. In assessing competitive conditions, "the appropriate standard is not that no remedy should issue if every consumer cannot obtain the exact device desired that was found to infringe the patents at issue. Rather, the impact is assessed in the aggregate and consideration is given to whether there are reasonable substitutes for the devices subject to the exclusion order in

terms of features, price points, and other pertinent factors.” *Certain Elec. Digital Media Devices & Components Thereof*, Inv. No. 337-TA-796, Comm’n Op. (Pub. Version) at 120 (Sept. 6, 2013).

In this case, stopping Proposed Respondents’ unlawful importation of accused products into the U.S. would not negatively impact competitive conditions in the market. Complainant DivX and third parties, including Element, Roku, Samsung, and LG, make like or directly competitive articles that could replace the accused products if they were to be excluded from the U.S., and have the capacity to replace the volume of articles potentially subject to remedial orders in a commercially reasonable time. Licensee Element, which assembles TVs in the U.S., and industry leaders such as Samsung and LG, make some of the most popular products available in the U.S., and are more than capable of supplying substitutes for Proposed Respondents’ excluded TVs and video processing devices. Similarly, industry leaders such as Roku, Google, and Apple are more than capable of supplying substitutes for Proposed Respondents’ excluded dedicated streaming media devices.

IV. THE RELIEF REQUESTED WILL HAVE NO SIGNIFICANT NEGATIVE IMPACT ON U.S. CONSUMERS

As described above, the consumer products targeted in this Investigation consist of smart TVs and external streaming media devices, which are used for entertainment purposes. U.S. consumers have available to them a wide variety of connected TV options, including both smart TV products and external streaming media devices. The requested remedial measures will have little or no discernable impact on consumers in the U.S. If Proposed Respondents’ infringing products were excluded, consumers would not be deprived of new televisions or digital video streaming technology. There are ample replacement articles of like or directly competitive products such that there would be no negative impact on U.S. consumers. For example, Best Buy,

a leading “big box” retailer of consumer electronics, offers at least 294 models of non-accused Samsung and LG-branded smart TVs, at prices as low as \$53.99.¹ Best Buy also offers at least 38 models of non-accused Roku, Google, and Apple-branded external streaming media devices, at prices as low as \$29.99.² Exclusion of Proposed Respondents’ products will not negatively impact consumers with increased prices or reduced availability of alternative products.

V. CONCLUSION

Permanent limited exclusion orders and cease and desist orders in this Investigation against the Proposed Respondents’ infringing products will have no meaningful impact on the public health, safety, or welfare in the U.S., competitive conditions in the U.S. economy, the production of like or competitive articles in the U.S., or the availability of products to consumers. Thus, U.S. consumers will not be negatively affected by the requested remedial measures.

This Investigation presents no special issues of public interest that would affect the Commission’s issuance of the requested limited exclusion orders and cease and desist orders or that would necessitate discovery and trial on this issue by the ALJ. Accordingly, the Commission should not direct the ALJ to take unnecessary evidence on the public interest.

¹ https://www.bestbuy.com/site/searchpage.jsp?_dyncharset=UTF-8&browsedCategory=pcmcat220700050011&id=pcat17071&iht=n&ks=960&list=y&qp=brand_facet%3DBrand~Samsung%5Ebrand_facet%3DBrand~LG&sc=Global&sp=%2Bcurrentprice%20skuidsas&st=pcmcat220700050011_categoryid%24abcat0101001&type=page&usc=All%20Categories (last accessed on October 23, 2022).

² https://www.bestbuy.com/site/searchpage.jsp?_dyncharset=UTF-8&browsedCategory=pcmcat161100050040&id=pcat17071&iht=n&ks=960&list=y&qp=brand_facet%3DBrand~Roku%5Ebrand_facet%3DBrand~Apple%5Ebrand_facet%3DBrand~Google&sc=Global&sp=%2Bcurrentprice%20skuidsas&st=categoryid%24pcmcat161100050040&type=page&usc=All%20Categories (last accessed on October 23, 2022).

Dated: October 24, 2022

Respectfully submitted,



Matthew D. Powers

Paul T. Ehrlich

William P. Nelson

Natasha M. Saputo

Daniel M. Radke

Jerome Ma

TENSEGRITY LAW GROUP, LLP

555 Twin Dolphin Drive, Suite 650

Redwood Shores, CA 94065

Telephone: (650) 802-6000

Facsimile: (650) 802-6001

Email:

matthew.powers@tensegritylawgroup.com

paul.ehrlich@tensegritylawgroup.com

william.nelson@tensegritylawgroup.com

natasha.saputo@tensegritylawgroup.com

daniel.radke@tensegritylawgroup.com

jerome.ma@tensegritylawgroup.com

Azra M. Hadzimehmedovic

Ronald J. Pabis

Stephen K. Shahida

TENSEGRITY LAW GROUP, LLP

8260 Greensboro Dr., Suite 260

McLean, VA 22102

Telephone: (703) 940-5033

Facsimile: (650) 802-6001

Email:

azra@tensegritylawgroup.com

ron.pabis@tensegritylawgroup.com

stephen.shahida@tensegritylawgroup.com

Attorneys for Complainant,

DivX, LLC

**UNITED STATES INTERNATIONAL TRADE COMMISSION
WASHINGTON, D.C.**

In the Matter of

**CERTAIN VIDEO PROCESSING
DEVICES AND COMPONENTS
THEREOF**

Investigation No. 337-TA-_____

**VERIFIED COMPLAINT OF DIVX, LLC
UNDER SECTION 337 OF THE TARIFF ACT OF 1930**

COMPLAINANT

DivX, LLC

4350 La Jolla Village Drive
Suite 950
San Diego, CA 92122
Tel. (858) 869-9756

COUNSEL FOR COMPLAINANT

Matthew D. Powers
Paul T. Ehrlich
William P. Nelson
Natasha M. Saputo
Daniel M. Radke
Jerome Ma
Tensegrity Law Group LLP
555 Twin Dolphin Dr., Suite 650
Redwood Shores, CA 94061
Telephone: (650) 802-6000
Facsimile: (650) 802-6001

Azra M. Hadzimehmedovic
Ronald J. Pabis
Stephen K. Shahida
Tensegrity Law Group LLP
8260 Greensboro Dr., Suite 260
McLean, VA 22102
Telephone: (703) 940-5033
Facsimile: (650) 802-6001

PROPOSED RESPONDENTS

Amazon.com, Inc.

410 Terry Avenue North
Seattle, Washington 98109
Tel. (206) 266-1000

VIZIO, Inc.

39 Tesla
Irvine, CA 92618
Tel. (949) 428-2525

TABLE OF CONTENTS

I.	Introduction.....	1
II.	Complainant.....	2
III.	The Proposed Respondents.....	8
IV.	The Technology and Products At Issue	9
V.	The Asserted Patents and Non-Technical Description Of The Inventions.....	10
	A. Overview and Ownership of the Asserted Patents.....	10
	B. Non-Technical Description of 297 Patent.....	15
	C. Non-Technical Description of 673 Patent.....	19
	D. Non-Technical Description of 588 Patent.....	22
	E. Non-Technical Description of 553 Patent.....	25
	F. Non-Technical Description of 808 Patent.....	27
	G. Ownership and Foreign Counterparts of the Asserted Patents	32
	H. Licenses.....	35
VI.	Unlawful and Unfair Acts of Respondent - Patent Infringement	36
	A. Infringement of the 297 Patent.....	37
	B. Infringement of the 673 Patent.....	49
	1. Amazon.....	51
	2. VIZIO.....	60
	C. Infringement of the 588 Patent.....	72
	1. Amazon.....	74
	2. VIZIO.....	83
	D. Infringement of the 553 Patent.....	95
	1. Amazon.....	97
	2. VIZIO.....	106

E.	Infringement of the 808 Patent.....	118
1.	Amazon.....	120
2.	VIZIO.....	131
VII.	Specific Instances of Unfair Importation and Sale	142
VIII.	Harmonized Tariff Schedule Item Numbers.....	143
IX.	Related Litigation.....	144
X.	The Domestic Industry.....	147
A.	The Technical Prong of the Domestic Industry Requirement Is Satisfied.....	148
B.	The Economic Prong of the Domestic Industry Requirement Is Satisfied	149
1.	Disney’s Domestic Activities Satisfy the Economic Prong.....	149
2.	Element’s Domestic Activities Satisfy the Economic Prong.....	160
XI.	Relief Requested	167

TABLE OF SUPPORTING MATERIALS

EXHIBITS

<u>Exhibit No.</u>	<u>Description</u>
1.	Certified Copy of U.S. Patent No. 8,832,297
2.	Certified Copy of U.S. Patent No. 7,295,673
3.	Certified Copy of U.S. Patent No. 10,225,588
4.	Certified Copy of U.S. Patent No. 11,102,553
5.	Certified Copy of U.S. Patent No. 11,050,808
6.	Certified Copy of Patent Assignment for U.S. Patent No. 8,832,297, Reel/Frame Number 027896-0557
7.	Certified Copy of Patent Assignment for U.S. Patent No. 8,832,297 and U.S. Patent No. 7,295,673, Reel/Frame Number
8.	Certified Copy of Patent Assignment for U.S. Patent No. 8,832,297 and U.S. Patent No. 7,295,673, Reel/Frame Number
9.	Certified Copy of Patent Assignment for U.S. Patent No. 8,832,297 and U.S. Patent No. 7,295,673, Reel/Frame Number
10.	Certified Copy of Patent Assignment for U.S. Patent No. 8,832,297, Reel/Frame Number 050407-0104
11.	Certified Copy of Patent Assignment for U.S. Patent No. 7,295,673, Reel/Frame Number 014756-0790
12.	Certified Copy of Patent Assignment for U.S. Patent No. 7,295,673, Reel/Frame Number 017193-0908
13.	Certified Copy of Patent Assignment for U.S. Patent No. 7,295,673, Reel/Frame Number 026026-0111
14.	Certified Copy of Patent Assignment for U.S. Patent No. 7,295,673, Reel/Frame Number 028965-0830
15.	Certified Copy of Patent Assignment for U.S. Patent No. 7,295,673, Reel/Frame Number 030591-0534
16.	Certified Copy of Patent Assignment for U.S. Patent No. 7,295,673, Reel/Frame Number 032645-0559

17. Certified Copy of Patent Assignment for U.S. Patent No. 7,295,673, Reel/Frame Number 033378-0685
18. Certified Copy of Patent Assignment for U.S. Patent No. 7,295,673, Reel/Frame Number 050096-0715
19. Certified Copy of Patent Assignment for U.S. Patent No. 10,225,588, Reel/Frame Number 047831-0712
20. Certified Copy of Patent Assignment for U.S. Patent No. 10,225,588, Reel/Frame Number 047831-0769
21. Certified Copy of Patent Assignment for U.S. Patent No. 10,225,588, Reel/Frame Number 047831-0858
22. Certified Copy of Patent Assignment for U.S. Patent No. 10,225,588, Reel/Frame Number 047831-0929
23. Certified Copy of Patent Assignment for U.S. Patent No. 10,225,588, Reel/Frame Number 052034-0229
24. Certified Copy of Patent Assignment for U.S. Patent No. 11,102,553, Reel/Frame Number 055774-0714
25. Certified Copy of Patent Assignment for U.S. Patent No. 11,102,553, Reel/Frame Number 055774-0737
26. Certified Copy of Patent Assignment for U.S. Patent No. 11,102,553, Reel/Frame Number 055774-0756
27. Certified Copy of Patent Assignment for U.S. Patent No. 11,102,553, Reel/Frame Number 055774-0815
28. Certified Copy of Patent Assignment for U.S. Patent No. 11,050,808, Reel/Frame Number 052982-0055
29. Certified Copy of Patent Assignment for U.S. Patent No. 11,050,808, Reel/Frame Number 052982-0087
30. Certified Copy of Patent Assignment for U.S. Patent No. 11,050,808, Reel/Frame Number 052982-0092
31. Certified Copy of Patent Assignment for U.S. Patent No. 11,050,808, Reel/Frame Number 052982-0104
32. Certified Copy of Patent Assignment for U.S. Patent No. 11,050,808, Reel/Frame Number 052982-0123

33. HEXUS, “Review: DivX Stage6 (beta) – the high def rival to YouTube” (May 1, 2007), available at <https://hexus.net/tech/reviews/software/8558-divx-stage6-beta-high-def-rival-youtube/>
34. Get Grove! Download Grove App to Capture Amazing Moments Together, available at, www.dix.com/grove/
35. Fire 7 12th Generation Quick Start Guide, available at <https://www.amazon.com/gp/help/customer/display.html?nodeId=GSVHEM38SNSZE2HS>
36. Amazon Fire Stick 3rd Generation Quick Start Guide, available at https://customerdocumentation.s3-us-west-2.amazonaws.com/Amazon+Fire+TV+User+Guides/Fire+TV+Stick+Device+Documentation/22-002253-01_FireTVStick_3rd+Gen_Quick+Start+Guide_US.pdf
37. Echo Show 15 Quick Start Guide, available at <https://www.amazon.com/gp/help/customer/display.html?nodeId=202016340>
38. FireTV User Manual, FireTV4-Series, Fire TV Omni Series, available at <https://www.amazon.com/gp/help/customer/display.html?nodeId=201348270>
39. VIZIO V-Series User Manual for Models: V435-J01, V505-J01, V505-J09, V505C-J09, V555-J01, V585-J01, V655-J04, V655-J09, V705-J01, V705-J03, V705x-J03 & V755-J04
40. List of Amazon Accused Products and corresponding model numbers
41. List of VIZIO Accused Products and corresponding model numbers
42. CONFIDENTIAL – Purchase Agreement
43. CONFIDENTIAL – List of Entities
44. U.S. 8,832,297 Infringement Claim Chart (Amazon)
45. U.S. 7,295,673 Infringement Claim Chart (Amazon)
46. U.S. 7,295,673 Infringement Claim Chart (VIZIO)
47. U.S. 10,225,588 Infringement Claim Chart (Amazon)
48. U.S. 10,225,588 Infringement Claim Chart (VIZIO)
49. U.S. 11,102,553 Infringement Claim Chart (Amazon)
50. U.S. 11,102,553 Infringement Claim Chart (VIZIO)
51. U.S. 11,050,808 Infringement Claim Chart (Amazon)

52. U.S. 11,050,808 Infringement Claim Chart (VIZIO)
53. Prosecution History of Amazon’s U.S. Patent No. 10,277,924
54. In the Matter of CERTAIN VIDEO PROCESSING DEVICES, COMPONENTS THEREOF, AND DIGITAL SMART TELEVISIONS CONTAINING THE SAME II, Investigation No. 337-TA-1297, Motion to Intervene by Amazon.com, Inc., dated February 11, 2022
55. Amazon, Getting Started, available at https://www.amazon.com/gp/video/getstarted/ref=sv_atv_5
56. Amazon Appstore, Fire OS Overview, available at <https://developer.amazon.com/docs/fire-tv/fire-os-overview.html>
57. Amazon Appstore, Media Players (Fire TV), available at <https://developer.amazon.com/docs/fire-tv/media-players.html>
58. Declaration of Marc E. Levitt, Ph.D. (“Levitt Decl.”)
59. Physical Exhibit: Amazon video “Prime Video: How to Buy or Rent Prime Video,” available at <https://www.youtube.com/watch?v=gX0YkCjOxUg>
60. Amazon, Add Prime Video to your favorite device, available at https://www.amazon.com/gp/video/splash/device_linking
61. Amazon Fire Stick 4K Quick Start Guide, available at https://s3-us-west-2.amazonaws.com/customerdocumentation/Amazon+Fire+TV+User+Guides/Fire+TV+Stick+Device+Documentation/Fire+TV+Stick+4K_Quick+Start+Guide_US.pdf
62. Amazon, Download Apps on Your Fire TV Device, available at https://www.amazon.com/gp/help/customer/display.html?nodeId=GRDR6KJPL2FT6YHS&ref_=hp_GHH5TUHA7677G4HJ_c_Download-Apps-on-Your-Fire-TV-
63. VIZIO’s SmartCast® platform, available at <https://www.vizio.com/en/smartcast>
64. VIZIO, Smart TV Apps, available at <https://www.vizio.com/en/smart-tv-apps>
65. Prime Video advertisement, available at <https://www.vizio.com/en/smart-tv-apps?appName=prime-video&appId=vizio.amazon>
66. HBO Max advertisement, available at <https://www.vizio.com/en/smart-tv-apps?appName=hbomax&appId=vizio.hbomax>
67. VIZIO, Content Partner, available at <https://www.vizio.com/en/content-partners>
68. VIZIO press release, “HBO Max App Now Available on VIZIO SmartCast®”, September 1, 2021, available at <https://www.vizio.com/en/press/2021/sept/hbo-max-app-now-available-on-vizio-smartcast->

69. VIZIO Support, How to add an App to your VIZIO Smart TV, available at https://support.vizio.com/s/article/How-to-add-an-App-to-your-VIZIO-Smart-TV?language=en_US
70. Amazon.com Order Receipt, June 2, 2022
71. Image of 3rd Generation Fire TV Stick Packaging
72. Image of 3rd Generation Fire TV Stick Label
73. Walmart Order Receipt, June 23, 2022
74. Image of Vizio V435-J01 Packaging
75. Image of Vizio V435-J01 Device Label
76. CONFIDENTIAL – The Walt Disney Company License Agreement
77. CONFIDENTIAL – Element Electronics Holdings, LLC License Agreement
78. CONFIDENTIAL – Element Electronics Holdings, LLC License Agreement Side Letter
79. CONFIDENTIAL – Element Electronics Holdings, LLC Amended License Agreement
80. U.S. 8,832,297 Domestic Industry Claim Chart (Disney)
81. U.S. 7,295,673 Domestic Industry Claim Chart (Disney)
82. U.S. 10,225,588 Domestic Industry Claim Chart (Disney)
83. U.S. 11,102,553 Domestic Industry Claim Chart (Disney)
84. U.S. 11,050,808 Domestic Industry Claim Chart (Disney)
85. U.S. 8,832,297 Domestic Industry Claim Chart (Element)
86. U.S. 7,295,673 Domestic Industry Claim Chart (Element)
87. U.S. 10,225,588 Domestic Industry Claim Chart (Element)
88. U.S. 11,102,553 Domestic Industry Claim Chart (Element)
89. U.S. 11,050,808 Domestic Industry Claim Chart (Element)
90. CONFIDENTIAL – Declaration of Stephen D. Prowse (“Prowse Decl.”)
91. ISO/IEC 23009-1 Information technology – Dynamic adaptive streaming over HTTP (DASH) – Part 1: Media presentation description and segment formats (2d ed. 2014) (“ISO/IEC 23009-1:2014(E)” or “ISO/IEC 23009-1”)

92. ISO/IEC 23001-7 Information technology – MPEG systems technologies – Part 7: Common encryption in ISO base media file format files (3d ed. 2016) (“ISO Common Encryption Standard” or “ISO/IEC 23001-7:2016(E)” or “ISO/IEC 23001-7”)
93. CONFIDENTIAL – ISO/IEC 23000-19 Information technology – Multimedia application format (MPEG-A) – Part 19: Common media application format (CMAF) for segmented media (2d ed. 2020) (“ISO/IEC 23000-19:2020(E),” “ISO/IEC 23000-19”)
94. ISO/IEC 23009-1 Information technology – Dynamic adaptive streaming over HTTP (DASH) – Part 1: Media presentation description and segment formats (4th ed. 2019) (“ISO/IEC 23009-1:2019(E),” “DASH standard,” or “MPEG-DASH standard”)
95. ISO/IEC 14496-12 Information technology — Coding of audio-visual objects — Part 12: ISO base media file format (2d ed. 2005) (“ISO/IEC 14496-12:2005(E)”)
96. CONFIDENTIAL – Declaration of Vladimir Kazhdan (“Kazhdan Decl.”)
97. Amazon.com, Inc. List of Significant Subsidiaries (excerpt from Amazon Form 10-K For the fiscal year ended December 31, 2021)
98. Physical Exhibit: Video “Walmart and Element Electronics Bring Jobs to Winnsboro, South Carolina,” available at <https://www.youtube.com/watch?v=BKh3QnfuLrQ>
99. Physical Exhibit: Video “Element Electronics Celebrates Five Years at U.S. Factory,” available at <https://www.youtube.com/watch?v=XlxFuowpBj0>
100. Physical Exhibit: Amazon Fire stick
101. In the Matter of CERTAIN VIDEO PROCESSING DEVICES, COMPONENTS THEREOF, AND DIGITAL SMART TELEVISIONS CONTAINING THE SAME, Investigation No. 337-TA-1222, Stipulation Extending Time for Non-Party Amazon.com, Inc. to Respond to Complainant DivX, LLC’s Subpoena

APPENDICES

<u>Appendix Item</u>	<u>Description</u>
A.	Certified Copy of Prosecution History of U.S. Patent No. 8,832,297
B.	Certified Copy of Prosecution History of U.S. Patent No. 7,295,673
C.	Certified Copy of Prosecution History of U.S. Patent No. 10,225,588
D.	Certified Copy of Prosecution History of U.S. Patent No. 11,102,553
E.	Certified Copy of Prosecution History of U.S. Patent No. 11,050,808
F.	Technical references cited in the prosecution history for U.S. Patent No. 8,832,297
G.	Technical references cited in the prosecution history for U.S. Patent No. 7,295,673
H.	Technical references cited in the prosecution history for U.S. Patent No. 10,225,588
I.	Technical references cited in the prosecution history for U.S. Patent No. 11,102,553
J.	Technical references cited in the prosecution history for U.S. Patent No. 11,050,808

I. INTRODUCTION

1. DivX, LLC (“Complainant” or “DivX”) requests that the United States International Trade Commission commence an investigation under Section 337 of the Tariff Act of 1930, as amended, 19 U.S.C § 1337 (“Section 337”), to remedy the unlawful importation into the United States, the sale for importation, and/or the sale within the United States after importation of certain video processing devices and components thereof that infringe valid and enforceable United States patents owned by DivX.

2. The proposed Respondents are Amazon.com, Inc. (“Amazon”) and VIZIO Inc. (“VIZIO”).

3. The proposed Respondents have engaged in unfair acts in violation of Section 337 through and in connection with the unlicensed importation into the United States, sale for importation, and/or sale within the United States after importation of Accused Products that infringe directly or indirectly, one or more claims of U.S. Patent Nos. 8,832,297 (the “297 Patent”); 7,295,673 (the “673 Patent”); 10,225,588 (the “588 Patent”); 11,102,553 (the “553 Patent”); and 11,050,808 (the “808 Patent”) (collectively “the Asserted Patents”). Certified copies of the Asserted Patents are attached as Exhibits 1-5.

4. DivX owns all rights, title, and interest in each of the Asserted Patents. Certified copies of the recorded assignments of the Asserted Patents are attached as Exhibits 6-32.

5. The technology at issue utilized by the Accused Products involves streaming media (such as video, audio, etc.) by devices used in and with digital smart televisions, media streaming devices and tablets, associated software and/or firmware, components thereof, consisting of integrated circuits containing video processors and associated software and/or firmware. On information and belief, the Accused Products are imported into the United States,

sold for importation into the United States, or sold within the United States after importation by or on behalf of Respondents.

6. The proposed Respondents directly, and/or indirectly, infringe at least the patents and claims listed in the following chart.

U.S. Patent No.	Claims Infringed by Amazon	Claims Infringed by VIZIO
8,832,297	1, 2, 4	none asserted
7,295,673	29-32	29-32
10,225,588	1-11	1-11
11,102,553	11-13, 15-17	11-13, 15-17
11,050,808	1-7, 10-16	1-7, 10-16

7. As required by 19 U.S.C. §§ 1337 (a)(2) and (3), an industry in the United States relating to the articles protected by the Asserted Patents exists.

8. DivX seeks, as permanent relief, a limited exclusion order, specifically directed to the proposed Respondents and their subsidiaries and affiliates, barring from entry into the United States all infringing devices and products containing the accused functionalities. DivX also seeks cease and desist orders directed to the proposed Respondents prohibiting their sale for importation, importation, sale after importation, use, offer for sale, sale, distribution, advertising, testing, repair, technical support, or any commercial activity related to the Accused Products. Further, DivX requests that the Commission impose a bond upon Respondents' importation of Accused Products during the 60-day Presidential review period pursuant to 19 U.S.C. § 1337(j) to prevent further injury to the domestic industry relating to each of the Asserted Patents.

II. COMPLAINANT

9. Pursuant to Commission Rule 210.12(a)(7), DivX is a U.S. company founded in 2000. Since its inception, DivX has set the bar for high-quality digital video. DivX is one of the first companies to enable successful delivery of high-quality digital video over the internet. For more than 20 years, DivX has been developing innovative technologies to deliver better digital

entertainment experiences for consumers—making internet video high-quality, secure, easy, and enjoyable for consumers to watch on any device.

10. Continuing to this day, DivX’s patented technology helps people around the world enjoy digital media on their own terms. Today, consumers take for granted that high-quality video from the internet is readily available on any device at the touch of a button. But by the time DivX’s engineers accomplished this feat in the mid to late aughts, they had to overcome significant technical obstacles to do so. Through those efforts, DivX engineers invented foundational technologies that made high-quality internet video possible long before smart televisions existed.

11. For example, DivX’s fundamental advances in video compression and streaming technology have made it possible to transmit large video files efficiently over the internet. DivX also created technology that allows those video files to be streamed to and played on a wide variety of consumer electronics devices. DivX further developed encryption technology (*e.g.*, Digital Rights Management technology) for video files, to protect valuable video content so that content producers would be comfortable making their original works available on the internet. DivX’s fundamental advances include innovations in multiphase adaptive bitrate streaming, playback of encrypted bitstreams, and enabling seeking functionality during streaming playback. DivX’s innovation paved the way and provided a roadmap for today’s proliferation of internet video streaming on consumer devices.

12. Digital Rights Management (“DRM”), is the foundation of many DivX innovations. A robust DRM system allows owners of video content (like studio movies) to control access to the video content and provide increased protection against piracy. DRM is

therefore fundamental to distribution of video over the Internet because DRM enables secure downloading and playback of videos.

13. In 2001, when DivX took the first steps toward creating an Internet video platform, content owners such as Hollywood studios would not release their premium video content on an Internet platform because they feared that piracy and losing control of their content would severely diminish the value of their rights.

14. From 2000 to 2005, DivX met with content owners such as Disney, Warner Bros., Sony, and Paramount Pictures about technical solutions to overcome their concerns and to implement the strict security requirements that the owners demanded. During the same period, DivX also met with major consumer electronics manufacturers about overcoming challenges to implementing DRM features in their devices. DivX recognized at the time that existing technologies would not meet the content protection concerns of studios, and it had to innovate to serve the market need.

15. DivX engineers worked to build a DRM system that would solve these long-standing technical problems, and as a result of DivX's research and development efforts, DivX DRM became one of the first DRM systems accepted by major Hollywood Studios.

16. In 2001, DivX completed a new implementation of the MPEG_4 video standard that aimed to satisfy consumer demand for accessible, high-quality digital video content—DivX Codec 4.0. Over the next decade, DivX developed and released numerous new and improved versions of the DivX Codec. DivX bundled the DivX Codec with other features for video encoding, decoding, and playback and packaged it as the “DivX Software.”

17. In addition to providing the DivX Codec, the DivX Software functioned like a master translator for video files, allowing variations in codecs, containers, and playback across

different file types in different devices. It allowed consumers to compress, decode, and play back digital video using a single program that could allow users to access and use the variety of technologies available on the market, all in one place.

18. DivX continually evolved and improved its DivX Codec and DivX Software and consumer access to and use of digital video over the Internet became more widespread as computing power and network bandwidth increased. These developments led to widespread adoption of the DivX Software, a large base of DivX users, and the creation of billions of DivX video files.

19. In 2001, DivX launched Open Video System (“OVS”)—an Internet-based video-on-demand system that built upon the quality and performance of DivX Software. OVS launched at a time when broadband Internet access was not yet ubiquitous and in a business environment where Hollywood studios were not yet ready to embrace digital distribution. After the launch of OVS, DivX engineers continued to invest in technical improvements and innovations for the platform, and their innovations expanded the platform to enable playback on a wide variety of playback devices.

20. DivX’s investments in OVS produced many key innovations for delivering video over the Internet including:

- (a) A flexible, key-based DRM system that tied purchased video content to a viewer rather than a device, preventing unauthorized access when the device was sold or obtained by others while improving the viewer experience.
- (b) A core codec that offered industry-best compression and performance, enabling full-screen, DVD-like quality that was vastly superior to the pixelated, postage-stamp size viewing experience associated with Internet video at the time.

- (c) A “progressive download” feature that allowed the viewer to begin watching a purchased or rented video after only a few minutes while the file continued to download in the background.

21. DivX OVS was a successful video streaming platform. Throughout the mid-2000s, hundreds of millions of devices spanning virtually every major consumer electronics manufacturer were released supporting DivX OVS playback. Blockbuster, Netflix, Amazon, and others discussed with DivX using DivX technology to power their streaming platforms.

22. In 2006, DivX launched “Stage6”—one of the first HTTP-based websites for sharing and streaming high-resolution video. Streaming video from an HTTP-based website allows a web server to continuously send data to a viewer over a single HTTP connection that remains open. DivX Stage6 implemented DivX’s video compression, codec, and playback technology in an HTTP-based environment that allowed users to upload, share, and view larger video files than other competing platforms at that time, like YouTube.

23. DivX Stage6 was one of the earliest websites that supported sharing and streaming of high-resolution video. Even in 2007, when computing resources and network bandwidth were far more limited than today, DivX Stage6 supported streaming of 720p and 1080p high-definition video. The quality of the high-resolution video playback on Stage6 surprised reviewers, with one commenting “DivX has clearly got something right with web playback of higher-resolution video!” Ex. 33 (HEXUS, “Review: DivX Stage6 (beta) – the high def rival to YouTube” (May 1, 2007), *available at* <https://hexus.net/tech/reviews/software/8558-divx-stage6-beta-high-def-rival-youtube/>). DivX Stage6 enjoyed rapid user traffic growth, and by January 2008, it had over 10,000,000 monthly views.

24. In 2011, DivX released the DivX Plus Streaming SDK, an end-to-end Internet video streaming software that rivaled Blu-ray DVDs in quality and feature-set (such as user commands for seeking in the video, fast-forward, and rewind). The DivX innovations incorporated in DivX Plus Streaming include several that provide the foundation for the widespread technological success of video streaming today.

25. DivX Plus Streaming was one of the earliest secure streaming software packages that supported Dynamic Adaptive Streaming over HTTP (“DASH”). DASH standardizes certain aspects of adaptive bitrate streaming of video over the Internet and has been widely adopted as a protocol used by many of today’s video streaming services. Fast start and smooth switching among video streams of different resolutions, depending on bandwidth, both improve the viewer experience during DASH. The innovations incorporated in DivX Plus Streaming improve both aspects of the streaming user experience.

26. DivX engineers’ efforts to create DivX Plus Streaming produced many innovations fundamental to today’s video streaming services, including adaptive bitrate streaming that delivered video streams configured for each specific screen size on which the user wanted to watch the video. Configuring video streams based on the characteristics of individual playback devices ensures the optimal balance of video quality and playback performance.

27. DivX continues to make investments in research and development for Internet video led to technical innovations. And DivX continues to patent its inventions. Today, DivX has a portfolio of more than 500 issued and pending patents and patent applications—with more than 400 issued patents alone. Most recently, DivX has filed patent applications for its new Grove App which is available for download in the Apple App Store in the U.S. and Canada with an Android version coming soon. Ex. 34 (www.divx.com/grove/).

28. Presently, DivX has two distinct areas of business: (i) distributing consumer software (*e.g.*, the DivX Software) implementing its technologies, and (ii) licensing its software and/or patents to consumer electronics manufacturers, video streaming platforms, and supply chain manufacturers. Consumers have downloaded DivX software more than one billion times and created billions of files using DivX's proprietary ".divx" file format. Consumer electronics companies as well as video streaming companies, including Samsung, Disney, and Element TV Company, have licensed DivX's technologies, and are able to integrate them into millions of devices worldwide. To date, DivX has licensed at least 50% of the global Smart Television market and at least 70% of the U.S. Smart Television market.

III. THE PROPOSED RESPONDENTS

29. Amazon.com, Inc. ("Amazon") is a Delaware corporation, with its principal office at 410 Terry Avenue North, Seattle, WA 98109. Amazon operates the e-commerce website Amazon.com, which sells products manufactured outside of the United States, including, without limitation, various generations and screen sizes of Amazon Fire, Fire HD, Fire HD Plus, Fire Kids, Fire Kids Pro, Fire HD Kids, and Fire HD Kids Pro tablets (collectively, "Amazon Fire tablets"); various generations of Amazon Fire TV Stick and Fire Cube devices (collectively, "Amazon Fire TV/Cube devices"); various generations and screen sizes of Amazon Echo Show devices ("Amazon Echo Show devices"); and various screen sizes of Amazon Fire TV 4-Series and Fire TV Omni Series sets (collectively, "Amazon Fire TV sets"). On information and belief, these accused devices are manufactured, assembled, packaged and/or tested outside of the United States. Amazon then imports, sells for importation, or sells after importation the accused devices into the United States.

30. Respondent VIZIO, Inc. ("VIZIO") is a corporation organized and existing under the laws of the state of California with its principal place of business located at 39 Tesla, Irvine,

California, 92618. VIZIO is in the business of designing, manufacturing, importing, selling for importation, and/or selling after importation, into the United States, smart televisions that play back streaming video and audio. On information and belief, the accused televisions are manufactured, assembled, packaged and/or tested outside of the United States. VIZIO and/or others then import, sell for importation, or sell after importation the accused televisions into the United States.

IV. THE TECHNOLOGY AND PRODUCTS AT ISSUE

31. Pursuant to Commission Rule 210.12(a)(12), DivX states that the products accused in this Investigation comprise smart televisions, digital tablets, dedicated streaming media and video processing devices and set-top boxes, and components thereof.

32. The Amazon Accused Products and VIZIO Accused Products are defined below. Exemplary manuals and technical materials for products listed below are included as Exhibits 35, 36, 37, 38, 39 (one manual for each category of devices, such as one manual for Fire and one manual for VIZIO TV).

33. The Amazon Accused Products include the following families: various generations and screen sizes of Amazon Fire, Fire HD, Fire HD Plus, Fire Kids, Fire Kids Pro, Fire HD Kids, and Fire HD Kids Pro tablets (collectively, “Amazon Fire tablets”); various generations of Amazon Fire TV Stick and Fire Cube devices (collectively, “Amazon Fire TV/Cube devices”); various generations and screen sizes of Amazon Echo Show devices (“Amazon Echo Show devices”); and various screen sizes of Amazon Fire TV 4-Series and Fire TV Omni Series sets (collectively, “Amazon Fire TV sets”). Infringement charts of the exemplary product Fire TV Stick (2020, 3rd Gen) are attached. The list of Amazon Accused Products and corresponding model numbers is also attached. Ex. 40.

34. The VIZIO Accused Products include the D-Series, M-Series, P-Series, V-Series, and OLED 4K HDR line of smart televisions. Infringement charts of the exemplary product VIZIO Model V435-J01 TV Device are attached. The full list of VIZIO Accused Products and corresponding model numbers is also attached. Ex. 41.

35. The Amazon Accused Products and VIZIO Accused Products are sold for importation into the United States, imported, and/or sold within the United States after importation, by or on behalf of Amazon and VIZIO.

36. Upon information and belief, all Amazon Accused Products are configured and operate in substantially the same way with respect to the Asserted Patents asserted against those products.

37. Upon information and belief, all VIZIO Accused Products are configured and operate in substantially the same way with respect to the Asserted Patents asserted against those products.

38. Without discovery, DivX cannot exhaustively identify all devices sold for importation into the United States, imported, and/or sold within the United States after importation that infringe or are used to infringe the DivX Asserted Patents. DivX reserves its right to supplement its allegations, to further amend this Complaint, and to add Respondents and accused products in the future if necessary.

V. THE ASSERTED PATENTS AND NON-TECHNICAL DESCRIPTION OF THE INVENTIONS

A. Overview and Ownership of the Asserted Patents

39. United States Patent No. 8,832,297, entitled “Systems and Methods for Performing Multiphase Adaptive Bitrate Streaming,” issued on September 9, 2014, to inventors

Kourosh Soroushian, Auke van der Schaar, Jason Braness, and William David Amidei. Ex. 1 (297 Patent).

40. The 297 Patent issued from U.S. Patent App. Ser. No. 13/339,992, filed on December 29, 2011, and was previously published as U.S. Patent Pub. No. 2013/0007297 on January 3, 2013. The 297 Patent claims priority to U.S. Provisional Application No. 61/502,769, filed on June 29, 2011. The 297 Patent expires on December 29, 2031.

41. The 297 Patent contains 41 claims, including 3 independent claims and 38 dependent claims. The claims of the 297 Patent are valid, enforceable, and currently in full force and effect.

42. DivX owns by assignment the entire right, title, and interest in the 297 Patent. Exs. 6-10 (297 Patent Assignment).

43. Under Commission Rule 210.12(c)(1), this Complaint is accompanied by the prosecution history of the 297 Patent (Appx. A). Further, under Commission Rule 210.12 (c)(2), this Complaint is accompanied by each technical reference identified in the prosecution history of the 297 Patent (Appx. F).

44. United States Patent No. 7,295,673, entitled “Method and System for Securing Compressed Digital Video,” was duly and legally issued on November 13, 2007, from a patent application filed July 8, 2003, with Eric W. Grab and Adam H. Li as the named inventors. Ex. 2 (673 Patent). The 673 Patent claims priority to U.S. Provisional Application No. 60/420,500, filed on October 23, 2002. The 673 Patent expires on November 1, 2025.

45. The 673 Patent contains 32 claims, including 4 independent claims and 28 dependent claims. The asserted claims of the 673 Patent are valid, enforceable, and currently in full force and effect.

46. DivX owns by assignment the entire right, title, and interest in the 673 Patent. Exs. 7-9, 11-18 (673 Patent Assignment).

47. Under Commission Rule 210.12(c)(1), this Complaint is accompanied by the prosecution history of the 673 Patent (Appx. B). Further, under Commission Rule 210.12 (c)(2), this Complaint is accompanied by each technical reference identified in the prosecution history of the 673 Patent (Appx. G).

48. United States Patent No. 10,225,588, entitled “Playback Devices And Methods For Playing Back Alternative Streams Of Content Protected Using A Common Set Of Cryptographic Keys,” issued on March 5, 2019, from Application No. 16/136,183, filed September 19, 2018, to inventors Michael George Kiefer, Eric William Grab, and Jason Brans. Ex. 3 (588 Patent). The 588 Patent is a continuation of Application No. 15/481,340, filed on April 6, 2017, now U.S. Patent No. 10,244,272, which is a continuation of Application No. 14/970,412, filed on December 15, 2015, now U.S. Patent No. 9,621,522, which is a continuation of Application No. 14/564,003, filed on December 8, 2014, now U.S. Patent No. 9,247,311, which is a continuation of Application No. 13/340,623, filed on December 29, 2011, now U.S. Patent No. 8,909,922. The 588 Patent claims priority to U.S. Provisional Application No. 61/530,305, filed on September 1, 2011. The 588 Patent expires on December 29, 2031.

49. The 588 Patent has 24 claims, including 2 independent claims and 22 dependent claims. The claims of the 588 Patent are valid, enforceable, and currently in full force and effect.

50. DivX owns by assignment the entire right, title, and interest in the 588 Patent. Exs. 19-23 (588 Patent Assignment).

51. Under Commission Rule 210.12(c)(1), this Complaint is accompanied by the prosecution history of the 588 Patent (Appx. C). Further, under Commission Rule 210.12 (c)(2),

this Complaint is accompanied by each technical reference identified in the prosecution history of the 588 Patent (Appx. H).

52. United States Patent No. 11,102,553, entitled “Systems and Methods for Secure Playback of Encrypted Elementary Bitstreams,” issued on August 24, 2021, to inventors Francis Yee-Dug Chan, Kourosh Soroushian, and Andrew Jeffrey Wood. Ex. 4 (553 Patent). The 553 Patent issued from Application No. 16/686,727, filed November 18, 2019.

53. The 553 Patent is the result of a continuation of U.S. Patent Application No. 16/136,170, filed September 19, 2018, now U.S. Patent No. 10,484,749, which is a continuation of U.S. Patent Application No. 15/615,626, filed on June 6, 2017, now U.S. Patent No. 10,212,486, which is a continuation of U.S. Patent Application No. 14/839,783, filed on August 28, 2015, now U.S. Patent No. 9,706,259, which is a continuation of U.S. Patent Application No. 14/306,146, filed on June 16, 2014, now U.S. Patent No. 9,124,773, which is a continuation of U.S. Patent Application No. 12/946,631, filed on November 15, 2010, now U.S. Patent No. 8,781,122. The 553 Patent claims priority to U.S. Provisional Application No. 61/266,982, filed on December 4, 2009. The 553 Patent expires on November 15, 2030.

54. The 553 Patent has 26 claims, including 3 independent claims and 23 dependent claims. The claims of the 553 Patent are valid, enforceable, and currently in full force and effect.

55. DivX owns by assignment the entire right, title, and interest in the 553 Patent. Exs. 24-27 (553 Patent Assignment).

56. Under Commission Rule 210.12(c)(1), this Complaint is accompanied by the prosecution history of the 553 Patent (Appx. D). Further, under Commission Rule 210.12 (c)(2), this Complaint is accompanied by each technical reference identified in the prosecution history of the 553 Patent (Appx. I).

57. United States Patent No. 11,050,808, entitled “Systems and Methods for Seeking Within Multimedia Content During Streaming Playback,” was duly and legally issued on June 29, 2021, from Application No. 16/565,375, filed September 9, 2019, to inventor Roland Osborne. Ex. 5 (808 Patent). The 808 Patent issued from U.S. Patent App. Ser. No. 16/565,375, filed on September 9, 2019. The 808 Patent expires on January 7, 2028.

58. The 808 Patent is a continuation of Application No. 16/136,149, filed on September 19, 2018, now U.S. Patent No. 10,412,141 which is a continuation of Application No. 15/682,379, filed on August 21, 2017, now U.S. Patent No. 10,574,716, which is a continuation of Application No. 14/632,670, filed on February 26, 2015, now U.S. Patent No. 9,794,318, which is a continuation of Application No. 12/982,413, filed on December 30, 2010, now U.S. Patent No. 8,977,768, which is a continuation of Application No. 11/970,493, filed on January 7, 2008, now U.S. Patent No. 7,886,069. The 808 Patent claims priority to U.S. Provisional Application No. 60/883,659, filed January 5, 2007.

59. The 808 Patent contains 17 claims, including 2 independent claims and 15 dependent claims. The claims of the 808 Patent are valid, enforceable, and currently in full force and effect.

60. DivX owns by assignment the entire right, title, and interest in the 808 Patent. Exs. 28-32 (808 Patent Assignment).

61. Under Commission Rule 210.12(c)(1), this Complaint is accompanied by the prosecution history of the 808 Patent (Appx. E). Further, under Commission Rule 210.12 (c)(2), this Complaint is accompanied by each technical reference identified in the prosecution history of the 808 Patent (Appx. J).

B. Non-Technical Description of 297 Patent¹

62. The 297 Patent is directed to improvements to computer systems for streaming media (such as video, audio, etc.). Specifically, the technologies at issue in the Asserted Patent relate to adaptive bitrate streaming of media files to consumer electronics devices over the internet. The inventors of the 297 Patent discovered that the significant delays and glitches afflicting conventional adaptive bitrate streaming systems could be mitigated or avoided altogether by varying the conditions under which streaming and playback would switch to a different multimedia stream, for example a higher or lower bitrate stream, depending on the operational phase. In this way, playback can start in one operational phase with one set of streaming conditions, and transition to another phase characterized by a different set of streaming conditions.

