United States Court of Appeals for the Federal Circuit

ADAPTIVE STREAMING INC., a Delaware Corporation,

Plaintiff-Appellant,

-v.-

NETFLIX, INC., a Delaware Corporation,

Defendant-Appellee.

On Appeal from the United States District Court for the Central District of California in No. 8:19-cv-01450-DOC-KES, Hon. David O. Carter, U.S. District Judge

REPLY BRIEF FOR PLAINTIFF-APPELLANT ADAPTIVE STREAMING INC.

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JULY 29, 2020

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

CERTIFICATE OF INTEREST

Case Number	2020-1310			
Short Case Caption	Adaptive Streaming Inc. v. Netflix, Inc.			
Filing Party/Entity	Adaptive Streaming Inc.			
Instructions: Complete each section of the form. In answering items 2 and 3, be specific as to which represented entities the answers apply; lack of specificity may result in non-compliance. Please enter only one item per box; attach additional pages as needed and check the relevant box. Counsel must immediately file an amended Certificate of Interest if information changes. Fed. Cir. R. 47.4(b).				
I certify the following information and any attached sheets are accurate and complete to the best of my knowledge.				
Date: <u>07/29/2020</u>	Signature: /Alexander E. Gasser/			

Name:

Alexander E. Gasser

1. Represented Entities. Fed. Cir. R. 47.4(a)(1).	2. Real Party in Interest. Fed. Cir. R. 47.4(a)(2).	3. Parent Corporations and Stockholders. Fed. Cir. R. 47.4(a)(3).	
Provide the full names of all entities represented by undersigned counsel in this case.	Provide the full names of all real parties in interest for the entities. Do not list the real parties if they are the same as the entities.	Provide the full names of all parent corporations for the entities and all publicly held companies that own 10% or more stock in the entities.	
☐ None/Not Applicable	☑ None/Not Applicable	☐ None/Not Applicable	
Adaptive Streaming Inc.		Wi-LAN Technologies Inc.	
		Wi-LAN Inc.	
		Quarterhill Inc.	
☐ Additional pages attached			

4. Legal Representatives. List all law firms, partners, and associates that (a) appeared for the entities in the originating court or agency or (b) are expected to appear in this court for the entities. Do not include those who have already entered an appearance in this court. Fed. Cir. R. 47.4(a)(4).			
✓ None/Not Applicable ☐ Additional pages attached			
5. Related Cases. Provide the case titles and numbers of any case known to be pending in this court or any other court or agency that will directly affect or be directly affected by this court's decision in the pending appeal. Do not include the originating case number(s) for this case. Fed. Cir. R. 47.4(a)(5). See also Fed. Cir. R. 47.5(b).			
✓ None/Not Applicable ☐ Additional pages attached			
6. Organizational Victims and Bankruptcy Cases . Provide any information required under Fed. R. App. P. 26.1(b) (organizational victims in criminal cases) and 26.1(c) (bankruptcy case debtors and trustees). Fed. Cir. R. 47.4(a)(6).			
✓ None/Not Applicable		Additiona	ll pages attached

TABLE OF CONTENTS

CERTIFICATE OF INTEREST FOR ADAPTIVE STREAMING INC	I
TABLE OF CONTENTS	IV
TABLE OF AUTHORITIES	V
INTRODUCTION	1
ARGUMENT	4
I. THE '305 PATENT'S ASSERTED CLAIMS ARE NARROWLY TAILORED TECHNOLOGICAL SOLUTIONS TO TECHNOLOGICAL PROBLEMS IN VIDEO BROADCAST PROCESSING SYSTEMS, NOT AN ABSTRACT IDEA UNDER ALICE STEP ONE	4
A. The Asserted Claims Are Not Limited to Collecting Information and Transcoding Data	4
B. Transcoding does not render the claims abstract	6
C. Transcoding is not a technical equivalent to "translation"	11
D. The Asserted Claims improve computer network technology	16
II. THE ASSERTED CLAIMS ARE INVENTIVE	23
III. THERE IS NO WAIVER	28
IV. CONCLUSION	30
CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME LIMITATION	S31

TABLE OF AUTHORITIES

Cases

Aatrix Software, Inc. v. Green Shades Software, Inc., 882 F.3d 1121 (Fed. Cir. 2018)	.24
Acosta-Huerta v. Estelle, 7 F.3d 139 (9 th Cir. 1992)	.28
Affinity Labs of Texas, LLC v. Amazon.com Inc., 838 F.3d 1266 (Fed. Cir. 2016)	.21
Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 573 U.S. 208 (2014)	.24
American Broadcasting Cos., Inc. v. Aereo, Inc., 573 U.S. 431 (2014)	.12
Data Engine Techs. LLC v. Google LLC, 906 F.3d 999 (Fed. Cir. 2018)	26
DDR Holdings, LLC v. Hotels.com, L.P., 773 F.3d 1245 (Fed. Cir. 2014)	.22
Diamond v. Diehr, 450 U.S. 175 (1981)	.27
Enfish, LLC v. Microsoft Corp., 822 F.3d 1327 (Fed. Cir. 2016)	.19
Finjan, Inc. v. Blue Coat Sys., Inc., 879 F.3d 1299 (Fed. Cir. 2018)	.18
Gribben v. United Parcel Service, Inc., 528 F.3d 1166 (9 th Cir. 2008)	.29
Hybritech Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367 (Fed. Cir. 1986)10-11,	21
KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398 (2007)	.27

