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ROVI GUIDES, INC. (f/k/a GEMSTAR-TV
GUIDE INTERNATIONAL), and
Counterdefendants APTIV DIGITAL, INC. and
STARSIGHT TELECAST, INC.

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
OAKLAND DIVISION

NETFLIX, INC.,

Plaintiff,

v.

ROVI CORPORATION, ROVI
TECHNOLOGIES CORPORATION,
ROVI GUIDES, INC. (f/k/a GEMSTAR-
TV GUIDE INTERNATIONAL), and
UNITED VIDEO PROPERTIES, INC.

Defendants.

CASE NO. 4:11-cv-06591-PJH

**ROVI'S OPPOSITION TO NETFLIX'S
MOTION FOR SUMMARY JUDGMENT
OF INVALIDITY UNDER 35 U.S.C. § 101**

Judge: Hon. Phyllis J. Hamilton
Hearing Date: March 25, 2015
Time: 9:00 a.m.
Location: Courtroom 3 – 3rd Floor

ROVI CORPORATION, ROVI
TECHNOLOGIES CORPORATION,
ROVI GUIDES, INC. (f/k/a GEMSTAR-
TV GUIDE INTERNATIONAL),
UNITED VIDEO PROPERTIES, INC.,
APTIV DIGITAL, INC., and STARSIGHT
TELECAST, INC.

Counterclaimants,

v.

NETFLIX, INC.,

Counterdefendant.

NETFLIX, INC.,

Counterclaimant,

v.

ROVI CORPORATION, UNITED VIDEO
PROPERTIES, INC., APTIV DIGITAL,
INC., AND STARSIGHT TELECAST,
INC.

Counterdefendants.

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1 **I. INTRODUCTION**

2 The question here is how should § 101 be applied to patents in the Information Age? To
 3 answer that question, it is worth considering a patent from the Industrial Age discussed by the
 4 Supreme Court during oral argument in *Alice v. CLS*—Eli Whitney’s patent on the cotton gin.
 5 Netflix’s misapplication of 30 years of Supreme Court jurisprudence would invalidate even this
 6 well-known patent under § 101. How? Netflix ignores the Supreme Court’s 30-year mandate
 7 that claims under § 101 must be viewed “as a whole.” *Alice v. CLS*, 134 S. Ct. 2347, 2355 n.3
 8 (2014) (applying “general rule that patent claims ‘must be considered as a whole’”); *Mayo v.*
 9 *Prometheus Labs.*, 132 S. Ct. 1289, 1298 (2012) (requiring all steps in the claim to be considered
 10 “as an ordered combination”); *Bilski v. Kappos*, 561 U.S. 593, 611 (2010) (explaining “the need
 11 to consider the invention as a whole”); *Diamond v. Diehr*, 450 U.S. 175, 188 (1981) (“[C]laims
 12 must be considered as a whole. It is inappropriate to dissect the claims into old and new
 13 elements.”).¹ Instead, Netflix distorts Rovi’s patents by cherry picking one aspect of each
 14 invention, mischaracterizing it as abstract, and reading out other crucial limitations. By
 15 dissecting patents like Netflix does, most inventions from the Industrial and Information Ages—
 16 even the patent on the cotton gin or a hypothetical computerized version thereof—would be
 17 declared abstract, generic, and invalid under § 101.

18 The Supreme Court captured this precise problem during oral arguments in *Alice*, asking
 19 “why isn’t doing it through a computer not enough? . . . was the cotton gin not an invention
 20 because it just means you’re doing through a machine what people used to do by hand? . . . why is
 21 a computer any different in that respect?”² Importantly, as adopted in the *Alice* opinion, Justice
 22 Breyer answered this question by following 30 years of Supreme Court precedent:

23 [A] computer improvement that, in fact, leads to an improvement in harvesting
 24 cotton is an ***improvement through a computer of technology***, so it qualifies....³

25 For more than 30 years, the Supreme Court has followed this maxim, consistently holding
 26 that, when viewed as a whole, a computer-implemented claim that is directed to “any new and

27 ¹ Internal citations omitted and emphasis added in bold italics herein, unless otherwise noted.

28 ² *Alice*, RT 9:12-15 (Mar. 31, 2014).

³ *Id.* at 47:10-13.