63. The claimed inventions of the 297 Patent address significant technical problems in streaming digital video over a network to playback devices. As the 297 Patent explains, “[t]ypically, the playback device stores a sufficient quantity of media in a buffer at any given time during playback to prevent disruption of playback” if the buffered content runs out prior to receipt of the next portion of the media to be streamed. 297 Patent at 1:25-29. But buffering, alone, was not sufficient to ensure a quality digital streaming experience. One prior art technique to improve streaming media at the time of the inventions was “[a]daptive bit rate streaming,” in which the “present streaming conditions” – measurements of conditions which affect streaming quality such “the user's network bandwidth and CPU capacity,” *id.* at 1:29-33 are measured and

¹ All non-technical descriptions of the Asserted Patents are presented to provide a general background of the claimed inventions. Such statements are not intended to be used, nor should be used, for purposes of patent claim interpretation. DivX presents these statements subject to, and without waiver of, its right to argue that claim terms should be construed in a particular way, as contemplated by claim interpretation jurisprudence and the relevant evidence.

the quality of the streamed media is adjusted accordingly. *Id.* In known adaptive bit rate streaming systems, “[t]ypically, the source media is encoded at multiple bit rates and the playback device or client switches between streaming the different encodings,” *id.* at 1:29-36, depending on the detected “streaming conditions.” Adaptive bitrate streaming achieved an improved quality streaming experience by streaming “the highest bitrate stream available given the streaming conditions experienced by the playback device without stalls in the playback of media due to underflow” that occurs where the playback device “receives streaming media at a lower data rate than the minimum data rate for playing back the stream at the display rate of the playback device.” *Id.* at 1:37-43.

64. But these known methods have deficiencies which are addressed by the 297 inventions. Because known adaptive bitrate streaming techniques used the same “stream switching conditions” (the threshold streaming condition measurement that determines whether the playback device will request a higher or lower bitrate stream, thereby “switching”) “throughout the duration of the streaming of a particular piece of content,” *see id.* at 7:12-19, this “one size fits all” approach could not optimize stream selection during different operational streaming phases, for instance phases marked by rapidly changing streaming conditions, *id.* at 10:64-11:26, or phases where streaming conditions remain stable for an extended period. *Id.* at 10:24-62. For example, conservative stream switching heuristics, which are less responsive to changing streaming conditions and only switch to a higher or lower bitrate stream in the event of dramatic changes in streaming conditions, or following a sustained period of a detected streaming condition, may be well-suited to streaming phases characterized by stable streaming conditions, such as available network bandwidth, or buffer state, *id.* at 10:24-62, but poorly suited for streaming phases characterized by rapidly changing streaming conditions – for

example, where available network bandwidth deteriorates rapidly. During rapidly changing streaming conditions, such conservative stream switching conditions may not permit the playback device to switch to a lower bitrate stream quickly enough when network conditions deteriorate, risking a buffer underflow condition and interruption in playback. Conversely, aggressive stream switching heuristics, such as those which switch to a higher or lower bitrate stream following small changes in streaming conditions, or following a short period of a detected streaming conditions (such as falling bandwidth), may be well-suited to streaming phases characterized by rapidly changing streaming conditions, such as available network bandwidth, or buffer state, as they permit the playback device to react quickly to changing conditions, for example to move to a lower bitrate to prevent buffer underflow. *Id.* at 10:64-11:26. But they may be poorly suited for streaming phases characterized by relatively stable streaming conditions – for example, by unnecessarily switching to an observably lower quality (*i.e.*, lower bitrate) stream due to a momentary drop in network bandwidth, even though the connection is largely stable over time and the device buffer is full. As a result, existing adaptive bitrate streaming strategies could not provide optimal streaming video quality in light of detected streaming conditions across the duration of streaming video playback.

65. The 297 patent claims recite specific technical solutions to solve these technical problems with adapting to changes in streaming conditions and applying the appropriate stream switching conditions for the current needs of the system. The 297 Patent claims are directed to a new “[m]ultiphase adaptive bitrate streaming” that “can transition between different phases in which different stream switching conditions are utilized.” *Id.* at 2:28-31. As the 297 Patent describes:

In a multiphase adaptive bitrate streaming system, the playback device can progress through a series of operational phases in which the playback device

responds differently in each phase to changes in the streaming conditions. In a number of embodiments, stability in streaming conditions or improving streaming conditions can result in a transition to a phase in which the playback device assumes stable operating conditions, buffers more content, and is less responsive to fluctuations in streaming conditions. In many embodiments, a deterioration in streaming conditions that results in a stream switch to a set of streams requiring less bandwidth results in the playback device transitioning to a phase in which the playback device assumes unstable operating conditions, buffers less content, and responds rapidly to variations in streaming conditions. *Id.* at 8:17-32.

66. The 297 Patent claims are directed to improved devices (claim 1 and dependents) and methods (claim 18 and dependents) for providing this new multiphase adaptive bitrate streaming. More specifically, the 297 Patent provides a playback device that requests media content and switches to a higher or lower bitrate stream based on detected switching conditions. *Id.* at 6:59-67. For example, in one phase, this allows the playback device to react quickly to changes in the streaming conditions and (for example) buffer less content. *Id.* at 6:67-7:3. In another phase, the stream-switching conditions may cause the playback device to buffer more content and react more slowly to “ride out temporary bandwidth fluctuations.” *Id.* at 7:3-7. The 297 Patent claims describe selecting initial streams and stream-switching conditions, and measuring the streaming conditions as content is received. *Id.* at 9:44-46, 9:64-10:1. When certain streaming conditions are met, the playback device switches streams. *Id.* at 10:1-6. The playback device then determines whether the conditions dictate transitioning to another operational phase, again based on streaming conditions. *Id.* at 10:8-11. When the phase transition conditions are met, “the playback device transitions between operational phases, which involves adopting (62) a different set of stream switching conditions.” *Id.* at 10:8-12. Multiphase adaptive bitrate streaming that allows for the transition between different phases in which different stream switching conditions are utilized, was not well-known, routine, or conventional at the time of the 297 inventions.

C. Non-Technical Description of 673 Patent

67. The 673 Patent generally concerns efficient techniques for generating a protected stream of compressed video content from an input stream of compressed video content containing a sequence of frames, and techniques for decrypting the protected stream, such as by a television, or set-top box, for display by an end user. Specifically, a protected video stream including both partially encrypted video frames and frame decryption information needed to decrypt the encrypted frames are provided to a playback device. The frame decryption information that is also included within the protected stream includes both information needed to generate decryption keys, and data distinguishing the partially encrypted portions of the frames from the unencrypted portions, so that the encrypted portions can be located and decrypted, with the resulting decrypted compressed video stream being passed to an entropy decoder for decompression and subsequent playback.

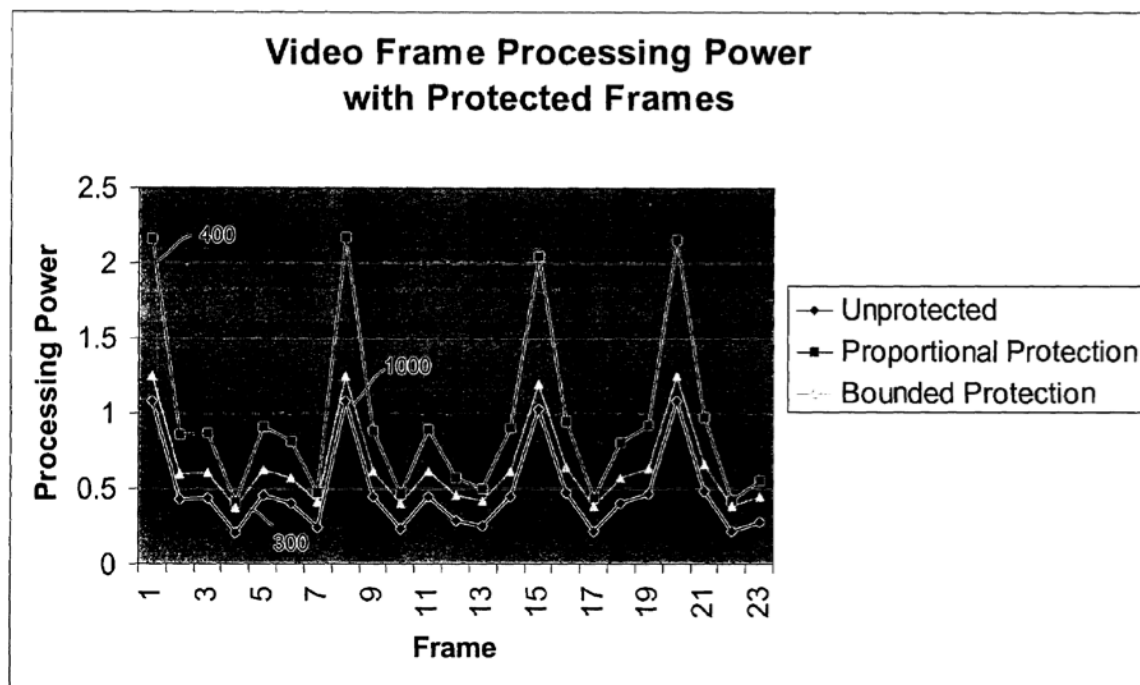
68. The claimed inventions of the 673 Patent address significant technical problems in streaming digital video to playback devices. As existed in the prior art and continues to be the case today, a stream of compressed digital video content has a specific structure arranged so that it can be interpreted properly by a playback device and converted to pixels on the display screen. *See, e.g.*, 673 Patent at 1:24-49 (describing display of digital video as pixels), 3:3-11 (describing standards used for video compression and decompression), 5:55-6:24 (describing, with respect to FIG. 5, “types of frames within a video stream . . . formatted consistently with the MPEG-4 standard”), 7:15-28 (describing specific organization of MPEG-4 stream), 9:6-10:17 (describing, with respect to FIG. 9, “the structure of an unencrypted video stream and of a video stream encrypted in accordance with the present invention”).

69. Decoding a digital video stream on a playback device, such as a television, tablet or smartphone, is “very computationally intensive, with the degree of computational intensity

varying directly with the extent of compression.” *Id.* at 1:63-2:9. Therefore, “[a]nything that adds to computational intensity over and above the processing overhead associated with the applicable decoding process is undesirable, since this leads to increased system complexity and expense.” *Id.* In particular, “[a]ny processing of frames required in addition to decoding (*e.g.*, decryption) consumes yet further processing resources.” *Id.* at 3:12-19 (describing FIG. 3). Decryption adds to the computational overhead associated with decoding. “[T]he processing power necessary required [sic] to both decrypt and decode a sequence of frames” that have been encrypted is higher than “the relatively smaller amount of processing power required to decode unprotected (*i.e.*, unencrypted) frames.” *Id.* at 3:34-51 (describing FIG. 4). As such, at the time of the 673 inventions, “a need exist[ed] for an adequately secure technique for bounding the resources consumed during decryption, thereby reducing peak processing requirements.” *Id.* at 3:49-51. The 673 invention provides for these efficiencies while also providing the requisite content security. The 673 Patent, therefore, addresses a technical problem: allowing adequate content security while limiting the resources consumed during video decryption. *See, e.g., id.* at 3:39-51.

70. The 673 patent claims recite specific technical solutions to solve these technical problems with compressed digital video content that provide sufficient security but requires less processing power to decrypt. The 673 Patent claims are directed to improvements to the functionality of computer systems that perform digital video encoding, encryption, decryption, and decoding, by providing a new structure of encrypted video data, and how a video decoder is configured to decrypt and decode that new structure. The new structure of encrypted video data of the 673 invention includes frame decryption information synchronized with encrypted frames in the video data. *See, e.g., id.* at 3:55-4:42; 5:25-32, 6:39-7:14 (describing FIG. 6, including new process for creating the new structure of encrypted video data), 7:15- 8:42 (describing FIG. 7,

including new process for generating “frame decryption information” for the new structure of encrypted video data), 8:43-9:5 (describing FIG. 8, including new process for decrypting and decoding the new structure of encrypted video data), 9:6-10:17 (describing FIG. 9, including structure of the new video data format). In claim 29, the compressed encrypted frames are partially encrypted, such that the frame decryption information “identifies the specific portions of the frames to be decrypted and the applicable frame decryption key” *Id.* at 14:18-45 (claim 29). By only partially encrypting frames in the video stream, the new structure of encrypted video data reduces the computing resources required for decrypting and decoding the data, as depicted, for example, in FIG. 10.



71. The top line in the figure represents the processing power needed to decrypt and decode a fully encrypted stream, the bottom line represents the power needed to decode an unencrypted stream, and the middle line represents the power needed to decrypt and decode the new file structure of the invention—reducing the resources needed from a fully encrypted

approach while providing more security than the unencrypted approach. As such, “[t]he bounded encryption approach of the invention requires substantially less peak processing power (see, e.g., frames 8, 15, and 20) during the decryption process than would otherwise be required using standard encryption techniques.” *Id.* at 10:18-34. By synchronizing frame decryption information with the encrypted frames in the video data, the new structure of encrypted video data improves the performance of the computer system executing decryption and decoding operations, making decryption less computationally intensive and reducing errors that could be caused by a lack of synchronization. Partial frame encryption, combined with frame decryption information synchronized with encrypted frames to permit decryption of those frames, with the resultant decrypted frames passed to an entropy decompression unit for decompression and display, was not well-known, routine, or conventional at the time of the 673 inventions.

D. Non-Technical Description of 588 Patent

72. The 588 Patent generally relates to a system to implement adaptive bitrate streaming—where a given media (*e.g.*, video) is encoded in multiple bitrate streams. The receiver switches in real-time between the streams depending on the detected streaming conditions (*e.g.*, network, CPU). The 588 Patent is directed to a new encryption architecture for digital video streams that uses common frame encryption keys to encode alternate video streams, reducing playback stalls and improving performance during adaptive bitrate streaming. The inventions recited in the 588 Patent enable an improved experience for adaptive bitrate streaming while maintaining the content security required to make video content available over the internet.

73. The claimed inventions of the 588 Patent address a technical problem: providing content security while reducing the computational burdens of processing cryptographic information for alternative video streams during Adaptive Bitrate Streaming (“ABS”). “In many instances, content is divided into multiple streams,” and “some streams can be encoded as

alternative streams that are suitable for different network connection bandwidths.” *See, e.g., id.* at 1:45-58. In ABS, “the source media is encoded at multiple bitrates and the playback device or client switches between streaming the different encodings depending on available resources.” *See, e.g., id.* at 1:59-67. Prior to the 588 inventions, each stream used different cryptographic information for authorizing secure playback. *See, e.g., id.* at 8:37-61, 9:65-10:31. Storing and processing cryptographic information for each stream required more computing resources and increased the cost and complexity of the playback device, and it can also result in stalls and delays when switching among video streams with different bitrates. *See, e.g., id.* Accordingly, a need existed for a more efficient and high-performance DRM implementation for ABS that would reduce the computer memory consumed by cryptographic information and reduce the time and computing resources consumed by playback devices when switching among video streams having different bitrates.

74. The 588 Patent claims recite specific technical solutions to solve these technical problems with playback device implementations and methods that reduce the computer memory and other resources consumed by cryptographic information during ABS. The 588 claims are directed to improvements to the functionality of computer systems that perform digital video decryption and playback during ABS. More specifically, the 588 claims are directed to a new index file structure and a new structure of encrypted data for ABS, how a playback device is configured to request, decrypt, and play back video data using the new structures (claim 1 and dependents), and how to request, decrypt, and play back video data using the new structures (claim 12 and dependents).

75. The new index file structure and a new structure of encrypted data of the 588 inventions incorporate alternative video streams including partially encrypted video frames that

are encrypted using a set of common keys, a top level index identifying those streams, and a container index containing byte ranges for portions of a stream. With the 588 inventions, “each of the alternative streams of protected content are encrypted using common cryptographic information.” *See, e.g., id.* at Abstract; *see also id.* at 2:66-3:30, 8:37-61, 9:65-10:31. Prior ABS video encryption formats and index files did not encrypt alternative streams using a set of common keys. The new index file structure and new structure of encrypted data of the 588 Patent, and the devices and methods used to process the new index file structure and encrypted data structure, therefore were not well-known, routine, and conventional at the time of the 588 inventions.

76. The new index file structure and new encrypted data structure of the 588 inventions, and the devices and methods used to process the new index file structure and encrypted data structure, provide technical benefits that improve the functionality and capabilities of computer systems performing these operations. Encrypting alternative video streams using a set of common keys, and identifying those encrypted streams using a top level index file, allows playback devices to switch between alternative video streams during ABS and to decrypt those streams without having to perform the computationally intensive processes of obtaining and processing additional cryptographic information, while maintaining the security of the video content. *Id.* at 8:55-61, 10:22-31. The new file structures of the 588 inventions, and new methods for processing those structures, therefore reduce the computing resources needed to provide ABS while providing content security. The 588 inventions, therefore, allow an ABS system to switch among video streams having different bitrates more efficiently, consuming fewer computing resources and avoiding interruptions in video playback, improving the performance of the computing system. *Id.* The 588 Patent’s new encryption architecture for

digital video streams that uses partial-frame encryption and common encryption keys to encode alternate video streams, reducing playback stalls and improving performance during ABS while maintaining content security, was not well-known, routine, or conventional at the time of the 588 inventions.

E. Non-Technical Description of 553 Patent

77. The 553 Patent generally describes a method of securely distributing media content to customers by taking cryptographic material from a container file and providing partially encrypted frames with the cryptographic material to a video decoder. By employing and leveraging this novel method, playback devices enable users to access their purchased content remotely and from virtually anywhere while providing confidence to the stakeholders that only authorized users can access their content. The inventions recited in the 553 Patent curtail unauthorized access while transmitting the content downstream and maintaining or increasing content accessibility.

78. The 553 Patent addresses a technical problem: in digital multimedia distribution systems, “the multimedia file is authorized and decrypted in a demultiplexer and then transmitted downstream unencrypted to the decoder via an inter-communication data channel. This however can present a security problem due to the high value of the unencrypted but still encoded bitstream that can be captured during transmission. This bitstream is considered high-value since the encoded data can be easily multiplexed [which refers to repackaging into a multimedia file,] back into a container for unprotected and unauthorized views and/or distribution with no loss in the quality of the data.” 553 Patent at 6:59-7:2.

79. Content providers need to make sure that only authorized users can access and play back digital content. *See, e.g., id.* at 1:39-43. This is a particular problem when the content is communicated over connections that are not secure and can be intercepted, such as when

content is communicated “from one process or component to another process or component over an unsecured connection”, such as between a “demultiplexer and a decoder over an unsecured connection.” *See, e.g., id.* at 5:25-31; *see also id.* at 1:61-63 (explaining that “when communication or the transporting of information becomes unsecured or untrustworthy, such gaps need to be accounted for and filled”). Accordingly, a need existed to improve the distribution of digital content to enhance security of content that may be transported over an unsecured connection, while enabling efficient access to the content for the correct users. *Id.* at 1:59-61, 1:65-67.

80. The 553 Patent provides a solution to this problem with specific ways to transport “encrypted multimedia content over an unsecured connection” such as from one process or component to another process or component to improve security and enable efficient distribution and playback of multimedia content. *See, e.g., id.* at 1:36-37. The 553 Patent inventions package decryption information with digital video in a “container file” and allow processing of that file such that decryption can occur on the video decoder. *Id.* at 6:3-36, FIG. 1, FIG. 2. The 553 Patent claims are therefore directed to improvements to the functionality of computer systems that perform digital video decryption, decoding, and playback. The 553 Patent claims are directed to a playback device with a new structure of container file containing encrypted digital video; how a playback device is configured to decrypt, decode, and play back the new file structure (claims 1, 11, and their dependents); and the method of decrypting, decoding, and playing back that new file structure (claim 19 and dependents). Prior video container file formats did not contain this specific structure of partially encrypted frames and cryptographic information necessary for decryption and decoding. This new file structure, and the playback

devices and methods used to decrypt and play back video structured in this new way, therefore were not well-known, routine, or conventional at the time of the 553 Patent inventions.

81. The new structure of a container file containing encrypted digital video of the 553 Patent inventions and the playback devices and methods used to decrypt and play back video structured in this new way provide technical benefits that improve the functionality and capabilities of computer systems performing these operations. By providing partially encrypted video frames, coupled with specific cryptographic information describing the encrypted portion of each partially encrypted frame, and requiring deciphering of frame keys using the cryptographic material, the new container file format improves the security of the video data and reduces the processing resources required to decrypt and play back the video. The 553 Patent inventions “do not secure the transmission but rather secure the data being transmitted via the unsecured connection.” *See, e.g., id.* at 5:33-51. The inventions accomplish this using enciphered decryption key information in the multimedia data, and not deciphering those keys to decrypt the multimedia until the data is at the decoder and no longer being transmitted. *See, e.g., id.; see also* 6:57-7:9. As a result, for example, “by allowing the decryption to occur on the decoder the bitstream is protected even if the connection is compromised and an unauthorized component or process intercepts the bitstream.” *See, e.g., id.* at 5:41-44.

F. Non-Technical Description of 808 Patent

82. The 808 Patent generally relates to systems and methods for seeking content during streaming playback. The specification describes maintaining a mask of the portions of the media file that have been downloaded, identifying that at least a portion of byte range required to play the media in accordance with the user instruction has already been downloaded using the mask, and requesting only the portions of byte ranges that have not already been downloaded

from the media server. The claimed inventions thus provide a more efficient manner for seeking during progressive playback.

83. The 808 Patent addresses problems caused by inferior prior art systems: startup delay, streaming options limited to single track files, audio files, and/or files without subtitles, and lack of or limited trick play functionality. The 808 Patent's new playback methods and systems address multiple technical problems. Existing digital video playback systems facilitated progressive playback for only short video clips because the systems downloaded video files *linearly*, from beginning to end. 808 Patent at 1:48-49. Playback would begin only after the player had "buffered enough data to provide a likelihood that the media [would] play without interruption." *Id.* at 1:49-51. Because playback would begin only after the player had downloaded sufficient data, longer content would suffer from startup delay: "The buffering requirement can either be a fixed amount suitable for a large percentage of content, or a dynamic amount, where the player infers how much data is required to play the entire content without suffering buffer under-run." *Id.* at 1:51-55. Thus, existing systems did not support random seeking, trick play (for example, pausing, rewinding, fast forwarding, skipping), or playing back longer content (i.e., feature-length movies), and was not suitable for use with Internet servers that "store files that can contain multiple titles, titles that include multiple audio tracks, and/or titles that include one or more subtitle tracks." *Id.* at 1:55-59, 2:37-42; *see also id.* at 2:7-17 ("When a long clip is started, it is impossible to seek or fast-forward to a point in the file that has not already been downloaded."). Multi-track media, in particular, was not suitable for the existing smooth trick play functionality as the playback device must download the data for the other tracks, even if only certain tracks have been chosen for playback. *See id.* at 10:49-11:15. Such systems were likely to suffer from buffer under-run when receiving trick play instructions,

resulting in playback stalls and startup delays caused by access delays in data transmission and computing burdens placed on the network and device.

84. Some existing streaming systems were “server-driven,” as opposed to receiver-driven (e.g., based on instructions from the player). In server-driven systems, “the server parse[d] the data file and determine[d] which data to send” for playback. *Id.* at 1:65-66. Server-driven systems required custom computing systems, which increased expense: “[s]tandard HTTP web servers . . . do not typically provide this functionality, and custom web servers providing this functionality often scale poorly when called upon to deliver content simultaneously to a large number of players.” *Id.* at 1:67-2:4. These systems required expensive, impractical, inefficient custom server designs unable to simultaneously supply digital video content to a large number of playback devices. *Id.*

85. Accordingly, as demand for streaming digital video content increased, a need existed for a new, improved playback implementation able to facilitate (1) efficient, non-linear, partial-download playback with trick play functionality, (2) receiver-driven, partial-download playback compatible with HTTP, and (3) delivery of video streaming to a large number of devices.

86. The 808 Patent provides specific, technical solutions to the technical challenges presented by existing playback systems, specifically, for instance by enabling the playback device to support playback of multiple audio and subtitle tracks without downloading them all. *See, e.g., id.* at 2:23-39. The system selects video, audio, and/or subtitle tracks among other tracks in the file and requests specific portions of the selected tracks for download, buffering, and playback based on instructions at the playback device. The 808 Patent claims are directed to improvements to the functionality of computers that request, receive, download, buffer, and play

back digital video, audio, and subtitle content stored in container files on a remote server. The 808 Patent claims are directed to improved devices (claim 1 and dependents) and methods (claim 17 and dependents).

87. One aspect of the 808 Patent inventions recites a technical solution related to the player's ability to deliver requests to the server for specific portions of a video file. For example, "[i]n several embodiments, the ability to provide full featured progressive playback is due in part to the tight coupling of the playback engine for the media sequence (i.e., the system that decodes and plays back the encoded media) with a transport protocol that provides random access to the remote file. Interfacing of the playback engine with the transport protocol via a file parser can reduce latency and enable the client and media server to operate in parallel improving download efficiency and interactivity." *Id.* at 2:43-51. Further, the multi-track media "files are formatted to include an index to the data within the file and a transport protocol that allows for downloading specific byte ranges within a file." *Id.* at 2:51-55; *see also id.* at 6:25-49 ("When the media file includes an index, a device configured with a client application in accordance with an embodiment of the invention can use the index to determine the location of various portions of the media. Therefore, the index can be used to provide a user with 'trick play' functions. . . . [T]he client application requests portions of the media file using a transport protocol that allows for downloading of specific byte ranges within the media file.").

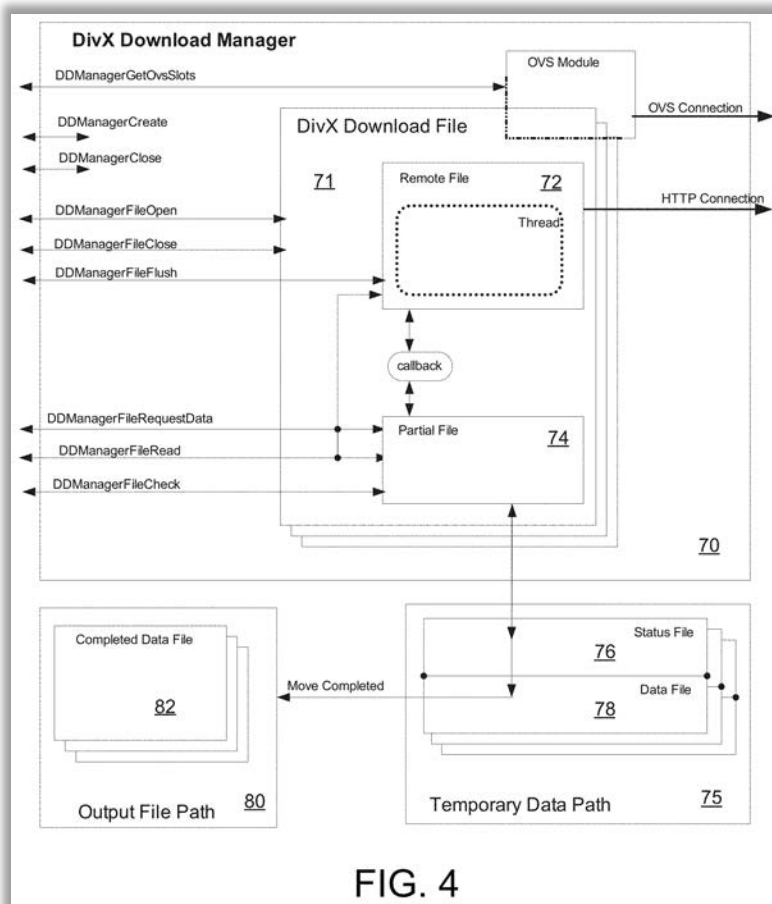
88. Another aspect of the technical solution provided by the inventions of the 808 Patent is the new ability for the client to "flush" or purge an existing "queue of pending byte range requests and establish a new queue of byte range requests," for example in response to a new trick play command received at the play back device that corresponds a different byte range of streaming media, such as a different scene or portion of the media, than is currently being

requested by the playback device. *Id.* at 9:7-11. As the 808 Patent explains, when “a user provides a ‘trick play’ instruction, previously requested byte ranges may no longer be required in order to continue playing media in the manner instructed by the user.” *Id.* at 9:4-7 The new playback devices of the 808 Patent “possess the ability to flush the queue of pending byte range requests and establish a new queue of byte range requests. An advantage of flushing a request queue is that there is no latency associated with waiting until previously requested byte ranges have been requested prior to downloading the now higher priority byte ranges.” *Id.* at 9:7-14.

89. The 808 Patent inventions provide an improved playback implementation that enables a client application at the player to commence playing video content and to request non-sequential portions of the video file without receiving the complete video file. *Id.* at 5:33-54. The inventions create a client computing application capable of implementing progressive playback and supporting trick play functionality for files containing multiple titles and for titles with multiple media tracks. *Id.*; *Id.* at 2:26-42. These implementations were new and not well-known, routine, or conventional at the time of the 808 Patent inventions.

90. The 808 Patent provides technical—not merely conceptual—solutions to recognized, but unsolved progressive playback shortcomings. The 808 Patent inventions specify a client application with multiple “abstraction layers” to facilitate progressive playback with trick play functionality. *Id.* at 7:16-37. One exemplary embodiment of the player disclosed by the 808 Patent includes a download manager “that is responsible for coordinating the downloading of specific byte ranges of a file from a remote server”; a playback engine “that coordinates the playback of a media file in response to user interactions”; and a file parser that “interfaces between the playback engine and the download manager” and “maps high level data requests

from the playback engine to specific byte ranges that can then be requested using the download manager.” *Id.*



808 Patent, FIG. 4

G. Ownership and Foreign Counterparts of the Asserted Patents

91. DivX owns by assignment the entire rights, title, and interest in the Asserted Patents. Pursuant to Commission Rule 210.12(a)(9)(ii), certified copies of the assignment records for the 297 Patent to DivX are included as Exhibits 6 through 10 (Certified Reel-Frame Nos. 027896/0557, 031713/0032, 045310/0020, 045498/0560, 050407/0104). Certified copies of the assignment records for the 673 Patent to DivX are included as Exhibits 7 through 9 and 11 through 18 (Certified Reel-Frame Nos. 031713/0032, 045310/0020, 045498/0560, 014756/0790, 017193/0908, 026026/0111, 028965/0830, 030591/0534, 032645/0559, 033378/0685,

050096/0715). Certified copies of the assignment records for the 588 Patent to DivX are included as Exhibits 19 through 23 (Certified Reel-Frame Nos. 047831/0712, 047831/0769, 047831/0858, 047831/0929, 052034/0229). Certified copies of the assignment records for the 553 Patent to DivX are included as Exhibits 24 through 27 (Certified Reel-Frame Nos. 055774/0714, 055774/0737, 055774/0756, 055774/0815). Certified copies of the assignment records for the 808 Patent to DivX are included as Exhibits 28 through 32 (Certified Reel-Frame Nos. 052982/0055, 052982/0087, 052982/0092, 052982/0104, 052982/0123). A copy of the confidential Purchase Agreement referenced in, e.g., the assignment record attached as Exhibits 6-10, is attached hereto as Confidential Exhibit 42.

92. Pursuant to Commission Rule 210.12(c), the certified prosecution histories of each of the Asserted Patents—the 297 Patent, the 673 Patent, the 588 Patent, the 553 Patent, and the 808 Patent—have been submitted with this Complaint as Appendices A, B, C, D, and E, respectively. Pursuant to Commission Rule 210.12(c), the cited references for each of the Asserted Patents—the 297 Patent, the 673 Patent, the 588 Patent, the 553 Patent, and the 808 Patent—have also been submitted with this Complaint as Appendices F, G, H, I, and J, respectively.

93. Pursuant to Commission Rule 210.12(a)(9)(v), a list of foreign patents and applications also claiming the same benefit of priority as the Asserted Patent is included in the following table.

List of Related Foreign Counterparts for U.S. Patent No. 8,832,297				
Status	Publication Number	Application Number	Filing Date	Publication Date
Complete	WO2013002834 (A1)	PCT/US2011/068156	12/30/2011	1/3/2013

List of Related Foreign Counterparts for U.S. Patent No. 10,225,588				
Status	Publication Number	Application Number	Filing Date	Publication Date

Complete	WO2013032518 (A2)	PCT/US2011/068276	12/31/2011	3/7/2013
----------	-------------------	-------------------	------------	----------

List of Related Foreign Counterparts for U.S. Patent No. 11,102,553				
Status	Publication Number	Application Number	Filing Date	Publication Date
Granted/In Force	CA2782825	CA2782825	11/15/2010	4/26/2016
Withdrawn	EP2507995	EP 10834935A	11/15/2010	10/10/2012
Granted/In Force	JP5723888 JP2013513298	JP 2012542061A	11/15/2010	5/27/2015
Granted/In Force	JP6078574 JP2015167357	JP 2015068797A	3/30/2015	2/8/2017
Complete	WO2011068668 (A1)	PCT/US2010/056733	11/15/2010	6/9/2011

List of Related Foreign Counterparts for U.S. Patent No. 11,050,808				
Status	Publication Number	Application Number	Filing Date	Publication Date
Granted/In Force	CN101636726	CN200880007014.9	1/7/2008	1/27/2010
Granted/In Force	CN103561278	CN201310430673.6	1/7/2008	2/5/2014
Granted/In Force	CN103559165	CN201310429994.4	1/7/2008	2/5/2014
Granted/In Force	DE2122482	602008057889.5	1/7/2008	11/14/2018
Granted/In Force	DE3467666	602008063754.9	1/7/2008	4/10/2019
Granted/In Force	EP2122482	EP08705745	1/7/2008	11/25/2009
Granted/In Force	EP3467666	EP18206048	1/7/2008	4/10/2019
Pending/ Published	EP3901779	EP21160147	1/7/2008	10/27/2021
Pending/Not Yet Published		EP22199792.7	1/7/2008	
Granted/In Force	ES2709208	ES08705745	1/7/2008	4/15/2019
Granted/In Force	ES2875428	ES18206048	1/7/2008	11/10/2021
Granted/In Force	FR2122482	FR2122482	1/7/2008	11/14/2018
Granted/In Force	FR3467666	FR3467666	1/7/2008	4/10/2019
Granted/In	GB2122482	GB2122482	1/7/2008	11/14/2018

Force				
Granted/In Force	GB3467666	GB3467666	1/7/2008	4/10/2019
Withdrawn	HK1140035	HK10106505.3	7/5/2010	9/30/2010
Granted/In Force	IT2122482	08705745.1	1/7/2008	11/14/2018
Granted/In Force	IT3467666	18206048.3	1/7/2008	3/3/2021
Granted/In Force	JP5559544 JP2010-516123	JP2009545012	1/7/2008	7/23/2014
Granted/In Force	JP5894220 JP2014-197879	JP2014117349	1/7/2008	3/23/2016
Granted/In Force	NL3467666	18206048.3	1/7/2008	6/2/2021
Granted/In Force	SG153621	SG2009045303	1/7/2008	5/31/2012
Complete	WO200808631 3 (A1)	PCT/US2008/050440	1/7/2008	7/17/2008

94. For the Asserted Patents, DivX is not aware of any other foreign counterpart applications or patents that have been issued, abandoned, or rejected, or that remain pending.

H. Licenses

95. Pursuant to Commission Rule 210(a)(9)(iii), DivX has attached as Confidential Exhibit 43 a list that identifies certain entities who have obtained licenses to the Asserted Patents. Out of an abundance of caution, DivX notes that other entities have obtained certain limited rights to incorporate certain DivX®-branded software development kits (“SDKs”), such as the “DivX Plus Streaming Profile,” into certain of their own products, and thus, they may have certain limited, non-exclusive rights under certain necessary intellectual property owned by DivX with respect to those DivX-supplied software products. To the extent that these entities have rights to use or incorporate DivX-supplied software products, none of the associated software licenses include rights to any DivX intellectual property other than for the use or incorporation of the applicable DivX-supplied software into their own products. Furthermore, the

Accused Products and features identified in the claim charts of Exhibits 44-52 are not covered by any DivX software license.

VI. UNLAWFUL AND UNFAIR ACTS OF RESPONDENT - PATENT INFRINGEMENT

96. Respondents, directly and/or indirectly, literally and/or under the doctrine of equivalents, infringe one or more of the Asserted Patents with the Accused Products that are manufactured and/or assembled outside the United States and, by or on behalf of Respondents, imported, sold for importation, and/or sold and/or leased after importation into the United States. To the extent that the infringing acts involve software that is provided by Respondents or third parties and downloaded to or otherwise made available on an Accused Product, after importation, and/or involves streaming video content delivered to the Accused Products by Respondents' or third parties' services, applications, or network infrastructure, after importation, all Respondents induce infringement of one or more of the Asserted Patents, as described below.

97. Respondents were aware of, or will have knowledge of, the Asserted Patents and Respondents' infringing activity at least based on the filing of the instant complaint and subsequent service of the complaints in the Eastern District of Virginia ("EDVA") and Central District of California ("CDCA") against Amazon and VIZIO, respectively.

98. In addition to serving the district court complaints, DivX is providing each Respondent with a copy of this Complaint upon the filing of this Complaint with the Commission. This expressly provides Respondents with knowledge of the Asserted Patents and their infringing acts, to the extent that Respondents contend they did not previously have such knowledge, so that continuing acts by Respondents demonstrate intent to induce others to infringe the Asserted Patents.

99. In addition, upon information and belief, the Respondents were aware of the Asserted Patents or will have knowledge of the Asserted Patents and their infringing activity based on the public filing of this Complaint. At a minimum, the Notice of Investigation that will be published by the Commission in the Federal Register, should the Commission institute an investigation, together with the service of this Complaint by the Commission upon Respondents, will serve as notice to the Respondents of the Asserted Patents and their infringing activities, should the Respondents contend that they did not previously have knowledge of the Asserted Patents or their infringing activity.

A. Infringement of the 297 Patent

100. Upon information and belief, Amazon's Accused Products directly and/or indirectly infringe claims 1-2 and 4 of the 297 Patent, literally and/or under the doctrine of equivalents.

101. A claim chart applying independent claim 1 of the 297 Patent to a current-generation Amazon Fire Stick operating with the Amazon Prime Video streaming service as an exemplary streaming application, as exemplary of the Amazon Accused Products (and components thereof) can be found at Exhibit 44. Amazon directly infringes the asserted claims by making, using (*e.g.*, when testing its Prime Video service with the Amazon Accused Products), selling, offering to sell, and/or importing the Amazon Accused Products, each of which comprises the claimed playback device. The current-generation Amazon Fire Stick is depicted here, and a physical sample of it is provided herewith as Exhibit 100:



Source: *Fire TV Stick with Alexa Voice Remote (includes TV controls), (HD streaming device)*, Amazon, <https://www.amazon.com/fire-tv-stick-with-3rd-gen-alexa-voice-remote/dp/B08C1W5N87>.

102. Amazon induces infringement of the asserted claims of the 297 Patent. Amazon has had actual knowledge of the 297 Patent as of at least September 21, 2018, when the 297 Patent was cited by the Patent Examiner as part of the prosecution history for what became U.S. Patent No. 10,277,924, assigned to Amazon Technologies, Inc., which is a wholly owned subsidiary of Amazon. Ex. 53 (U.S. Patent No. 10,277,924 File History, 9/21/18 Non-Final Rejection of Claims and Notice of References Cited at PDF pp. 64-89, 68, 81); Ex. 97 (Excerpt of Amazon's 2021 SEC 10-K Filing, at Exhibit 21.1 (Amazon.com's List of Significant Subsidiaries), *available at* [38](https://d18rn0p25nwr6d.cloudfront.net/CIK-0001018724/f965e5c3-</p></div><div data-bbox=)

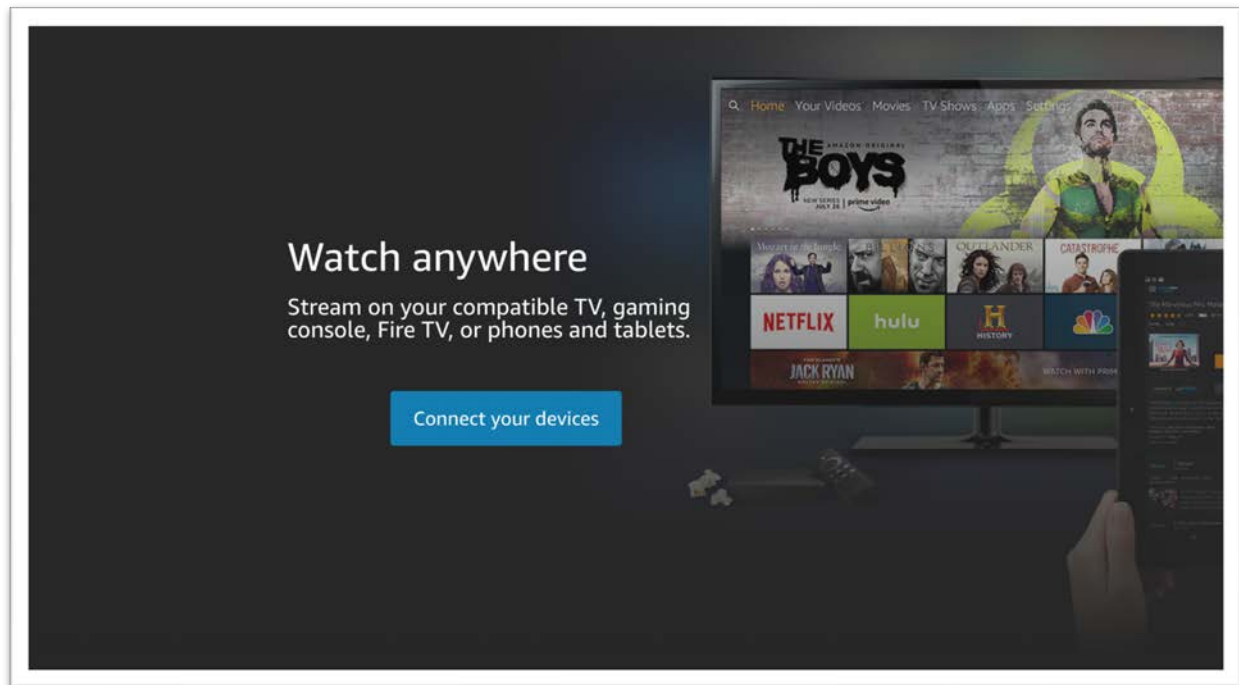
fded-45d3-bbdb-f750f156dcc9.pdf at page 189). The Patent Examiner rejected several claims of what became U.S. Patent No. 10,277,924 based on a patent publication, U.S. Patent Publication No. 2017/0366833, assigned to DivX, that also incorporated the 297 Patent by reference. Ex. 53 (U.S. Patent No. 10,277,924 File History) at PDF pp. 69-70; *see also* Ex. 53 (Notice of References Cited by the Examiner) at PDF p. 81. The September 21, 2018, Claim Rejections explicitly cited the 297 Patent at least six times. Ex. 53 (U.S. Patent No. 10,277,924 File History) at PDF pp. 69-71, 72- 73, 73-75, 75-77, 77-80, 82. The applicant then had to amend its claims in view of these claim rejections. Ex. 53 (Amendment and Remarks) at PDF pp. 91-107.

103. In ITC Investigation No. 337-TA-1222, *In the Matter of Certain Video Processing Devices, Components Thereof, and Digital Smart Televisions Containing the Same I*, where DivX was also asserted the 297 Patent, Amazon was again placed on notice of the 297 Patent as of at least November 3, 2020, when Complainant DivX served a subpoena *duces tecum* and subpoena *ad testificandum* on Amazon by overnight FedEx delivery. Ex. 101 (Stipulation Extending Time for Non-Party Amazon.com, Inc. to Respond to Complainant DivX, LLC's Subpoena) at 1. Additionally, in February 11, 2022, Amazon confirmed its awareness of the 297 Patent and of DivX's infringement allegations implicating Amazon's technology. On that day, Amazon filed a motion to intervene in ITC Investigation No. 337-TA-1297, *In the Matter of Certain Video Processing Devices, Components Thereof, and Digital Smart Televisions Containing the Same II*, filed by DivX against Respondent TCL where DivX again asserted the 297 Patent. Amazon based its motion on the grounds that DivX's infringement allegations, including alleged infringement of the 297 Patent, against TCL "implicate Amazon's technology, including the Prime Video streaming service and application that may be installed on and used by the accused TCL smart TV products". Ex. 54 at 1-2 (Amazon Motion to Intervene).

104. Amazon knowingly and intentionally encourages at least: (1) streaming service providers, such as Warner Bros. Discovery, Inc. and its HBO Max streaming service; and (2) end-users of the Amazon accused products, such as consumers in the United States, to directly infringe the 297 Patent.

105. For example, Amazon provides the technical and business infrastructure, specifications, software, know-how, and other support to instruct and enable streaming service providers to make, use, sell/lease, and/or offer for sale/lease applications that provide video streaming services for installation on the Amazon Accused Products, or otherwise provide video streaming services to the Amazon Accused Products. Once installed, or otherwise when such services are used, such applications in combination with the Amazon Accused Products directly infringe the 297 Patent.