<i>McRO</i> , Inc. v. Bandai Namco Games America Inc., 837 F.3d 1299 (Fed. Cir. 2016)
Microsoft Corp. v. I4I Ltd. P'ship, 564 U.S. 91 (2011)27
Novo Transforma Techs., LLC v. Sprint Spectrum, L.P., No. CV 14-612-RGA, 2015 WL 5156526 (D. Del. Sept. 2, 2015)8
<i>Orbcomm Inc. v. Calamp Corp.</i> , 215 F. Supp.3d 499 (E.D. Va. 2016)8
Realtime Data, LLC v. Carbonite, Inc., No. 6:17-cv-00121, 2017 WL 4693969 (E.D. Tex. Sept. 20, 2017)9
RecogniCorp, LLC v. Nintendo Co., Ltd., 855 F.3d 1322 (Fed. Cir. 2017)
Sycamore IP Holdings LLC v. AT&T Corp., 294 F. Supp. 3d 620 (E.D. Tex. 2018)
Synopsys, Inc. v. Mentor Graphics Corp., 839 F.3d 1138 (Fed. Cir. 2016)
Uniloc USA, Inc. v. LG Elecs. USA, Inc., 957 F.3d 1303 (Fed. Cir. 2020)
Visual Memory LLC v. NVIDIA Corp., 867 F.3d 1253 (Fed. Cir. 2017)
Youtoo Techs. LLC v. Twitter Inc., C.A. No. 3:16-CV-00764-N, 2016 WL 7118922 (N.D. Tex. Nov. 10, 2016)
Statutes
35 U.S.C. § 112

TABLE OF ABBREVIATIONS

Abbreviation	Full Term
'305 patent	U.S. Patent No. 7,047,305
Alice	Alice Corp. Pty. Ltd v. CLS Bank Int'l, 573 U.S. 208 (2014)
ASI or Appellant	Adaptive Streaming Inc.
Asserted Claims	Independent Claim 39 and Dependent Claims 40 and 42 of the '305 patent
Complaint	Complaint for Patent Infringement filed on July 29, 2019 by ASI
Netflix or Appellee	Netflix, Inc.
Br.	Opening Brief filed on April 16, 2020 by Adaptive Streaming Inc.
Орр.	Opposition Brief of Appellee filed on June 17, 2020 by Netflix Inc.

INTRODUCTION

Broadcast video streaming in 1999 was restricted by client device requirements and subjected to inconsistent and ever-changing bandwidth conditions. As a result, uninterrupted video streaming to numerous different client devices with varying processing and display requirements was simply not possible.

The '305 patent and the Asserted Claims developed an elegant solution, allowing for the first time, streaming from a single video input to multiple devices, which required multiple differently formatted outputs. Along with many other limitations, the Asserted Claims require a transcoding module with access to a very particular data structure used to determine parameters of output compression formats, capable of transcoding at least one incoming video signal into multiple output signals, the automatic selection of the video format more suitable for the client device(s), wherein any one of the multiple output signals can be selected to be presented to the client device, and providing for the dynamic and changing selection of which format to utilize at a given moment, to account for bandwidth changes experienced by the device's network conditions. Br. 39-41. This solution not only rendered irrelevant both the format of the original input video as well as the formatting requirements of the client devices, but also enabled streaming among multiple different devices, thus allowing for efficient network operation. Br. 41.

In determining that the Asserted Claims are abstract and thus unpatentable, the District Court offered no analysis whatsoever, nor showed any appreciation that the patented inventions pioneered *video broadcast streaming*. The court concluded simply that the claims are directed to the abstract idea of "collecting [general] information and transcoding it into multiple formats." Apx0005. In its response brief, Netflix tries to provide what the District Court did not – an analysis of why the '305 patent and the Asserted Claims are purportedly abstract. But Netflix's attempts to fill in the blanks ignores the claims, the specification, basic tenets of patent law, and section 101 jurisprudence.

Netflix's primary argument rests on the conclusion that transcoding – a single partial claim limitation read to the exclusion of the surrounding language and the specification – dooms the entire patent. Opp. 22. Not only does Netflix ignore the specification and the claim language, which limits the claimed transcoding to a particular implementation in a particular environment, it also ignores case law recognizing that *compression is necessarily implemented into computer systems*, improves accuracy and speed of communications and is thus, patentable. *Sycamore IP Holdings LLC v. AT&T Corp.*, 294 F. Supp. 3d 620, 652 (E.D. Tex. 2018) (Bryson J.).

Yet rather than accepting that both *video streaming and transcoding are* fundamentally rooted in computer technology, cannot be performed manually by

humans, and are thus technological solutions to technological problems under *Alice* step one, Netflix equates transcoding with translation (which can be and is performed outside of computer technology). Tellingly, Netflix's creative license is "supported" by copyright – not patent– cases and miscellaneous, irrelevant and manufactured "examples" about spinning radio dials to tune to United Nations translation broadcasts. Accordingly, Netflix amplifies the District Court's error in characterizing the claimed invention in an overly simplistic manner inconsistent with the claims, the specification and the prosecution history, all of which demonstrate that the claims improve specific computer network technology and allow uninterrupted video streaming to multiple client devices with different format requirements under changing network conditions.

Netflix attempts to steer clear of *Alice* step 2 in a similar fashion, parroting the District Court that the claims add nothing more to compression and therefore are not inventive. But pronouncing individual claim limitations as not inventive is hardly persuasive, particularly when read at the exclusion of the surrounding language and the specification. Furthermore, the extensive prosecution history, the foundational nature of the '305 patent, and the success of Vidiator, the first commercial embodiment of the claims, are all weathervanes of inventiveness, and not seriously rebutted by Netflix. *Data Engine Techs. LLC v. Google LLC*, 906 F.3d 999, 1011 (Fed. Cir. 2018) (industry awards and recognition are relevant to

determining whether claimed subject-matter is directed to a technical solution and improve computer functionality).