1 useful improvement,” like Rovi’s asserted claims, is rightly patentable. 35 U.S.C. § 101
 2 (“Whoever invents or discovers **any new and useful process . . . or any new and useful**
 3 **improvement thereof**, may obtain a patent therefor. . . .”); *Alice*, 134 S. Ct. at 2359-60 (explaining
 4 that “many computer-implemented claims are formally addressed to patent-eligible subject
 5 matter” and those which “**improve the functioning of the computer itself**” or “**any other**
 6 **technology**” are patentable); *Diehr*, 450 U.S. at 187-88 (computerized method using well-known
 7 mathematical formula applied to old, known process for curing rubber held patentable because
 8 “they **improved an existing technological process**, not because they were implemented on a
 9 computer”); *Parker v. Flook*, 437 U.S. 584, 590-91 (1978) (explaining the “proper analysis” as
 10 **whether “[t]he process itself, not merely the mathematical algorithm,” is “new and useful”**);
 11 *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972) (“If there is to be invention from such a discovery,
 12 it must come from the **application of the law of nature to a new and useful end.**”).

13 Applying these longstanding Supreme Court principles, an increasing number of courts
 14 after *Alice* are validating patents similar to Rovi’s patents-in-suit for claiming new and useful
 15 improvements to existing technologies. In *DDR*, the Federal Circuit rejected the accused
 16 infringer’s attempt to read out limitations and mischaracterize the claimed invention as merely
 17 “syndicated commerce on the computer using the Internet.” *DDR v. Hotels.com*, No. 13-1505,
 18 2014 U.S. App. LEXIS 22902, at *25 (Fed. Cir. Dec. 5, 2014). Instead, the Federal Circuit
 19 affirmed the patentability of a computerized method for generating a composite web page
 20 because, viewed as a whole, “**the claimed solution is necessarily rooted in computer technology**
 21 **in order to overcome a problem specifically arising in the realm of computer networks.**” *Id.* at
 22 *26; *see also* Ex. 29, PTO Updated 2014 Interim Eligibility Guidance at 4-6 (Jan. 27, 2015)
 23 (adopting *DDR* patent as official example of patentable subject matter under *Alice* steps 1 and 2).

24 True to *Alice* and its predecessors, Judge Pfaelzer in the Central District of California
 25 found Caltech’s patents *not* abstract despite purely functional claiming. “Caltech’s patents
 26 **improve a computer’s functionality by applying concepts unique to computing** (like using a
 27 linear transform operation to encode data) **to solve a problem unique to computing** (data
 28 corruption due to noise).” *Caltech v. Hughes Commc’ns*, No. 13-7245, 2014 U.S. Dist. LEXIS

156763, at *62 (C.D. Cal. Nov. 3, 2014). Judge Pfaelzer emphasized that “patents should encourage inventors to create new computing solutions to today’s computing problems.” *Id.*; see also Ex. 30, *Ameranth v. Genesis Gaming Sol’n*, No. 11-189, Dkt. 288 at 10 (C.D. Cal. Jan. 2, 2015) (Guilford, J.) (denying summary judgment under § 101 for claims directed to computerized gaming applications because “Defendants have not accounted for either (1) the majority of the elements of the challenged claims, or (2) the claims as a whole”); Ex. 27, *Wavetronix v. Iteris*, No. 14-970, Dkt. 50 at 12-13 (W.D. Tex. Jan. 22, 2015) (finding claimed method for dilemma zone protection “**significantly improved upon existing technological processes**” and “does not claim the mathematical formula itself, the concept of the dilemma zone, or an unimproved application of either”); Ex. 28, *Smartflash v. Apple*, No. 13-447, Dkt. 423 at 18, 20 (E.D. Tex. Jan. 21, 2015) (denying summary judgment under § 101 because claimed method and system for controlling access and paying for digital content “**improve the functioning of the computer itself** by providing protection for proprietary digital content”).⁴ Rovi’s patents claim exactly these types of improvements to existing technologies. Unlike the age-old business practices found unpatentable in *Alice* and *Bilski* or the mathematical calculations found unpatentable in *Flook* and *Benson*, Rovi’s patents-in-suit are directed to improvements in media-on-demand and interactive program guide technologies.