106. For example, Amazon provides an application store and associated infrastructure to enable streaming service providers to provide their Amazon device-specific streaming applications to end users, so that such end users can download, install, and use such streaming applications using the Amazon Accused Products.



Ex. 55 (https://www.amazon.com/gp/video/getstarted/ref=sv_atv_5).

107. Amazon further encourages third-party streaming service providers to provide such applications for use with the Amazon Accused Products by providing software tools and libraries that facilitate the process of developing streaming applications that work with the Amazon Accused Products. For example, Amazon provides a “port” of the ExoPlayer library (originally from Google) for video streaming. Because Amazon Fire OS is a “fork of Android,” Android’s ExoPlayer lends itself to be highly compatible with Fire OS. Ex. 56 (<https://developer.amazon.com/docs/fire-tv/fire-os-overview.html>). Indeed, as Amazon claims, “if your app runs on Android, it will most likely run on Amazon’s Fire devices too. You can quickly check your app’s compatibility with Amazon through the App Testing Service. As a developer, you might not have to adjust your Android code at all to publish your app on Amazon’s platform.” *Id.* A screenshot of these instructions is provided here:

Fire OS Overview

Fire OS is the operating system that runs Amazon's Fire TV and tablets. Fire OS is a fork of [Android](#), so if your app runs on Android, it will most likely run on Amazon's Fire devices too. You can quickly check your app's compatibility with Amazon through the [App Testing Service](#). As a developer, you might not have to adjust your Android code at all to publish your app on Amazon's platform.

Ex. 56 (<https://developer.amazon.com/docs/fire-tv/fire-os-overview.html>).

108. Amazon provides specific tools and libraries (*e.g.*, its own version of ExoPlayer) for software developers to adopt and to facilitate the development process. Amazon encourages third-party streaming service providers to, “[i]nstead of integrating the default ExoPlayer into your Fire TV app, use the Amazon port of ExoPlayer. The Amazon port of ExoPlayer provides many fixes, workarounds, and other patches to make ExoPlayer work on Amazon devices.”

Ex. 57 (<https://developer.amazon.com/docs/fire-tv/media-players.html>).

Amazon Port of ExoPlayer

ExoPlayer is an open-source media player developed by Google and intended for Android media apps. To learn more about ExoPlayer, see the following resources:

- [ExoPlayer homepage](#)
- [ExoPlayer Video from Google](#)
- [ExoPlayer Developer Guide](#)

Amazon has a port of ExoPlayer that is compatible with Fire TV. Instead of integrating the default ExoPlayer into your Fire TV app, use the Amazon port of ExoPlayer. The Amazon port of ExoPlayer provides many fixes, workarounds, and other patches to make ExoPlayer work on Amazon devices.

To understand how to use ExoPlayer, consult the standard ExoPlayer resources as listed previously.

[Download the Amazon Port of Exoplayer](#)

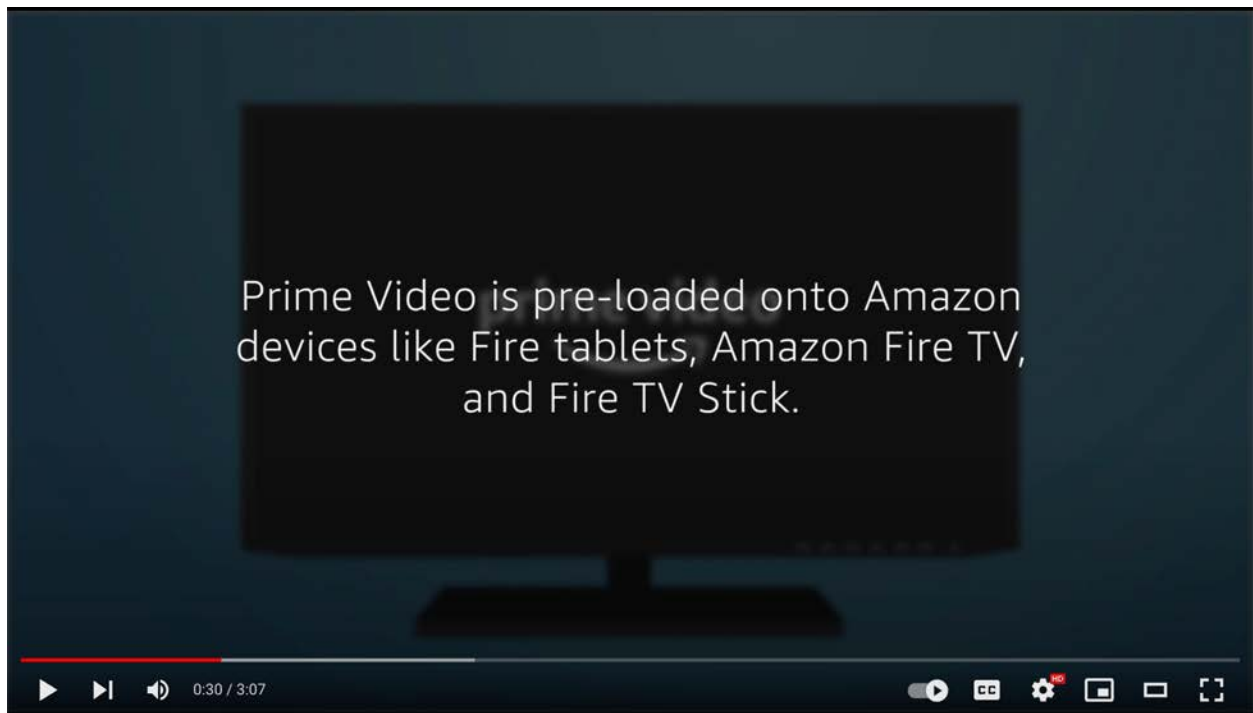
Ex. 57 (<https://developer.amazon.com/docs/fire-tv/media-players.html>).

109. Streaming service providers thereby directly infringe at least by making and using infringing apparatuses in conjunction with the Amazon Accused Products, such as when testing applications developed for use with the Amazon Accused products. Such activities directly infringe, as described, for example, at Exhibit 44, a claim chart applying independent claim 1 of the 297 Patent to the Amazon Accused Products (and components thereof) operating with the Amazon Prime Video streaming service as an exemplary product.

110. Amazon knowingly induces such infringement by providing the technical and business infrastructure, know-how, and other support to enable and facilitate such infringement, examples of which are discussed above. Upon information and belief, Amazon specifically intends that its actions will result in infringement of the 297 Patent, or at the very least, because Amazon has been and remains on notice of the 297 Patent and the accused infringement, it has been and is intentionally inducing infringement or at least has been and remains willfully blind regarding the infringement it has induced and continues to induce.

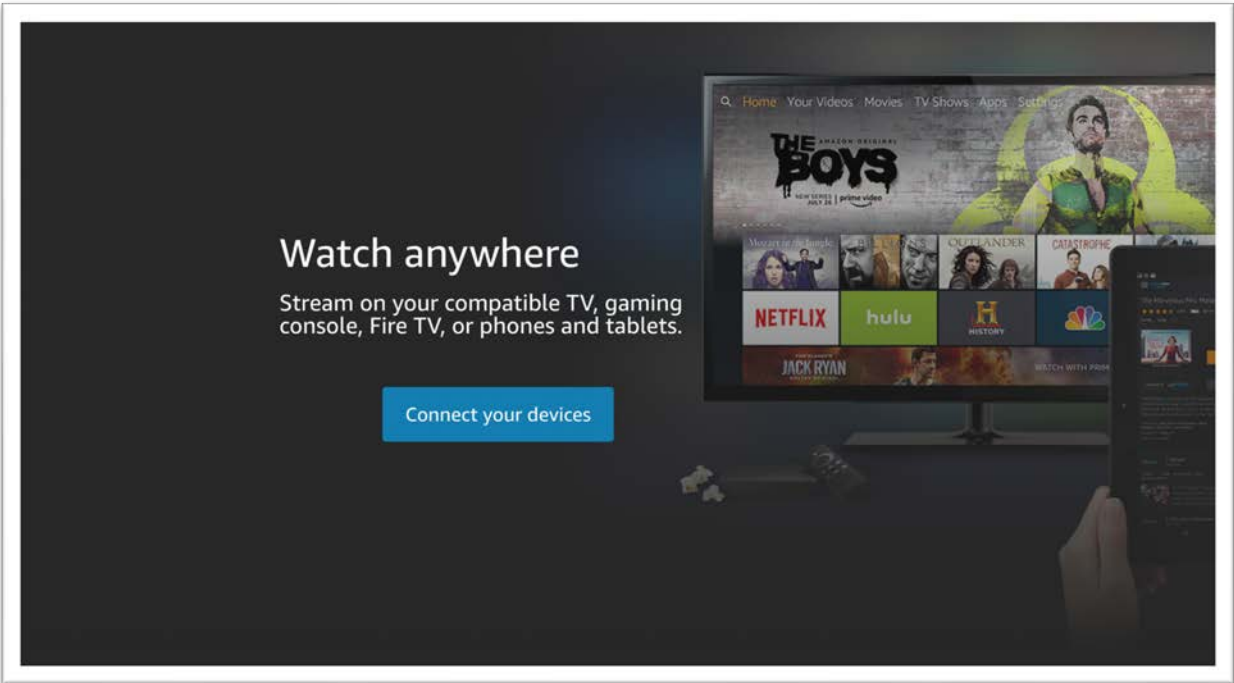
111. Amazon also provides the Amazon Accused Products and instructions to end users so that such end users will use the Accused Products in an infringing manner. For example, Amazon pre-installs the Amazon Prime Video application on the Amazon Accused Products, Ex. 58 (Declaration of Marc E. Levitt (“Levitt Decl.”)) at ¶12, with the intent that end users use the application to stream video to the Amazon Accused Products. *See also* Ex. 59 (<https://www.youtube.com/watch?v=gX0YkCjOxUg>) at 0:30. When end users do so, this results in direct infringement of the 297 Patent, as described, for example, at Exhibit 44 a claim chart applying independent claim 1 of the 297 Patent to the Amazon Accused Products (and components thereof) operating with the Amazon Prime Video streaming service as an exemplary

product. The following screenshot from Exhibit 59 confirms that Prime Video is pre-loaded onto Amazon Accused Products:



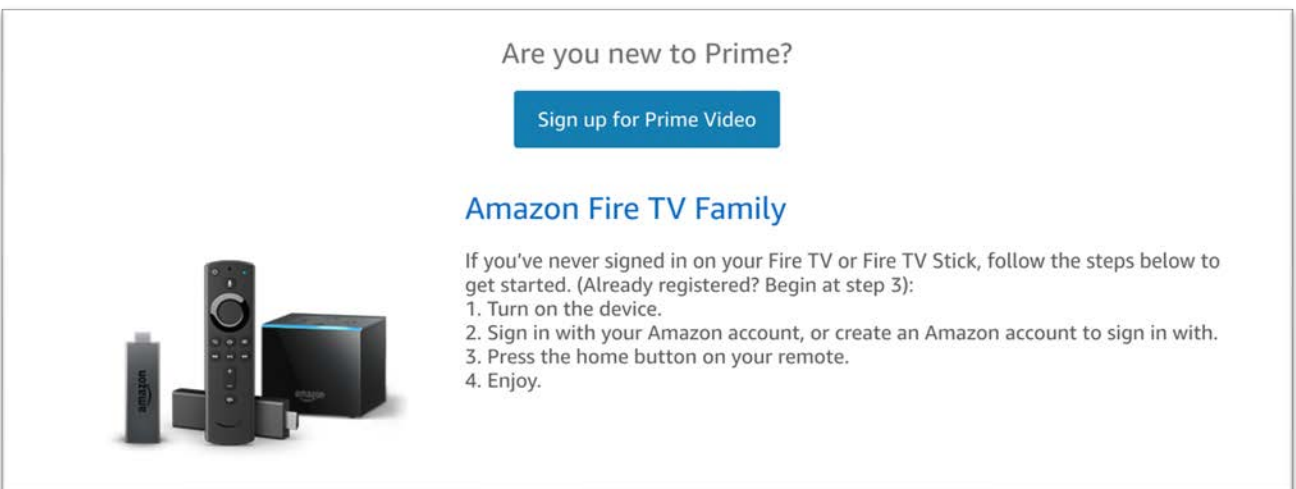
Ex. 59 (<https://www.youtube.com/watch?v=gX0YkCjOxUg>) at 0:30.

112. Amazon provides the streaming platform for its Prime Video service, which allows its consumers to “[w]atch anywhere” and “[s]tream on your compatible TV, gaming console, Fire TV, or phones and tablets.” Ex. 55 (https://www.amazon.com/gp/video/getstarted/ref=sv_atv_5).



Ex. 55 (https://www.amazon.com/gp/video/getstarted/ref=sv_atv_5).

113. As shown below, Amazon provides consumers with instructions on how to access the Prime Video streaming platform and thereby induces consumers to infringe the claims of the 297 Patent. The following are examples of such Amazon instructions:



Ex. 60 (https://www.amazon.com/gp/video/splash/device_linking).



Fire tablet

1. Sign in to your Amazon account on your Fire tablet.
2. If needed, register your device.
3. Open the Prime Video app, or go to the "Video" tab.
4. Enjoy.

Ex. 60 (https://www.amazon.com/gp/video/splash/device_linking).



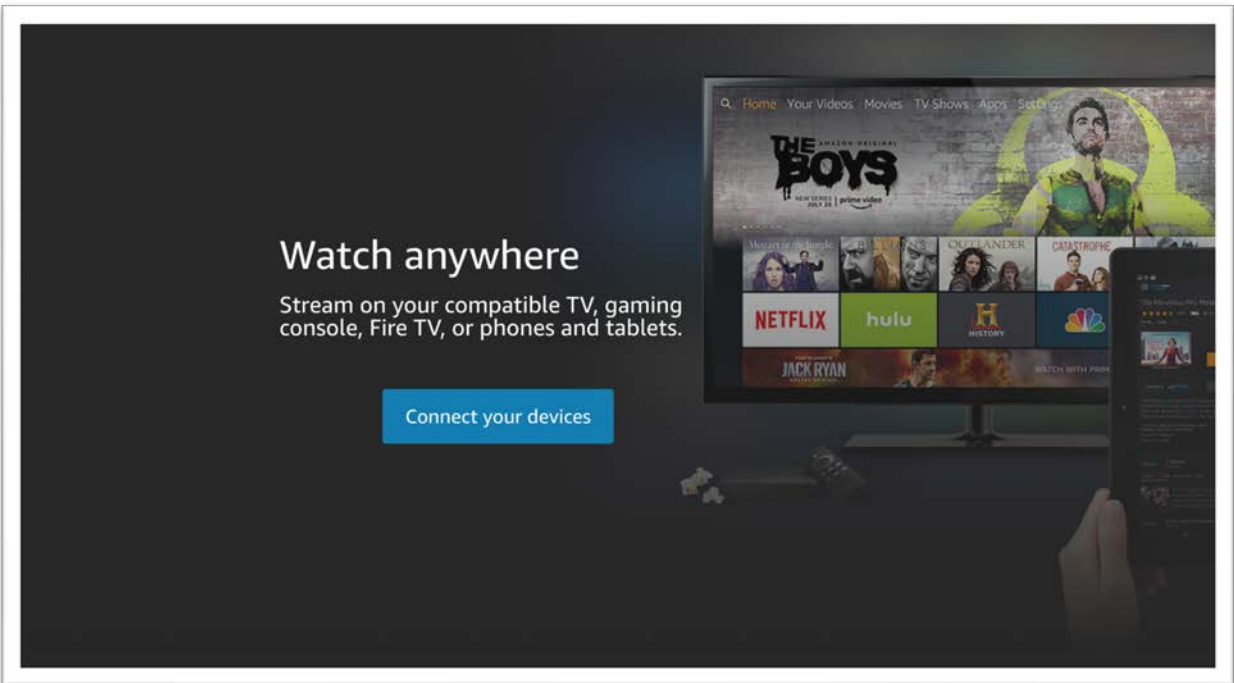
Smart TV, Blu-ray player

1. Open the app store to download, install, and open the Prime Video app.
2. Register your device—here are two ways:
 - (1) Select "Sign in and start watching" and enter your Amazon account information.
 - (2) Choose "Register on the Amazon website" to get a 5–6 character code, then sign in to your Amazon account and enter your code.

[Sign in to your Amazon account and enter your code](#)

Ex. 60 (https://www.amazon.com/gp/video/splash/device_linking).

114. Moreover, Amazon instructs and encourages end users to download, install, and use third-party streaming services in a manner that directly infringes the asserted 297 Patent claims. For example, Amazon provides an application store and associated infrastructure to enable end users to download and install streaming applications from third-party streaming service providers and stream video using the Amazon Accused Products. Amazon markets the Accused Products as permitting end users to “[w]atch anywhere” and “[s]tream on your compatible TV, gaming console, Fire TV, or phones and tablets.” Ex. 55 (https://www.amazon.com/gp/video/getstarted/ref=sv_atv_5).



Ex. 55 (https://www.amazon.com/gp/video/getstarted/ref=sv_atv_5).

115. Amazon encourages and instructs end users of the Amazon Accused Products that “[y]ou’ll never run out of things to watch on Fire TV,” because they can “[e]asily download your favorite apps like Netflix, Prime Video, YouTube,” and “[a]ccess thousands of hours of free movies and TV episodes from popular ad-supported streaming apps like IMDb TV, Tubi, and Pluto TV.” The following screenshot shows an example of those instructions:

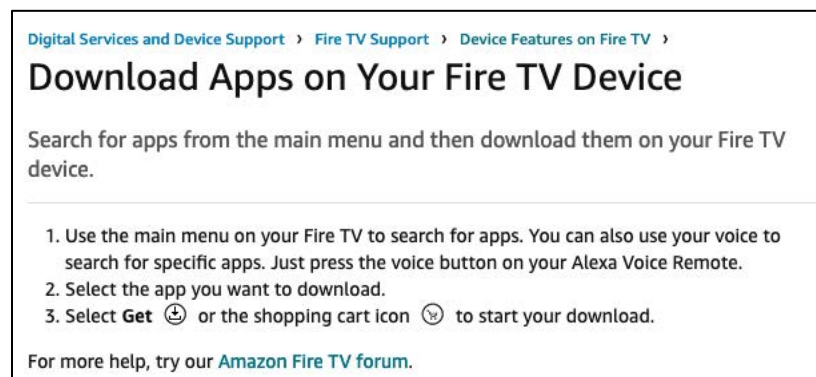
Get the most out of your Fire TV Stick 4K

Something’s always on

You’ll never run out of things to watch on Fire TV. Easily download your favorite apps like Netflix, Prime Video, YouTube, Hulu, and Disney+. Access thousands of hours of free movies and TV episodes from popular ad-supported streaming apps like IMDb TV, Tubi, and Pluto TV. Watch or browse live TV, sports, news, and channels from Live on the Main Menu. With Profiles, everyone in your household can quickly get recommendations tailored to what they like. To learn more about your Fire TV, visit amazon.com/firetv.

Ex. 61 (Amazon Fire Stick 4K Quick User Guide, *available at* https://s3-us-west-2.amazonaws.com/customerdocumentation/Amazon+Fire+TV+User+Guides/Fire+TV+Stick+Device+Documentation/Fire+TV+Stick+4K_Quick+Start+Guide_US.pdf).

116. Amazon encourages and instructs end users of the Amazon Accused Products on how to “Download Apps On Your Fire TV Device,” including on how to access and search for third-party streaming applications, and download them to the Amazon Accused Products. The following screenshot shows an example of those instructions:



Ex. 62

(https://www.amazon.com/gp/help/customer/display.html?nodeId=GRDR6KJPL2FT6YHS&ref_=hp_GHH5TUHA7677G4HJ_c_Download-Apps-on-Your-Fire-TV-).

117. When end users do so, this results in direct infringement of the 297 Patent, as described, for example, at Exhibit 44, a claim chart applying independent claim 1 of the 297 Patent to the Amazon Accused Products (and components thereof) operating with the Amazon Prime Video streaming service as an exemplary product.

118. Amazon customers such as end users directly infringe by using the Accused Products in their intended manner to infringe, *e.g.*, by using the Amazon Accused Products to stream video, thereby making and/or using an infringing apparatus. Amazon knowingly induces such infringement by providing the Accused Products and instructions to enable and facilitate

infringement as described above. Upon information and belief, Amazon specifically intends that its actions will result in infringement of the 297 Patent, or at the very least, because Amazon has been and remains on notice of the 297 Patent and the accused infringement, it has been and remains willfully blind regarding the infringement it has induced and continues to induce.

119. Thus, Amazon has violated Section 337 with respect to the 297 Patent. Because it is difficult to identify all sources of infringing articles, and discovery may reveal additional violations of Section 337 with respect to the 297 Patent, DivX reserves all rights to supplement its allegations to identify additional respondents that have violated Section 337 with respect to this patent, or additional ways in which Amazon has violated Section 337 with respect to the 297 Patent.

B. Infringement of the 673 Patent

120. Upon information and belief, the Accused Products of the Amazon and VIZIO Respondents directly and/or indirectly infringe claims 29-32 of the 673 Patent, literally and/or under the doctrine of equivalents.

121. A claim chart applying independent claim 29 of the 673 Patent to a current-generation Amazon Fire Stick operating with the Amazon Prime Video streaming service as an exemplary streaming application, as exemplary of the Amazon Accused Products (and components thereof), can be found at Exhibit 45. Amazon directly infringes the asserted claims by making, using (*e.g.*, when testing its Prime Video service with the Amazon Accused Products), selling, offering to sell, and/or importing the Amazon Accused Products, each of which comprises the claimed decrypting digital video decoder. The current-generation Amazon Fire Stick is depicted here:



Source: *Fire TV Stick with Alexa Voice Remote (includes TV controls), (HD streaming device)*, Amazon, <https://www.amazon.com/fire-tv-stick-with-3rd-gen-alexa-voice-remote/dp/B08C1W5N87>.

122. A claim chart applying independent claim 29 of the 673 Patent to the VIZIO Accused Products (and components thereof) operating with the HBO Max streaming service as an exemplary product, can be found at Exhibit 46. VIZIO directly infringes the asserted claims by making, using (*e.g.*, when testing streaming services such as HBO Max with the VIZIO Accused Products), selling, offering to sell, and/or importing the VIZIO Accused Products, each of which comprises the claimed decrypting digital video decoder. The VIZIO 43-inch Class V-Series 4K UHD LED Smart TV, Model Number V435-J01, is depicted here:



Source: *VIZIO 43" Class V-Series 4K UHD LED Smart TV (Newest Model) V435-J01*, <https://www.walmart.com/ip/VIZIO-43-Class-V-Series-4K-UHD-LED-Smart-TV-Newest-Model-V435-J01/103263240>.

1. Amazon

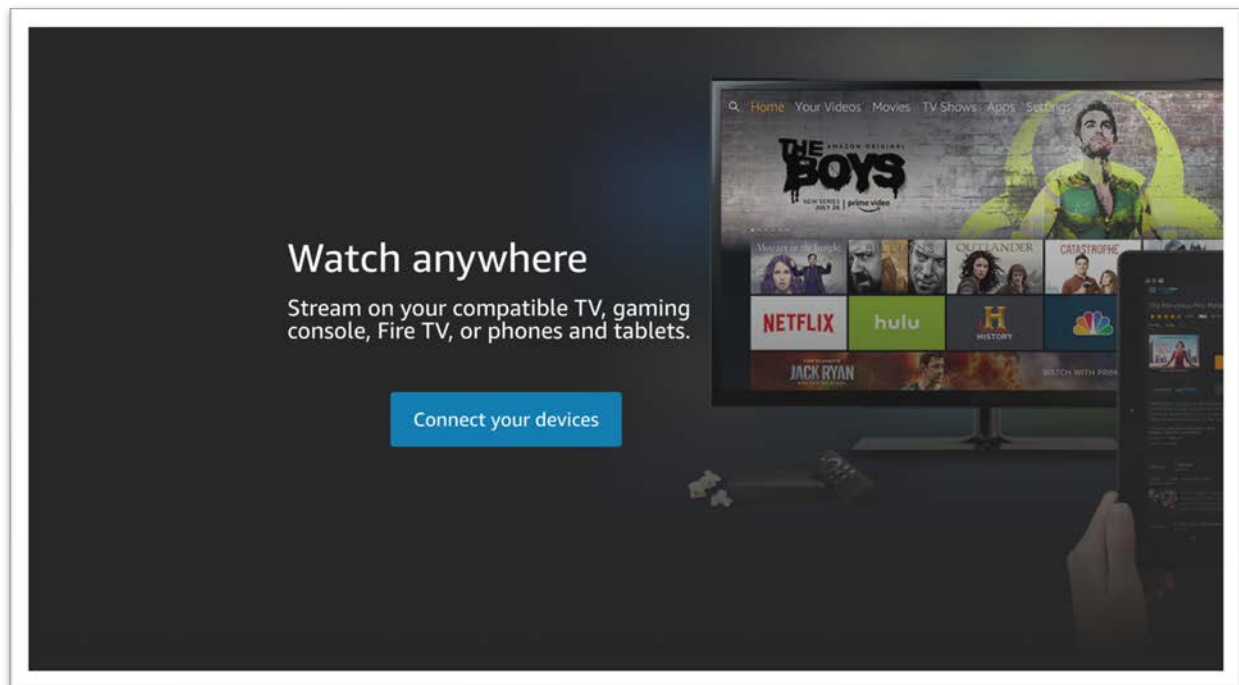
123. Amazon induces infringement of the asserted claims of the 673 Patent. Amazon has had knowledge of the 673 Patent and the Accused Products' infringement thereof since at least the filing and/or service of the complaint in the EDVA Action and/or this Complaint.

124. Amazon knowingly and intentionally encourages at least: (1) streaming service providers, such as Warner Bros. Discovery, Inc. and its HBO Max streaming service; and (2) end-users of the Amazon accused products, such as consumers in the United States, to directly infringe the 673 Patent.

125. For example, Amazon provides the technical and business infrastructure, specifications, software, know-how, and other support to instruct and enable streaming service providers to make, use, sell/lease, and/or offer for sale/lease applications that provide video streaming services for installation on the Amazon Accused Products, or otherwise provide video streaming services to the Amazon Accused Products. Once installed, or otherwise when such

services are used, such applications in combination with the Amazon Accused Products directly infringe the 673 Patent.

126. For example, Amazon provides an application store and associated infrastructure to enable streaming service providers to provide their Amazon device-specific streaming applications to end users, so that such end users can download, install, and use such streaming applications using the Amazon Accused Products.



Ex. 55 (https://www.amazon.com/gp/video/getstarted/ref=sv_atv_5).

127. Amazon further encourages third-party streaming service providers to provide such applications for use with the Amazon Accused Products by providing software tools and libraries that facilitate the process of developing streaming applications that work with the Amazon Accused Products. For example, Amazon provides a “port” of the ExoPlayer library (originally from Google) for video streaming. Because Amazon Fire OS is a “fork of Android,” Android’s ExoPlayer lends itself to be highly compatible with Fire OS. Ex. 56 (<https://developer.amazon.com/docs/fire-tv/fire-os-overview.html>). Indeed, as Amazon claims,

“if your app runs on Android, it will most likely run on Amazon’s Fire devices too. You can quickly check your app’s compatibility with Amazon through the App Testing Service. As a developer, you might not have to adjust your Android code at all to publish your app on Amazon’s platform.” *Id.*

Fire OS Overview

Fire OS is the operating system that runs Amazon's Fire TV and tablets. Fire OS is a fork of [Android](#), so if your app runs on Android, it will most likely run on Amazon's Fire devices too. You can quickly check your app's compatibility with Amazon through the [App Testing Service](#). As a developer, you might not have to adjust your Android code at all to publish your app on Amazon's platform.

Ex. 56 (<https://developer.amazon.com/docs/fire-tv/fire-os-overview.html>).

128. Amazon provides specific tools and libraries (*e.g.*, its own version of ExoPlayer) for software developers to adopt and to facilitate the development process. Amazon encourages third-party streaming service providers to, “[i]nstead of integrating the default ExoPlayer into your Fire TV app, use the Amazon port of ExoPlayer. The Amazon port of ExoPlayer provides many fixes, workarounds, and other patches to make ExoPlayer work on Amazon devices.”

Ex. 57 (<https://developer.amazon.com/docs/fire-tv/media-players.html>).

Amazon Port of ExoPlayer

ExoPlayer is an open-source media player developed by Google and intended for Android media apps. To learn more about ExoPlayer, see the following resources:

- [ExoPlayer homepage](#)
- [ExoPlayer Video from Google](#)
- [ExoPlayer Developer Guide](#)

Amazon has a port of ExoPlayer that is compatible with Fire TV. Instead of integrating the default ExoPlayer into your Fire TV app, use the Amazon port of ExoPlayer. The Amazon port of ExoPlayer provides many fixes, workarounds, and other patches to make ExoPlayer work on Amazon devices.

To understand how to use ExoPlayer, consult the standard ExoPlayer resources as listed previously.

[Download the Amazon Port of Exoplayer](#)

Ex. 57 (<https://developer.amazon.com/docs/fire-tv/media-players.html>).

129. Streaming service providers thereby directly infringe at least by making and using infringing apparatuses in conjunction with the Amazon Accused Products, such as when testing applications developed for use with the Amazon Accused products. Such activities directly infringe, as described, for example, at Exhibit 45, a claim chart applying independent claim 29 of the 673 Patent to the Amazon Accused Products (and components thereof) operating with the Amazon Prime Video streaming service as an exemplary product.

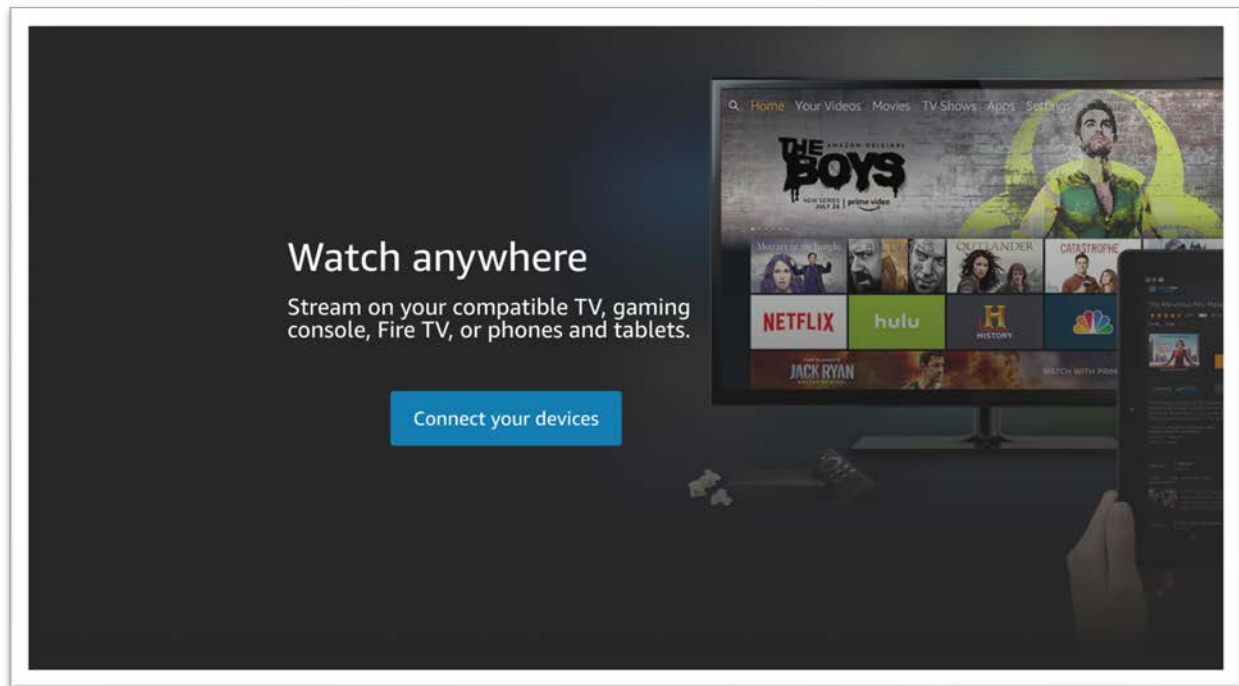
130. Amazon knowingly induces such infringement by providing the technical and business infrastructure, know-how, and other support to enable and facilitate such infringement, examples of which are discussed above. Upon information and belief, Amazon specifically intends that its actions will result in infringement of the 673 Patent, or at the very least, because Amazon has been and remains on notice of the 673 Patent and the accused infringement, it has been and remains willfully blind regarding the infringement it has induced and continues to induce.

131. Amazon also provides the Amazon Accused Products and instructions to end users so that such end users will use the Accused Products in an infringing manner. For example, Amazon pre-installs the Amazon Prime Video application on the Amazon Accused Products. Ex. 58 (Levitt Decl.) at ¶12, with the intent that end users use the application to stream video to the Amazon Accused Products. *See also* Ex. 59 (<https://www.youtube.com/watch?v=gX0YkCjOxUg>) at 0:30. When end users do so, this results in direct infringement of the 673 Patent, as described, for example, at Exhibit 45 a claim chart applying independent claim 29 of the 673 Patent to the Amazon Accused Products (and components thereof) operating with the Amazon Prime Video streaming service as an exemplary product. The following screenshot from Exhibit 59 confirms that Prime Video is pre-loaded onto Amazon Accused Products:



Ex. 59 (<https://www.youtube.com/watch?v=gX0YkCjOxUg>) at 0:30.

132. Amazon provides the streaming platform for its Prime Video service, which allows its consumers to “[w]atch anywhere” and “[s]tream on your compatible TV, gaming console, Fire TV, or phones and tablets.”



Ex. 55 (https://www.amazon.com/gp/video/getstarted/ref=sv_atv_5).

133. As shown below, Amazon provides consumers with instructions on how to access the Prime Video streaming platform and thereby induces consumers to infringe the claims of the 673 Patent. The following are examples of such Amazon instructions:

Are you new to Prime?

[Sign up for Prime Video](#)

Amazon Fire TV Family



If you've never signed in on your Fire TV or Fire TV Stick, follow the steps below to get started. (Already registered? Begin at step 3):

1. Turn on the device.
2. Sign in with your Amazon account, or create an Amazon account to sign in with.
3. Press the home button on your remote.
4. Enjoy.

Ex. 60 (https://www.amazon.com/gp/video/splash/device_linking).

Fire tablet



1. Sign in to your Amazon account on your Fire tablet.
2. If needed, register your device.
3. Open the Prime Video app, or go to the "Video" tab.
4. Enjoy.

Ex. 60 (https://www.amazon.com/gp/video/splash/device_linking).

Smart TV, Blu-ray player



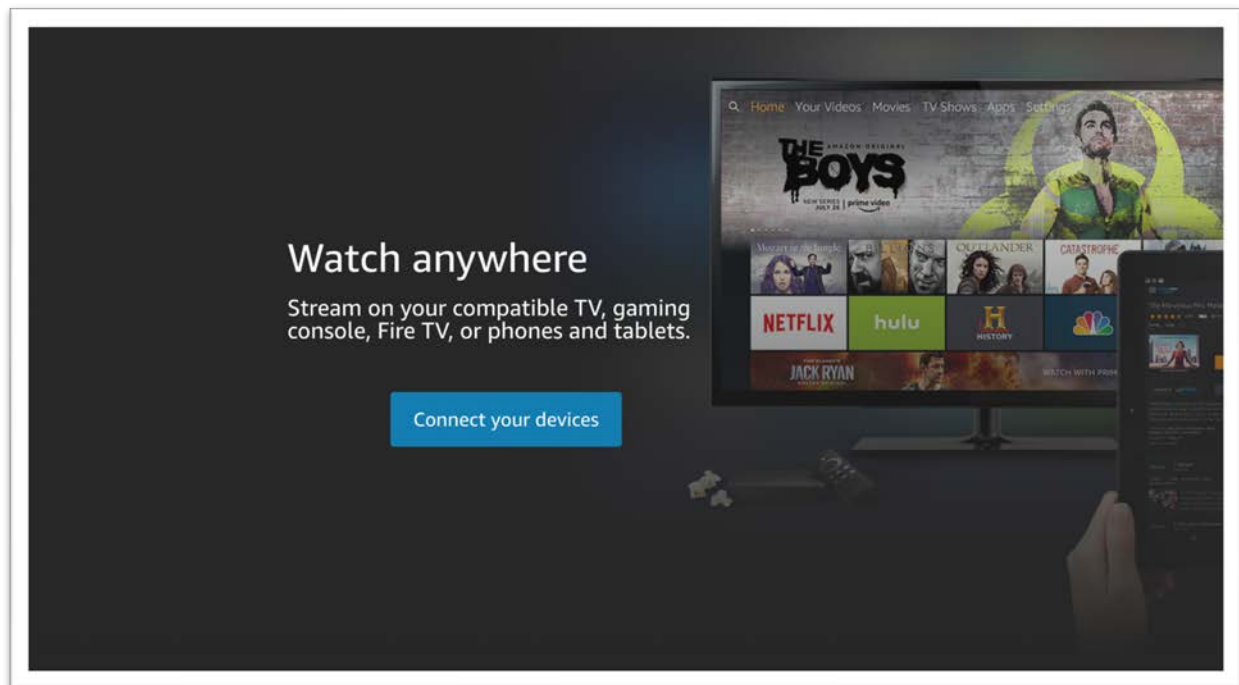
1. Open the app store to download, install, and open the Prime Video app.
2. Register your device—here are two ways:
 - (1) Select "Sign in and start watching" and enter your Amazon account information.
 - (2) Choose "Register on the Amazon website" to get a 5–6 character code, then sign in to your Amazon account and enter your code.

[Sign in to your Amazon account and enter your code](#)

Ex. 60 (https://www.amazon.com/gp/video/splash/device_linking).

134. Moreover, Amazon instructs and encourages end users to download, install, and use third-party streaming services in a manner that directly infringes the asserted 673 Patent

claims. For example, Amazon provides an application store and associated infrastructure to enable end users to download and install streaming applications from third-party streaming service providers and stream video using the Amazon Accused Products. Amazon markets the Accused Products as permitting end users to “[w]atch anywhere” and “[s]tream on your compatible TV, gaming console, Fire TV, or phones and tablets.” Ex. 55 (https://www.amazon.com/gp/video/getstarted/ref=sv_atv_5).



Ex. 55 (https://www.amazon.com/gp/video/getstarted/ref=sv_atv_5).

135. Amazon encourages and instructs end users of the Amazon Accused Products that “[y]ou’ll never run out of things to watch on Fire TV,” because they can “[e]asily download your favorite apps like Netflix, Prime Video, YouTube, Hulu, and Disney+,” and “[a]ccess thousands of hours of free movies and TV episodes from popular ad-supported streaming apps like IMDb TV, Tubi, and Pluto TV.” The following screenshot shows an example of those instructions:

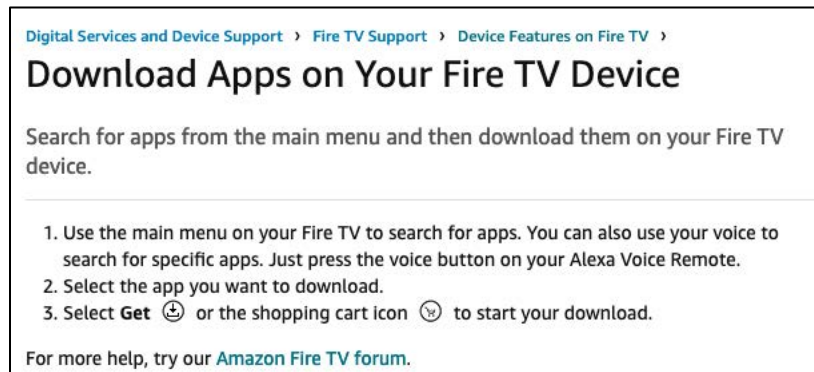
Get the most out of your Fire TV Stick 4K

Something's always on

You'll never run out of things to watch on Fire TV. Easily download your favorite apps like Netflix, Prime Video, YouTube, Hulu, and Disney+. Access thousands of hours of free movies and TV episodes from popular ad-supported streaming apps like IMDb TV, Tubi, and Pluto TV. Watch or browse live TV, sports, news, and channels from Live on the Main Menu. With Profiles, everyone in your household can quickly get recommendations tailored to what they like. To learn more about your Fire TV, visit amazon.com/firetv.

Ex. 61 (Amazon Fire Stick 4K Quick User Guide, *available at* https://s3-us-west-2.amazonaws.com/customerdocumentation/Amazon+Fire+TV+User+Guides/Fire+TV+Stick+Device+Documentation/Fire+TV+Stick+4K_Quick+Start+Guide_US.pdf).

136. Amazon encourages and instructs end users of the Amazon Accused Products on how to “Download Apps On Your Fire TV Device,” including on how to access and search for third-party streaming applications, and download them to the Amazon Accused Products. The following screenshot shows an example of those instructions:



Ex. 62

([https://www.amazon.com/gp/help/customer/display.html?nodeId=GRDR6KJPL2FT6YHS&ref_](https://www.amazon.com/gp/help/customer/display.html?nodeId=GRDR6KJPL2FT6YHS&ref_=hp_GHH5TUHA7677G4HJ_c_Download-Apps-on-Your-Fire-TV-)
[=hp_GHH5TUHA7677G4HJ_c_Download-Apps-on-Your-Fire-TV-](https://www.amazon.com/gp/help/customer/display.html?nodeId=GRDR6KJPL2FT6YHS&ref_=hp_GHH5TUHA7677G4HJ_c_Download-Apps-on-Your-Fire-TV-)).

137. When end users do so, this results in direct infringement of the 673 Patent, as described, for example, at Exhibit 45 a claim chart applying independent claim 29 of the 673 Patent to the Amazon Accused Products (and components thereof) operating with the Amazon Prime Video streaming service as an exemplary product.

138. Amazon customers such as end users directly infringe by using the Accused Products in their intended manner to infringe, e.g., by using the Amazon Accused Products to stream video, thereby making and/or using an infringing apparatus. Amazon knowingly induces such infringement by providing the Accused Products and instructions to enable and facilitate infringement as described above. Upon information and belief, Amazon specifically intends that its actions will result in infringement of the 673 Patent, or at the very least, because Amazon has been and remains on notice of the 673 Patent and the accused infringement, it has been and remains willfully blind regarding the infringement it has induced and continues to induce.

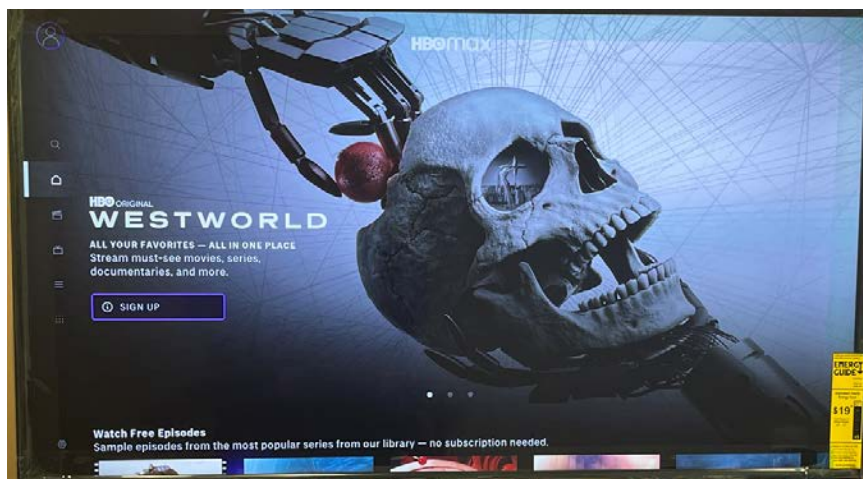
139. Thus, Amazon has violated Section 337 with respect to the 673 Patent. However, because it is difficult to identify all sources of infringing articles, and discovery may reveal additional violations of Section 337 with respect to the 673 Patent, DivX reserves all rights to supplement its allegations to identify additional respondents that have violated Section 337 with respect to this patent, or additional ways in which Amazon has violated Section 337 with respect to the 673 Patent.

2. VIZIO

140. VIZIO induces infringement of the asserted claims of the 673 Patent. VIZIO has had knowledge of the 673 Patent and the Accused Products' infringement thereof since at least the filing and/or service of the complaint in the CDCA Action and/or this Complaint.