Indeed, Netflix's arguments, untethered to the technology, the specification or the claims and relying instead on fantastical "analogies" tacitly concede that Netflix does not and cannot clearly and convincingly establish invalidity under section 101. Accordingly, the District Court's judgement should be reversed.

ARGUMENT

- I. THE '305 PATENT'S ASSERTED CLAIMS ARE NARROWLY TAILORED TECHNOLOGICAL SOLUTIONS TO TECHNOLOGICAL PROBLEMS IN VIDEO BROADCAST PROCESSING SYSTEMS, NOT AN ABSTRACT IDEA UNDER ALICE STEP ONE
 - A. The Asserted Claims Are Not Limited to Collecting Information and Transcoding Data

The District Court found – incorrectly – that the Asserted Claims "are directed to the abstract idea of collecting information and transcoding it into multiple formats." Appx0005. But, as the opening brief ("Br.") makes clear, the District Court's assessment was not only glib, it was patently incorrect. Br. 33-35.

ASI went painstakingly through various limitations of the Asserted Claims demonstrating that the claims, read as a whole (and in light of the specification) are directed to a specifically tailored and narrow technological solution - a multifaceted video broadcast system used to process and ultimately distribute a single video input in a very particular manner to multiple devices with different

requirements and varying adjustable bandwidth capabilities - not the general abstract idea of collecting "information and transcoding it into multiple formats." See, e.g., Appx0137-138, 0140, 0144, 0156-158. In fact, as the claims demonstrate, and as ASI pointed out, the claims require a number of specific limitations including: a *broadcast server* with an image retrieval portion to *retrieve* a video signal in a first format – not miscellaneous information, as the District Court found - as well as a data structure to determine parameters for second compression formats, and a transcoding module with access to the data structure, wherein the transcoding module is capable of transcoding the *incoming video* signal from the first format into multiple compressed output video signals based, in part, on parameters – not generic transcoding, as the District Court found. Furthermore, the Asserted Claims provide for multiple compressed output video signals more suitable for at least one device, which video signals can be selected to be presented to a device, as well as additional limitations relating to accessing different compression formats from different devices and the dynamic selection of second compression formats in response to changes in bandwidth conditions. Br. 33.

Indeed, as ASI showed (Br. 12-17), the claims include *a multitude of very specific limitations* describing a broadcast system wherein an input video stream in one format is processed into multiple output video streams in other formats (the so-

called "one to many" technique) with *client devices selecting for themselves* which format to utilize (claim 40) and enabling *the dynamic selection of different formats during content viewing, in response to changing bandwidth conditions* (claim 42). The '305 patent allowed, for the first time, uninterrupted and automated streaming of video content through a broadcast system to multiple client devices, themselves requiring different formats. Accordingly, video streaming services were born.

Netflix knows it cannot prevail at *Alice* step one if the claims are read as a whole in light of the specification, as the law requires. *See Data Engine*, 906 F.3d at 1011. Thus, Netflix intentionally avoids the claimed invention, the specification, and the language of the Asserted Claims in their entirety, instead relying on three broad – and incorrect - points: (1) transcoding is an abstract idea; (2) the addition of multiple formats is nothing more than "translation" and does not alter this analysis; and (3) the claims are not a technological improvement. Netflix is wrong on all counts.

B. Transcoding does not render the claims abstract.

Netflix doubles down on the District Court's error, baldly asserting that "transcoding is an abstract idea." Opp. 22. Thus, concludes Netflix, the claims are, by extension, abstract. Opp. 22. But including transcoding in a patent claim does not and cannot, on its own, control patent eligibility, particularly where, as

here there are multiple claim limitations and a detailed specification that further define the metes and bounds of the invention. *See McRO, Inc. v. Bandai Namco Games America Inc.*, 837 F.3d 1299, 1313 (Fed. Cir. 2016) (courts must be careful of oversimplifying claims by looking at them generally, failing to account for the specific requirements).

Netflix's assertion is not only wrong, it's intellectually disingenuous. First, neither *RecogniCorp* nor the other cases cited by Netflix stand for this oversimplified proposition. In fact, this Court in RecogniCorp, LLC v. Nintendo Co., Ltd., found the claims unpatentable because they merely reflected, without more, the encoding and decoding of image data. 855 F.3d 1322, 1326 (Fed. Cir. 2017). The sum metes and bounds of the claims in *RecogniCorp* "starts with data, [the user] codes that data using 'at least one multiplication operation,' and ends with a new form of data" – nothing more. *Id.* at 1327. Accordingly, the claims in RecogniCorp – unlike the Asserted Claims in the '305 patent – covered only the encoding and decoding of image data, which, understandably rendered the claims abstract. See id. Likewise, the patent claims in Youtoo Techs. LLC v. Twitter Inc., covered a method of receiving video data, transcoding the data, and transferring the video data for distribution. 2016 WL 7118922 at *2 (N.D. Tex. Nov. 10, 2016). The claims in *Youtoo* were invalid under section 101 *not* because they referenced transcoding, as Netflix suggests, but because they simply claimed a

process that was already performed prior to the invention (e.g. uploading video) and there was nothing in the claims directed to improving computer capabilities. See id. at *1-2 (the claims facilitate "uploading video in a certain format, a process that was previously possible without the patents at issue"). The patents in Orbcomm Inc. v. Calamp Corp., 215 F. Supp.3d 499, 506 (E.D. Va. 2016) and Novo Transforma Techs., LLC v. Sprint Spectrum, L.P., No. CV 14-612-RGA, 2015 WL 5156526, at *1-3 (D. Del. Sept. 2, 2015) suffered a similar fate. Although the claimed technology in those cases related to translation and not transcoding, it was deemed abstract because, in part, the act was performed manually before implementing it on computers and there was nothing rooting the claims in computer technology. See Orbcomm, 215 F. Supp.3d at *1-3 (automatically translating wireless messages from non-industry format into industry-format "merely recites the existing practice of translation applied to wireless messages"); Novo, 2015 WL 4146526 at *1 (specification disclosed claims were "the electronic equivalent to registered mail" and nothing in the claims was rooted in computer technology).

ASI does not dispute that merely transcoding, on its own and as specified in *RecogniCorp*, can be patent ineligible. But the '305 patent is not limited to standard, known transcoding, as Netflix claims. Nor were the '305 patent claims performed manually prior to patenting, nor could they be. In contrast, the '305

patent enabled, for the first time, the receipt of a single formatted video input, the transcoding of that single formatted video input into many differently formatted outputs based on specific data structures, such as lookup tables, and delivery of the appropriately formatted video to multiple devices requiring different formats, which devices can themselves dynamically select different formats based on changing bandwidth conditions during viewing. Thus, for the first time, uninterrupted streaming of video content through a broadcast system to multiple devices with different format requirements and accounting for changing bandwidth requirements dynamically and on the fly was not only achieved, it was patentable. See Realtime Data, LLC v. Carbonite, Inc., 2017 WL 4693969 at *7 (E.D. Tex. Sept. 20, 2017) (claims utilizing data compression and decompression that enable improved data storage, retrieval, and bandwidth found patentable and not abstract under 101); McRo, Inc., 837 F.3d at 1316 (the automation of a specific process for animating characters using particular information and techniques is patentable).¹

¹ Netflix disputes that the District Court's assessment of the claims was too simplistic (Opp. 23-24) before inexplicably launching into several miscellaneous case citations, the relevance of which is unclear. Although Netflix generally characterizes several inventions found to be abstract in a number of cases, Netflix's characterizations are irrelevant where this Court, unlike the District Court, undertook a detailed analysis of each invention in light of the specification before rendering its opinion. Furthermore, as this Court cautions, courts must be careful oversimplifying claims by looking at them generally, failing to account for specific requirements. *See McRO*, *Inc*, 837 F.3d at 1313. Netflix justifies the District Court's simplistic assessment of the claims by citing back to ASI's allegations made in its Complaint. Opp. 24. But summarized allegations in ASI's Complaint

Netflix also, inexplicably, tries to claim Judge Bryson's opinion in Sycamore *IP*, as supportive of Netflix's – not ASI's – position. Opp. 25. Yet Judge Bryson clearly confirmed that the presence of compression – or transcoding – in a claim does not, by itself, force an invalidity finding, as Netflix leads this Court to believe. 294 F. Supp. 3d at 652 ("compression protocol is not fundamentally different from other computer-driven programs that *improve the accuracy*, *speed* and security of communications such as error correction programs, encryption protocols . . . all of which have been held to survive section 101 challenges without serious doubts as to their patentability.") (collecting cases). Rather than addressing Judge Bryson's statement or the collection of cases, which are inapposite to Netflix's position that transcoding equates with unpatentability, Netflix alleges that Sycamore IP stands for the proposition that there must be a specific and recited encoding scheme in the claims to render it patentable. Opp. 25-26. But Judge Bryson in Sycamore IP evaluated the patent at issue in relation to the claims and did not make such a broad holding. Furthermore, the law has never required that all implementation details be recited in the claims as a prerequisite to patent-eligibility. See, e.g., Hybritech Inc. v. Monoclonal Antibodies, Inc., 802

do not and cannot replace an analysis of the claim language and limitations viewed in light of the specification, which must occur in a 101 analysis. *Data Engine*, 906 F.3d at 1011.

F.2d 1367, 1384 (Fed. Cir. 1986) ("[A] patent need not teach, and preferably omits, what is well known in the art."). All that is required is that the specification contain sufficient detail to inform a person skilled in the art how to practice the claimed invention. *See* 35 U.S.C. § 112. Netflix's concerted effort to avoid the claims as a whole, focusing instead on a single claim limitation plucked out of context and without considering the specification, the surrounding language, or other claim limitations is nothing short of intentional and ultimately flawed. To the extent that Netflix takes issue with the alleged lack of detail in the claims, this is appropriately addressed under section 112, not 101; Netflix's approach is misleading and legally incorrect.

C. Transcoding is not a technical equivalent to "translation"

Netflix not only concludes - incorrectly - that transcoding unilaterally renders the Asserted Claims abstract, but Netflix also asserts that transcoding is nothing more than "translation" and thus, like translation, could be accomplished manually, untethered to computer technology. Opp. 21. Netflix's pretzel logic is not only intellectually disingenuous, it is borderline deceitful.

As an initial leap, Netflix unilaterally equates "transcoding" with "translation." Opp. 21. But Netflix's equivalency argument is neither grounded in technology nor the understanding of one skilled in the art at time of the invention. *See, e.g., Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1139 (Fed. Cir.

2016) (Whether a patent presents a technical improvement is determined from the point of view of a person of ordinary skill in the art.). Netflix's authority for this surprising proposition is *American Broadcasting Cos., Inc. v. Aereo, Inc.*, 573 U.S. 431, 436 (2014). But *American Broadcasting* is not a patent case, it is a copyright case about the right to perform copyrighted works and Netflix's sole basis for the equivalency of translation and transcoding is the Supreme Court's general (and non-technical) assessment of the "transcoder" utilized in the system transmitting the copyrighted works. This does not equate the technical term transcoding as used in the '305 patent with the colloquial understanding of translation, nor is there any evidence to indicate one skilled in the art would equivalently define the claim term "transcoding" as "translation" when reading the claims in light of the specification.²

With its unilateral (and false) equivalency between transcoding and translation in hand, Netflix continues its bid for abstractness. Netflix asserts that because the act of translating existed pre-computer, the Asserted Claims have been

² Netflix purports to cite to a patent application incorporated by reference into the '305 specification as support. But the 'specification states that the application is incorporated for its mobile computing device disclosure, not for any representations about translation. Opp. 22; Appx0066 (5:20-21); Appx0337. Furthermore, the cited application is not supportive of Netflix's position – it does not equate translation with transcoding and its reference to "translation" is in a storied "Background Section" discussing the Tower of Babel, made outside of any technical discussion. Appx0337. To allege, as Netflix has done, that the terms are recognized as technical equivalents, is not only unsupported, it is false.