141. VIZIO knowingly and intentionally encourages at least: (1) streaming service providers, such as Warner Bros. Discovery, Inc. and its HBO Max streaming service; and (2)

end-users of the VIZIO-accused products, such as consumers in the United States, to directly infringe the 673 Patent.

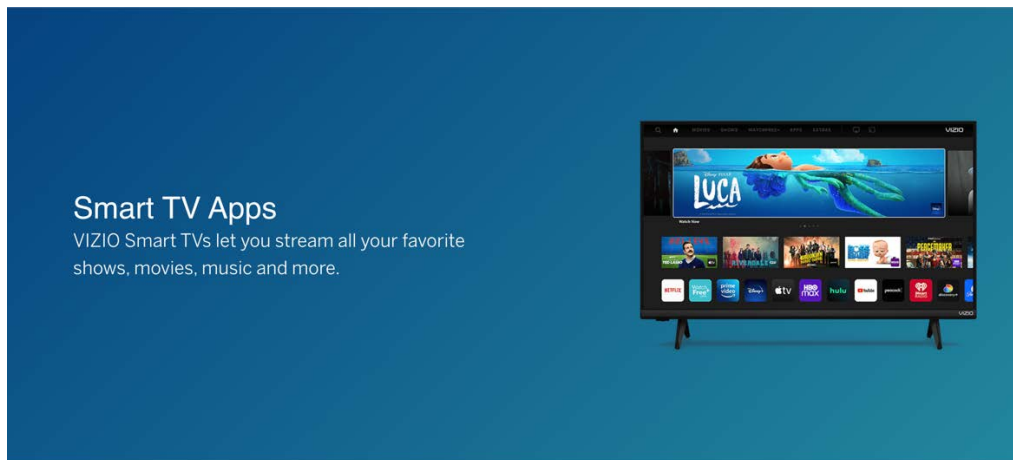


The above screenshot of the HBO Max application running on the exemplary VIZIO TV Device was taken by, or on behalf of, DivX.

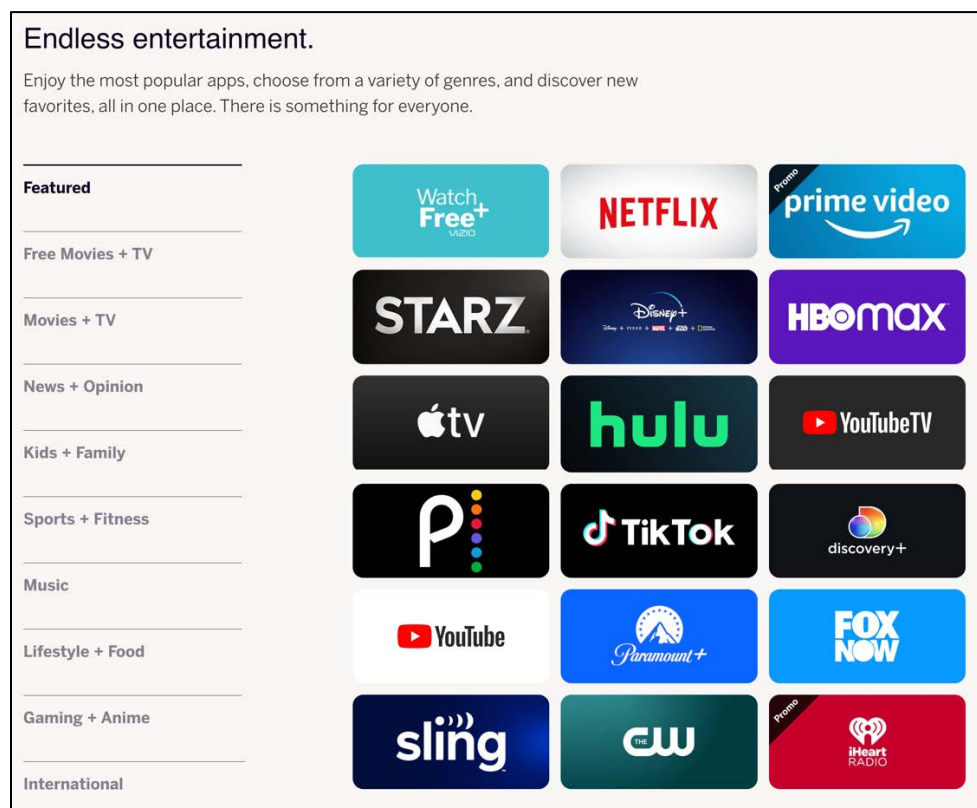
142. For example, VIZIO provides the technical and business infrastructure, specifications, software, know-how, and other support to instruct and enable streaming service providers to make, use, sell/lease, and/or offer for sale/lease applications that provide video streaming services for installation on the VIZIO Accused Products, or otherwise provide video streaming services to the VIZIO Accused Products. Once installed, or otherwise when such services are used, such applications in combination with the VIZIO Accused Products directly infringe the 673 Patent.

143. For example, VIZIO provides application offerings and associated infrastructure, such as VIZIO's SmartCast® platform, to enable streaming service providers to provide their VIZIO device-specific streaming applications to end users, so that such end users can use such streaming applications using the VIZIO Accused Products. For example, VIZIO states that its SmartCast® platform is “the (incredibly) smart platform that powers every VIZIO TV.” Ex. 63 (<https://www.vizio.com/en/smartcast>). The following screenshots depict the various video

content that may be consumed on the VIZIO SmartCast® platform and the ways to access such content on the platform:



Ex. 64 (<https://www.vizio.com/en/smart-tv-apps>).



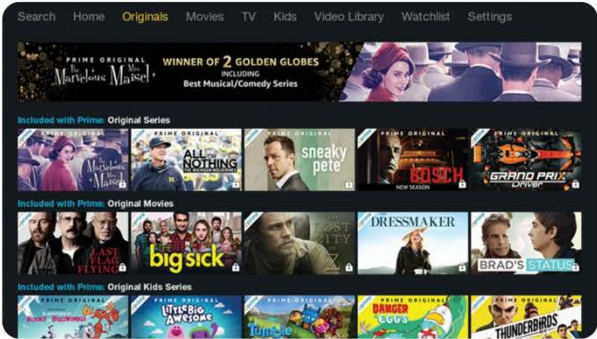
Ex. 64 (<https://www.vizio.com/en/smart-tv-apps>).



Prime Video

With Prime Video, you have access to a huge library of entertainment at no additional cost, including award-winning shows and movies like The Marvelous Mrs. Maisel, Coming 2 America, Jack Ryan, and The Tomorrow War.

Visit Prime Video



Stream award-winning movies, shows, kids & family content, sports, & more. Watch on any device.

Start Your 30-Day Free Trial

Ex. 65 (<https://www.vizio.com/en/smart-tv-apps?appName=prime-video&appId=vizio.amazon>).



HBO Max

HBO Max is a premium streaming app that combines all of HBO with even more must-see TV series, blockbuster movies, and exclusive Max Originals.

Visit HBO Max



Ex. 66 (<https://www.vizio.com/en/smart-tv-apps?appName=hbomax&appId=vizio.hbomax>).



The (incredibly) smart platform that powers every VIZIO TV.

From free TV to your favorite premium channels, instantly access endless entertainment straight out of the box.

[Explore Apps](#)

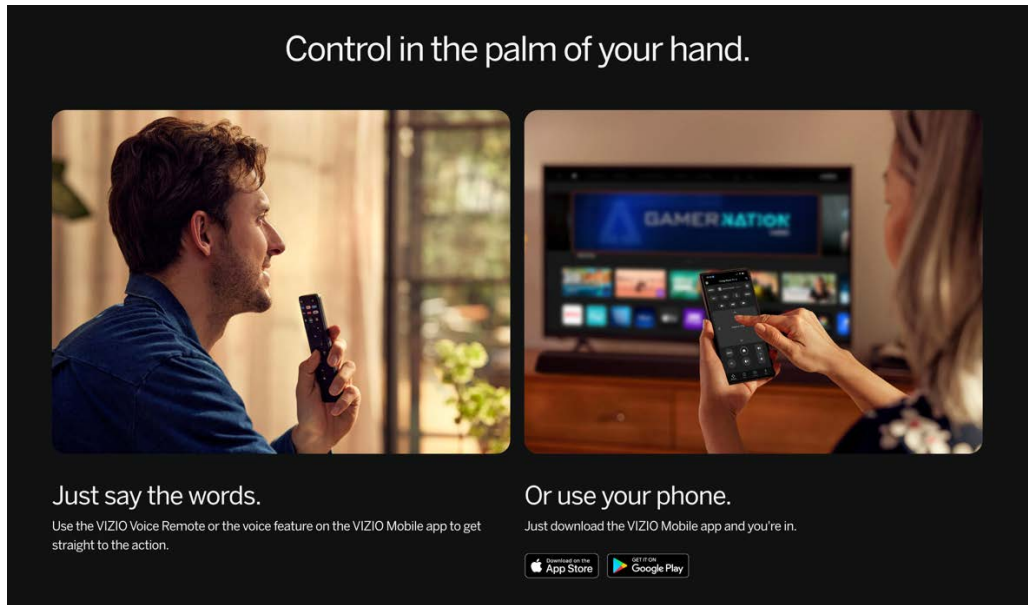
Ex. 63 (<https://www.vizio.com/en/smartcast>).



Stream what you love.

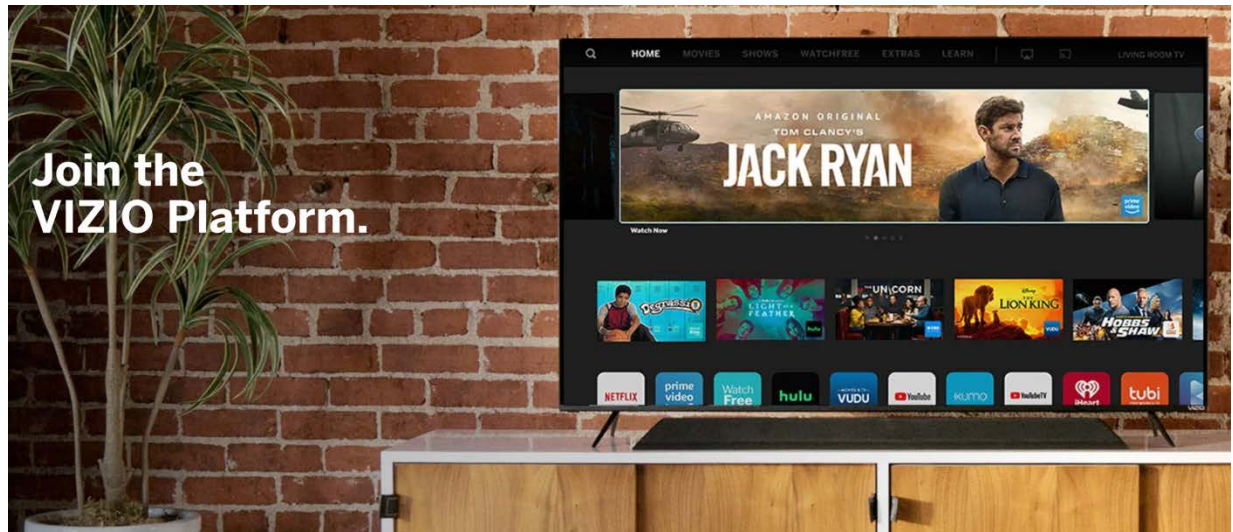
From Netflix to Hulu, Disney+ to FuboTV, You'll find your favorite apps built right in.

Ex. 63 (<https://www.vizio.com/en/smartcast>).



Ex. 63 (<https://www.vizio.com/en/smartcast>).

144. VIZIO further encourages third-party streaming service providers to develop such streaming service applications for use with the VIZIO Accused Products. For example, VIZIO encourages third-party streaming service providers to “[j]oin the VIZIO platform” and to fill out a form to be a Content Partner. <https://www.vizio.com/en/content-partners>. VIZIO touts its “[s]imple integration,” “[d]omestic support team,” “[i]nnovative technologies,” and “[m]illions of TVs” as reasons why third-party streaming service providers should “[b]ring [their] content or app to millions of households” that use the VIZIO Accused Products. *Id.* The following screenshots include such advertisements that encourage Content Partners to join the VIZIO SmartCast® Platform:



Ex. 67 (<https://www.vizio.com/en/content-partners>).

Bring your content or app to millions of households.

Contact Us

Simple integration.

Our platform offers a lightweight integration solution.

Domestic support team.

Work directly with VIZIO's domestic engineers to onboard your app quickly.

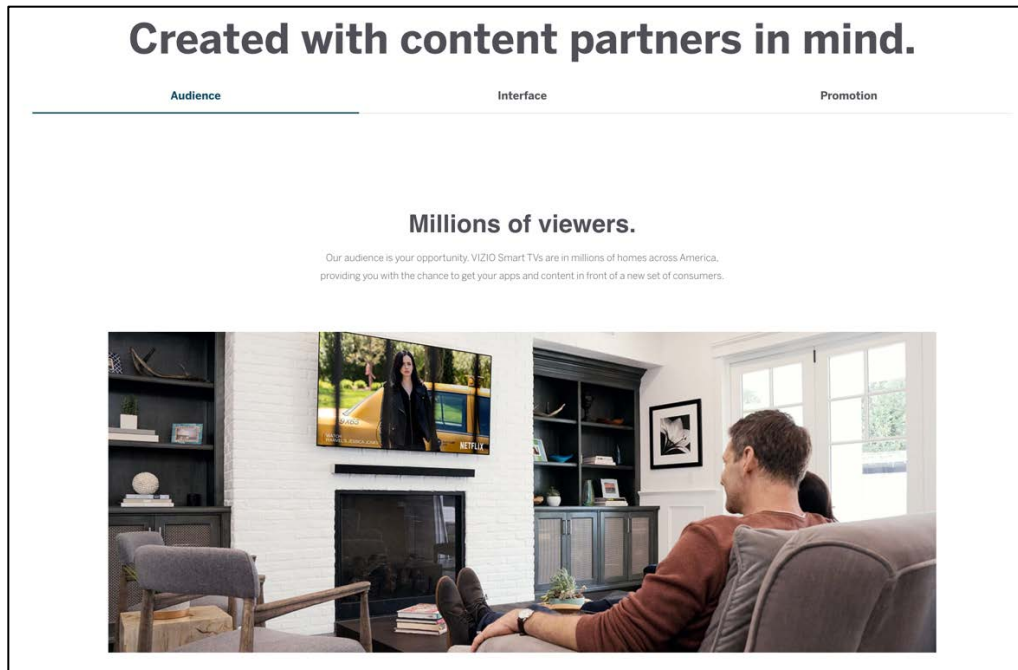
Innovative technologies.

We support 4K UHD, HDR 10, Dolby Vision, Alexa, Google Assistant and more.

Millions of TVs.

We're growing every day with TVs in millions of homes across the country.

Ex. 67 (<https://www.vizio.com/en/content-partners>).



Ex. 67 (<https://www.vizio.com/en/content-partners>).

Get started.

Complete the form below and a representative will be in touch.

First Name

Last Name

Email Address

Company

Website

Business Model

Company Overview

☐ I'm not a robot
 

Ex. 67 (<https://www.vizio.com/en/content-partners>).

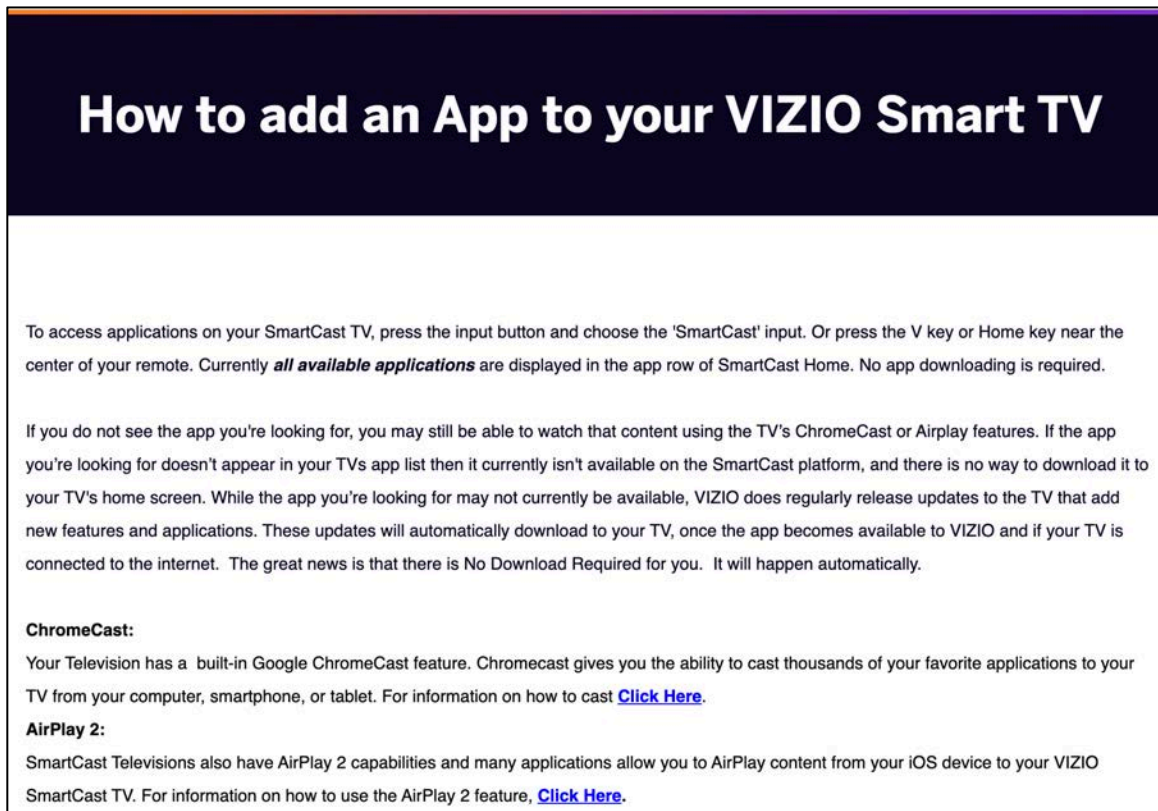
145. Streaming service providers thereby directly infringe at least by making and using infringing apparatuses in conjunction with the VIZIO Accused Products, such as when testing applications developed for use with the VIZIO Accused Products. Such activities directly infringe, as described, for example, at Exhibit 46, a claim chart applying independent claim 29 of the 673 Patent to the VIZIO Accused Products (and components thereof) operating with the HBO Max streaming service as an exemplary product.

146. VIZIO knowingly induces such infringement by providing the technical and business infrastructure, know-how, and other support to enable and facilitate such infringement, examples of which are discussed above. Upon information and belief, VIZIO specifically intends that its actions will result in infringement of the 673 Patent, or at the very least, because VIZIO has been and remains on notice of the 673 Patent and the accused infringement, it has been and remains willfully blind regarding the infringement it has induced and continues to induce.

147. VIZIO also provides the VIZIO Accused Products and instructions to end users so that such end users will use the Accused Products in an infringing manner. For example, VIZIO promotes the use of the HBO Max application on the VIZIO Accused Products, *see* Ex. 68 (<https://www.vizio.com/en/press/2021/sept/hbo-max-app-now-available-on-vizio-smartcast->), with the intent that end users use the application to stream video to the VIZIO Accused Products. When end users do so, this results in direct infringement of the 673 Patent, as described, for example, at Exhibit 46, a claim chart applying independent claim 29 of the 673 Patent to the VIZIO Accused Products (and components thereof) operating with the HBO Max streaming service as an exemplary product.

148. VIZIO provides the streaming platform for the HBO Max service, which allows its consumers to “access applications on [their] SmartCast TV,” such as HBO Max, with “[n]o

app downloading [] required.” Ex. 69 (https://support.vizio.com/s/article/How-to-add-an-App-to-your-VIZIO-Smart-TV?language=en_US). The following screenshot shows an example of those instructions:

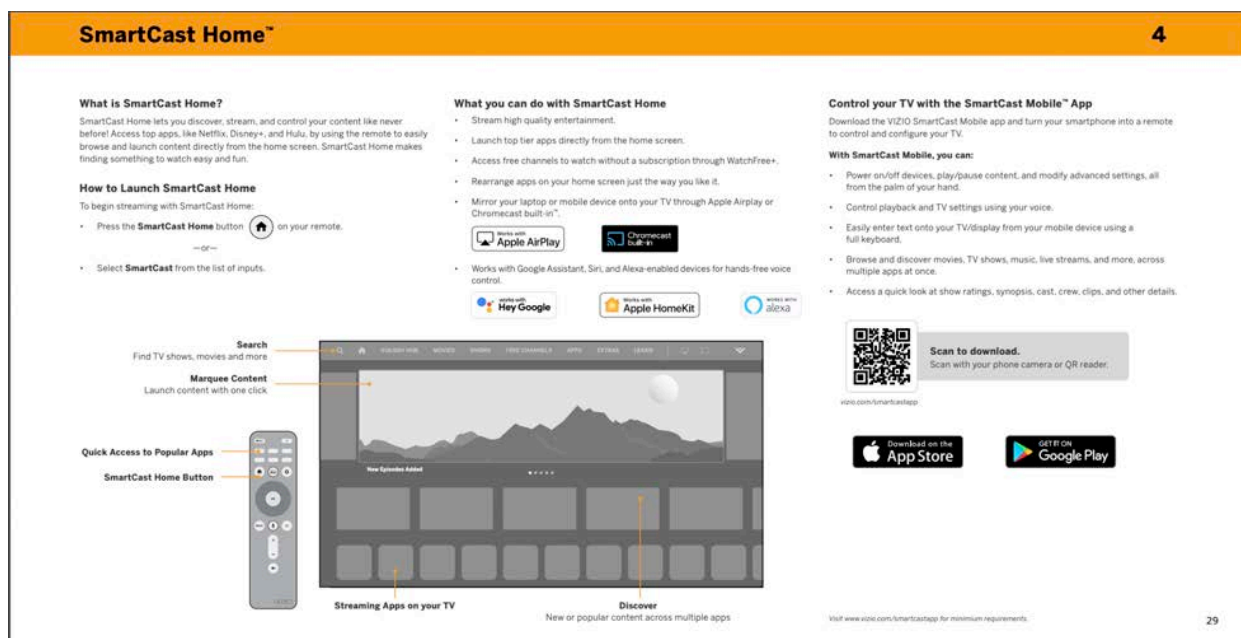


Ex. 69 (https://support.vizio.com/s/article/How-to-add-an-App-to-your-VIZIO-Smart-TV?language=en_US).

149. As shown above, VIZIO provides consumers with instructions on how to access “all available applications” on the VIZIO Accused Products and thereby induces consumers to infringe the claims of the 673 Patent. Ex. 69 (https://support.vizio.com/s/article/How-to-add-an-App-to-your-VIZIO-Smart-TV?language=en_US). VIZIO instructs end users to access the SmartCast® platform by “press[ing] the input button and choose the ‘SmartCast’ input. Or press[ing] the V key or Home key near the center of your remote.” *Id.*

150. VIZIO instructs and encourages end users to use third-party streaming services in a manner that directly infringes the asserted 673 Patent claims. For example, VIZIO provides an application row and associated infrastructure to enable end users to stream video using the VIZIO Accused Products. “Currently all available applications are displayed in the app row of the SmartCast Home. No app downloading is required. . . . If the app you’re looking for doesn’t appear in your TVs app list then it currently isn’t available on the SmartCast platform, and there is no way to download it to your TV’s home screen.” Ex. 69 (https://support.vizio.com/s/article/How-to-add-an-App-to-your-VIZIO-Smart-TV?language=en_US). VIZIO markets its Accused Products as continually updating (or that updates “happen automatically”) in that VIZIO “regularly release[s] updates to the TV that add new features and applications,” and that “[t]hese updates will automatically download to your TV, once the app becomes available to VIZIO and if your TV is connected to the internet.” *Id.*

151. VIZIO encourages and instructs end users of the VIZIO Accused Products that “SmartCast Home lets you discover, stream, and control your content like never before,” because they can “[a]ccess top apps, like Netflix, Disney+, and Hulu, by using the remote to easily browse and launch content directly from the home screen” and “SmartCast Home makes finding something to watch easy and fun.” Ex. 39 (VIZIO V-Series User Manual for Models: V435-J01, V505-J01, V505-J09, V505C-J09, V555-J01, V585-J01, V655-J04, V655-J09, V705-J01, V705-J03, V705x-J03 & V755-J04) at 29.



Ex. 39 (VIZIO V-Series User Manual for Models: V435-J01, V505-J01, V505-J09, V505C-J09, V555-J01, V585-J01, V655-J04, V655-J09, V705-J01, V705-J03, V705x-J03 & V755-J04) at 29.

152. When end users do so, this results in direct infringement of the 673 Patent, as described, for example, at Exhibit 46, a claim chart applying independent claim 29 of the 673 Patent to the VIZIO Accused Products (and components thereof) operating with the HBO Max streaming service as an exemplary product.

153. VIZIO customers such as end users directly infringe by using the Accused Products in their intended manner to infringe, *e.g.*, by using the VIZIO Accused Products to stream video, thereby making and/or using an infringing apparatus. VIZIO knowingly induces such infringement by providing the Accused Products and instructions to enable and facilitate infringement as described above. Upon information and belief, VIZIO specifically intends that its actions will result in infringement of the 673 Patent, or at the very least, because VIZIO has been and remains on notice of the 673 Patent and the accused infringement, it has been and remains willfully blind regarding the infringement it has induced and continues to induce.

154. Thus, VIZIO has violated Section 337 with respect to the 673 Patent. Because it is difficult to identify all sources of infringing articles, and discovery may reveal additional violations of Section 337 with respect to the 673 Patent, DivX reserves all rights to supplement its allegations to identify additional respondents that have violated Section 337 with respect to this patent, or additional ways in which VIZIO has violated Section 337 with respect to the 673 Patent.

C. Infringement of the 588 Patent

155. Upon information and belief, the Accused Products of the Amazon and VIZIO Respondents directly and/or indirectly infringe claims 1-10 of the 588 Patent, literally and/or under the doctrine of equivalents.

156. A claim chart applying independent claim 1 of the 588 Patent to a current-generation Amazon Fire Stick operating with the Amazon Prime Video streaming service as an exemplary streaming application, as exemplary of the Amazon Accused Products (and components thereof), can be found at Exhibit 47. Amazon directly infringes the asserted claims by making, using (*e.g.*, when testing its Prime Video service with the Amazon Accused Products), selling, offering to sell, and/or importing the Amazon Accused Products, each of which comprises the claimed playback device. The current-generation Amazon Fire Stick is depicted here:



Source: *Fire TV Stick with Alexa Voice Remote (includes TV controls), (HD streaming device)*, Amazon, <https://www.amazon.com/fire-tv-stick-with-3rd-gen-alexa-voice-remote/dp/B08C1W5N87>.

157. A claim chart applying independent claim 1 of the 588 Patent to the VIZIO Accused Products (and components thereof) operating with the HBO Max streaming service as an exemplary product, can be found at Exhibit 48. VIZIO directly infringes the asserted claims by making, using (*e.g.*, when testing the HBO Max service with the VIZIO Accused Products), selling, offering to sell, and/or importing the VIZIO Accused Products, each of which comprises the claimed playback device. The VIZIO 43-inch Class V-Series 4K UHD LED Smart TV, Model Number V435-J01, is depicted here:



Source: *VIZIO 43" Class V-Series 4K UHD LED Smart TV (Newest Model) V435-J01*, <https://www.walmart.com/ip/VIZIO-43-Class-V-Series-4K-UHD-LED-Smart-TV-Newest-Model-V435-J01/103263240>.

1. Amazon

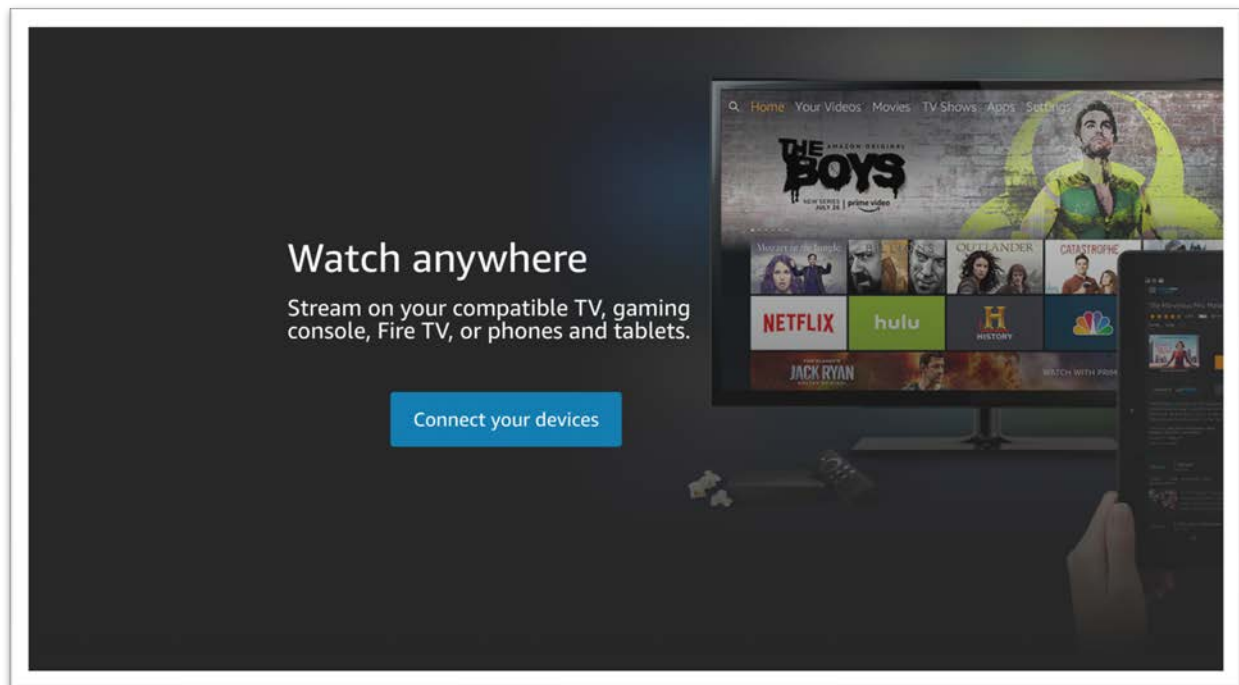
158. Amazon induces infringement of the asserted claims of the 588 Patent. Amazon has had knowledge of the 588 Patent and the Accused Products' infringement thereof since at least the filing and/or service of the complaint in the EDVA Action and/or this Complaint.

159. Amazon knowingly and intentionally encourages at least: (1) streaming service providers, such as Warner Bros. Discovery, Inc. and its HBO Max streaming service; and (2) end-users of the Amazon accused products, such as consumers in the United States, to directly infringe the 588 Patent.

160. For example, Amazon provides the technical and business infrastructure, specifications, software, know-how, and other support to instruct and enable streaming service providers to make, use, sell/lease, and/or offer for sale/lease applications that provide video streaming services for installation on the Amazon Accused Products, or otherwise provide video streaming services to the Amazon Accused Products. Once installed, or otherwise when such

services are used, such applications in combination with the Amazon Accused Products directly infringe the 588 Patent.

161. For example, Amazon provides an application store and associated infrastructure to enable streaming service providers to provide their Amazon device-specific streaming applications to end users, so that such end users can download, install, and use such streaming applications using the Amazon Accused Products.



Ex. 55 (https://www.amazon.com/gp/video/getstarted/ref=sv_atv_5).

162. Amazon further encourages third-party streaming service providers to provide such applications for use with the Amazon Accused Products by providing software tools and libraries that facilitate the process of developing streaming applications that work with the Amazon Accused Products. For example, Amazon provides a “port” of the ExoPlayer library (originally from Google) for video streaming. Because Amazon Fire OS is a “fork of Android,” Android’s ExoPlayer lends itself to be highly compatible with Fire OS. Ex. 56 (<https://developer.amazon.com/docs/fire-tv/fire-os-overview.html>). Indeed, as Amazon claims,

“if your app runs on Android, it will most likely run on Amazon’s Fire devices too. You can quickly check your app’s compatibility with Amazon through the App Testing Service. As a developer, you might not have to adjust your Android code at all to publish your app on Amazon’s platform.” *Id.*

Fire OS Overview

Fire OS is the operating system that runs Amazon's Fire TV and tablets. Fire OS is a fork of [Android](#), so if your app runs on Android, it will most likely run on Amazon's Fire devices too. You can quickly check your app's compatibility with Amazon through the [App Testing Service](#). As a developer, you might not have to adjust your Android code at all to publish your app on Amazon's platform.

Ex. 56 (<https://developer.amazon.com/docs/fire-tv/fire-os-overview.html>).

163. Amazon provides specific tools and libraries (*e.g.*, its own version of ExoPlayer) for software developers to adopt and to facilitate the development process. Amazon encourages third-party streaming service providers to, “[i]nstead of integrating the default ExoPlayer into your Fire TV app, use the Amazon port of ExoPlayer. The Amazon port of ExoPlayer provides many fixes, workarounds, and other patches to make ExoPlayer work on Amazon devices.”

Ex. 57 (<https://developer.amazon.com/docs/fire-tv/media-players.html>).

Amazon Port of ExoPlayer

ExoPlayer is an open-source media player developed by Google and intended for Android media apps. To learn more about ExoPlayer, see the following resources:

- [ExoPlayer homepage](#)
- [ExoPlayer Video from Google](#)
- [ExoPlayer Developer Guide](#)

Amazon has a port of ExoPlayer that is compatible with Fire TV. Instead of integrating the default ExoPlayer into your Fire TV app, use the Amazon port of ExoPlayer. The Amazon port of ExoPlayer provides many fixes, workarounds, and other patches to make ExoPlayer work on Amazon devices.

To understand how to use ExoPlayer, consult the standard ExoPlayer resources as listed previously.

[Download the Amazon Port of Exoplayer](#)

Ex. 57 (<https://developer.amazon.com/docs/fire-tv/media-players.html>).

164. Streaming service providers thereby directly infringe at least by making and using infringing apparatuses in conjunction with the Amazon Accused Products, such as when testing applications developed for use with the Amazon Accused products. Such activities directly infringe, as described, for example, at Exhibit 47, a claim chart applying independent claim 1 of the 588 Patent to the Amazon Accused Products (and components thereof) operating with the Amazon Prime Video streaming service as an exemplary product.

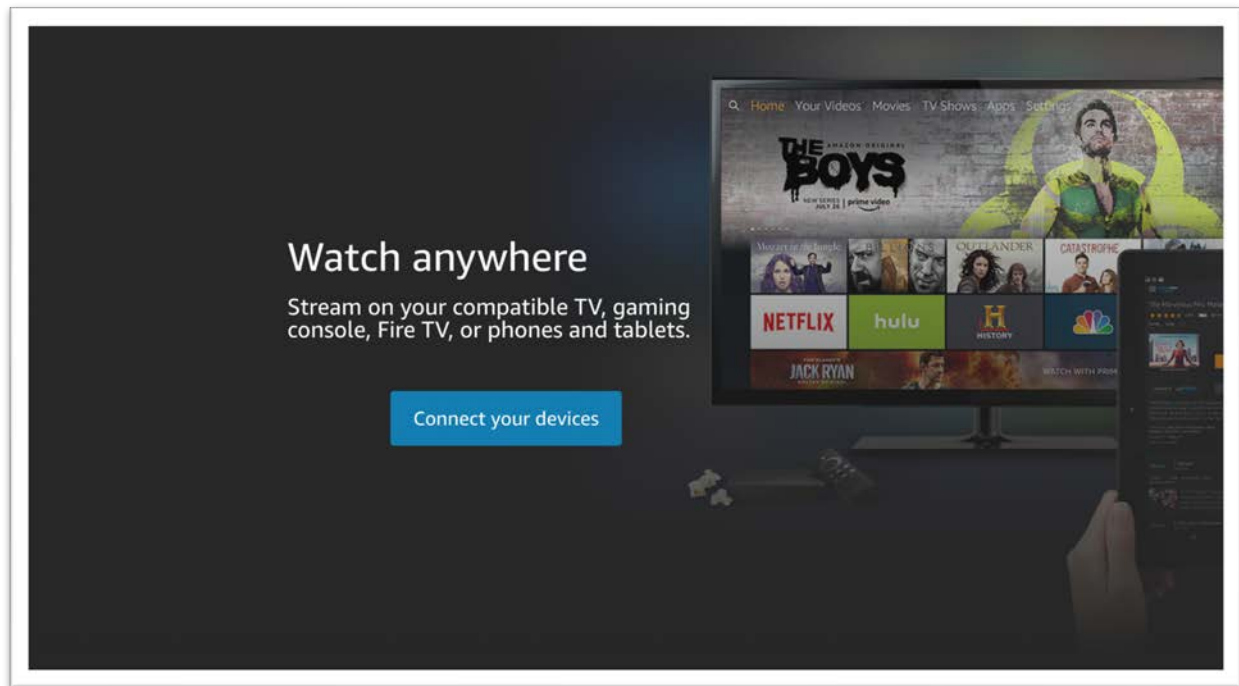
165. Amazon knowingly induces such infringement by providing the technical and business infrastructure, know-how, and other support to enable and facilitate such infringement, examples of which are discussed above. Upon information and belief, Amazon specifically intends that its actions will result in infringement of the 588 Patent, or at the very least, because Amazon has been and remains on notice of the 588 Patent and the accused infringement, it has been and remains willfully blind regarding the infringement it has induced and continues to induce.

166. Amazon also provides the Amazon Accused Products and instructions to end users so that such end users will use the Accused Products in an infringing manner. For example, Amazon pre-installs the Amazon Prime Video application on the Amazon Accused Products, Ex. 58 (Levitt Decl.) at ¶12, with the intent that end users use the application to stream video to the Amazon Accused Products. *See also* Ex. 59 (<https://www.youtube.com/watch?v=gX0YkCjOxUg>) at 0:30. When end users do so, this results in direct infringement of the 588 Patent, as described, for example, at Exhibit 47 a claim chart applying independent claim 1 of the 588 Patent to the Amazon Accused Products (and components thereof) operating with the Amazon Prime Video streaming service as an exemplary product. The following screenshot from Exhibit 59 confirms that Prime Video is pre-loaded onto Amazon Accused Products:



Ex. 59 (<https://www.youtube.com/watch?v=gX0YkCjOxUg>) at 0:30.

167. Amazon provides the streaming platform for its Prime Video service, which allows its consumers to “[w]atch anywhere” and “[s]tream on your compatible TV, gaming console, Fire TV, or phones and tablets.”



Ex. 55 (https://www.amazon.com/gp/video/getstarted/ref=sv_atv_5).

168. As shown below, Amazon provides consumers with instructions on how to access the Prime Video streaming platform and thereby induces consumers to infringe the claims of the 588 Patent. The following are examples of such Amazon instructions:

Are you new to Prime?

[Sign up for Prime Video](#)

Amazon Fire TV Family



If you've never signed in on your Fire TV or Fire TV Stick, follow the steps below to get started. (Already registered? Begin at step 3):

1. Turn on the device.
2. Sign in with your Amazon account, or create an Amazon account to sign in with.
3. Press the home button on your remote.
4. Enjoy.

Ex. 60 (https://www.amazon.com/gp/video/splash/device_linking).

Fire tablet



1. Sign in to your Amazon account on your Fire tablet.
2. If needed, register your device.
3. Open the Prime Video app, or go to the "Video" tab.
4. Enjoy.

Ex. 60 (https://www.amazon.com/gp/video/splash/device_linking).

Smart TV, Blu-ray player



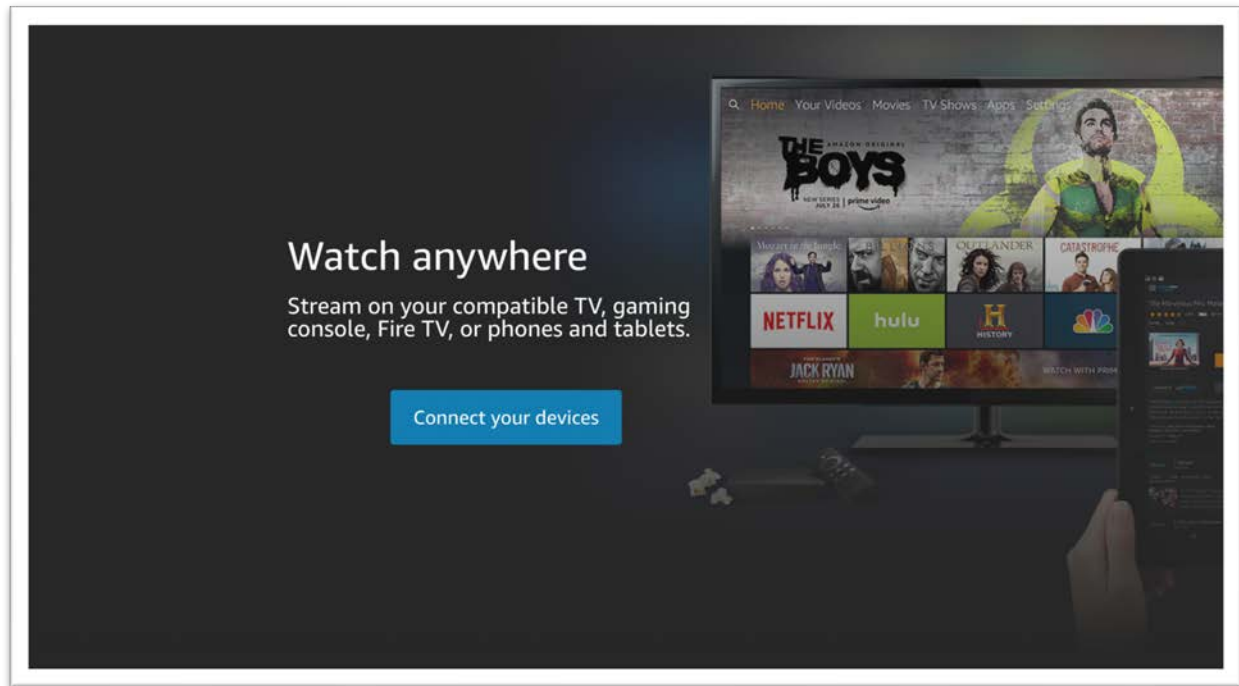
1. Open the app store to download, install, and open the Prime Video app.
2. Register your device—here are two ways:
 - (1) Select "Sign in and start watching" and enter your Amazon account information.
 - (2) Choose "Register on the Amazon website" to get a 5–6 character code, then sign in to your Amazon account and enter your code.

[Sign in to your Amazon account and enter your code](#)

Ex. 60 (https://www.amazon.com/gp/video/splash/device_linking).

169. Moreover, Amazon instructs and encourages end users to download, install, and use third-party streaming services in a manner that directly infringes the asserted 588 Patent claims. For example, Amazon provides an application store and associated infrastructure to

enable end users to download and install streaming applications from third-party streaming service providers and stream video using the Amazon Accused Products. Amazon markets the Accused Products as permitting end users to “[w]atch anywhere” and “[s]tream on your compatible TV, gaming console, Fire TV, or phones and tablets.” Ex. 55 (https://www.amazon.com/gp/video/getstarted/ref=sv_atv_5).



Ex. 55 (https://www.amazon.com/gp/video/getstarted/ref=sv_atv_5).

170. Amazon encourages and instructs end users of the Amazon Accused Products that “[y]ou’ll never run out of things to watch on Fire TV,” because they can “[e]asily download your favorite apps like Netflix, Prime Video, YouTube, Hulu, and Disney+,” and “[a]ccess thousands of hours of free movies and TV episodes from popular ad-supported streaming apps like IMDb TV, Tubi, and Pluto TV.” The following screenshot shows an example of those instructions:

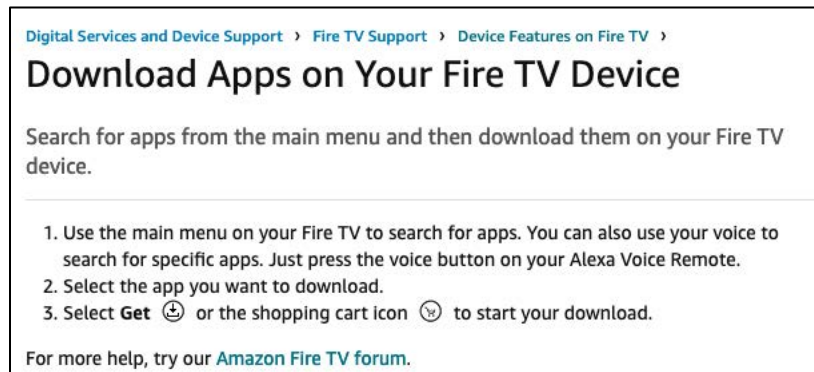
Get the most out of your Fire TV Stick 4K

Something's always on

You'll never run out of things to watch on Fire TV. Easily download your favorite apps like Netflix, Prime Video, YouTube, Hulu, and Disney+. Access thousands of hours of free movies and TV episodes from popular ad-supported streaming apps like IMDb TV, Tubi, and Pluto TV. Watch or browse live TV, sports, news, and channels from Live on the Main Menu. With Profiles, everyone in your household can quickly get recommendations tailored to what they like. To learn more about your Fire TV, visit amazon.com/firetv.