(allegedly) performed manually for centuries. According to Netflix, the Asserted Claims fail to address a problem arising in a particular technological context or offer a solution rooted in technology and, thus, by extension, the Asserted Claims are abstract. Opp. 26-27; *see also Supra* at 6-8 (discussion re *YouToo*, *Novo*, etc.).

Tellingly, Netflix's "evidence" that the '305 patented invention is allegedly equivalent to manual "translation" and thus is not patentable is not grounded in technology, the specification, the prosecution history, prior art references, the knowledge of one skilled in the art, or any other acceptable form of intrinsic – or even extrinsic – evidence. Instead Netflix's "evidence" lies in manufactured, bizarre, and irrelevant examples of "translation" ranging from the broadcast of United Nations interpreter services in several languages to live presidential addresses, all in an attempt to render the Asserted Claims equivalent and thus nontechnical. Opp. 27. Netflix's sleight of hand does not and cannot change the fact that the disclosure and the Asserted Claims are grounded in technology and can only be practiced on computers – not manually, as Netflix suggests. Indeed, Netflix's examples are not analogous at all. Manually spinning a dial to tune into a radio broadcast in French or German and determining whether one wants to listen to a live presidential address on a radio or a television, switching between the two, is not equivalent to a broadcast server receiving a single formatted video input, utilizing a data structure to determine compression formats for the video input,

conducting transcoding through a module where the single formatted video input is transcoded into multiple compressed output video signals in different formats, which include more suitable formats for a client device, and wherein the device automatically selects the appropriately formatted output and can change its selection dynamically in response to changing bandwidth availability. Br. 7-10; Appx0151-0153.

Further, this Court has rejected Netflix's approach and arguments, characterizing them as misdirected and irrelevant to the patent eligibility issue. For example, just as Netflix argues that pre-existing human translation renders the asserted claims patent ineligible, Google argued that pre-existing human use of tabs rendered ineligible the claimed use of notebook tabs in three-dimensional electronic spreadsheets. This Court found such arguments have no place in patent eligibility analyses:

Google avers that humans have long used tabs to organize information. It cites tabbed notebooks, binder dividers, file folders, and sticky Post-it notes as well-known examples of organizing information using tabs. We agree that tabs existed outside the context of electronic spreadsheets prior to the claimed invention. It is not enough, however, to merely trace the invention to some real-world analogy. The eligibility question is not whether anyone has ever used tabs to organize information. That question is reserved for §§ 102 and 103. The question of abstraction is whether the claim is "directed to" the abstract idea itself. . . We must consider the claim as a whole to determine whether the claim is directed to an abstract idea or something

more. Google fails to appreciate the functional improvement achieved by the specifically recited notebook tabs in the claimed methods.

Data Engine, 906 F.3d at 1011 (emphasis added). Netflix's over-simplification of the claims, failure to consider the claims as a whole, and failure to appreciate the technological improvements provided by the claims are fatal to its arguments.

Netflix's simplistic argument, grounded in the 1950's, also lends zero credibility to the extensive examination by the Patent Office, the technological expertise of the Examiner, the multiple technical prior art references that were evaluated and used as bases for rejections before finally the Examiner, satisfied, issued a Notice of Allowance. Appx0028, ¶ 44. If the technology were as simple as Netflix makes it out to be, it begs the question why the Examiner would have delved into highly complex prior art references and issued United States patents relating to video transmission, encoding, intermix, decoding, switching, generation of data streams, and video output. Br. 14-17. Indeed, Netflix would have this Court believe that the Examiner could have reasonably issued a single, final rejection citing general broadcasting techniques used 50 years prior to the '305 patent application. In sum, the inclusion of a transcoding module in the claims does not and cannot sentence the claims to unpatentability, particularly where, as here, there remains a very specific and narrow application of the transcoding module, as well as a host of other claim limitations which, when read in the context of the disclosure, present a narrow, tailored technological solution to video broadcasting.

D. The Asserted Claims improve computer network technology.

The District Court concluded, with no analysis, that the focus of the Asserted Claims is "not an 'improvement in computers" and, by extension, the invention did not improve computer functionality. Appx0005. However, as ASI pointed out in depth in its brief, this finding is not only unsupported, it is simply untrue. Br. 38-46. While cellular phones and computers existed in 1999, the varying format requirements of each device made streaming a single video input to multiple devices requiring different formats impossible. Br. 40. Additionally, assuming that the correctly formatted video was even available, bandwidth obstacles and dynamically changing bandwidth availability made streaming a video fraught with problems, and buffering freezes interfered with the viewing experience. Br. 40-41. The '305 patent determined a way around these obstacles with an elegant solution which includes utilizing a data structure to determine the output parameters for the client devices, a transcoding module with access to the data structure to transcode an incoming video signal from one format into multiple compressed output video signals in second compression formats, from which the more suitable format for the client device could be selected. The Asserted Claims further allowed for the client device to dynamically select which compressed

format should be presented at a given moment, to account for bandwidth changes, thus allowing for an uninterrupted streaming experience. Br. 41-43. This solution not only rendered irrelevant both the format of the original input video as well as the formatting requirements of the client devices, but also enabled streaming to large numbers of disparate devices under varying bandwidth conditions. Br. 41. ASI's opening brief explained how the patent explicitly accomplished its various technical improvements. (*See, e.g.,* Br. 41-43, including citations to Appx0066-0068, 6:33-34, 6:63-10:3; Appx0068, 9:10-12; Appx0070, 14:9-18, 42; Appx0071, 15:29-33, 16:63-65; Appx0072, 17:12-18:35; Appx0074, 22:1-66; *See also*, Appx0022-0026, ¶¶ 22-25, 27-29, 32-34.)