Ex. 61 (Amazon Fire Stick 4K Quick User Guide, *available at* https://s3-us-west-2.amazonaws.com/customerdocumentation/Amazon+Fire+TV+User+Guides/Fire+TV+Stick+Device+Documentation/Fire+TV+Stick+4K_Quick+Start+Guide_US.pdf).

171. Amazon encourages and instructs end users of the Amazon Accused Products how to “Download Apps On Your Fire TV Device,” including how to access and search for third-party streaming applications, and download them to the Amazon Accused Products. The following screenshot shows an example of those instructions:



Ex. 62

([https://www.amazon.com/gp/help/customer/display.html?nodeId=GRDR6KJPL2FT6YHS&ref_](https://www.amazon.com/gp/help/customer/display.html?nodeId=GRDR6KJPL2FT6YHS&ref_=hp_GHH5TUHA7677G4HJ_c_Download-Apps-on-Your-Fire-TV-)
[=hp_GHH5TUHA7677G4HJ_c_Download-Apps-on-Your-Fire-TV-](https://www.amazon.com/gp/help/customer/display.html?nodeId=GRDR6KJPL2FT6YHS&ref_=hp_GHH5TUHA7677G4HJ_c_Download-Apps-on-Your-Fire-TV-)).

172. When end users do so, this results in direct infringement of the 588 Patent, as described, for example, at Exhibit 47 a claim chart applying independent claim 1 of the 588 Patent to the Amazon Accused Products (and components thereof) operating with the Amazon Prime Video streaming service as an exemplary product.

173. Amazon customers such as end users directly infringe by using the Accused Products in their intended manner to infringe, *e.g.*, by using the Amazon Accused Products to stream video, thereby making and/or using an infringing apparatus. Amazon knowingly induces such infringement by providing the Accused Products and instructions to enable and facilitate infringement as described above. Upon information and belief, Amazon specifically intends that its actions will result in infringement of the 588 Patent, or at the very least, because Amazon has been and remains on notice of the 588 Patent and the accused infringement, it has been and remains willfully blind regarding the infringement it has induced and continues to induce.

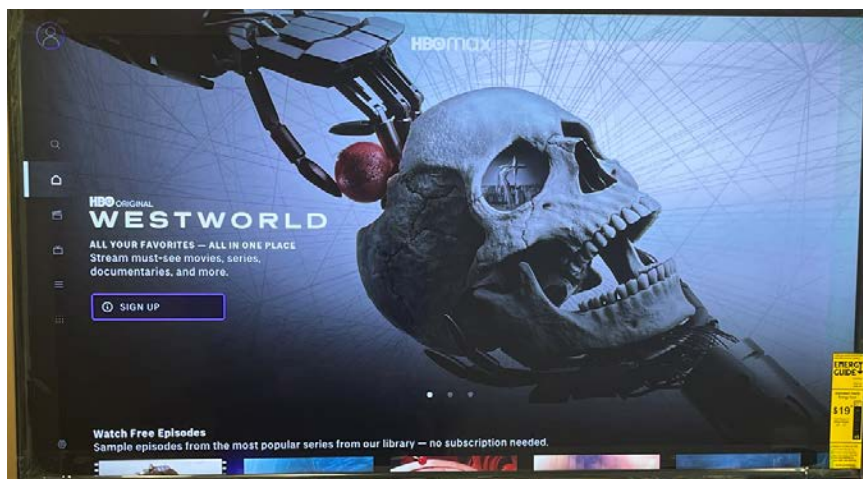
174. Thus, Amazon has violated Section 337 with respect to the 588 Patent. Because it is difficult to identify all sources of infringing articles, and discovery may reveal additional violations of Section 337 with respect to the 588 Patent, DivX reserves all rights to supplement its allegations to identify additional respondents that have violated Section 337 with respect to this patent, or additional ways in which Amazon has violated Section 337 with respect to the 588 Patent.

2. VIZIO

175. VIZIO induces infringement of the asserted claims of the 588 Patent. VIZIO has had knowledge of the 588 Patent and the Accused Products' infringement thereof since at least the filing and/or service of the complaint in the CDCA Action and/or this Complaint.

176. VIZIO knowingly and intentionally encourages at least: (1) streaming service providers, such as Warner Bros. Discovery, Inc. and its HBO Max streaming service; and (2)

end-users of the VIZIO-accused products, such as consumers in the United States, to directly infringe the 588 Patent.

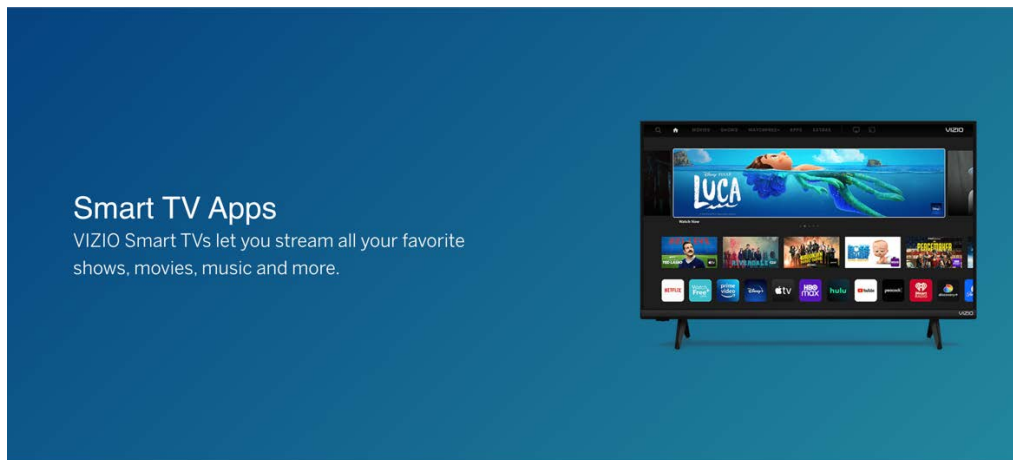


The above screenshot of the HBO Max application running on the exemplary VIZIO TV Device was taken by, or on behalf of, DivX.

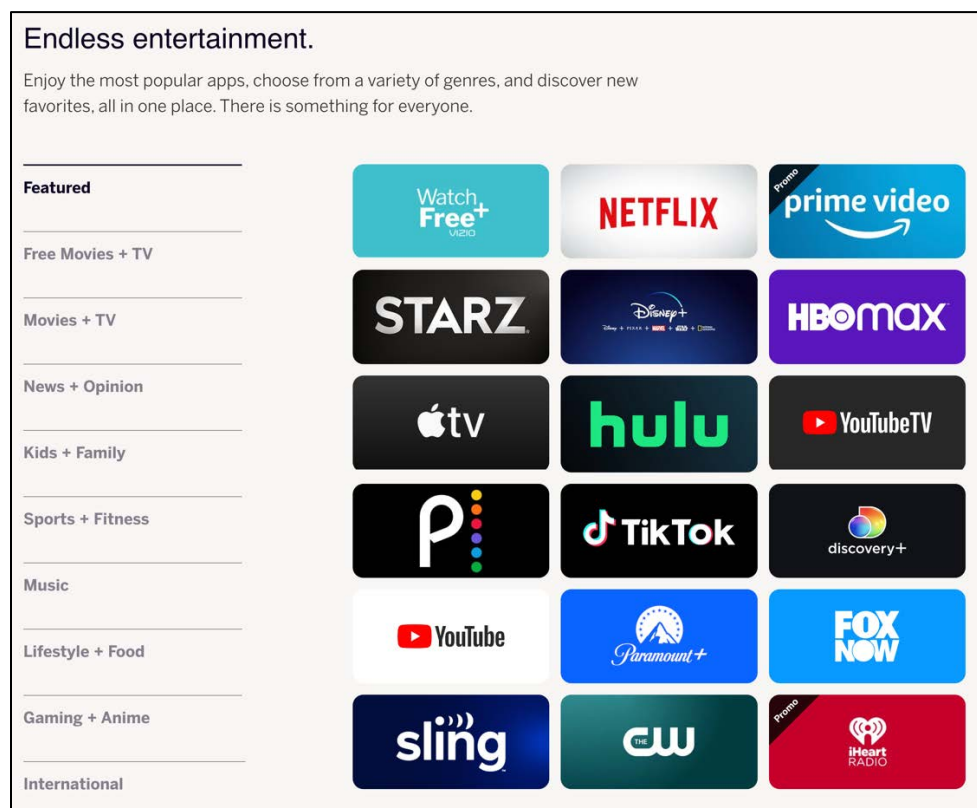
177. For example, VIZIO provides the technical and business infrastructure, specifications, software, know-how, and other support to instruct and enable streaming service providers to make, use, sell/lease, and/or offer for sale/lease applications that provide video streaming services for installation on the VIZIO Accused Products, or otherwise provide video streaming services to the VIZIO Accused Products. Once installed, or otherwise when such services are used, such applications in combination with the VIZIO Accused Products directly infringe the 588 Patent.

178. For example, VIZIO provides application offerings and associated infrastructure, such as VIZIO's SmartCast® platform, to enable streaming service providers to provide their VIZIO device-specific streaming applications to end users, so that such end users can use such streaming applications using the VIZIO Accused Products. For example, VIZIO states that its SmartCast® platform is “the (incredibly) smart platform that powers every VIZIO TV.” Ex. 63 (<https://www.vizio.com/en/smartcast>). The following screenshots depict the various video

content that may be consumed on the VIZIO SmartCast® platform and the ways to access such content on the platform:



Ex. 64 (<https://www.vizio.com/en/smart-tv-apps>).



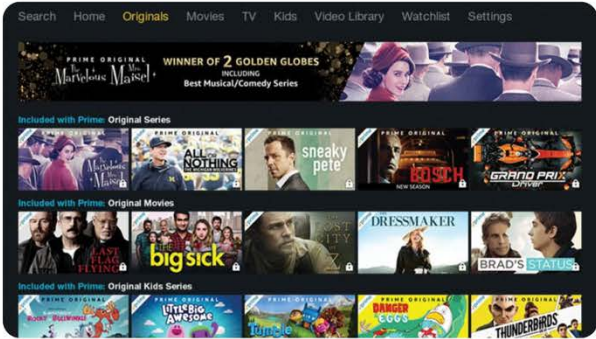
Ex. 64 (<https://www.vizio.com/en/smart-tv-apps>).



Prime Video

With Prime Video, you have access to a huge library of entertainment at no additional cost, including award-winning shows and movies like The Marvelous Mrs. Maisel, Coming 2 America, Jack Ryan, and The Tomorrow War.

Visit Prime Video



Stream award-winning movies, shows, kids & family content, sports, & more. Watch on any device.

Start Your 30-Day Free Trial

Ex. 65 (<https://www.vizio.com/en/smart-tv-apps?appName=prime-video&appId=vizio.amazon>).



HBO Max

HBO Max is a premium streaming app that combines all of HBO with even more must-see TV series, blockbuster movies, and exclusive Max Originals.

Visit HBO Max



Ex. 66 (<https://www.vizio.com/en/smart-tv-apps?appName=hbomax&appId=vizio.hbomax>).



The (incredibly) smart platform that powers every VIZIO TV.

From free TV to your favorite premium channels, instantly access endless entertainment straight out of the box.

[Explore Apps](#)

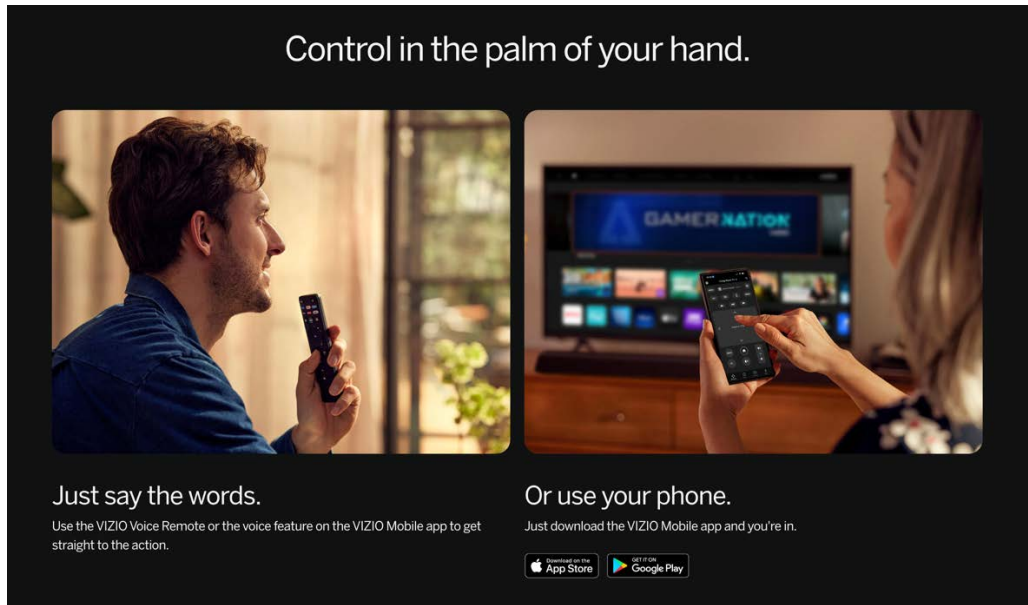
Ex. 63 (<https://www.vizio.com/en/smartcast>).



Stream what you love.

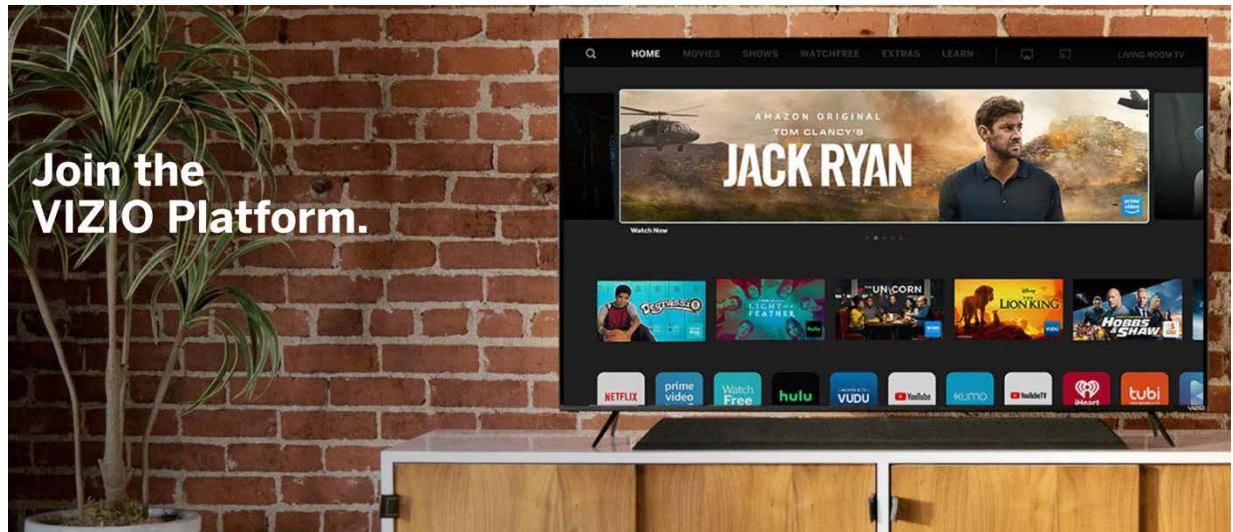
From Netflix to Hulu, Disney+ to FuboTV, You'll find your favorite apps built right in.

Ex. 63 (<https://www.vizio.com/en/smartcast>).



Ex. 63 (<https://www.vizio.com/en/smartcast>).

179. VIZIO further encourages third-party streaming service providers to develop such streaming service applications for use with the VIZIO Accused Products. For example, VIZIO encourages third-party streaming service providers to “[j]oin the VIZIO platform” and to fill out a form to be a Content Partner. Ex. 67 (<https://www.vizio.com/en/content-partners>). VIZIO touts its “[s]imple integration,” “[d]omestic support team,” “[i]nnovative technologies,” and “[m]illions of TVs” as reasons why third-party streaming service providers should “[b]ring [their] content or app to millions of households” that use the VIZIO Accused Products. *Id.* The following screenshots include such advertisements that encourage Content Partners to join the VIZIO SmartCast® Platform:



Ex. 67 (<https://www.vizio.com/en/content-partners>).

Bring your content or app to millions of households.

Contact Us

Simple integration.

Our platform offers a lightweight integration solution.

Domestic support team.

Work directly with VIZIO's domestic engineers to onboard your app quickly.

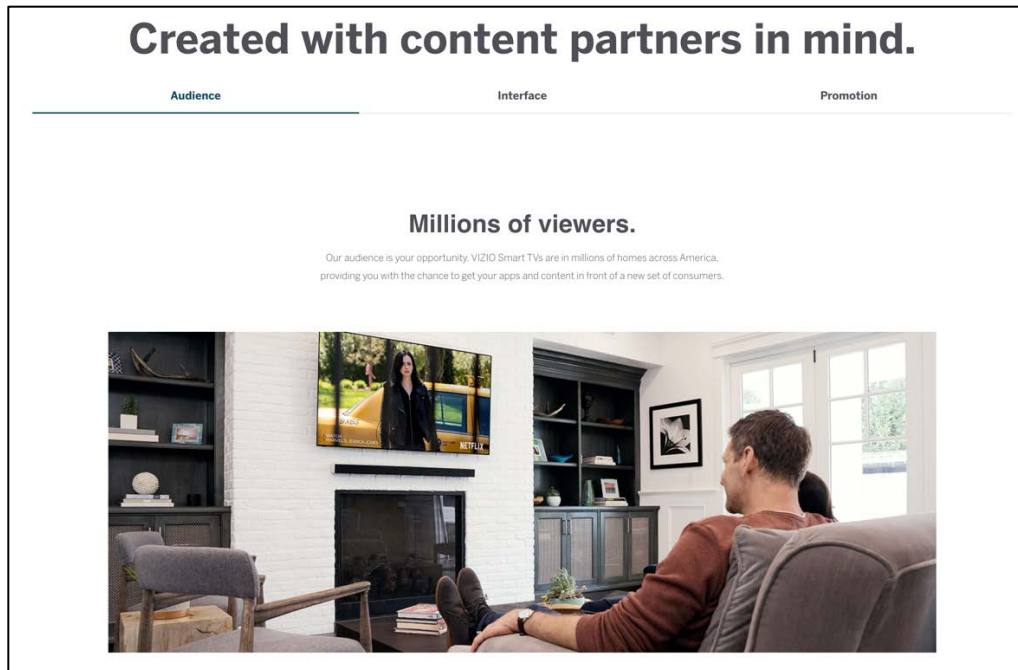
Innovative technologies.

We support 4K UHD, HDR 10, Dolby Vision, Alexa, Google Assistant and more.

Millions of TVs.

We're growing every day with TVs in millions of homes across the country.

Ex. 67 (<https://www.vizio.com/en/content-partners>).



Ex. 67 (<https://www.vizio.com/en/content-partners>).

Get started.

Complete the form below and a representative will be in touch.

First Name

Last Name

Email Address

Company

Website

Business Model

Company Overview

☐ I'm not a robot
 

Ex. 67 (<https://www.vizio.com/en/content-partners>).

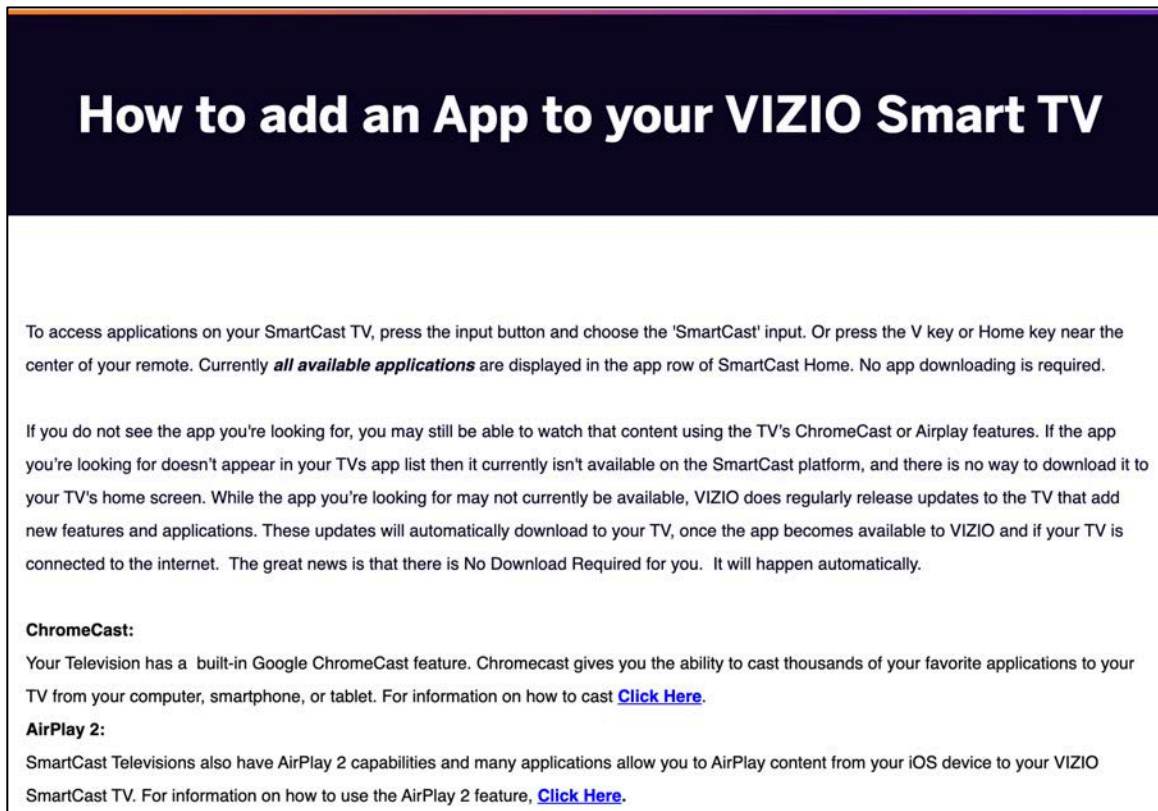
180. Streaming service providers thereby directly infringe at least by making and using infringing apparatuses in conjunction with the VIZIO Accused Products, such as when testing applications developed for use with the VIZIO Accused Products. Such activities directly infringe, as described, for example, at Exhibit 48, a claim chart applying independent claim 1 of the 588 Patent to the VIZIO Accused Products (and components thereof) operating with the HBO Max streaming service as an exemplary product.

181. VIZIO knowingly induces such infringement by providing the technical and business infrastructure, know-how, and other support to enable and facilitate such infringement, examples of which are discussed above. Upon information and belief, VIZIO specifically intends that its actions will result in infringement of the 588 Patent, or at the very least, because VIZIO has been and remains on notice of the 588 Patent and the accused infringement, it has been and remains willfully blind regarding the infringement it has induced and continues to induce.

182. VIZIO also provides the VIZIO Accused Products and instructions to end users so that such end users will use the Accused Products in an infringing manner. For example, VIZIO promotes the use of the HBO Max application on the VIZIO Accused Products, *see* Ex. 68 (<https://www.vizio.com/en/press/2021/sept/hbo-max-app-now-available-on-vizio-smartcast->), with the intent that end users use the application to stream video to the VIZIO Accused Products. When end users do so, this results in direct infringement of the 588 Patent, as described, for example, at Exhibit 48 a claim chart applying independent claim 1 of the 588 Patent to the VIZIO Accused Products (and components thereof) operating with the HBO Max streaming service as an exemplary product.

183. VIZIO provides the streaming platform for the HBO Max service, which allows its consumers to “access applications on [their] SmartCast TV,” such as HBO Max, with “[n]o

app downloading [] required.” Ex. 69 (https://support.vizio.com/s/article/How-to-add-an-App-to-your-VIZIO-Smart-TV?language=en_US). The following screenshot shows an example of those instructions:

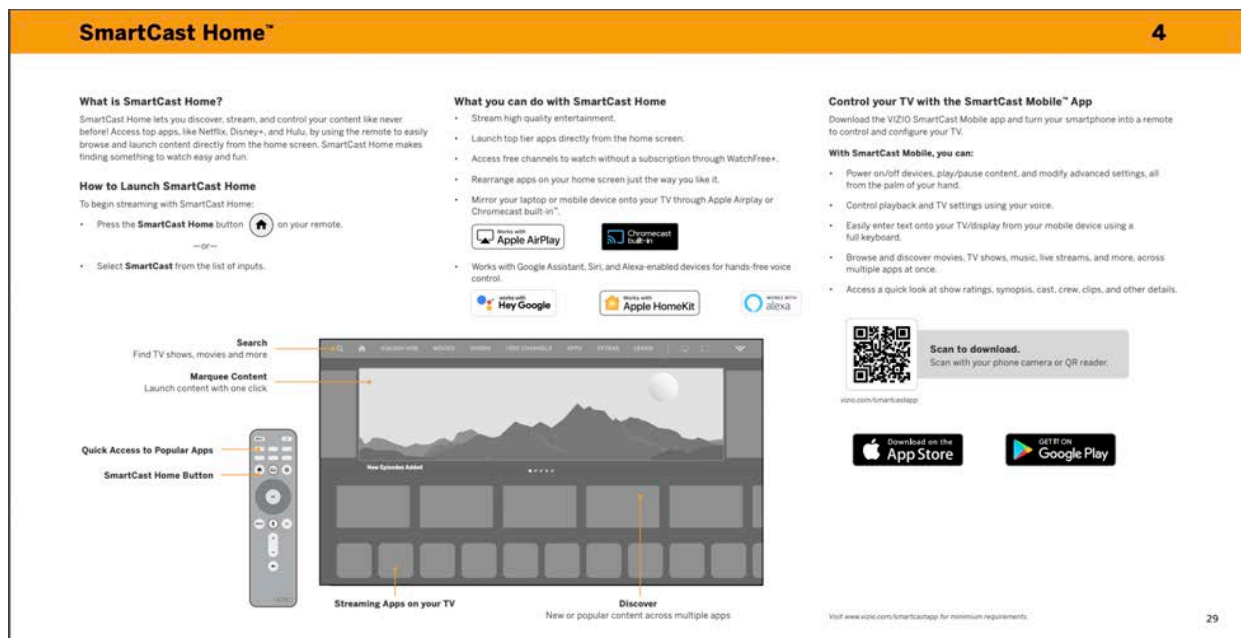


Ex. 69 (https://support.vizio.com/s/article/How-to-add-an-App-to-your-VIZIO-Smart-TV?language=en_US).

184. As shown above, VIZIO provides consumers with instructions on how to access “all available applications” on the VIZIO Accused Products and thereby induces consumers to infringe the claims of the 588 Patent. Ex. 69 (https://support.vizio.com/s/article/How-to-add-an-App-to-your-VIZIO-Smart-TV?language=en_US). VIZIO instructs end users to access the SmartCast® platform by “press[ing] the input button and choose the ‘SmartCast’ input. Or press[ing] the V key or Home key near the center of your remote.” *Id.*

185. VIZIO instructs and encourages end users to use third-party streaming services in a manner that directly infringes the asserted 588 Patent claims. For example, VIZIO provides an application row and associated infrastructure to enable end users to stream video using the VIZIO Accused Products. “Currently all available applications are displayed in the app row of the SmartCast Home. No app downloading is required. . . . If the app you’re looking for doesn’t appear in your TVs app list then it currently isn’t available on the SmartCast platform, and there is no way to download it to your TV’s home screen.” Ex. 69 (https://support.vizio.com/s/article/How-to-add-an-App-to-your-VIZIO-Smart-TV?language=en_US). VIZIO markets its Accused Products as continually updating (or that updates “happen automatically”) in that VIZIO “regularly release[s] updates to the TV that add new features and applications,” and that “[t]hese updates will automatically download to your TV, once the app becomes available to VIZIO and if your TV is connected to the internet.” *Id.*

186. VIZIO encourages and instructs end users of the VIZIO Accused Products that “SmartCast Home lets you discover, stream, and control your content like never before,” because they can “[a]ccess top apps, like Netflix, Disney+, and Hulu, by using the remote to easily browse and launch content directly from the home screen” and “SmartCast Home makes finding something to watch easy and fun.” Ex. 39 (VIZIO V-Series User Manual for Models: V435-J01, V505-J01, V505-J09, V505C-J09, V555-J01, V585-J01, V655-J04, V655-J09, V705-J01, V705-J03, V705x-J03 & V755-J04) at 29.



Ex. 39 (VIZIO V-Series User Manual for Models: V435-J01, V505-J01, V505-J09, V505C-J09, V555-J01, V585-J01, V655-J04, V655-J09, V705-J01, V705-J03, V705x-J03 & V755-J04) at 29.

187. When end users do so, this results in direct infringement of the 588 Patent, as described, for example, at Exhibit 48 a claim chart applying independent claim 1 of the 588 Patent to the VIZIO Accused Products (and components thereof) operating with the HBO Max streaming service as an exemplary product.

188. VIZIO customers such as end users directly infringe by using the Accused Products in their intended manner to infringe, *e.g.*, by using the VIZIO Accused Products to stream video, thereby making and/or using an infringing apparatus. VIZIO knowingly induces such infringement by providing the Accused Products and instructions to enable and facilitate infringement as described above. Upon information and belief, VIZIO specifically intends that its actions will result in infringement of the 588 Patent, or at the very least, because VIZIO has been and remains on notice of the 588 Patent and the accused infringement, it has been and remains willfully blind regarding the infringement it has induced and continues to induce.

189. Thus, VIZIO has violated Section 337 with respect to the 588 Patent. Because it is difficult to identify all sources of infringing articles, and discovery may reveal additional violations of Section 337 with respect to the 588 Patent, DivX reserves all rights to supplement its allegations to identify additional respondents that have violated Section 337 with respect to this patent, or additional ways in which VIZIO has violated Section 337 with respect to the 588 Patent.

D. Infringement of the 553 Patent

190. Upon information and belief, the Accused Products of the Amazon and VIZIO Respondents directly and/or indirectly infringe claims 11-13 and 15-17 of the 553 Patent, literally and/or under the doctrine of equivalents.

191. A claim chart applying independent claim 11 of the 553 Patent to a current-generation Amazon Fire Stick operating with the Amazon Prime Video streaming service as an exemplary streaming application, as exemplary of the Amazon Accused Products (and components thereof), can be found at Exhibit 49. Amazon directly infringes the asserted claims by making, using (*e.g.*, when testing its Prime Video service with the Amazon Accused Products), selling, offering to sell, and/or importing the Amazon Accused Products, each of which comprises the claimed playback device for playing back encrypted video. The current-generation Amazon Fire Stick is depicted here:



Source: *Fire TV Stick with Alexa Voice Remote (includes TV controls), (HD streaming device)*, Amazon, <https://www.amazon.com/fire-tv-stick-with-3rd-gen-alexa-voice-remote/dp/B08C1W5N87>.

192. A claim chart applying independent claim 11 of the 553 Patent to the VIZIO Accused Products (and components thereof) operating with the HBO Max streaming service as an exemplary product, can be found at Exhibit 50. VIZIO directly infringes the asserted claims by making, using (*e.g.*, when testing the HBO Max service with the VIZIO Accused Products), selling, offering to sell, and/or importing the VIZIO Accused Products, each of which comprises the claimed playback device for playing back encrypted video. The VIZIO 43-inch Class V-Series 4K UHD LED Smart TV, Model Number V435-J01, is depicted here:



Source: *VIZIO 43" Class V-Series 4K UHD LED Smart TV (Newest Model) V435-J01*, <https://www.walmart.com/ip/VIZIO-43-Class-V-Series-4K-UHD-LED-Smart-TV-Newest-Model-V435-J01/103263240>.

1. Amazon

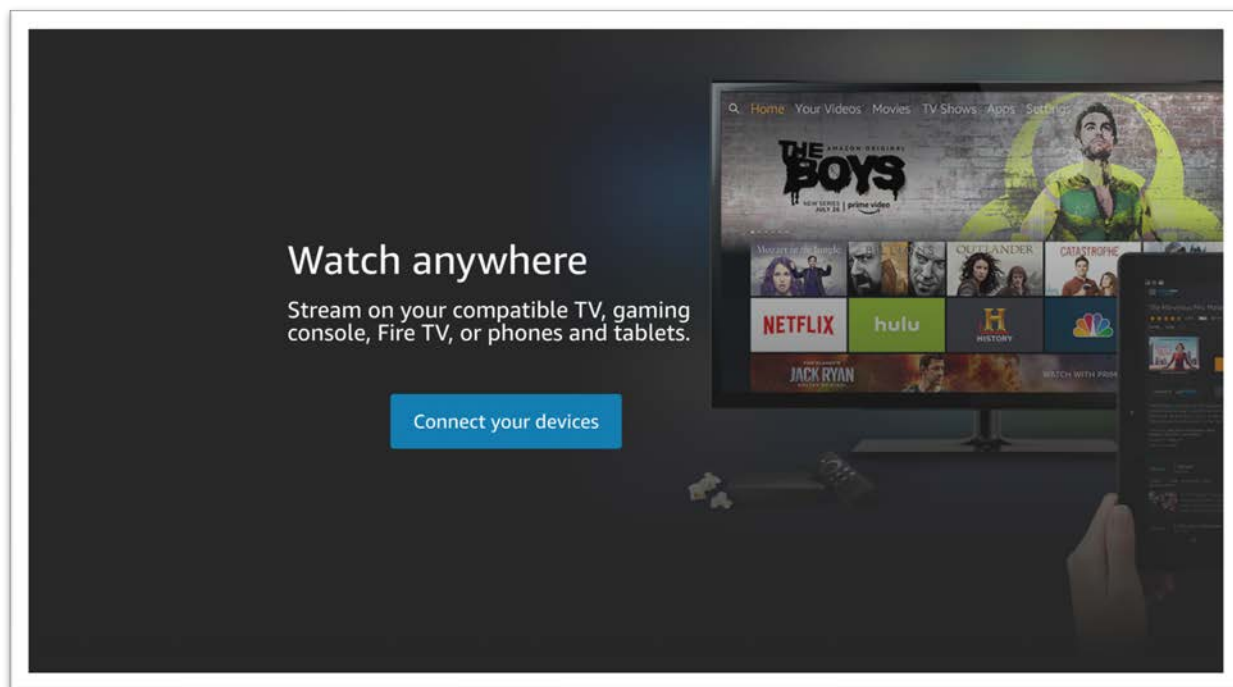
193. Amazon induces infringement of the asserted claims of the 553 Patent. Amazon has had knowledge of the 553 Patent and the Accused Products' infringement thereof since at least the filing and/or service of the complaint in the EDVA Action and/or this Complaint.

194. Amazon knowingly and intentionally encourages at least: (1) streaming service providers, such as Warner Bros. Discovery, Inc. and its HBO Max streaming service; and (2) end-users of the Amazon accused products, such as consumers in the United States, to directly infringe the 553 Patent.

195. For example, Amazon provides the Accused Products as well as technical and business infrastructure, specifications, software, know-how, and other support to instruct and enable unlicensed streaming service providers to make, use, sell/lease, and/or offer for sale/lease applications that provide video streaming services for installation on the Amazon Accused Products, or otherwise provide video streaming services to the Amazon Accused Products. Once

installed, or otherwise when such services are used, such applications in combination with the Amazon Accused Products directly infringe the 553 Patent.

196. For example, Amazon provides an application store and associated infrastructure to enable unlicensed streaming service providers to provide their Amazon device-specific streaming applications to end users, so that such end users can download, install, and use such streaming applications using the Amazon Accused Products.



Ex. 55 (https://www.amazon.com/gp/video/getstarted/ref=sv_atv_5).

197. Amazon further encourages unlicensed third-party streaming service providers to provide such applications for use with the Amazon Accused Products by providing software tools and libraries that facilitate the process of developing streaming applications that work with the Amazon Accused Products. For example, Amazon provides a “port” of the ExoPlayer library (originally from Google) for video streaming. Because Amazon Fire OS is a “fork of Android,” Android’s ExoPlayer lends itself to be highly compatible with Fire OS. Ex. 56 (<https://developer.amazon.com/docs/fire-tv/fire-os-overview.html>). Indeed, as Amazon claims,

“if your app runs on Android, it will most likely run on Amazon’s Fire devices too. You can quickly check your app’s compatibility with Amazon through the App Testing Service. As a developer, you might not have to adjust your Android code at all to publish your app on Amazon’s platform.” *Id.*

Fire OS Overview

Fire OS is the operating system that runs Amazon's Fire TV and tablets. Fire OS is a fork of [Android](#), so if your app runs on Android, it will most likely run on Amazon's Fire devices too. You can quickly check your app's compatibility with Amazon through the [App Testing Service](#). As a developer, you might not have to adjust your Android code at all to publish your app on Amazon's platform.

Ex. 56 (<https://developer.amazon.com/docs/fire-tv/fire-os-overview.html>).

198. Amazon provides specific tools and libraries (*e.g.*, its own version of ExoPlayer) for software developers to adopt and to facilitate the development process. Amazon encourages third-party streaming service providers to, “[i]nstead of integrating the default ExoPlayer into your Fire TV app, use the Amazon port of ExoPlayer. The Amazon port of ExoPlayer provides many fixes, workarounds, and other patches to make ExoPlayer work on Amazon devices.”

Ex. 57 (<https://developer.amazon.com/docs/fire-tv/media-players.html>).

Amazon Port of ExoPlayer

ExoPlayer is an open-source media player developed by Google and intended for Android media apps. To learn more about ExoPlayer, see the following resources:

- [ExoPlayer homepage](#)
- [ExoPlayer Video from Google](#)
- [ExoPlayer Developer Guide](#)

Amazon has a port of ExoPlayer that is compatible with Fire TV. Instead of integrating the default ExoPlayer into your Fire TV app, use the Amazon port of ExoPlayer. The Amazon port of ExoPlayer provides many fixes, workarounds, and other patches to make ExoPlayer work on Amazon devices.

To understand how to use ExoPlayer, consult the standard ExoPlayer resources as listed previously.

[Download the Amazon Port of Exoplayer](#)

Ex. 57 (<https://developer.amazon.com/docs/fire-tv/media-players.html>).

199. Providers of unlicensed streaming services thereby directly infringe at least by making and using infringing apparatuses in conjunction with the Amazon Accused Products, such as when testing applications developed for use with the Amazon Accused products. Such activities directly infringe, as described, for example, at Exhibit 49, a claim chart applying independent claim 11 of the 553 Patent to the Amazon Accused Products (and components thereof) operating with the Amazon Prime Video streaming service as an exemplary product.

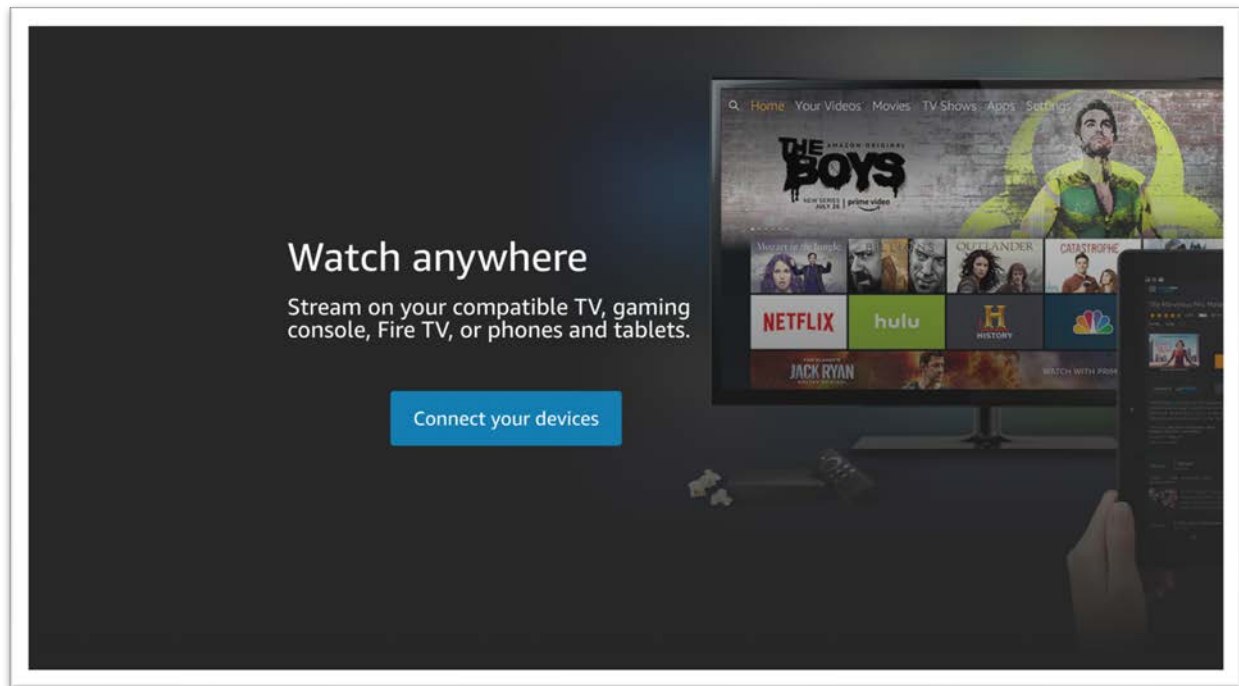
200. Amazon knowingly induces such infringement by providing the Accused Products as well as technical and business infrastructure, know-how, and other support to enable and facilitate such infringement, examples of which are discussed above. Upon information and belief, Amazon specifically intends that its actions will result in infringement of the 553 Patent, or at the very least, because Amazon has been and remains on notice of the 553 Patent and the accused infringement, it has been and remains willfully blind regarding the infringement it has induced and continues to induce.

201. Amazon also provides the Amazon Accused Products and instructions to end users so that such end users will use the Accused Products in an infringing manner. For example, Amazon pre-installs the Amazon Prime Video application on the Amazon Accused Products, Ex. 58 (Levitt Decl.) at ¶12, with the intent that end users use the application to stream video to the Amazon Accused Products. *See also* Ex. 59 (<https://www.youtube.com/watch?v=gX0YkCjOxUg>) at 0:30. When end users do so, this results in direct infringement of the 553 Patent, as described, for example, at Exhibit 49 a claim chart applying independent claim 11 of the 553 Patent to the Amazon Accused Products (and components thereof) operating with the Amazon Prime Video streaming service as an exemplary product. The following screenshot from Exhibit 59 confirms that Prime Video is pre-loaded onto Amazon Accused Products:



Ex. 59 (<https://www.youtube.com/watch?v=gX0YkCjOxUg>) at 0:30.

202. Amazon provides the streaming platform for its Prime Video service, which allows its consumers to “[w]atch anywhere” and “[s]tream on your compatible TV, gaming console, Fire TV, or phones and tablets.”



Ex. 55 (https://www.amazon.com/gp/video/getstarted/ref=sv_atv_5).

203. As shown below, Amazon provides consumers with the Accused Products and instructions on how to access the Prime Video streaming platform and thereby induces consumers to infringe the claims of the 553 Patent. The following are examples of such Amazon instructions:

Are you new to Prime?

[Sign up for Prime Video](#)

Amazon Fire TV Family



If you've never signed in on your Fire TV or Fire TV Stick, follow the steps below to get started. (Already registered? Begin at step 3):

1. Turn on the device.
2. Sign in with your Amazon account, or create an Amazon account to sign in with.
3. Press the home button on your remote.
4. Enjoy.

Ex. 60 (https://www.amazon.com/gp/video/splash/device_linking).