It was – and is – simply *impossible* to accomplish video streaming manually; thus the Asserted Claims are *necessarily* a technological invention meant to address the nature of a technological problem rooted in computer technology and not a mere automation to known process, as Netflix asserts. Br. 38 *et. seq.*; *Data Engine*, 906 F.3d at 1008. Netflix cannot plausibly dispute this through its irrelevant translation examples discussed above, which only prove ASI's point. Opp. 28. While translation may occur manually, transcoding and distribution of multiple formatted video streams from one video input in accordance with the claims *requires* computers.

Netflix additionally picks apart individual claim limitations without viewing the claims as a whole in light of the specification. But this methodology is wholly rejected by this Court, which requires claims to be viewed as a whole in light of the disclosure. See Finjan, Inc. v. Blue Coat Sys., Inc., 879 F.3d 1299, 1034 (Fed. Cir. 2018); Visual Memory LLC v. NVIDIA Corp., 867 F.3d 1253, 1259 (Fed. Cir. 2017). In this vein, Netflix raises issue that the Asserted Claims do not mention streaming (Opp. 29). Yet the patent itself references "streaming" or a "stream" of data, including video data no less than one hundred and ninety-two times. Furthermore, the term appears in a number of claims. The abstract, specification, and claims of the '305 patent also ubiquitously refer to "real time video information," an acknowledged description of video streaming. Notably, the first listed and bolded technical category that the U.S. Patent Office used to classify the patent is classification no. 709/231, specifically directed to computer data streaming:

231 Computer-to-computer data streaming:

This subclass is indented under subclass 230. Subject matter further comprising means or steps for processing streamed data transferred between computers wherein the data are transferred more or less continuously.

SEE OR SEARCH THIS CLASS, SUBCLASS:

219, for data transfer between a remote file server and a requesting computer where the data may be streamed.

https://www.uspto.gov/web/patents/classification/uspc709/defs709.htm#C709S231 000. See also, Appx0042. Accordingly, the patent itself is undoubtedly directed to streaming video data, and for Netflix to suggest otherwise is disingenuous.

Both Netflix and the District Court fault the patent for not disclosing how to transcode from one format to another. Opp. 29. Yet the patent explains in great detail how and what parameters (e.g. frame rate, screen size, and supported video format, to name a few) are used to transcode video signals received in a first format into multiple compressed different formats and how second compression format(s) that are *more suitable* for the client device are automatically determined. Br. 44-45. Netflix, like the District Court, minimizes the importance of these claimed parameters, discarding them as merely "illustrative." Opp. 26. But the claimed data structure containing parameters corresponding to different client devices is central to the invention. Additionally, lookup tables or parameters may not be so easily discarded as Netflix suggests. In fact, this Court has found patents relating *exclusively* to lookup tables non-abstract under a 101 analysis. *See Enfish*, LLC v. Microsoft Corp., 822 F.3d 1327, 1336-37 (Fed. Cir. 2016) (finding that, in view of the specification, the claimed lookup table functioned differently than a

database and was not abstract); see also Visual Memory, 867 F.3d at 1259-60 (claims were limited to certain types of data stored and thus patent eligible).

Netflix claims that the patent's alleged failure to disclose a particular mechanism of transcoding renders it abstract. Opp. 29. Yet the claimed transcoding module's ability to provide video in multiple formats (which has access to a data structure usable to determine the output parameters for these multiple devices) improves the functioning of both the broadcast system and the devices by allowing video streaming to occur irrespective of low or changing bandwidth or the inability to accept high quality video by the device. Furthermore, no authority in this or any other court requires that every facet of an invention be disclosed in the patent. Indeed, whether or not enough detail is disclosed falls under enablement and the evaluation is from the view of one of ordinary skill in the art. 35 U.S.C. § 112; Visual Memory, 867 F.3d at 1261 ("[W]hether a patent specification teaches an ordinarily skilled artisan how to implement the claimed invention presents an enablement issue under 35 U.S.C. § 112, not an eligibility issue under § 101."). There is simply no evidence in this record concerning what one skilled in the art would – or would not – understand by reading the claims in light of the specification.

Netflix's argument and the District Court's order seemingly finding that the failure to disclose *how* to transcode forces a finding of abstractness is premature,

rendered under the wrong legal inquiry, and not supported by any evidence. *See Hybritech*, 802 F.2d at 1384 ("[A] patent need not teach, and preferably omits, what is well known in the art."). Netflix cites *Affinity Labs of Texas*, *LLC v*. *Amazon.com Inc.*, 838 F.3d 1266, 1269 (Fed. Cir. 2016) for the proposition that a patent that does not disclose a particular mechanism is not a technological improvement and is therefore abstract. Opp. 29. But *Affinity Labs* made no such holding and the decision is limited to the generalized patent claim language at issue in that case. Accordingly, evaluating the patent claims in *Affinity Labs* in view of the specification, this Court found that the claims merely added conventional computer components³ to well-known business practices, rather than improved the function of a computer, deeming the claims abstract. *Id.* at 1269.

The '305 patent does not suffer the same fate – if anything, the '305 patent enjoys technical specificity. There are 21 detailed figures and more than 21 columns imparting dense technical descriptions and disclosures concerning how

³ The generalized claim language at issue in *Affinity* included "a media managing system" that "maintains a library of content," a "collection of instructions stored by a processor," and "a network based delivery resource configured to respond to the request." *Id.* at 1267-68. These terms differ significantly from the specific and non-conventional limitations central to the Asserted Claims, such as transcoding modules with access to data structures usable to determine second compression formats, wherein such transcoding modules can transcode multiple compressed output video signals, and wherein any one of these multiple output video signals can be selected to be presented to a client device. *See* Appx0077, 27:15-33.

the claims improve video streaming from a broadcast system and between devices without buffering or stalling.⁴ See DDR Holdings, LLC v. Hotels.com, L.P., 773 F.3d 1245, 1257 (Fed. Cir. 2014) (claims were "necessarily rooted in computer technology" that "overcome a problem specifically arising in the realm of computer networks" and thus patent eligible under Alice step 1); Sycamore, 294 F. Supp. 3d at 652 (where compression protocol improves the accuracy, speed, security of communications 101 challenges may be defeated). Furthermore, any argument by Netflix that the claim language itself must disclose the benefits is a red herring; the specification, industry success and industry reliance on the '305 patented technologies unequivocally demonstrate its contribution and improvements to video streaming. See Uniloc USA, Inc. v. LG Elecs. USA, Inc., 957 F.3d 1303, 1309 (Fed. Cir. 2020) ("Claims need not articulate the advantages of the claimed combinations to be eligible.").

the invention. Appx0065, 4:13-15.

⁴ Netflix's brief is replete with overly simplistic characterizations of the invention to the exclusion of the specification. For example, Netflix faults the specification for disclosing subsampling using filtering "without further explanation of what that means or how it might be done" (Opp. 7) yet ignores the same paragraph of the disclosure describing the sampler block in detail. Appx0067, 7:15-43; *see e.g.*, Appx0068, 9:64-10:3; Appx0072, 17:4-12. Netflix also presents Fig. 2C as if it is it the sum total of the claimed invention (Opp. 6), ignoring that the figure is a simplified diagram illustrating a single component of

II. THE ASSERTED CLAIMS ARE INVENTIVE

The District Court erred when it invalidated the '305 patent under step two of the *Alice* framework, concluding, inaccurately and with no analysis, that compression is commonly known in the art and thus there was nothing significant added to save the claims. Appx0009. But the Asserted Claims are not limited to "compression." Netflix quotes two lines from the 24-column disclosure which Netflix claims "concedes that compression was 'functionality common[ly] known in the art." Opp. 33. Netflix's summary is self-serving and disingenuous. The lines, which are a partial illustration of a preferred embodiment, indicate that:

which transfers the audio through a sequence of blocks 266 including the audio compression 263, stream casting 264, and network interface 265. Each of these blocks carry out functionality common known in the art as well as described above and throughout the present specification. The personal broadcasting server generally receives video data in a first format and converts such video data into a second format for transmission over to a client device, which is coupled to the network. Here, the video data in the first format cannot effectively be used by the client device...

Appx0068 (10:16-27). While the specification discloses that audio compression, stream casting and network interfaces are known in the art, *it does not reduce the claimed inventions to compression*. Indeed, if the claims were in fact limited to known methods of compression, they would not have issued. *RecogniCorp*, 855 F.3d at 1326.

As ASI painstakingly showed, the claims are not limited to compression and include *a multitude of very specific limitations* including a broadcast system wherein a single input video stream in one format is processed into multiple output video streams in other formats based on parameters within a data structure, wherein any of the multiple output streams can be presented to a client device, with *client devices selecting for themselves* which format to utilize (claim 40) and *the dynamic selection of different formats during content viewing, in response to changing bandwidth conditions* (claim 42).

The Asserted Claims meet the test for an inventive concept because they (1) are confined to a new and useful application at the time of the invention (*e.g.*, for the first time allowing for uninterrupted streaming of a single input video in one format through a broadcast system to multiple devices requiring different formats under varying network conditions), and (2) were meaningfully limited, improving upon an existing technology or field. *See Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 573 U.S. 208, 215, 221-225 (2014); *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1127-28 (Fed. Cir. 2018).

Yet despite factual allegations and evidence in the record demonstrating: (1) the benefits provided by the challenged claims, particularly in view of the prior art; (2) the foundational nature of the '305 patent in the video streaming industry; and (3) the success of Vidiator, the first commercial embodiment of the claimed

invention, Netflix remains unjustifiably dismissive. With the waive of a hand, Netflix discards the extensive discussion of the prior art references, the distinctions between the prior art and the patented invention, and the resulting basis of patentability found by the Examiner (Br. 13-18, 53-56), concluding, simply, that certain features considered alone and without the benefit of the surrounding claims or disclosure, are simply "not inventive". Opp. 33 (citing no technical authority). With an almost audible sigh Netflix rejects the status of the '305 patent as a foundational patent in the field of streaming content, stating that the large number of times the '305 patent has been cited has no bearing on whether the claims are inventive. Opp. 33-34 (citing no authority whatsoever). And with an eye roll Netflix posits that the commercial success enjoyed by Vidiator, an early commercial embodiment of the invention, does not demonstrate patent eligibility. Opp. 34. Yet commercial success and industry recognition serves as evidence that the technology underlying the asserted patent is far from well-understood, routine or conventional, and supports that the patent claims are directed to a technological solution to a technological problem. This Court has accordingly considered industry awards and recognition in its patent eligibility analysis to support finding that claimed subject-matter was directed to a technical solution and improved computer functionality:

The Tab Patents solved this known technological problem in computers in a particular way—by providing

a highly intuitive, user-friendly interface with familiar notebook tabs for navigating the three-dimensional worksheet environment. The improvement allowed computers, for the first time, to provide rapid access to and processing of information in different spreadsheets, as well as easy navigation in three-dimensional spreadsheets. The invention was applauded by the industry for improving computers' functionality as a tool able to instantly access all parts of complex three-dimensional electronic spreadsheets. Numerous contemporaneous articles attributed the improved three-dimensional spreadsheets' success to its notebook tab feature.