Fire tablet



1. Sign in to your Amazon account on your Fire tablet.
2. If needed, register your device.
3. Open the Prime Video app, or go to the "Video" tab.
4. Enjoy.

Ex. 60 (https://www.amazon.com/gp/video/splash/device_linking).

Smart TV, Blu-ray player



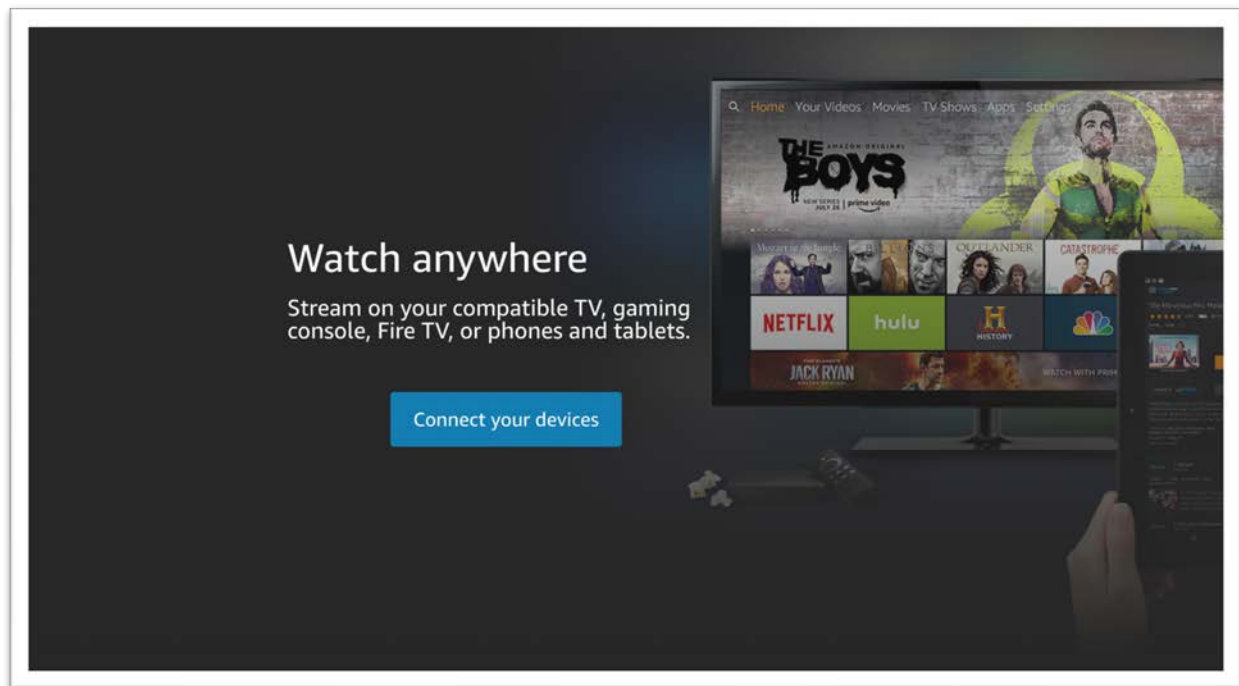
1. Open the app store to download, install, and open the Prime Video app.
2. Register your device—here are two ways:
 - (1) Select "Sign in and start watching" and enter your Amazon account information.
 - (2) Choose "Register on the Amazon website" to get a 5–6 character code, then sign in to your Amazon account and enter your code.

[Sign in to your Amazon account and enter your code](#)

Ex. 60 (https://www.amazon.com/gp/video/splash/device_linking).

204. Moreover, Amazon instructs and encourages end users to download, install, and use unlicensed third-party streaming services in a manner that directly infringes the asserted 553 Patent claims. For example, Amazon provides an application store and associated infrastructure

to enable end users to download and install unlicensed streaming applications from third-party streaming service providers and stream video using the Amazon Accused Products. Amazon markets the Accused Products as permitting end users to “[w]atch anywhere” and “[s]tream on your compatible TV, gaming console, Fire TV, or phones and tablets.” Ex. 55 (https://www.amazon.com/gp/video/getstarted/ref=sv_atv_5).



Ex. 55 (https://www.amazon.com/gp/video/getstarted/ref=sv_atv_5).

205. Amazon encourages and instructs end users of the Amazon Accused Products that “[y]ou’ll never run out of things to watch on Fire TV,” because they can “[e]asily download your favorite apps like Netflix, Prime Video, YouTube, Hulu, and Disney+,” and “[a]ccess thousands of hours of free movies and TV episodes from popular ad-supported streaming apps like IMDb TV, Tubi, and Pluto TV.” The following screenshot shows an example of those instructions:

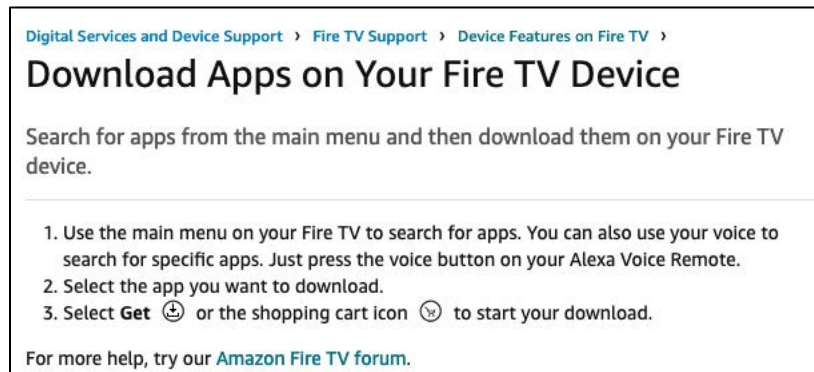
Get the most out of your Fire TV Stick 4K

Something's always on

You'll never run out of things to watch on Fire TV. Easily download your favorite apps like Netflix, Prime Video, YouTube, Hulu, and Disney+. Access thousands of hours of free movies and TV episodes from popular ad-supported streaming apps like IMDb TV, Tubi, and Pluto TV. Watch or browse live TV, sports, news, and channels from Live on the Main Menu. With Profiles, everyone in your household can quickly get recommendations tailored to what they like. To learn more about your Fire TV, visit amazon.com/firetv.

Ex. 61 (Amazon Fire Stick 4K Quick User Guide, *available at* https://s3-us-west-2.amazonaws.com/customerdocumentation/Amazon+Fire+TV+User+Guides/Fire+TV+Stick+Device+Documentation/Fire+TV+Stick+4K_Quick+Start+Guide_US.pdf).

206. Amazon encourages and instructs end users of the Amazon Accused Products how to “Download Apps On Your Fire TV Device,” including how to access and search for third-party streaming applications, and download them to the Amazon Accused Products. The following screenshot shows an example of those instructions:



Ex. 62

([https://www.amazon.com/gp/help/customer/display.html?nodeId=GRDR6KJPL2FT6YHS&ref_](https://www.amazon.com/gp/help/customer/display.html?nodeId=GRDR6KJPL2FT6YHS&ref_=hp_GHH5TUHA7677G4HJ_c_Download-Apps-on-Your-Fire-TV-)
[=hp_GHH5TUHA7677G4HJ_c_Download-Apps-on-Your-Fire-TV-](https://www.amazon.com/gp/help/customer/display.html?nodeId=GRDR6KJPL2FT6YHS&ref_=hp_GHH5TUHA7677G4HJ_c_Download-Apps-on-Your-Fire-TV-)).

207. When end users do so, this results in direct infringement of the 553 Patent, as described, for example, at Exhibit 49 a claim chart applying independent claim 11 of the 553 Patent to the Amazon Accused Products (and components thereof) operating with the Amazon Prime Video streaming service as an exemplary product.

208. Amazon customers such as end users directly infringe by using the Accused Products in their intended manner to infringe, e.g., by using the Amazon Accused Products to stream video, thereby making and/or using an infringing apparatus. Amazon knowingly induces such infringement by providing the Accused Products and instructions to enable and facilitate infringement as described above. Upon information and belief, Amazon specifically intends that its actions will result in infringement of the 553 Patent, or at the very least, because Amazon has been and remains on notice of the 553 Patent and the accused infringement, it has been and remains willfully blind regarding the infringement it has induced and continues to induce.

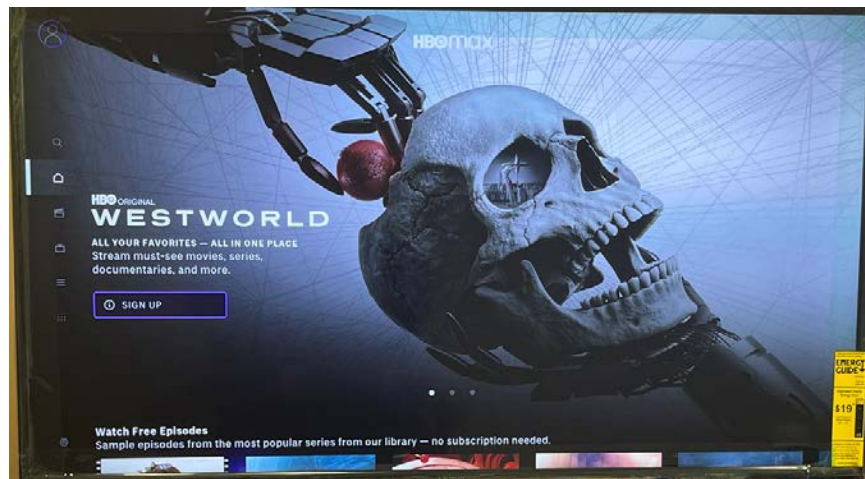
209. Thus, Amazon has violated Section 337 with respect to the 553 Patent. Because it is difficult to identify all sources of infringing articles, and discovery may reveal additional violations of Section 337 with respect to the 553 Patent, DivX reserves all rights to supplement its allegations to identify additional respondents that have violated Section 337 with respect to this patent, or additional ways in which Amazon has violated Section 337 with respect to the 553 Patent.

2. VIZIO

210. VIZIO induces infringement of the asserted claims of the 553 Patent. VIZIO has had knowledge of the 553 Patent and the Accused Products' infringement thereof since at least the filing and/or service of the complaint in the CDCA Action and/or this Complaint.

211. VIZIO knowingly and intentionally encourages at least: (1) streaming service providers, such as Warner Bros. Discovery, Inc. and its HBO Max streaming service; and (2)

end-users of the VIZIO-accused products, such as consumers in the United States, to directly infringe the 553 Patent.

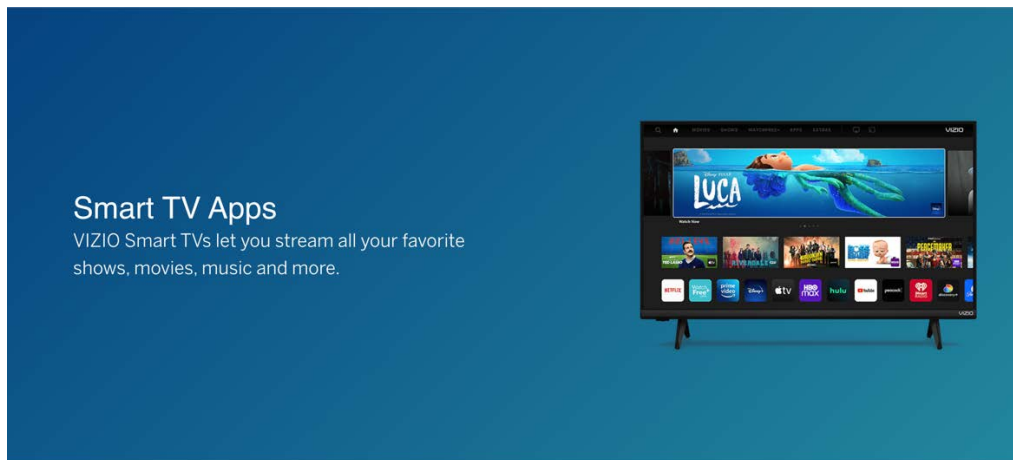


The above screenshot of the HBO Max application running on the exemplary VIZIO TV Device was taken by, or on behalf of, DivX.

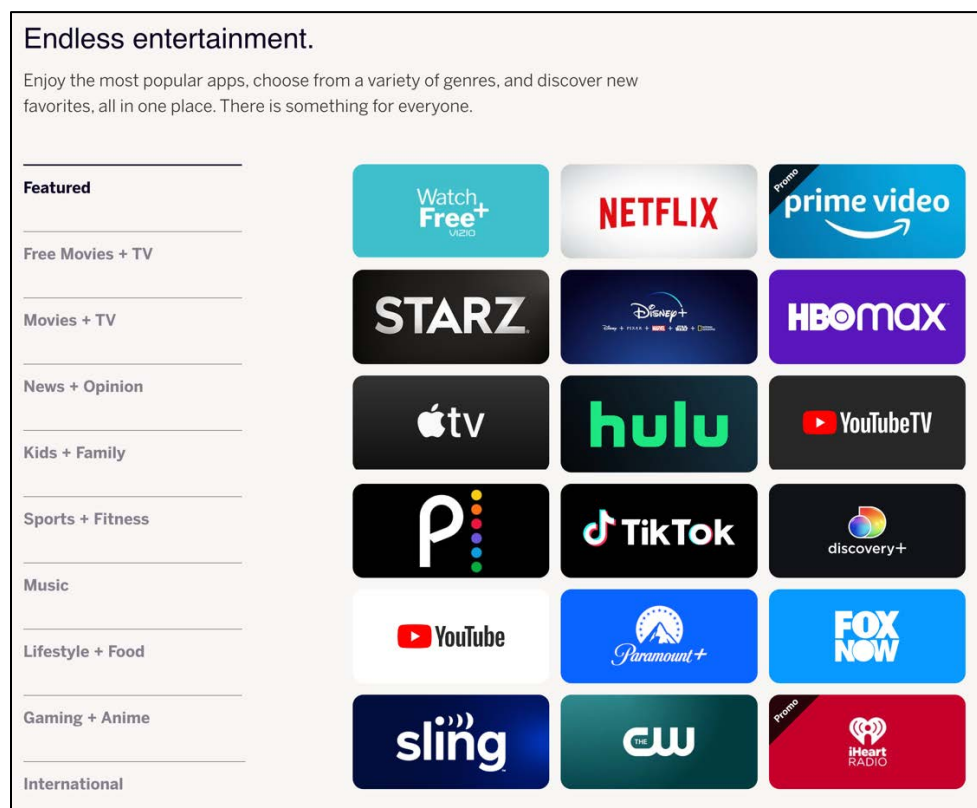
212. For example, VIZIO provides the Accused Products as well as the technical and business infrastructure, specifications, software, know-how, and other support to instruct and enable unlicensed streaming service providers to make, use, sell/lease, and/or offer for sale/lease applications that provide video streaming services for installation on the VIZIO Accused Products, or otherwise provide video streaming services to the VIZIO Accused Products. Once installed, or otherwise when such services are used, such applications in combination with the VIZIO Accused Products directly infringe the 553 Patent.

213. For example, VIZIO provides application offerings and associated infrastructure, such as VIZIO's SmartCast® platform, to enable streaming service providers to provide their VIZIO device-specific streaming applications to end users, so that such end users can use such streaming applications using the VIZIO Accused Products. For example, VIZIO states that its SmartCast® platform is "the (incredibly) smart platform that powers every VIZIO TV." Ex. 63 (<https://www.vizio.com/en/smartcast>). The following screenshots depict the various video

content that may be consumed on the VIZIO SmartCast® platform and the ways to access such content on the platform:



Ex. 64 (<https://www.vizio.com/en/smart-tv-apps>).



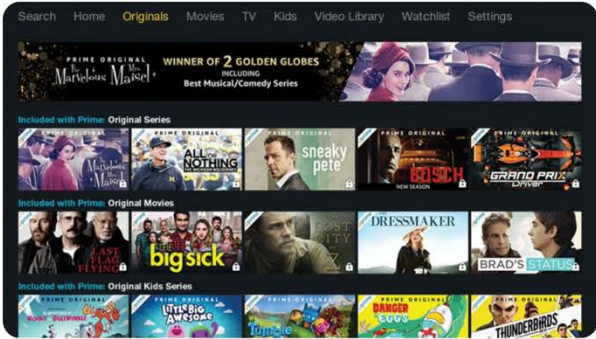
Ex. 64 (<https://www.vizio.com/en/smart-tv-apps>).



Prime Video

With Prime Video, you have access to a huge library of entertainment at no additional cost, including award-winning shows and movies like The Marvelous Mrs. Maisel, Coming 2 America, Jack Ryan, and The Tomorrow War.

Visit Prime Video



Stream award-winning movies, shows, kids & family content, sports, & more. Watch on any device.

Start Your 30-Day Free Trial

Ex. 65 (<https://www.vizio.com/en/smart-tv-apps?appName=prime-video&appId=vizio.amazon>).



HBO Max

HBO Max is a premium streaming app that combines all of HBO with even more must-see TV series, blockbuster movies, and exclusive Max Originals.

Visit HBO Max



Ex. 66 (<https://www.vizio.com/en/smart-tv-apps?appName=hbomax&appId=vizio.hbomax>).



The (incredibly) smart platform that powers every VIZIO TV.

From free TV to your favorite premium channels, instantly access endless entertainment straight out of the box.

[Explore Apps](#)

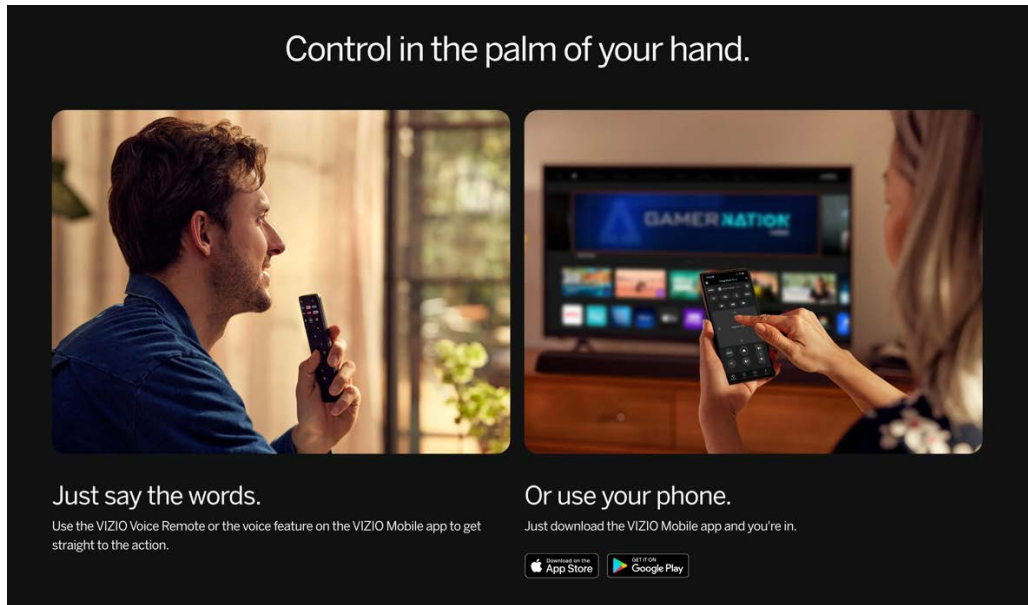
Ex. 63 (<https://www.vizio.com/en/smartcast>).



Stream what you love.

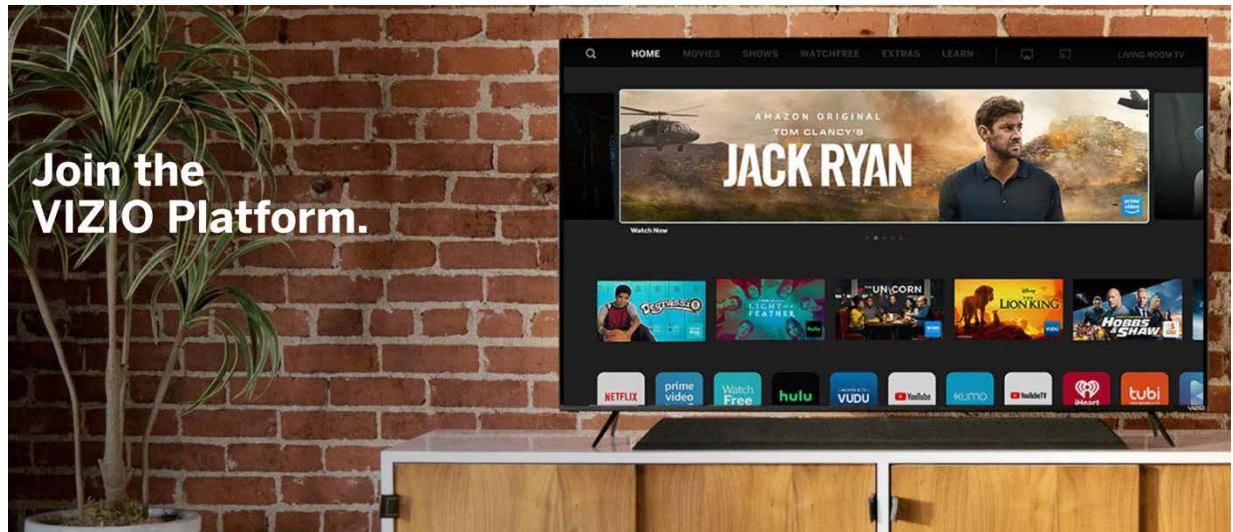
From Netflix to Hulu, Disney+ to FuboTV, You'll find your favorite apps built right in.

Ex. 63 (<https://www.vizio.com/en/smartcast>).



Ex. 63 (<https://www.vizio.com/en/smartcast>).

214. VIZIO further encourages third-party streaming service providers to develop such streaming service applications for use with the VIZIO Accused Products. For example, VIZIO encourages third-party streaming service providers to “[j]oin the VIZIO platform” and to fill out a form to be a Content Partner. Ex. 67 (<https://www.vizio.com/en/content-partners>). VIZIO touts its “[s]imple integration,” “[d]omestic support team,” “[i]nnovative technologies,” and “[m]illions of TVs” as reasons why third-party streaming service providers should “[b]ring [their] content or app to millions of households” that use the VIZIO Accused Products. *Id.* The following screenshots include such advertisements that encourage Content Partners to join the VIZIO SmartCast® Platform:



Ex. 67 (<https://www.vizio.com/en/content-partners>).

Bring your content or app to millions of households.

Contact Us

Simple integration.

Our platform offers a lightweight integration solution.

Domestic support team.

Work directly with VIZIO's domestic engineers to onboard your app quickly.

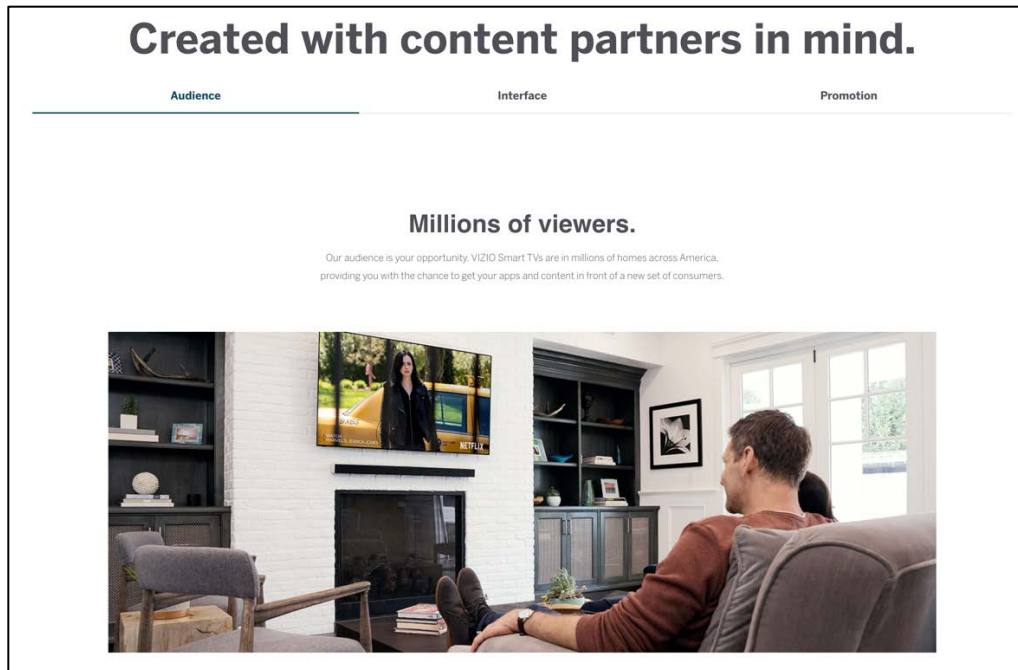
Innovative technologies.

We support 4K UHD, HDR 10, Dolby Vision, Alexa, Google Assistant and more.

Millions of TVs.

We're growing every day with TVs in millions of homes across the country.

Ex. 67 (<https://www.vizio.com/en/content-partners>).



Ex. 67 (<https://www.vizio.com/en/content-partners>).

Get started.

Complete the form below and a representative will be in touch.

First Name

Last Name

Email Address

Company

Website

Business Model

Company Overview

☐ I'm not a robot
 

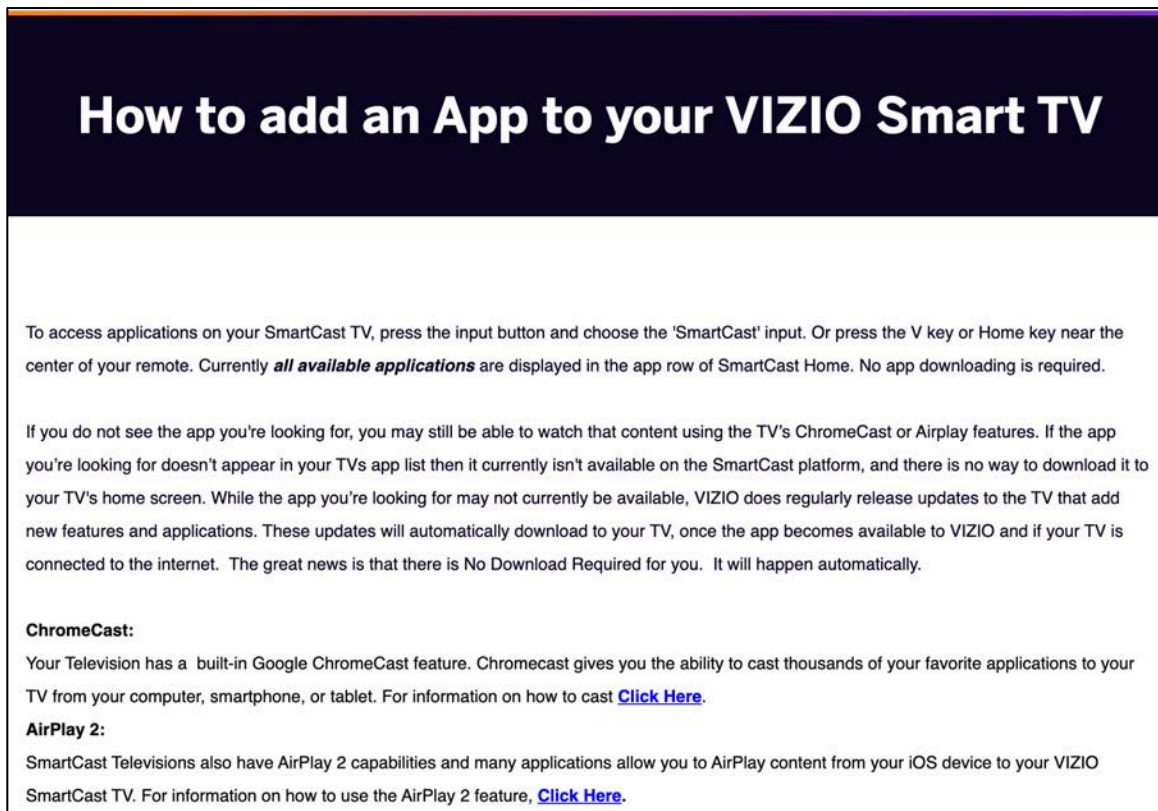
Ex. 67 (<https://www.vizio.com/en/content-partners>).

215. Unlicensed streaming service providers thereby directly infringe at least by making and using infringing apparatuses in conjunction with the VIZIO Accused Products, such as when testing applications developed for use with the VIZIO Accused Products. Such activities directly infringe, as described, for example, at Exhibit 50, a claim chart applying independent claim 11 of the 553 Patent to the VIZIO Accused Products (and components thereof) operating with the HBO Max streaming service as an exemplary product.

216. VIZIO knowingly induces such infringement by providing the Accused Products as well as technical and business infrastructure, know-how, and other support to enable and facilitate such infringement, examples of which are discussed above. Upon information and belief, VIZIO specifically intends that its actions will result in infringement of the 553 Patent, or at the very least, because VIZIO has been and remains on notice of the 553 Patent and the accused infringement, it has been and remains willfully blind regarding the infringement it has induced and continues to induce.

217. VIZIO also provides the VIZIO Accused Products and instructions to end users so that such end users will use the Accused Products in an infringing manner. For example, VIZIO promotes the use of the HBO Max application on the VIZIO Accused Products, *see* Ex. 68 (<https://www.vizio.com/en/press/2021/sept/hbo-max-app-now-available-on-vizio-smartcast->), with the intent that end users use the application to stream video to the VIZIO Accused Products. When end users do so, this results in direct infringement of the 553 Patent, as described, for example, at Exhibit 50 a claim chart applying independent claim 11 of the 553 Patent to the VIZIO Accused Products (and components thereof) operating with the HBO Max streaming service as an exemplary product.

218. VIZIO provides the streaming platform for the HBO Max service, which allows its consumers to “access applications on [their] SmartCast TV” with “[n]o app downloading [] required.” Ex. 69 (https://support.vizio.com/s/article/How-to-add-an-App-to-your-VIZIO-Smart-TV?language=en_US). The following screenshot shows an example of those instructions:

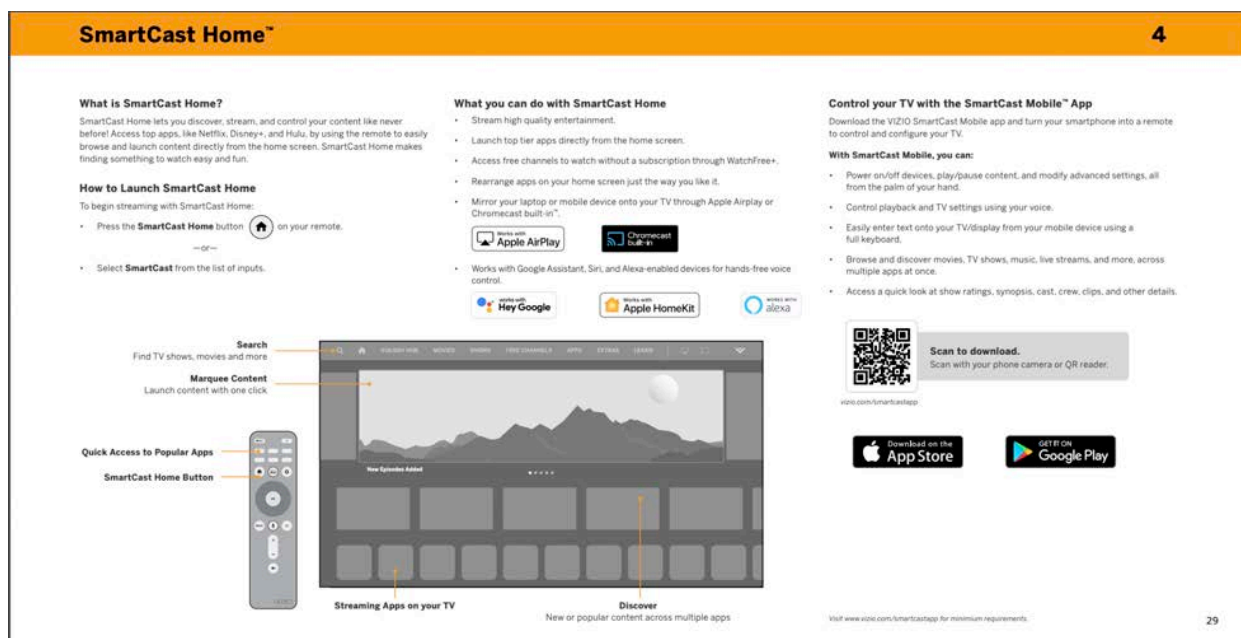


Ex. 69 (https://support.vizio.com/s/article/How-to-add-an-App-to-your-VIZIO-Smart-TV?language=en_US).

219. As shown above, VIZIO provides consumers with instructions on how to access “all available applications” on the VIZIO Accused Products and thereby induces consumers to infringe the claims of the 553 Patent. Ex. 69 (https://support.vizio.com/s/article/How-to-add-an-App-to-your-VIZIO-Smart-TV?language=en_US). VIZIO instructs end users to access the SmartCast® platform by “press[ing] the input button and choose the ‘SmartCast’ input. Or press[ing] the V key or Home key near the center of your remote.” *Id.*

220. VIZIO instructs and encourages end users to use third-party streaming services in a manner that directly infringes the asserted 553 Patent claims. For example, VIZIO provides an application row and associated infrastructure to enable end users to stream video using the VIZIO Accused Products. “Currently all available applications are displayed in the app row of the SmartCast Home. No app downloading is required. . . . If the app you’re looking for doesn’t appear in your TVs app list then it currently isn’t available on the SmartCast platform, and there is no way to download it to your TV’s home screen.” Ex. 69 (https://support.vizio.com/s/article/How-to-add-an-App-to-your-VIZIO-Smart-TV?language=en_US). VIZIO markets its Accused Products as continually updating (or that updates “happen automatically”) in that VIZIO “regularly release[s] updates to the TV that add new features and applications,” and that “[t]hese updates will automatically download to your TV, once the app becomes available to VIZIO and if your TV is connected to the internet.” *Id.*

221. VIZIO encourages and instructs end users of the VIZIO Accused Products that “SmartCast Home lets you discover, stream, and control your content like never before,” because they can “[a]ccess top apps, like Netflix, Disney+, and Hulu, by using the remote to easily browse and launch content directly from the home screen” and “SmartCast Home makes finding something to watch easy and fun.” Ex. 39 (VIZIO V-Series User Manual for Models: V435-J01, V505-J01, V505-J09, V505C-J09, V555-J01, V585-J01, V655-J04, V655-J09, V705-J01, V705-J03, V705x-J03 & V755-J04) at 29.



Ex. 39 (VIZIO V-Series User Manual for Models: V435-J01, V505-J01, V505-J09, V505C-J09, V555-J01, V585-J01, V655-J04, V655-J09, V705-J01, V705-J03, V705x-J03 & V755-J04) at 29.

222. When end users use the Accused Products to download and stream unlicensed streaming services, this results in direct infringement of the 553 Patent, as described, for example, at Exhibit 50 a claim chart applying independent claim 11 of the 553 Patent to the VIZIO Accused Products (and components thereof) operating with the HBO Max streaming service as an exemplary product.

223. VIZIO customers such as end users directly infringe by using the Accused Products in their intended manner to infringe, e.g., by using the VIZIO Accused Products to stream video, thereby making and/or using an infringing apparatus. VIZIO knowingly induces such infringement by providing the Accused Products and instructions to enable and facilitate infringement as described above. Upon information and belief, VIZIO specifically intends that its actions will result in infringement of the 553 Patent, or at the very least, because VIZIO has been and remains on notice of the 553 Patent and the accused infringement, it has been and remains willfully blind regarding the infringement it has induced and continues to induce.

224. Thus, VIZIO has violated Section 337 with respect to the 553 Patent. Because it is difficult to identify all sources of infringing articles, and discovery may reveal additional violations of Section 337 with respect to the 553 Patent, DivX reserves all rights to supplement its allegations to identify additional respondents that have violated Section 337 with respect to this patent, or additional ways in which VIZIO has violated Section 337 with respect to the 553 Patent.

E. Infringement of the 808 Patent

225. Upon information and belief, the Accused Products of the Amazon and VIZIO Respondents directly and/or indirectly infringe claims 1-7 and 12-16 of the 808 Patent, literally and/or under the doctrine of equivalents.

226. A claim chart applying independent claim 1 of the 808 Patent to a current-generation Amazon Fire Stick operating with the Amazon Prime Video streaming service as an exemplary streaming application, as exemplary of the Amazon Accused Products (and components thereof), can be found at Exhibit 51. Amazon directly infringes the asserted claims by making, using (*e.g.*, when testing its Prime Video service with the Amazon Accused Products), selling, offering to sell, and/or importing the Amazon Accused Products, each of which comprises the claimed playback device. The current-generation Amazon Fire Stick is depicted here:



Source: *Fire TV Stick with Alexa Voice Remote (includes TV controls), (HD streaming device)*, Amazon, <https://www.amazon.com/fire-tv-stick-with-3rd-gen-alexa-voice-remote/dp/B08C1W5N87>.

227. A claim chart applying independent claim 1 of the 808 Patent to the VIZIO Accused Products (and components thereof) operating with the HBO Max streaming service as an exemplary product, can be found at Exhibit 52. VIZIO directly infringes the asserted claims by making, using (*e.g.*, when testing the HBO Max service with the VIZIO Accused Products), selling, offering to sell, and/or importing the VIZIO Accused Products, each of which comprises the claimed playback device. The VIZIO 43-inch Class V-Series 4K UHD LED Smart TV, Model Number V435-J01, is depicted here:



Source: *VIZIO 43" Class V-Series 4K UHD LED Smart TV (Newest Model) V435-J01*, <https://www.walmart.com/ip/VIZIO-43-Class-V-Series-4K-UHD-LED-Smart-TV-Newest-Model-V435-J01/103263240>.

1. Amazon

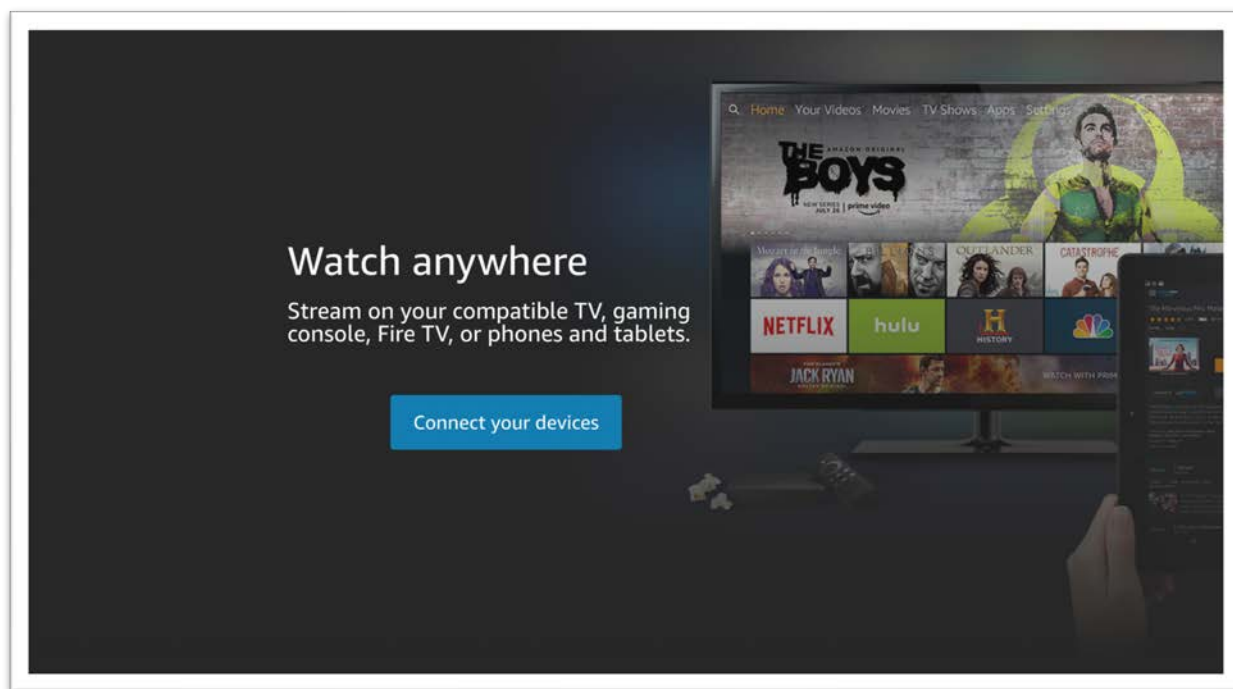
228. Amazon induces infringement of the asserted claims of the 808 Patent. Amazon has had knowledge of the 808 Patent and the Accused Products' infringement thereof since at least the filing and/or service of the complaint in the EDVA Action and/or this Complaint.

229. Amazon knowingly and intentionally encourages at least: (1) streaming service providers, such as Warner Bros. Discovery, Inc. and its HBO Max streaming service; and (2) end-users of the Amazon accused products, such as consumers in the United States, to directly infringe the 808 Patent.

230. For example, Amazon provides the Accused Products as well as technical and business infrastructure, specifications, software, know-how, and other support to instruct and enable streaming service providers to make, use, sell/lease, and/or offer for sale/lease applications that provide video streaming services for installation on the Amazon Accused

Products, or otherwise provide video streaming services to the Amazon Accused Products. Once installed, or otherwise when such services are used, such applications in combination with the Amazon Accused Products directly infringe the 808 Patent.

231. For example, Amazon provides an application store and associated infrastructure to enable unlicensed streaming service providers to provide their Amazon device-specific streaming applications to end users, so that such end users can download, install, and use such streaming applications using the Amazon Accused Products.



Ex. 55 (https://www.amazon.com/gp/video/getstarted/ref=sv_atv_5).

232. Amazon further encourages third-party streaming service providers to provide such applications for use with the Amazon Accused Products by providing software tools and libraries that facilitate the process of developing streaming applications that work with the Amazon Accused Products. For example, Amazon provides a “port” of the ExoPlayer library (originally from Google) for video streaming. Because Amazon Fire OS is a “fork of Android,” Android’s ExoPlayer lends itself to be highly compatible with Fire OS. Ex. 56

(<https://developer.amazon.com/docs/fire-tv/fire-os-overview.html>). Indeed, as Amazon claims, “if your app runs on Android, it will most likely run on Amazon’s Fire devices too. You can quickly check your app’s compatibility with Amazon through the App Testing Service. As a developer, you might not have to adjust your Android code at all to publish your app on Amazon’s platform.” *Id.*

Fire OS Overview

Fire OS is the operating system that runs Amazon's Fire TV and tablets. Fire OS is a fork of [Android](#), so if your app runs on Android, it will most likely run on Amazon's Fire devices too. You can quickly check your app's compatibility with Amazon through the [App Testing Service](#). As a developer, you might not have to adjust your Android code at all to publish your app on Amazon's platform.

Ex. 56 (<https://developer.amazon.com/docs/fire-tv/fire-os-overview.html>).

233. Amazon provides specific tools and libraries (*e.g.*, its own version of ExoPlayer) for software developers to adopt and to facilitate the development process. Amazon encourages third-party streaming service providers to, “[i]nstead of integrating the default ExoPlayer into your Fire TV app, use the Amazon port of ExoPlayer. The Amazon port of ExoPlayer provides many fixes, workarounds, and other patches to make ExoPlayer work on Amazon devices.”

Ex. 57 (<https://developer.amazon.com/docs/fire-tv/media-players.html>).

Amazon Port of ExoPlayer

ExoPlayer is an open-source media player developed by Google and intended for Android media apps. To learn more about ExoPlayer, see the following resources:

- [ExoPlayer homepage](#)
- [ExoPlayer Video from Google](#)
- [ExoPlayer Developer Guide](#)

Amazon has a port of ExoPlayer that is compatible with Fire TV. Instead of integrating the default ExoPlayer into your Fire TV app, use the Amazon port of ExoPlayer. The Amazon port of ExoPlayer provides many fixes, workarounds, and other patches to make ExoPlayer work on Amazon devices.

To understand how to use ExoPlayer, consult the standard ExoPlayer resources as listed previously.

[Download the Amazon Port of Exoplayer](#)

Ex. 57 (<https://developer.amazon.com/docs/fire-tv/media-players.html>).

234. Providers of unlicensed streaming services thereby directly infringe at least by making and using infringing apparatuses in conjunction with the Amazon Accused Products, such as when testing applications developed for use with the Amazon Accused products. Such activities directly infringe, as described, for example, at Exhibit 51, a claim chart applying independent claim 1 of the 808 Patent to the Amazon Accused Products (and components thereof) operating with the Amazon Prime Video streaming service as an exemplary product.