Data Engine, 906 F.3d at 1008 (emphasis added).

Netflix lobs similar treatment on each of the Asserted Claims individually, asserting only that individual claim elements taken out of context and read to the exclusion of the specification are simply "not inventive." Opp. 34 et. seq. Once again, Netflix takes creative license, offloading a slew of inapplicable and self-serving examples ranging from individuals changing television networks to view a presidential address, or selecting closed captioning or low and high beam headlights. Opp. 39-40. These examples, which rely on the in-person, manual selection and fickle choices of individual people concerning what they want to watch, listen to, or how they drive, are simply not relevant to the Asserted Claims, which are grounded in video streaming technology and can only be practiced, in accordance with the claims, on computer networks. See Data Engine, 906 F.3d at 1011, and above discussion in section I.C.

Netflix's cursory discard of the Asserted Claims and each of ASI's arguments exposes two fundamental flaws in its reasoning:

First, even if individual elements of the Asserted Claims are known, this does not exclude them from patentability, particularly where there is a new combination of conventional elements or, as here, there are unconventional elements to the claims. *See Diamond v. Diehr*, 450 U.S. 175, 188 (1981) (even if "all the constituents of [a] combination were well known and in common use" at the time of the invention, "a new combination" of those elements "may be patentable" under 101."); *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) ("inventions in most, if not all instances rely on building blocks long since uncovered.").

Second, it is Netflix's burden to establish invalidity by clear and convincing evidence. No amount of dismissiveness and deflection on the part of Netflix can transfer that burden to ASI. *See Microsoft Corp. v. 141 Ltd. P'ship*, 564 U.S. 91, 95 (2011) (holding that the burden of establishing invalidity lies with the challenger and must be proved by clear and convincing evidence).

Accordingly, Netflix's burden requires much more than simply alleging unpatentability and reducing the entire claimed invention down to a few limitations, considered alone, at the exclusion of surrounding limitations, the

detailed technical specification, extensive prosecution history, and other facts in the record. Netflix has not and cannot meet its burden.

III. THERE IS NO WAIVER

At the crux of this appeal is a single issue – the subject matter patentability of the asserted '305 patent claims under section 101 of the Patent Act. But rather than focusing on the claimed inventions in view of the specification, the allegations made in ASI's Complaint, and the law of subject matter patentability, Netflix throws up smokescreens claiming waiver. Waiver is not at issue here and Netflix's cited cases are misleading.

First, it is undisputed that the District Court did not undertake or even mention claim construction in its order rendering the '305 patent invalid on a motion to dismiss at the pleading stage. Appx0001-0010. ASI in the record below (Appx0157-0158) and in its opening brief to this Court (Br. 21) advanced that claim construction should be conducted for certain terms prior to a 101 decision, particularly where Netflix itself asserted the terms were vague. Rather than addressing ASI's argument, Netflix cries waiver, claiming that ASI cannot raise claim construction on appeal because it merely cites to the record below. Opp. 18-19. But waiver is not an escape hatch and Netflix's authority is misleading. In *Acosta-Huerta v. Estelle*, 7 F.3d 139, 144 (9th Cir. 1992), cited by Netflix, the court refused to determine whether or not a *habeus corpus* petitioner was entitled to a

new trial because the petitioner made the request in passing, unsupported by argument to the appellate court. But a request for a new trial is a fundamental issue on appeal, just as whether a patent meets the subject matter patentability requirements under section 101. ASI very clearly appeals the invalidity decision under section 101 and addresses the District Court's errors in its opening brief; accordingly, there is no waiver.⁵

Netflix also claims ASI waived argument concerning the inventiveness of asserted dependent claims 40 and 42 and certain limitations in claim 39. Opp. 36-37. But the District Court issued no claim-by-claim invalidity judgement when it rendered a complete dismissal of ASI's Complaint alleging infringement of the Asserted Claims, without leave to amend. Appx.0009-0010. ASI, in turn, appealed the entire District Court decision which invalidated as a whole the '305 patent and the Asserted Claims. Again, Netflix's authority is inapposite. Opp. 36-37. See Gribben v. United Parcel Service, Inc., 528 F.3d 1166, 1171 (9th Cir. 2008) (finding that the lower court's exclusion of evidence was appropriate where the

⁵ Netflix also raises issue with ASI's citation to ASI's opposition filed in the District Court, claiming that certain facts and arguments included in the opposition to the lower court and cited to in ASI's opening brief are waived because they are not explicitly made to this Court. Opp. 19-20. Not only does this argument hold no weight, it is also irrelevant where the citations appear in the background factual section and are meant to provide context for this case. Br. 21-22. ASI's opening brief sets forth its reasoning that the District Court erred in finding the asserted claims invalid; Netflix's waiver arguments are not only flawed, they are distracting.

excluded evidence supported a claim that the plaintiff had not, in fact, alleged in his complaint).

IV. CONCLUSION

For the foregoing reasons, the Asserted Clams of the '305 patent claim patent eligible subject matter and this case should be remanded.

Date July 29, 2020

Respectfully submitted:

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UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

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