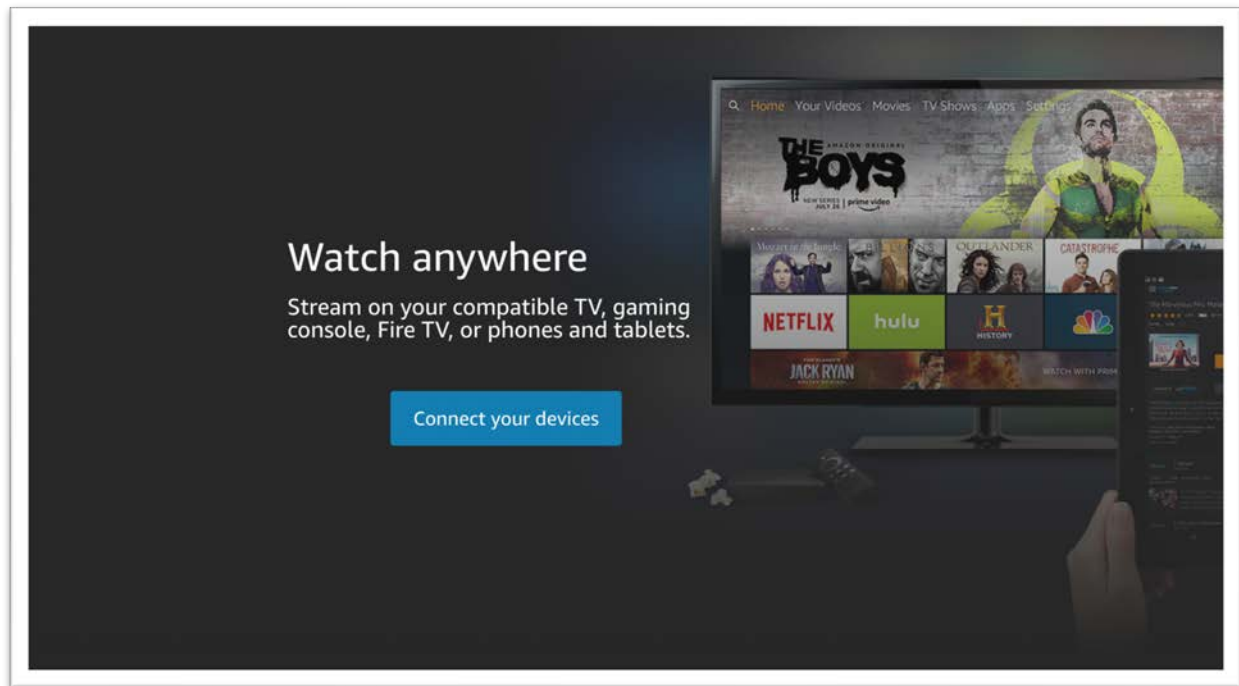
235. Amazon knowingly induces such infringement by providing the Accused Products as well as technical and business infrastructure, know-how, and other support to enable and facilitate such infringement, examples of which are discussed above. Upon information and belief, Amazon specifically intends that its actions will result in infringement of the 808 Patent, or at the very least, because Amazon has been and remains on notice of the 808 Patent and the accused infringement, it has been and remains willfully blind regarding the infringement it has induced and continues to induce.

236. Amazon also provides the Amazon Accused Products and instructions to end users so that such end users will use the Accused Products in an infringing manner. For example, Amazon pre-installs the Amazon Prime Video application on the Amazon Accused Products, Ex. 58 (Levitt Decl.) at ¶12, with the intent that end users use the application to stream video to the Amazon Accused Products. *See also* Ex. 59 (<https://www.youtube.com/watch?v=gX0YkCjOxUg>) at 0:30. When end users do so, this results in direct infringement of the 808 Patent, as described, for example, at Exhibit 51 a claim chart applying independent claim 11 of the 808 Patent to the Amazon Accused Products (and components thereof) operating with the Amazon Prime Video streaming service as an exemplary product. The following screenshot from Exhibit 59 confirms that Prime Video is pre-loaded onto Amazon Accused Products:



Ex. 59 (<https://www.youtube.com/watch?v=gX0YkCjOxUg>) at 0:30.

237. Amazon provides the streaming platform for its Prime Video service, which allows its consumers to “[w]atch anywhere” and “[s]tream on your compatible TV, gaming console, Fire TV, or phones and tablets.”



Ex. 55 (https://www.amazon.com/gp/video/getstarted/ref=sv_atv_5).

238. As shown below, Amazon provides consumers with the Accused Products and instructions on how to access the Prime Video streaming platform and thereby induces consumers to infringe the claims of the 808 Patent. The following are examples of such Amazon instructions:

Are you new to Prime?

[Sign up for Prime Video](#)

Amazon Fire TV Family



If you've never signed in on your Fire TV or Fire TV Stick, follow the steps below to get started. (Already registered? Begin at step 3):

1. Turn on the device.
2. Sign in with your Amazon account, or create an Amazon account to sign in with.
3. Press the home button on your remote.
4. Enjoy.

Ex. 60 (https://www.amazon.com/gp/video/splash/device_linking).

Fire tablet



1. Sign in to your Amazon account on your Fire tablet.
2. If needed, register your device.
3. Open the Prime Video app, or go to the "Video" tab.
4. Enjoy.

Ex. 60 (https://www.amazon.com/gp/video/splash/device_linking).

Smart TV, Blu-ray player



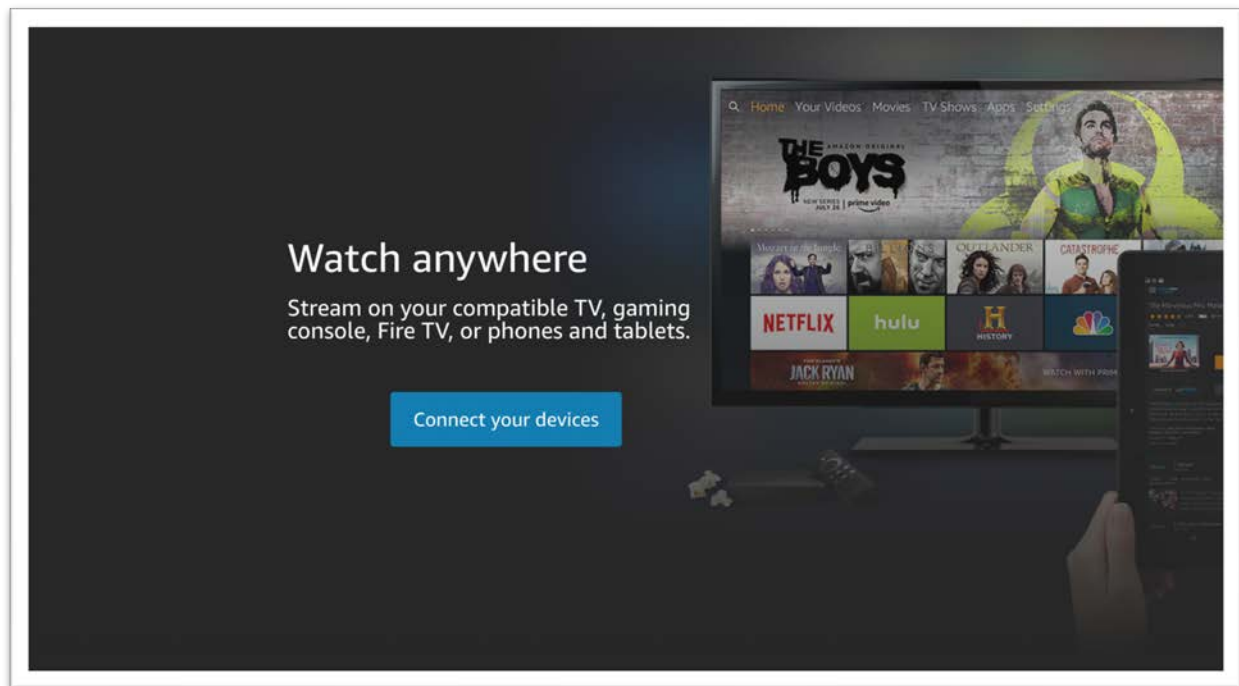
1. Open the app store to download, install, and open the Prime Video app.
2. Register your device—here are two ways:
 - (1) Select "Sign in and start watching" and enter your Amazon account information.
 - (2) Choose "Register on the Amazon website" to get a 5–6 character code, then sign in to your Amazon account and enter your code.

[Sign in to your Amazon account and enter your code](#)

Ex. 60 (https://www.amazon.com/gp/video/splash/device_linking).

239. Moreover, Amazon instructs and encourages end users to download, install, and use unlicensed third-party streaming services in a manner that directly infringes the asserted 808 Patent claims. For example, Amazon provides an application store and associated infrastructure

to enable end users to download and install unlicensed streaming applications from third-party streaming service providers and stream video using the Amazon Accused Products. Amazon markets the Accused Products as permitting end users to “[w]atch anywhere” and “[s]tream on your compatible TV, gaming console, Fire TV, or phones and tablets.” Ex. 55 (https://www.amazon.com/gp/video/getstarted/ref=sv_atv_5).



Ex. 55 (https://www.amazon.com/gp/video/getstarted/ref=sv_atv_5).

240. Amazon encourages and instructs end users of the Amazon Accused Products that “[y]ou’ll never run out of things to watch on Fire TV,” because they can “[e]asily download your favorite apps like Netflix, Prime Video, YouTube, Hulu, and Disney+,” and “[a]ccess thousands of hours of free movies and TV episodes from popular ad-supported streaming apps like IMDb TV, Tubi, and Pluto TV.” The following screenshot shows an example of those instructions:

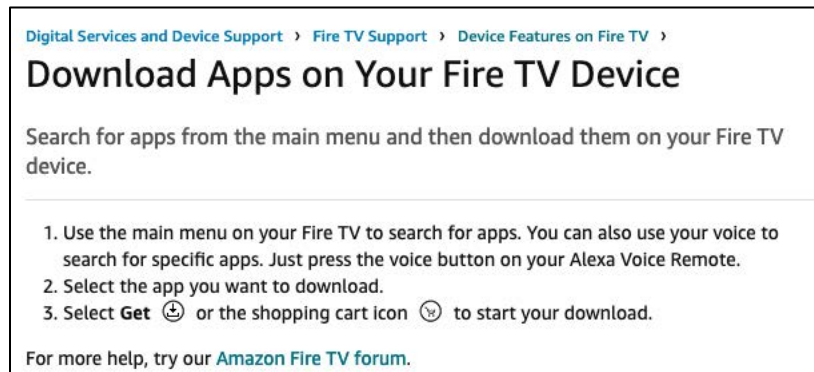
Get the most out of your Fire TV Stick 4K

Something's always on

You'll never run out of things to watch on Fire TV. Easily download your favorite apps like Netflix, Prime Video, YouTube, Hulu, and Disney+. Access thousands of hours of free movies and TV episodes from popular ad-supported streaming apps like IMDb TV, Tubi, and Pluto TV. Watch or browse live TV, sports, news, and channels from Live on the Main Menu. With Profiles, everyone in your household can quickly get recommendations tailored to what they like. To learn more about your Fire TV, visit amazon.com/firetv.

Ex. 61 (Amazon Fire Stick 4K Quick User Guide, *available at* https://s3-us-west-2.amazonaws.com/customerdocumentation/Amazon+Fire+TV+User+Guides/Fire+TV+Stick+Device+Documentation/Fire+TV+Stick+4K_Quick+Start+Guide_US.pdf).

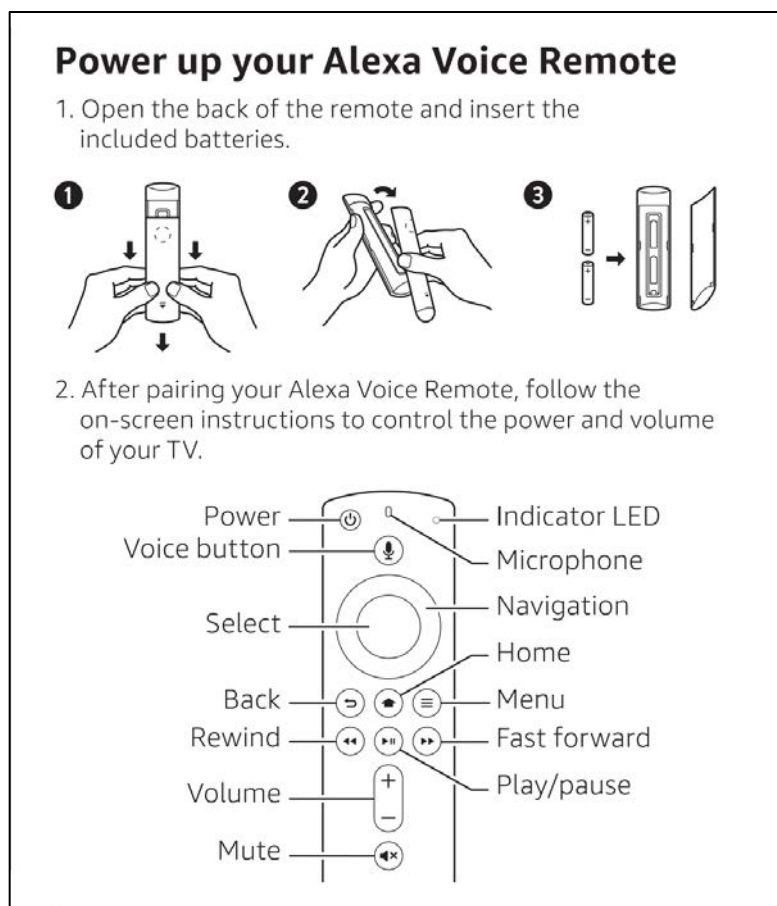
241. Amazon encourages and instructs end users of the Amazon Accused Products how to “Download Apps On Your Fire TV Device,” including how to access and search for third-party streaming applications, and download them to the Amazon Accused Products. The following screenshot shows an example of those instructions:



Ex. 62

([https://www.amazon.com/gp/help/customer/display.html?nodeId=GRDR6KJPL2FT6YHS&ref_](https://www.amazon.com/gp/help/customer/display.html?nodeId=GRDR6KJPL2FT6YHS&ref_=hp_GHH5TUHA7677G4HJ_c_Download-Apps-on-Your-Fire-TV-)
[=hp_GHH5TUHA7677G4HJ_c_Download-Apps-on-Your-Fire-TV-](https://www.amazon.com/gp/help/customer/display.html?nodeId=GRDR6KJPL2FT6YHS&ref_=hp_GHH5TUHA7677G4HJ_c_Download-Apps-on-Your-Fire-TV-)).

242. Amazon encourages and instructs end users of certain Amazon Accused Products, for example, Amazon Fire TV devices and sets that include or have the capability to pair with a Fire TV remote control, such as the Fire TV Alexa Voice Remote, to use remote control buttons to transmit user instructions to perform various playback or trickplay functionalities (e.g., pressing the fast forward button to fast forward). Ex. 36 (https://customerdocumentation.s3-us-west-2.amazonaws.com/Amazon+Fire+TV+User+Guides/Fire+TV+Stick+Device+Documentation/22-002253-01_FireTVStick_3rd+Gen_Quick+Start+Guide_US.pdf). The following screenshot shows an example of those instructions:



Ex. 36 (22-002253-01_FireTVStick_3rd+Gen_Quick+Start+Guide_US.pdf, available at [https://customerdocumentation.s3-us-west-](https://customerdocumentation.s3-us-west-2.amazonaws.com/Amazon+Fire+TV+User+Guides/Fire+TV+Stick+Device+Documentation/22-002253-01_FireTVStick_3rd+Gen_Quick+Start+Guide_US.pdf)

2.amazonaws.com/Amazon+Fire+TV+User+Guides/Fire+TV+Stick+Device+Documentation/22-002253-01_FireTVStick_3rd+Gen_Quick+Start+Guide_US.pdf).

243. When end users use the Accused hardware products to stream from an unlicensed streaming service, this results in direct infringement of the 808 Patent, as described, for example, at Exhibit 51 a claim chart applying independent claim 1 of the 808 Patent to the Amazon Accused Products (and components thereof) operating with the Amazon Prime Video streaming service as an exemplary product.

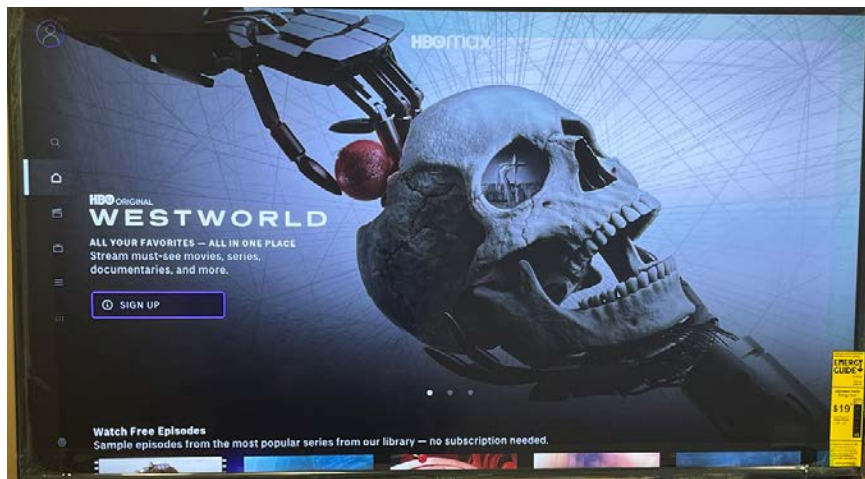
244. Amazon customers such as end users directly infringe by using the Accused Products in their intended manner to infringe, e.g., by using the Amazon Accused Products to stream video, thereby making and/or using an infringing apparatus. Amazon knowingly induces such infringement by providing the Accused Products and instructions to enable and facilitate infringement as described above. Upon information and belief, Amazon specifically intends that its actions will result in infringement of the 808 Patent, or at the very least, because Amazon has been and remains on notice of the 808 Patent and the accused infringement, it has been and remains willfully blind regarding the infringement it has induced and continues to induce.

245. Thus, Amazon has violated Section 337 with respect to the 808 Patent. Because it is difficult to identify all sources of infringing articles, and discovery may reveal additional violations of Section 337 with respect to the 808 Patent, DivX reserves all rights to supplement its allegations to identify additional respondents that have violated Section 337 with respect to this patent, or additional ways in which Amazon has violated Section 337 with respect to the 808 Patent.

2. VIZIO

246. VIZIO induces infringement of the asserted claims of the 808 Patent. VIZIO has had knowledge of the 808 Patent and the Accused Products' infringement thereof since at least the filing and/or service of the complaint in the CDCA Action and/or this Complaint.

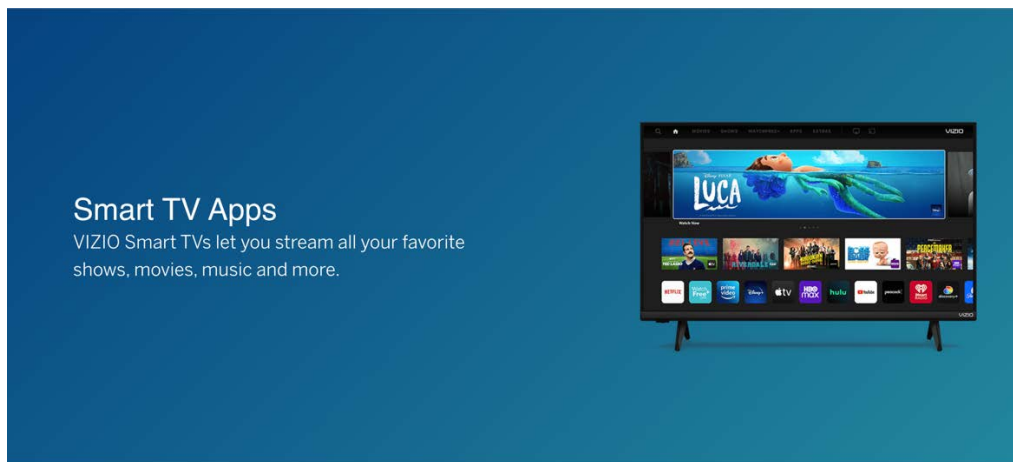
247. VIZIO knowingly and intentionally encourages at least: (1) streaming service providers, such as Warner Bros. Discovery, Inc. and its HBO Max streaming service; and (2) end-users of the VIZIO-accused products, such as consumers in the United States, to directly infringe the 808 Patent.



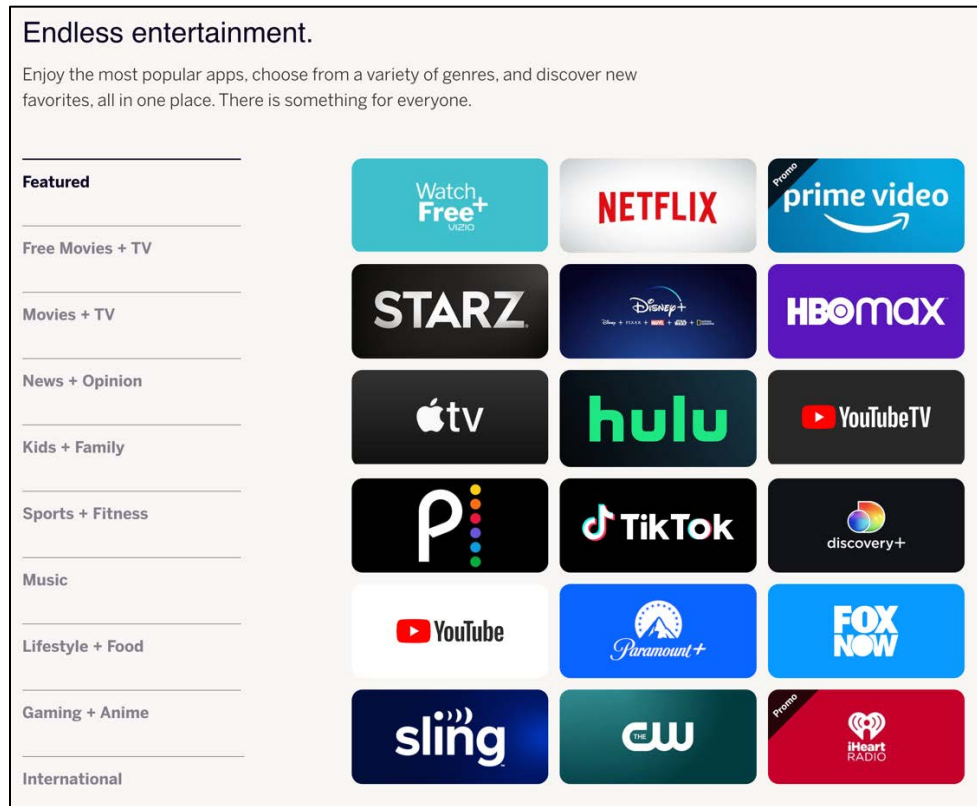
The above screenshot of the HBO Max application running on the exemplary VIZIO TV Device was taken by, or on behalf of, DivX.

248. For example, VIZIO provides the Accused Products as well as the technical and business infrastructure, specifications, software, know-how, and other support to instruct and enable unlicensed streaming service providers to make, use, sell/lease, and/or offer for sale/lease applications that provide unlicensed video streaming services for installation on the VIZIO Accused Products, or otherwise provide video streaming services to the VIZIO Accused Products. Once installed, or otherwise when such services are used, such applications in combination with the VIZIO Accused Products directly infringe the 808 Patent.

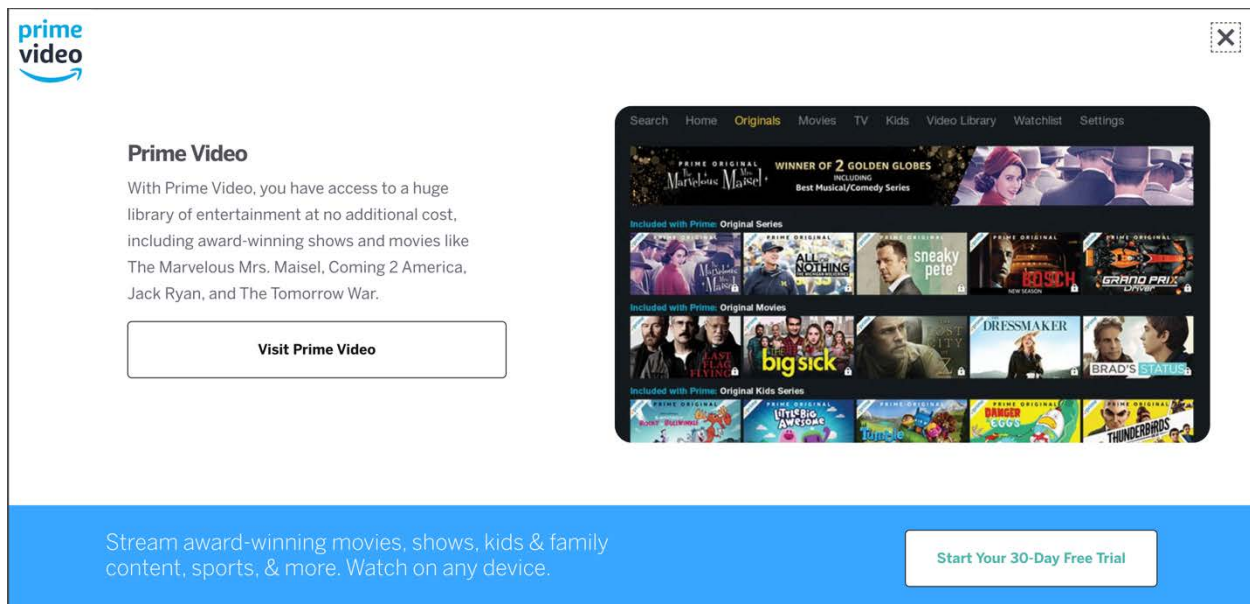
249. For example, VIZIO provides application offerings and associated infrastructure, such as VIZIO's SmartCast® platform, to enable streaming service providers to provide their VIZIO device-specific streaming applications to end users, so that such end users can use such streaming applications using the VIZIO Accused Products. For example, VIZIO states that its SmartCast® platform is “the (incredibly) smart platform that powers every VIZIO TV.” Ex. 63 (<https://www.vizio.com/en/smartcast>). The following screenshots depict the various video content that may be consumed on the VIZIO SmartCast® platform and the ways to access such content on the platform:



Ex. 64 (<https://www.vizio.com/en/smart-tv-apps>).



Ex. 64 (<https://www.vizio.com/en/smart-tv-apps>).



Ex. 65 (<https://www.vizio.com/en/smart-tv-apps?appName=prime-video&appId=vizio.amazon>).



HBO Max

HBO Max is a premium streaming app that combines all of HBO with even more must-see TV series, blockbuster movies, and exclusive Max Originals.

Visit HBO Max



Ex. 66 (<https://www.vizio.com/en/smart-tv-apps?appName=hbomax&appId=vizio.hbomax>).

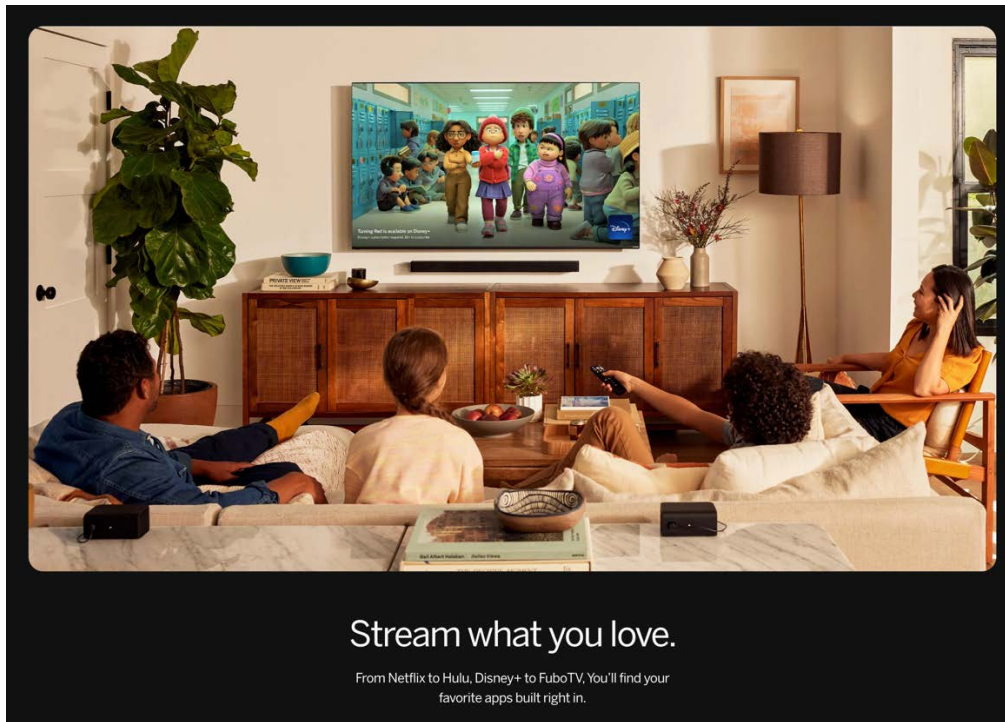


The (incredibly) smart platform that powers every VIZIO TV.

From free TV to your favorite premium channels, instantly access endless entertainment straight out of the box.

Explore Apps

Ex. 63 (<https://www.vizio.com/en/smartcast>).



Ex. 63 (<https://www.vizio.com/en/smartcast>).

Control in the palm of your hand.



Just say the words.

Use the VIZIO Voice Remote or the voice feature on the VIZIO Mobile app to get straight to the action.



Or use your phone.

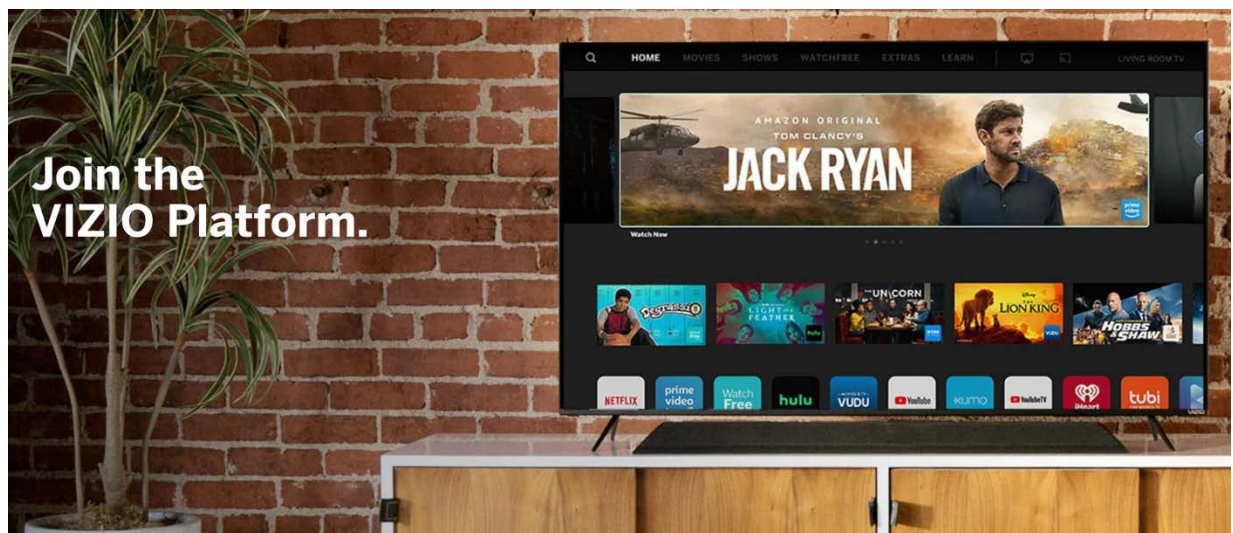
Just download the VIZIO Mobile app and you're in.




Ex. 63 (<https://www.vizio.com/en/smartcast>).

250. VIZIO further encourages third-party streaming service providers to develop such streaming service applications for use with the VIZIO Accused Products. For example, VIZIO encourages third-party streaming service providers to “[j]oin the VIZIO platform” and to fill out

a form to be a Content Partner. Ex. 67 (<https://www.vizio.com/en/content-partners>). VIZIO touts its “[s]imple integration,” “[d]omestic support team,” “[i]nnovative technologies,” and “[m]illions of TVs” as reasons why third-party streaming service providers should “[b]ring [their] content or app to millions of households” that use the VIZIO Accused Products. *Id.* The following screenshots include such advertisements that encourage Content Partners to join the VIZIO SmartCast® Platform:



Ex. 67 (<https://www.vizio.com/en/content-partners>).

Bring your content or app to millions of households.

Contact Us

Simple integration.

Our platform offers a lightweight integration solution.

Domestic support team.

Work directly with VIZIO's domestic engineers to onboard your app quickly.

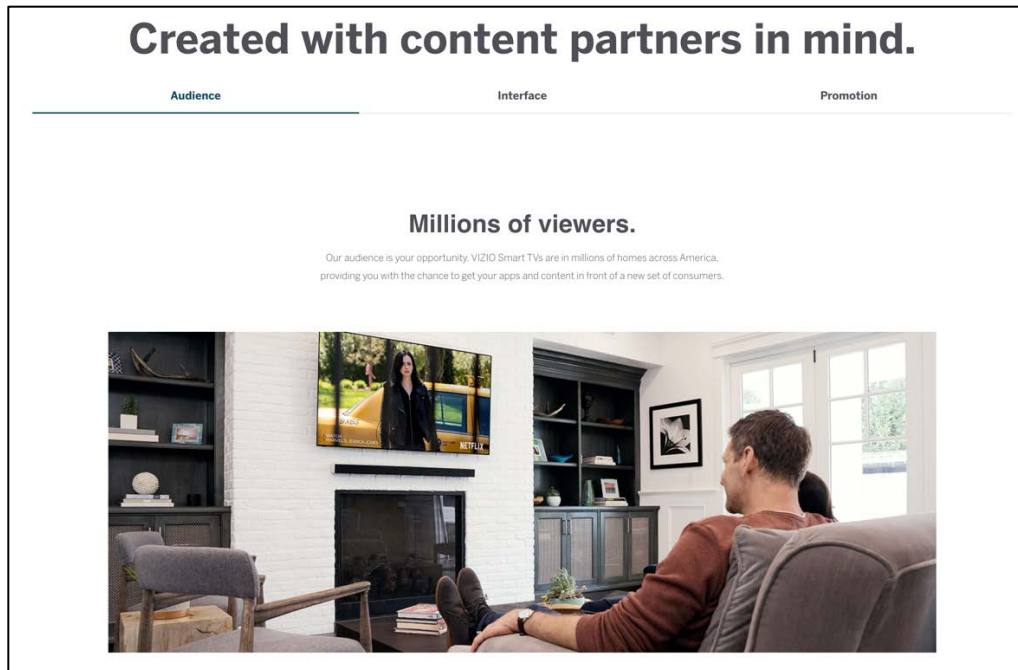
Innovative technologies.

We support 4K UHD, HDR 10, Dolby Vision, Alexa, Google Assistant and more.

Millions of TVs.

We're growing every day with TVs in millions of homes across the country.

Ex. 67 (<https://www.vizio.com/en/content-partners>).



Ex. 67 (<https://www.vizio.com/en/content-partners>).

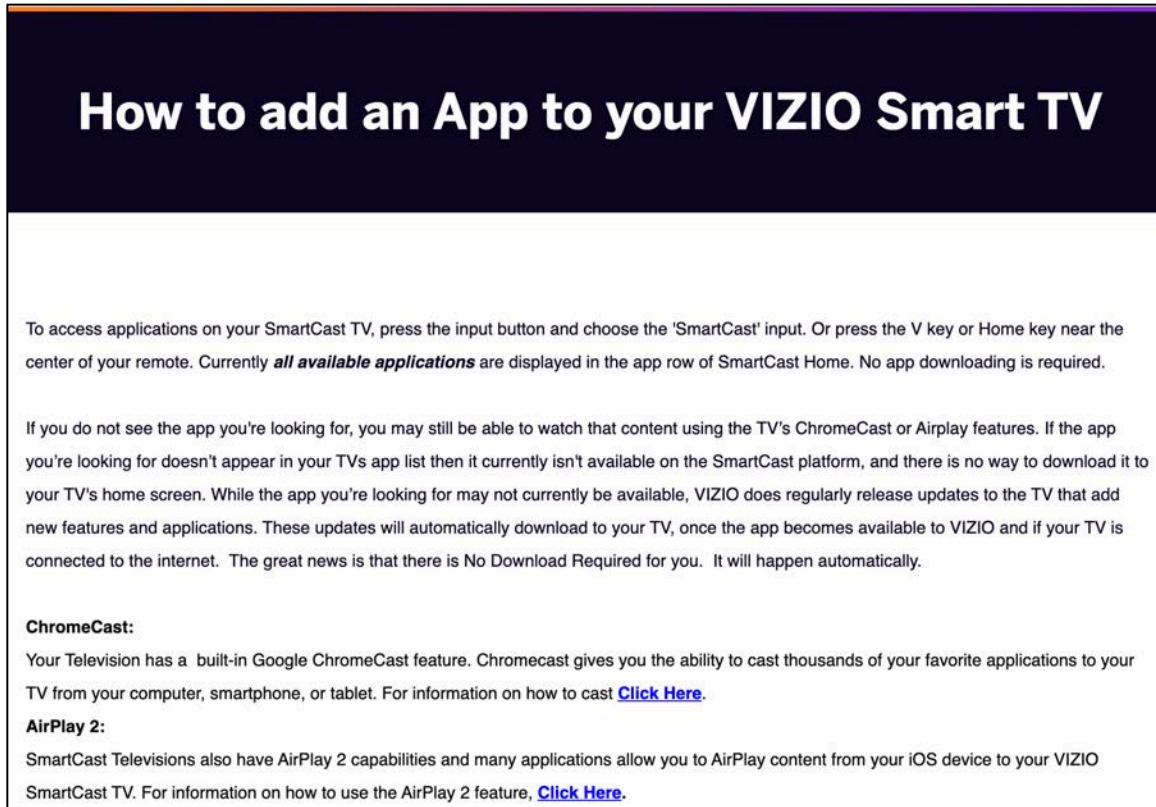
Ex. 67 (<https://www.vizio.com/en/content-partners>).

251. Unlicensed streaming service providers thereby directly infringe at least by making and using infringing apparatuses in conjunction with the VIZIO Accused Products, such as when testing applications developed for use with the VIZIO Accused Products. Such activities directly infringe, as described, for example, at Exhibit 52, a claim chart applying independent claim 1 of the 808 Patent to the VIZIO Accused Products (and components thereof) operating with the HBO Max streaming service as an exemplary product.

252. VIZIO knowingly induces such infringement by providing the Accused Products as well as technical and business infrastructure, know-how, and other support to enable and facilitate such infringement, examples of which are discussed above. Upon information and belief, VIZIO specifically intends that its actions will result in infringement of the 808 Patent, or at the very least, because VIZIO has been and remains on notice of the 808 Patent and the accused infringement, it has been and remains willfully blind regarding the infringement it has induced and continues to induce.

253. VIZIO also provides the VIZIO Accused Products and instructions to end users so that such end users will use the Accused Products in an infringing manner. For example, VIZIO promotes the use of the HBO Max application on the VIZIO Accused Products, see Ex. 68 (<https://www.vizio.com/en/press/2021/sept/hbo-max-app-now-available-on-vizio-smartcast->), with the intent that end users use the application to stream video to the VIZIO Accused Products. When end users do so, this results in direct infringement of the 808 Patent, as described, for example, at Exhibit 52 a claim chart applying independent claim 1 of the 808 Patent to the VIZIO Accused Products (and components thereof) operating with the HBO Max streaming service as an exemplary product.

254. VIZIO provides the streaming platform for the HBO Max service, which allows its consumers to “access applications on [their] SmartCast TV,” such as HBO Max, with “[n]o app downloading [] required.” Ex. 69 (https://support.vizio.com/s/article/How-to-add-an-App-to-your-VIZIO-Smart-TV?language=en_US). The following screenshot shows an example of those instructions:



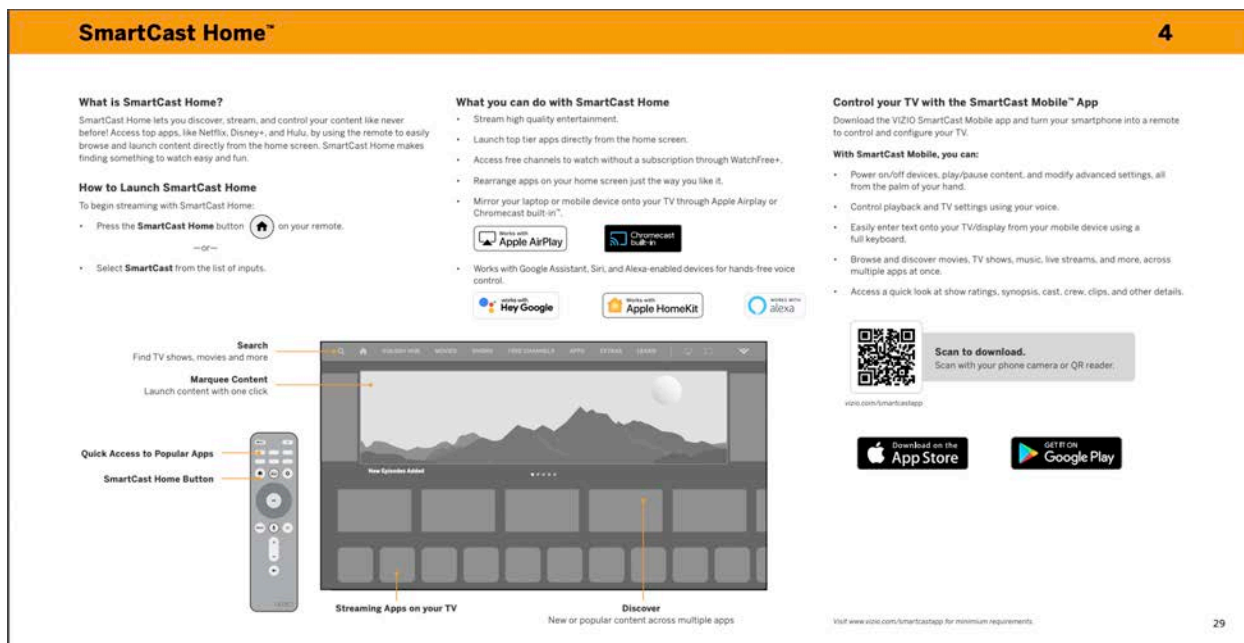
Ex. 69 (https://support.vizio.com/s/article/How-to-add-an-App-to-your-VIZIO-Smart-TV?language=en_US).

255. As shown above, VIZIO provides consumers with instructions on how to access “all available applications” on the VIZIO Accused Products and thereby induces consumers to infringe the claims of the 808 Patent. Ex. 69 (https://support.vizio.com/s/article/How-to-add-an-App-to-your-VIZIO-Smart-TV?language=en_US). VIZIO instructs end users to access the

SmartCast® platform by “press[ing] the input button and choose the ‘SmartCast’ input. Or press[ing] the V key or Home key near the center of your remote.” *Id.*

256. VIZIO instructs and encourages end users to use third-party streaming services in a manner that directly infringes the asserted 808 Patent claims. For example, VIZIO provides an application row and associated infrastructure to enable end users to stream video using the VIZIO Accused Products. “Currently all available applications are displayed in the app row of the SmartCast Home. No app downloading is required. . . . If the app you’re looking for doesn’t appear in your TVs app list then it currently isn’t available on the SmartCast platform, and there is no way to download it to your TV’s home screen.” Ex. 69 (https://support.vizio.com/s/article/How-to-add-an-App-to-your-VIZIO-Smart-TV?language=en_US). VIZIO markets its Accused Products as continually updating (or that updates “happen automatically”) in that VIZIO “regularly release[s] updates to the TV that add new features and applications,” and that “[t]hese updates will automatically download to your TV, once the app becomes available to VIZIO and if your TV is connected to the internet.” *Id.*

257. VIZIO encourages and instructs end users of the VIZIO Accused Products that “SmartCast Home lets you discover, stream, and control your content like never before,” because they can “[a]ccess top apps, like Netflix, Disney+, and Hulu, by using the remote to easily browse and launch content directly from the home screen” and “SmartCast Home makes finding something to watch easy and fun.” Ex. 39 (VIZIO V-Series User Manual for Models: V435-J01, V505-J01, V505-J09, V505C-J09, V555-J01, V585-J01, V655-J04, V655-J09, V705-J01, V705-J03, V705x-J03 & V755-J04) at 29.



Ex. 39 (VIZIO V-Series User Manual for Models: V435-J01, V505-J01, V505-J09, V505C-J09, V555-J01, V585-J01, V655-J04, V655-J09, V705-J01, V705-J03, V705x-J03 & V755-J04) at 29.

258. When end users use the Accused Products to download and stream unlicensed streaming services, this results in direct infringement of the 808 Patent, as described, for example, at Exhibit 52 a claim chart applying independent claim 1 of the 808 Patent to the VIZIO Accused Products (and components thereof) operating with the HBO Max streaming service as an exemplary product.

259. VIZIO customers such as end users directly infringe by using the Accused Products in their intended manner to infringe, e.g., by using the VIZIO Accused Products to stream video, thereby making and/or using an infringing apparatus. VIZIO knowingly induces such infringement by providing the Accused Products and instructions to enable and facilitate infringement as described above. Upon information and belief, VIZIO specifically intends that its actions will result in infringement of the 808 Patent, or at the very least, because VIZIO has been and remains on notice of the 808 Patent and the accused infringement, it has been and remains willfully blind regarding the infringement it has induced and continues to induce.

260. Thus, VIZIO has violated Section 337 with respect to the 808 Patent. However, because it is difficult to identify all sources of infringing articles, and discovery may reveal additional violations of Section 337 with respect to the 808 Patent, DivX reserves all rights to supplement its allegations to identify additional respondents that have violated Section 337 with respect to this patent, or additional ways in which VIZIO has violated Section 337 with respect to the 808 Patent.

VII. SPECIFIC INSTANCES OF UNFAIR IMPORTATION AND SALE

261. Upon information and belief, the Amazon Accused Products and VIZIO Accused Products are not manufactured or assembled in the United States. Instead, the Amazon Accused Products and VIZIO Accused Products were and are manufactured and assembled by or on behalf of Respondents in foreign facilities and are imported into the United States. Upon information and belief, the software components of the Amazon Accused Products and VIZIO Accused Products alleged to infringe the DivX Asserted Patents are installed on the Amazon Accused Products and VIZIO Accused Products before importation into the United States or installed on the Amazon Accused Products and VIZIO Accused Products in the United States after importation but before being provided or sold to end-user customers.

262. Upon information and belief, Amazon provides its Amazon Prime Video Service to customers in the United States for use with the Amazon Accused Products and VIZIO Accused Products. *See* Ex. 64 (VIZIO Smart TV Apps, *available at* <https://www.vizio.com/en/smart-tv-apps> (showing Amazon Prime Video App is included)); Ex. 59 (Prime Video: How to Buy or Rent Prime Video, <https://www.youtube.com/watch?v=gX0YkCjOxUg> at 0:30 (showing Prime Video is pre-loaded onto Amazon Fire TV Stick)); Ex. 60 (https://www.amazon.com/gp/video/splash/device_linking (showing Amazon instructions on how to link Amazon Prime Video to Fire TV Stick)); Ex. 61

(Amazon Fire Stick 4K Quick User Guide, *available at* https://s3-us-west-2.amazonaws.com/customerdocumentation/Amazon+Fire+TV+User+Guides/Fire+TV+Stick+Device+Documentation/Fire+TV+Stick+4K_Quick+Start+Guide_US.pdf (showing Amazon advertising use of apps like Prime Video to “Get the most out of your Fire TV Stick 4K”)).

263. Although the Amazon Accused Products and VIZIO Accused Products are sold to end-users in the United States, the Amazon Accused Products and VIZIO Accused Products were and continue to be made outside of the United States.

264. For example, the exemplary Amazon Fire TV Stick (Generation 3) (“3rd Generation Fire TV Stick”) was purchased from Amazon.com’s website for U.S. customers on June 2, 2022, for shipment to San Diego, California. Ex. 70 (6/2/2022 Amazon.com Order Receipt). The packaging for the 3rd Generation Fire TV Stick includes a label stating “assembled in China”. Ex. 71 (Image of 3rd Generation Fire TV Stick Packaging). Similarly, information printed on the back of the device states that it was “Assembled in China”. Ex. 72 (Image of 3rd Generation Fire TV Stick Label).

265. For example, the exemplary VIZIO 43” Class V-Series 4k UHD LED Smart TV V435-J01 (“VIZIO V435-J01”) was purchased from Walmart’s website for U.S. customers on June 23, 2022, for shipment to Los Gatos, California. Ex. 73 (6/23/2022 Walmart Order Receipt). A label affixed to the outside of the box in which the VIZIO V435-J01 arrived states that the device was “Assembled in Thailand/PB”. Ex. 74 (Image of VIZIO V435-J01 Packaging). Information printed onto the back of the device similarly states that it was “Made in Thailand/PB”. Ex. 75 (Image of VIZIO V435-J01 Device Label).

VIII. HARMONIZED TARIFF SCHEDULE ITEM NUMBERS

266. On information and belief, the Harmonized Tariff Schedule of the United States (“HTSUS”) item numbers under which the infringing devices and components thereof may be

imported into the United States may be at least HTSUS 8471.49.00 (Other automatic data processing machines entered in the form of systems); 8471.50.01 (Processing units other than those of subheading 8471.41 or 8471.49, whether or not containing in the same housing one or two of the following types of unit: storage units, input units, output units); 8525 (Transmission apparatus for radio broadcasting or television, whether or not incorporating reception apparatus or sound recording or reproducing apparatus); 8529.10.21 (Television); 8529.90 (Other printed circuit assemblies of television apparatus); 8541.41.95 (Other semiconductor devices); 8542 (Electronic integrated circuits); and 8542.31.00 (Processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits). These classifications are intended for illustration only and are not intended to be restrictive of the accused products or of products subject to the relief requested.

IX. RELATED LITIGATION

267. Complainant is asserting the Asserted Patents against the proposed Respondents (separately) in district court proceedings before the United States District Court for the Eastern District of Virginia, styled as: *DivX, LLC v. Amazon.com, Inc.* (E.D. Va.), and the Central District of California, styled as *DivX, LLC v. VIZIO, Inc.* (C.D. Cal.).

268. Complainant had previously asserted the 297 Patent in two prior ITC investigations: 337-TA-1222 and 337-TA-1297. The Respondents in those Investigations included: LG Electronics, Inc.; LG Electronics USA, Inc.; MediaTek Inc.; MediaTek USA Inc.; MStar Semiconductor, Inc.; Realtek Semiconductor Corporation; Samsung Electronics America, Inc. f/k/a Samsung Telecommunications America LLC; Samsung Electronics Co., Ltd.; Samsung Electronics HCMC CE Complex, Co., Ltd.; Shenzhen TCL New Technology Company Ltd.; TCL Electronics Holdings Ltd. f/k/a TCL Multimedia Technology Holdings, Ltd.; TCL King Electrical Appliances (Huizhou) Co. Ltd.; TCL Moka International Ltd.; TCL Smart Device

(Vietnam) Company, Ltd.; TCL Technology Group Corporation f/k/a TCL Corporation; and TTE Technology, Inc.

269. In 337-TA-1222 and 337-TA-1297, *Certain Video Processing Devices, Components Thereof, and Digital Televisions Containing the Same* (I and II, respectively), there is already a record concerning the 297 Patent and Amazon Prime Video, including certain discovery, expert reports and expert hearing testimony on infringement (with respect to other television platforms not accused in this action) and validity, and claim construction on five disputed terms of the 297 Patent (337-TA-1222, Order No. 40, Appendix A at 1-23 (Mar. 12, 2021)). The 337-TA-1222 and 337-TA-1297 actions have concluded based on settlement. Investigation 337-TA-1222 was terminated following a hearing and post-hearing briefing, and 337-TA-1297 was terminated in the early phase of the investigation, roughly three months after TCL Respondents submitted their response to DivX's complaint.

270. In addition, for the sake of completeness, the 297 Patent was also asserted or challenged in (i) *DivX, LLC v. Samsung Electronics Co., Ltd., et al.*, 2:20-cv-00301 (E.D. Tex.), (ii) *DivX, LLC v. LG Electronics Inc., et al.*, 1:20-cv-01202 (D. Del.), (iii) *DivX, LLC v. TCL Corporation, et al.*, 1:20-cv-01203 (D. Del.), (iv) IPR2021-01579 (PTAB) (previously brought by Petitioner Roku Inc., who has now signed a license agreement with DivX), and (v) IPR2021-01580 (PTAB) (previously brought by Petitioner Roku Inc., who has now signed a license agreement with DivX). All three district court actions for Respondents against whom DivX asserted the 297 Patent in Investigation 337-TA-1222 were stayed under 28 U.S.C. § 1659 because of the pendency of the ITC Investigation against the same parties. The PTAB action was terminated before the PTAB's decision whether to institute the *inter partes* review. The Eastern District of Texas, District of Delaware, and PTAB actions have concluded based on settlement.

271. The 673 Patent was also asserted in district court actions against parties that are not a named Respondent here and challenged by the defendants in those district court actions as well as at the PTAB in the following proceedings: (i) *DivX, LLC v. Netflix, Inc.*, 2:19-cv-01602 (C.D. Cal.), (ii) *DivX, LLC v. Hulu, LLC*, 2:19-cv-01602 (C.D. Cal.), (iii) IPR2020-00614 (PTAB) (previously brought by Petitioners Hulu LLC and Netflix, Inc.); and (iv) *DivX, LLC v. Netflix, Inc.*, No. 22-1481 (Fed. Cir.). Both Netflix and Hulu attempted to dismiss DivX's amended complaint on the 673 Patent based on a 35 U.S.C. § 101 challenge, but the Court denied their motions without prejudice. *DivX, LLC v. Netflix, Inc.*, 2:19-cv-01602 (C.D. Cal.), Dkt. No. 72 (Nov. 4, 2019); *DivX, LLC v. Hulu, LLC*, 2:19-cv-01606 (C.D. Cal.), Dkt. No. 73 (Nov. 4, 2019). The *Netflix* action in the Central District of California is currently stayed pending resolution of the appeals of the final written decisions regarding the patents asserted in that action, including the appeal of PTAB's final written decision in IPR2020-00614 relating to the 673 Patent. That appeal before the Federal Circuit in No. 22-1481 is currently pending, but it does not involve patent claims asserted in this investigation. The *Hulu* action in the Central District of California has concluded based on settlement and Hulu has withdrawn from the Federal Circuit appeals involving DivX patents.

272. The 588 Patent was also asserted in district court actions against parties that are not a named Respondent here and challenged by the defendants in those district court actions as well as at the PTAB in the following proceedings: (i) *DivX, LLC v. Netflix, Inc.*, 2:19-cv-01602 (C.D. Cal.), (ii) *DivX, LLC v. Hulu, LLC*, 2:19-cv-01606 (C.D. Cal.), (iii) IPR2020-00558 (PTAB) (previously brought by Petitioners Hulu LLC and Netflix, Inc.), and (iv) *Netflix, Inc. v. DivX, LLC*, No. 22-1083 (Fed. Cir.). Both Netflix and Hulu attempted to dismiss DivX's amended complaint on the 588 Patent based on a 35 U.S.C. § 101 challenge, but the Court

denied that motion without prejudice. *DivX, LLC v. Netflix, Inc.*, 2:19-cv-01602 (C.D. Cal.), Dkt. No. 72 (Nov. 4, 2019); *DivX, LLC v. Hulu, LLC*, 2:19-cv-01606 (C.D. Cal.), Dkt. No. 73 (Nov. 4, 2019). The *Netflix* action in the Central District of California is currently stayed pending resolution of the appeals of the final written decisions regarding the patents asserted in that action, including the appeal of PTAB's final written decision in IPR2020-00558 relating to the 588 Patent. That appeal before the Federal Circuit in No. 22-1083 is currently pending. But the PTAB in its Final Written Decision in IPR2020-00558 confirmed the validity of all the challenged claims, including the patent claims that DivX is asserting in this Investigation. IPR2020-00558, Paper No. 50 (Aug. 23, 2021). The *Hulu* action in the Central District of California has concluded based on settlement and Hulu has withdrawn from the Federal Circuit appeals involving DivX patents.

273. Complainant also asserted the 553 Patent against parties that are not a named Respondent here: *DivX, LLC v. TCL Technology Group Corporation et al.*, 2:21-cv-00264 (E.D. Tex.). The Eastern District of Texas action was dismissed before defendants answered and has concluded based on settlement.

274. Pursuant to Commission Rule 210.12(a)(5), DivX states that, other than the litigations specified above, to DivX's knowledge, the alleged unfair methods of competition and unfair acts, or the subject matter thereof, are not, and have not been, the subject of any court or agency litigation.

X. THE DOMESTIC INDUSTRY

275. A domestic industry as defined under Section 337(a)(2) and (a)(3) exists in the United States as the result of domestic activities related to products and services that practice the Asserted Patents. These activities include significant domestic investments in (i) plant and equipment and (ii) labor or capital in the United States in products and services that practice the

Asserted Patents by DivX's licensees, The Walt Disney Company ("Disney") and Element TV Company ("Element").

276. DivX has licensed the Asserted Patents to, among many other industry leaders, Disney and Element, for use in manufacture, research, development, and engineering of products and services that practice the Asserted Patents. The technology covered by the Asserted Patents has benefited DivX's licensees. Under Commission Rule 210.12(a)(9)(iv), DivX has attached as Confidential Exhibit 76 a copy of its license agreement with Disney. Under Commission Rule 210.12(a)(9)(iv), DivX has attached as Confidential Exhibits 77, 78, and 79 copies of its license agreements with Element.

A. The Technical Prong of the Domestic Industry Requirement Is Satisfied

277. Disney by developing and offering the streaming platform Hulu as implemented on playback devices ("Disney DI Product") and Element by manufacturing the exemplary product 400 series E4AA43R smart TV ("Element DI Product"), respectively, practice at least claim 1 of the 297 Patent, claim 29 of the 673 Patent, claim 1 of the 588 Patent, claim 11 of the 553 Patent, and claim 1 of the 808 Patent.

278. A claim chart showing that Disney practices at least exemplary claim 1 of the 297 Patent is attached as Exhibit 80.

279. A claim chart showing that Disney practices at least exemplary claim 29 of the 673 Patent is attached as Exhibit 81.

280. A claim chart showing that Disney practices at least exemplary claim 1 of the 588 Patent is attached as Exhibit 82.

281. A claim chart showing that Disney practices at least exemplary claim 11 of the 553 Patent is attached as Exhibit 83.

282. A claim chart showing that Disney practices at least exemplary claim 1 of the 808 Patent is attached as Exhibit 84.

283. A claim chart showing that Element practices at least exemplary claim 1 of the 297 Patent is attached as Exhibit 85.

284. A claim chart showing that Element practices at least exemplary claim 29 of the 673 Patent is attached as Exhibit 86.

285. A claim chart showing that Element practices at least exemplary claim 1 of the 588 Patent is attached as Exhibit 87.

286. A claim chart showing that Element practices at least exemplary claim 11 of the 553 Patent is attached as Exhibit 88.

287. A claim chart showing that Element practices at least exemplary claim 1 of the 808 Patent is attached as Exhibit 89.

B. The Economic Prong of the Domestic Industry Requirement Is Satisfied

1. Disney's Domestic Activities Satisfy the Economic Prong

288. On July 25, 2022, Disney entered into a patent licensing agreement with DivX (the "Disney Patent License Agreement"). The Asserted Patents are licensed to Disney as part of that agreement. Confidential Exhibit 76.

289. Founded in 1923, incorporated in Delaware, with its principal executive offices in California, Disney is an iconic American conglomerate, and a great American corporate success. In 2021, Disney posted a total revenue of \$67.418 billion. Exhibit 90 (The Declaration of Stephen Prowse, Attachment 2 (The Walt Disney Company 2021 Form 10k, at p. 67)). A significant portion of Disney's operations focuses on media and entertainment distribution ("DMED"). In turn, Disney's DMED business encompasses its Direct-to-Consumer ("DTC") line of business, which is its video streaming offerings including, domestically, Hulu, Disney+,

and ESPN+. *Id.*, p. 3. Hulu is a streaming platform available in the U.S. only. Ex. 90 (Prowse Decl., Attachment 13, *available at*, <https://help.hulu.com/s/article/cant-use-internationally>).

290. Importantly, because of changes in the market, Disney “has significantly increased its focus on distribution of branded film and episodic content via [its] own DTC streaming services” relative to distribution along traditional patterns. Ex. 90 (Prowse Decl., Attachment 2 (The Walt Disney Company Form 10-K for the fiscal year ended October 2, 2021, p. 33)). “As of October 2, 2021, the estimated number of paid Hulu subscribers, based on internal management reports, was approximately 44 million.” *Id.* at 9.

291. Disney has made, and continues to make, significant domestic investments in connection with Hulu’s streaming platform. Pursuant to Commission Rule 210.12(a)(6), a domestic industry under subparts (A) and (B) of Section 337(a)(3) exists by virtue of Disney’s qualitatively and quantitatively significant expenditures in domestic plant and equipment, as well as labor or capital with respect to the Hulu streaming platform.

292. Disney’s products that practice the Asserted Patents include the Hulu streaming platform as implemented on playback devices.

293. The technology covered by the Asserted Patents has benefitted DivX’s licensee, Disney. The below sections detail the domestic investments made by Disney from 2020 through July 2022 (which represents Disney’s Q2 of FY 2020 through Q3 of FY 2022) on the DI Product.

294. Disney has incurred continuing domestic investments in plant and equipment, and labor or capital related to the DI Product.

295. Disney, together with its subsidiaries, is a diversified worldwide entertainment company. Ex. 90 (Prowse Decl.) at ¶10. Disney reports its operations in two segments, Disney

Media and Entertainment Distribution (“DMED”) and Disney Parks, Experiences and Products (“DPEP”). *Id.*

296. Disney also provides the revenue breakdown by region for the DMED and DPEP segments. As shown below, the Americas region accounts for approximately 80% of revenue for the DMED segment in FY 2020 and FY 2021.

Table 1 - DMED Revenue by Region (in millions)				
	FY 2020	%	FY 2021	%
Americas	\$ 51,992	80%	\$ 54,157	80%
Europe	\$ 7,333	11%	\$ 6,690	10%
Asia Pacific	\$ 6,063	9%	\$ 6,571	10%
Total Revenue	\$ 65,388	100%	\$ 67,418	100%

297. Disney’s DPEP segment includes its theme parks, hotels, resorts, and vacation facilities. In addition, Disney maintains numerous other “significant properties” related to the DMED segment, among others. For example, Disney maintains ‘significant properties’ including at least 11 U.S.-based properties ranging in size from 51,000 square feet to 4,695,000 square feet. Ex. 90 (Prowse Decl.) at ¶12. As shown in the table below, in FY 2021, these 11 U.S.-based facilities make up 360 acres and nearly 15 million square feet. These facilities are in various cities in California, New York, and Connecticut, and all of them house activities associated with the DMED segment, among others. *Id.* The facilities are used for various functions including offices space, production, warehousing, technical, storage, and theaters among others. *Id.* No specific foreign facilities are listed in Disney’s list of “significant properties,” indicating any foreign facilities are not significant compared to the U.S.-based facilities listed. *Id.*

Table 2 - Disney's Significant Properties		
	Land (in Acres)	Buildings (in sqft)
California	243	10,520,000
New York	-	2,767,000
Connecticut	117	1,686,000
Total properties	360	14,973,000

298. Within the DMED segment, Disney provides financial results according to three subsegments: (1) Linear Networks, (2) Direct-to-Consumer, and (3) Content Sales/Licensing. Ex. 90 (Prowse Decl.) at ¶13. Disney’s activities related to the DI Product are captured in the Direct-To-Consumer (“DTC”) subsegment, within the DMED segment. *Id.* Specifically, the DTC subsegment includes Disney’s streaming platforms, including Disney+, Disney+ Hotstar, ESPN+, Hulu and Star+. *Id.* Based on Disney’s FY 2021 10-K, activities in Disney’s DTC subsegment primarily include “programming and production costs, technology support costs, operating labor and distribution costs.” *Id.*

299. Disney tracks the percentage of expenses, by year, for at least the following expense categories within the DTC subsegment: (1) operating expenses (programming and production), (2) operating expenses (other), (3) depreciation and amortization, and (4) selling, general, and administrative (“SG&A”). Ex. 90 (Prowse Decl.) at ¶14. Table 3 below reflects the dollar amount and relative percentage each of these expense categories represent of DTC subsegment expenses:

Table 3 - Direct-To-Consumer Subsegment Operating Expenses by category (in millions)				
Expenses	FY 2020	%	FY 2021	%
Operating Expenses (Programming and Production)	\$ 8,124	60%	\$ 10,716	60%
Operating Expenses (Other)	\$ 1,954	15%	\$ 2,518	14%
SG&A and Other	\$ 3,126	23%	\$ 4,435	25%
Depreciation and Amortization	\$ 260	2%	\$ 329	2%
Equity in the loss of investees	\$ 1	0%	\$ -	0%
Total Expenses	\$ 13,465	100%	\$ 17,998	100%

300. In addition, Disney tracks DTC subsegment revenue and operating income by fiscal quarter. Disney Quarterly Earnings Reports from Q2 FY 2020 through Q3 FY 2022. Ex. 90 (Prowse Decl.) at ¶15. Using this information, as shown below, total expenses for the DTC subsegment can be calculated by fiscal quarter.

Table 4 - Direct-To-Consumer Subsegment Total Expenses (in millions)											
	FY 2020			FY 2021				FY2022			Total
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	FY 2020 Q2 - FY 2022 Q3
Expenses	\$ 3,366	\$ 3,366	\$ 3,366	\$ 3,970	\$ 4,289	\$ 4,549	\$ 5,190	\$ 5,283	\$ 5,790	\$ 6,119	\$ 45,289

301. Using the percentage of expenses by category as shown in Table 3 above, total expenses by category for the DTC subsegment can be calculated. As shown below, between Q2 FY 2020 and Q3 FY 2022, Disney incurred approximately \$45.3 billion of expenses in the DTC subsegment.

Table 5 - Direct-To-Consumer Expenses by Category (in millions)											
	FY 2020			FY 2021				FY2022			Total
Expenses	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	FY 2020 Q2 - FY 2022 Q3
Operating Expenses (Programming and Production)	\$ 2,031	\$ 2,031	\$ 2,031	\$ 2,364	\$ 2,554	\$ 2,708	\$ 3,090	\$ 3,145	\$ 3,447	\$ 3,643	\$ 27,045
Operating Expenses (Other)	\$ 489	\$ 489	\$ 489	\$ 555	\$ 600	\$ 636	\$ 726	\$ 739	\$ 810	\$ 856	\$ 6,389
Depreciation and Amortization	\$ 65	\$ 65	\$ 65	\$ 73	\$ 78	\$ 83	\$ 95	\$ 97	\$ 106	\$ 112	\$ 838
SG&A and Other	\$ 782	\$ 782	\$ 782	\$ 978	\$ 1,057	\$ 1,121	\$ 1,279	\$ 1,302	\$ 1,427	\$ 1,508	\$ 11,016
Total Expenses	\$ 3,366	\$ 3,366	\$ 3,366	\$ 3,970	\$ 4,289	\$ 4,549	\$ 5,190	\$ 5,283	\$ 5,790	\$ 6,119	\$ 45,288

302. The primary types of expenses included in the DTC subsegment shown above are programming and production costs, technology support costs, operating labor and distribution costs. Ex. 90 (Prowse Decl.) at ¶17.

303. Disney's domestic investments in plant and equipment and labor or capital for the DI Products are discussed next.

304. Plant and equipment expenditures include at least the depreciation and amortization category shown above. From Q2 FY 2020 through Q3 FY 2022, Disney incurred approximately \$838 million in plant and equipment expenses within the DTC subsegment. See Table 5 above.

305. One allocation methodology that could be employed to isolate investments in the DI Product is an allocation based on subscribers. Disney tracks its worldwide subscriber counts for its various streaming platforms within the DTC subsegment. These streaming services include Hulu, Disney+, and ESPN+. Hulu is a streaming platform available in the U.S. only, so the subscriber counts for Hulu represent U.S. subscribers. Ex. 90 (Prowse Decl.) at ¶20. An allocation based on subscriber count allocates expenses made in proportion to the number of subscribers. Disney also tracks and reports revenue within the DTC subsegment on a per-subscriber basis.

306. Table 6 below shows the percentage of subscribers by quarter, that are subscribed to the DI Product, Hulu, as a percentage of total worldwide subscribers.

Table 6 - Subscriber Allocation for Hulu (in millions)										
	FY 2020			FY 2021				FY2022		
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Disney +	34	58	74	95	104	116	118	130	138	152
ESPN+	8	9	10	12	14	15	17	21	22	23
Hulu	32	36	37	39	42	43	44	45	46	46
Total	74	102	121	146	159	174	179	196	206	221
Hulu as a % of total subscribers	44%	35%	30%	27%	26%	25%	24%	23%	22%	21%

307. The percentages from Table 6 can be applied to plant and equipment expenses to allocate plant and equipment expenses to the DI Product. As shown in Table 7 below, from Q2 FY 2020 through Q3 FY 2022, publicly available information indicates that Disney incurred approximately \$224 million on qualifying domestic plant and equipment expenditures for the DI Product that practices the Asserted Patents. Ex. 90 (Prowse Decl.) at ¶22.

Table 7 - Plant and Equipment Investments allocated to DI Product (in millions)											
	FY 2020			FY 2021				FY2022			Total FY 2020 Q2 - FY 2022 Q3
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
Depreciation and Amortization	\$ 65	\$ 65	\$ 65	\$ 73	\$ 78	\$ 83	\$ 95	\$ 97	\$ 106	\$ 112	\$ 838
Hulu as a % of total subscribers	44%	35%	30%	27%	26%	25%	24%	23%	22%	21%	
Plant and Equipment allocated to DI Product	\$ 28	\$ 23	\$ 20	\$ 20	\$ 21	\$ 20	\$ 23	\$ 22	\$ 23	\$ 23	\$ 224

308. Labor or capital expenditures include at least the operating expense categories shown above. From Q2 FY 2020 through Q3 FY 2022, Disney incurred approximately \$33.4 billion in operating expenses within the DTC subsegment in the Americas. *Id.* at ¶23.

309. Table 6 above shows the percentage of subscribers by quarter, that are subscribed to the DI Product, Hulu, as a percentage of total worldwide subscribers.

310. The percentages from Table 6 can be applied to labor or capital expenses to allocate labor or capital expenses to the DI Product. As shown in Table 8 below, from Q2 FY 2020 through Q3 FY 2022, publicly available information indicates that Disney has incurred approximately \$8.9 billion on qualifying domestic labor or capital expenditures for the DI Product that practices the Asserted Patents. Ex. 90 (Prowse Decl.) at ¶26.

Table 8 - Labor or Capital Investments allocated to DI Product (in millions)											
	FY 2020			FY 2021				FY 2022			Total
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	FY 2020 Q2 - FY 2022 Q3
Operating Expenses (Programming and Production)	\$ 2,031	\$ 2,031	\$ 2,031	\$ 2,364	\$ 2,554	\$ 2,708	\$ 3,090	\$ 3,145	\$ 3,447	\$ 3,643	\$ 27,045
Operating Expenses (Other)	\$ 489	\$ 489	\$ 489	\$ 555	\$ 600	\$ 636	\$ 726	\$ 739	\$ 810	\$ 856	\$ 6,389
Total	\$ 2,520	\$ 2,520	\$ 2,520	\$ 2,919	\$ 3,154	\$ 3,345	\$ 3,816	\$ 3,885	\$ 4,257	\$ 4,499	\$ 33,434
Hulu as a % of total subscribers	44%	35%	30%	27%	26%	25%	24%	23%	22%	21%	
Labor or Capital allocated to DI Product	\$ 1,100	\$ 881	\$ 765	\$ 786	\$ 825	\$ 824	\$ 932	\$ 894	\$ 943	\$ 940	\$ 8,891

311. Disney’s domestic plant and equipment, and labor or capital investments related to the DI Product are significant for each of the Asserted Patents in the context of the marketplace, the industry in question, and in Disney’s respective business.

312. Disney’s domestic activities on the DI Product for each Asserted Patent are qualitatively significant in the context of the marketplace, the industry in question, and in Disney’s respective business.

313. As an initial matter, Hulu is a streaming platform available in the U.S. only. Ex. 90 (Prowse Decl.) at ¶29. Specifically, Robert Chapek, CEO of Disney, stated that Hulu has “no brand awareness outside of the U.S. and nor does Hulu have any content that’s been licensed to it internationally.” *Id.*

314. Further, the DI Product falls in Disney’s DTC subsegment which includes the DI Product, is important to Disney and is being heavily invested in by Disney. For example, Mr. Chapek stated “Given that our DTC business is key to the future growth of our company, we've restructured our media and entertainment businesses. By separating content creation from distribution, we've been able to streamline our processes and better align the organization towards these important strategic objectives as we accelerate our pivot to a DTC-first business model. We intend to build upon the success we've achieved thus far and look forward to sharing more of our plans with you at our upcoming Investor Day.” Ex. 90 (Prowse Decl.) at ¶30. Mr. Chapek also stated, “we are more committed than ever to investing in our businesses, in particular our DTC strategy, which we see as the key driver of significant long-term value for our company” and it is “very clear to us that new content adds subscribers. So I think you'll see a continued increase in investment in our direct-to-consumer platforms, and that will then fuel some of the growth.” Id. Further, Christine Mary McCarthy, Senior EVP and CFO of The Walt Disney Company stated, “[t]o put our total direct-to-consumer content investment outlook into perspective, we expect that for fiscal 2024, our global direct-to-consumer content expense on our P&L will be between \$14 billion and \$16 billion across Disney+, Hulu and ESPN+. This excludes Hulu Live's programming cost for networks on its digital MVPD service. This level of content investment demonstrates our commitment to pivoting and accelerating our strategy.” Ex. 90 (Prowse Decl.) at ¶30. Likewise, Mr. Chapek stated, “[a]s you know, we used the opportunity when the world pretty much shut down to catalyze our DTC plans. And as such, we've got a very deliberate and a very aggressive push towards direct-to-consumer. We've dramatically increased our investment in content; again, based on those powerhouse brands and franchises that we have. But we've now got an organization that's really built for this push

towards direct-to-consumer and that pivot so that we can guarantee that we've got enough content flow regardless of whatever distribution channel we choose to employ on a particular piece of content.” Ex. 90 (Prowse Decl.) at ¶30. Mr. Chapek also stated that Disney’s “direct-to-consumer business is the company's top priority and the key to the future of the company.” *Id.*

315. Not only is the DTC subsegment important to Disney, but the DI Product is an important part of Disney’s DTC subsegment. For example, Ms. McCarthy stated, “We think Hulu is a fabulous platform. When you think about Disney+, ESPN+ and Hulu, they really are discrete. They have the – I mean, there are discrete types of programming, there are discrete types of target audiences, demos that they're going after. But we look at the Hulu as being very high-quality general entertainment ... [I]t also has original programming and some other licensed content. But the new original programming that has been developed for and launched on Hulu has really resonated. But there's a lot of different programming on Hulu. That is original and only seeing on Hulu. So it's really part of our overall offering.” Ex. 90 (Prowse Decl.) at ¶31. Similarly, Kelly Campbell, President of Hulu, stated: “Today, Hulu is at its strongest position ever with a rare combination of continued rapid growth and a clear path toward profitability. In just 3 years, Hulu has more than doubled its number of paying subscribers and become the largest digital MVPD service in the U.S. We've achieved this remarkable growth by providing consumers with the best of TV, film, news and sports, live or on-demand, all-in-one cohesive experience. It's that unprecedented level of choice and flexibility that differentiates Hulu. Subscribers can choose from the ad-supported SVOD package, SVOD with no ads or Hulu+ Live TV, with the option to add premium networks to any of these plans. And we do this in a way that uniquely allows consumers to seamlessly move between products, depending on their changing habits.” *Id.*

316. Further, the importance of the DI Product to Disney’s DTC subsegment and to the marketplace is evidenced by the number of subscribers to the DI Product. Between Q2 FY 2020 and Q3 FY 2022, Hulu subscribers have ranged between 21% and 44% of Disney’s total subscribers in its DTC subsegment. Similarly, between Q2 FY 2020 and Q3 FY 2022, Hulu subscribers have increased every quarter, from approximately 32.1 million subscribers in Q2 FY 2020 to approximately 46.2 million subscribers in Q3 FY 2022. Further, Hulu’s U.S. market share in the Subscription Video-On-Demand (“SVOD”) services market was approximately 13% in 2020, behind only Netflix and Amazon Prime Video. Ex. 90 (Prowse Decl.) at ¶32. Likewise, in the first quarter of 2022, “JustWatch.com” reported Hulu as having the fifth largest market share in the SVOD services market in the United States with approximately 10% market share. *Id.*

317. Disney’s domestic activities resulting in domestic industry investments on the DI Product are qualitatively significant in the context of the marketplace, the industry in question, and in Disney’s business.

318. Disney’s domestic plant and equipment, and labor or capital expenditures related to the DI Product are quantitatively significant for each Asserted Patent.

319. First, Hulu is a streaming platform exclusively available in the U.S. Ex. 90 (Prowse Decl.) at ¶35. Disney’s domestic investments in the DI Product are quantitatively significant in that there are little to no foreign investments in the DI Product.

320. Second, within Disney’s DTC subsegment Disney’s domestic industry plant and equipment investments in the DI Product are significant when compared to Disney’s worldwide DTC subsegment plant and equipment expenses. For example, from Q2 FY 2020 through Q3 FY 2022, Disney’s qualifying domestic plant and equipment expenditures for each of the

Asserted Patents are 27% of Disney's total worldwide DTC subsegment plant and equipment expenditures. Ex. 90 (Prowse Decl.) at ¶36.

Table 9 - Quantitative Significance - Plant & Equipment	
Plant & Equipment Investments (in millions)	FY 2020 Q2 - FY 2022 Q3
DI Product	\$ 224
Total DTC subsegment - Worldwide	\$ 838
DI Product as a % of Total	27%

321. Disney's domestic industry labor or capital investments in the DI Product are significant when compared to Disney's worldwide DTC subsegment labor or capital expenses. For example, from Q2 FY 2020 through Q3 FY 2022, Disney's qualifying domestic labor or capital expenditures for each of the Asserted Patents are 27% of Disney's total worldwide DTC subsegment labor or capital expenditures. Ex. 90 (Prowse Decl.) at ¶37.

Table 10 - Quantitative Significance - Labor or Capital	
Labor or Capital Investments (in millions)	FY 2020 Q2 - FY 2022 Q3
DI Product	\$ 8,891
Total DTC subsegment - Worldwide	\$ 33,434
DI Product as a % of Total	27%

322. Disney's domestic investments in plant and equipment and domestic investments in labor or capital with respect to each of the Asserted Patents are qualitatively and quantitatively significant whether the entire period from FY2020 is considered or only the period since the effective date of the Disney License is considered. Ex. 90 (Prowse Decl.) at ¶¶38-39. DivX based its allegations on the available public information and expects to promptly supplement details of

Disney's relevant domestic investments by serving a subpoena during the early stage of discovery.

2. Element's Domestic Activities Satisfy the Economic Prong

323. Element is an American electronics company that produces and markets smart televisions in the United States. Incorporated in Delaware, Element was founded in 2007 by former Polaroid CEO Mike O'Shaughnessy. Confidential Ex. 96 (Declaration of Vladimir Kazhdan, ("Kazhdan Decl.") at ¶5).

324. Element started as an exclusive Circuit City consumer electronics brand. Confidential Ex. 96 (Kazhdan Decl.") at ¶5. In 2012, Element began exploring production in the United States with the mission of making great TVs with the latest technology and a family-friendly price tag. Confidential Ex. 96 ("Kazhdan Decl.") at ¶6. Beginning in 2013, Element set up its domestic factory in the Winnsboro, South Carolina facility ("the Winnsboro Facility"). Confidential Ex. 96 ("Kazhdan Decl.") at ¶6; *see* Ex. 99 (<https://www.youtube.com/watch?v=XlxFuowpBj0>); Ex. 98 (<https://www.youtube.com/watch?v=BKh3QnfuLrQ>). The following video stills depict Winnsboro, South Carolina with the exterior of the Winnsboro Facility; the Winnsboro Facility assembly floor; and Winnsboro Facility employees working on the assembly lines:



Ex. 99 (<https://www.youtube.com/watch?v=XlxFuowpBj0>) at 0:00, depicting the Element factory in Winnsboro.



Ex. 99 (<https://www.youtube.com/watch?v=XlxFuowpBj0>) at 0:47, depicting assembly lines in Element's Winnsboro factory.



Ex. 98 (<https://www.youtube.com/watch?v=BKh3QnfuLrQ>) at 1:23, depicting assembly lines in Element's Winnsboro factory.



Ex. 98 (<https://www.youtube.com/watch?v=BKh3QnfuLrQ>) at 1:39, depicting Element employees working on assembly lines in Element's Winnsboro factory.



Ex. 98 (<https://www.youtube.com/watch?v=BKh3QnfuLrQ>) at 1:49, depicting Element's employees in the Winnsboro factory.

325. Since being an exclusive Circuit City consumer electronics brand, Element has expanded sales of Element-branded televisions to Sears, Walmart, Target, Costco, Meijer, and other retailers. Confidential Ex. 96 ("Kazhdan Decl."), ¶5. For example, Walmart is one of Element's major customers. Confidential Ex. 96 ("Kazhdan Decl."), ¶¶5, 11. At its Winnsboro Facility, Element also produces "onn" branded TVs, a Walmart-owned exclusive brand; Walmart does not currently source from any supplier other than Element for "onn" branded televisions. Confidential Ex. 96 ("Kazhdan Decl.") at ¶¶5, 11; Ex. 98 (<https://www.youtube.com/watch?v=BKh3QnfuLrQ>). The following video still depicts an Element employee working on an Element television:



Ex. 98 (<https://www.youtube.com/watch?v=BKh3QnfuLrQ>) at 1:01, depicting operations in Element's Winnsboro factory.

326. Element's largest manufacturing operation is in its Winnsboro Facility, which is directed towards the assembly of its products. Confidential Ex. 96 ("Kazhdan Decl.") at ¶21. The Winnsboro Facility is the United States' only mass-production TV assembly factory, and Element is currently the only major television company that assembles TVs in the United States. Ex. 98 (<https://www.youtube.com/watch?v=BKh3QnfuLrQ>). The following video stills depict Element employees assembling and providing quality control on televisions at the Winnsboro Facility assembly floor and pallets of packaged Element televisions ready for distribution with markings on the box which read "Assembled in the U.S.A.":



Ex. 98 (<https://www.youtube.com/watch?v=BKh3QnfuLrQ>) at 1:11, depicting an Element employee in the Winnsboro factory.



Ex. 98 (<https://www.youtube.com/watch?v=BKh3QnfuLrQ>) at 1:15, depicting Element's employees in the Winnsboro factory.



Ex. 98 (<https://www.youtube.com/watch?v=BKh3QnfuLrQ>) at 1:03, depicting Element’s finished products ready for shipment.

327. Element has invested significant sums in bringing these products to the United States market, and has derived significant revenue from domestic sales of these products. Confidential Ex. 96 (“Kazhdan Decl.”) at ¶14. For example, the use of video streaming technology in Element Smart TVs is instrumental to Element’s sales. *Id.* Thus, the Element Smart TVs are very important to Element’s commercial success. *Id.*

328. As detailed in the declaration of Vladimir Kazhdan, Element’s co-president, Element has made, and continues to make, significant domestic investments in plant and equipment as well as labor or capital, in connection with the Element DI products. Confidential Ex. 96 (Kazhdan Decl.) at ¶¶21-25, 26-27. These investments have continued from at least as far back as the effective date of the license agreement between Element and DivX. *Id.*; *see also* Ex. 77 at 1 (showing the effective date). All of the Element Smart TVs assembled in the United States are assembled at the Winnsboro facility. Confidential Ex. 96 (Kazhdan Decl.) at ¶15.

Element is continuing to expand its assembly capabilities for the Element Smart TVs at the Winnsboro Facility and intends to continue incurring significant personnel and facility expenses relating to assembly of these products. Confidential Ex. 96 (“Kazhdan Decl.”) at ¶28. In addition, Element expects to expend significant sums providing post-commercialization technical support relating to these products. *Id.*

329. Pursuant to Commission Rule 210.12(a)(6), a domestic industry under subparts (A) and (B) of Section 337(a)(3) exists by virtue qualitatively and quantitatively significant expenditures in domestic plant and equipment, as well as labor or capital with respect to Element’s Domestic Industry products as further detailed in Confidential Ex. 96 (Kazhdan Decl.).

XI. RELIEF REQUESTED

330. WHEREFORE, by reason of the foregoing, Complainant respectfully requests that the United States International Trade Commission:

- a) Institute an investigation under Section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, with respect to violations by proposed Respondents of Section 337 arising from its sale for importation, importation, and/or sale after importation into the United States of the articles that infringe the Asserted Patents;
- b) Schedule and conduct a hearing on said unlawful acts;
- c) Find a violation of Section 337 based upon said unlawful acts;
- d) Issue a permanent limited exclusion order, under 19 U.S.C. § 1337(d)(1), specifically directed to the named Respondents and each of its subsidiaries and affiliates, excluding from entry into the United States all Accused Products that infringe one or more claims of the Asserted Patents;
- e) Issue a permanent cease and desist order, under 19 U.S.C. § 1337(1), directing Respondents to cease and desist from selling for importation into the United States,

importing, selling after importation into the United States, offering for sale, marketing, advertising, demonstrating sampling, warehousing inventory for distribution, selling, distributing, licensing, testing, providing technical support, use, or other related commercial activity involving imported Accused Products that infringe one or more of the claims of the Asserted Patents;

- f) Impose a bond upon Respondents who continue to import infringing articles, including infringing video processing devices, components thereof, and digital smart televisions containing the same, during the 60-day Presidential review period per 19 U.S.C. §1337(j); and
- g) Grant such other and further relief as the Commission deems just and proper based on the facts determined by the investigation and the authority of the Commission.

Dated: October 24, 2022

Respectfully submitted,



Matthew D. Powers

Paul T. Ehrlich

William P. Nelson

Natasha M. Saputo

Daniel M. Radke

Jerome Ma

TENSEGRITY LAW GROUP, LLP

555 Twin Dolphin Drive, Suite 650

Redwood Shores, CA 94065

Telephone: (650) 802-6000

Fascimile: (650) 802-6001

Email:

matthew.powers@tensegritylawgroup.com

paul.ehrlich@tensegritylawgroup.com

william.nelson@tensegritylawgroup.com

natasha.saputo@tensegritylawgroup.com

daniel.radke@tensegritylawgroup.com

jerome.ma@tensegritylawgroup.com

Azra M. Hadzimehmedovic

Ronald J. Pabis

Stephen K. Shahida

TENSEGRITY LAW GROUP, LLP

8260 Greensboro Dr., Suite 260

McLean, VA 22102

Telephone: (703) 940-5033

Facsimile: (650) 802-6001

Email:

azra@tensegritylawgroup.com

ron.pabis@tensegritylawgroup.com

stephen.shahida@tensegritylawgroup.com

Attorneys for Complainant,

DivX, LLC

VERIFICATION OF COMPLAINT

I, Noel Egnatios, declare, in accordance with 19 C.F.R. §§ 210.4 and 210.12(a), under penalty of perjury under the laws of the United States of America, that the following statements are true:

1. I am currently Chief Legal Officer for DivX, LLC (“DivX”). I am duly authorized to verify the foregoing Complaint.

To the best of my knowledge, information, and belief, formed after a reasonable inquiry, the complaint is not being presented for any improper purpose, such as to harass or to cause unnecessary delay or needless increase in the cost of the investigation.

2. To the best of my knowledge, information, and belief, formed after a reasonable inquiry, the claims, defenses, and other legal contentions in the complaint are warranted by existing law or by a non-frivolous argument for the extension, modification, or reversal of existing law or the establishment of new law.

The allegations and other factual contentions in the Complaint have evidentiary support or, if specifically so identified, are likely to have evidentiary support after a reasonable opportunity for further investigation or discovery.

Executed this 24th day of October, 2022



Noel Egnatios
Chief Legal Officer
DivX, LLC