Based purely on attorney argument and not fact, Netflix mischaracterizes Rovi’s ’709, ’762, ’962, and ’929 patents as nothing more than non-technological and generic computer-

⁴ See also *Fairfield Indus. v. Wireless Seismic*, No. 14-2972, 2014 U.S. Dist. LEXIS 176599, at **14-15 (S.D. Tex. Dec. 23, 2014) (denying motion to dismiss because “claims outline a specific method of data transmission that is a **new and useful application** of a generic relay system”); *Card Verification v. Citigroup*, No. 13-6339, 2014 U.S. Dist. LEXIS 137577, at *14 (N.D. Ill. Sep. 29, 2014) (denying motion to dismiss because claimed method for securing online transaction, despite purely functional claiming, “plausibly recites a patent-eligible application of the abstract idea of verifying a transaction” by reciting “a protocol for making the communication system itself more secure”); *Helios Software v. SpectorSoft*, No. 12-081, 2014 U.S. Dist. LEXIS 135379, at *54 (D. Del. Sep. 18, 2014) (finding claimed method for remotely monitoring internet chat session patentable because steps viewed as a whole use “**a computer to play a significant part in permitting the claimed method to be performed**”); *Autoform Eng’g GMBH v. Eng’g Tech. Assocs.*, No. 10-14141, 2014 U.S. Dist. LEXIS 123684, at **7-9 (E.D. Mich. Sep. 5, 2014) (denying summary judgment under § 101 because, viewed as a whole, claimed method for creating addendum zones in tools “covers more than a mere abstract idea” by “includ[ing] numerous limitations that narrow the scope of the patent”).

implemented methods previously performed by humans using paper TV Guides, and the '906 patent as nothing more than bookmarking across multiple devices. Netflix ignores the claim language, ignores the unique problems solved by the inventions, and fails altogether to meet its burden of proving that each of the 44 asserted claims are invalid by clear and convincing evidence.⁵ By contrast, Rovi presents substantial evidence of validity through intrinsic evidence and expert declarations of Drs. Michael Shamos and Dan Schonfeld, demonstrating that, at a minimum, genuine issues of material fact exist that preclude summary judgment under § 101.

This Court should reject Netflix's invitation to blindly follow the "trend" of courts overextending *Alice* by abandoning decades of Supreme Court precedent. Netflix Br. 2, 5, 6. This troubling trend is now coming home to roost, resulting in a rising number of appeals of invalidated patents from the misapplication of *Alice*.⁶ *Alice* cautions courts to "tread carefully" and conduct a "meaningful" two-step inquiry with computer-implemented inventions. *Alice* at 2354. Otherwise, *Alice* warns that too broad of an interpretation of unpatentable abstract ideas could "swallow all of patent law." *Id.* Thus, a meaningful analysis under *Alice* and 30 years of Supreme Court jurisprudence mandates denial of Netflix's motion for summary judgment under § 101.

II. NETFLIX APPLIES THE WRONG LEGAL STANDARDS

A. Netflix Ignores the Summary Judgment Standard under Fed. R. Civ. P. 56

Netflix completely disregards its burden under the summary judgment standard. Rovi's patents-in-suit are presumed valid under 35 U.S.C. § 282. To invalidate these patents at summary judgment, Netflix "must submit such clear and convincing evidence of facts underlying invalidity that no reasonable jury could find otherwise." *SRAM Corp. v. AD-II Eng'g*, 465 F.3d 1351, 1357 (Fed. Cir. 2006). Summary judgment is only appropriate when no genuine issue exists as to any material fact and the moving party is entitled to judgment as a matter of law. FED. R. CIV. P.

⁵ Rovi asserts claims 1, 2, 3, 6, 8, 10, 11 of U.S. Patent No. 7,103,906; claims 1, 6, 13, 15, 17 of 6,898,762; claims 13-20 of 7,065,709; claims 1, 3, 5, 6, 9, 10, 13, 14, 16, 18, 19, 23, 24, 26, 27 of 7,974,962; and claims 11, 12, 13, 14, 16, 17, 18, 19, 20 of 7,945,929, attached as Ex. 11-15. All exhibits cited herein are to the Declaration of Amol A. Parikh.

⁶ See Ex. 1-10, Notices of Appeals of 10 recent judgments invalidating computer-implemented claims after *Alice*. The number of appeals is expected to continue rising in view of the spate of § 101 challenges after *Alice*.

56(a). The Court must view the evidence in the light most favorable to Rovi, as the non-moving party, and resolve all doubts and inferences, like questions of fact and claim construction, in Rovi's favor. *Anderson v. Liberty Lobby*, 477 U.S. 242, 255 (1986). While invalidity under § 101 is a question of law, the § 101 inquiry is "rife with underlying factual issues." *Ultramercial v. Hulu*, 722 F.3d 1335, 1339 (Fed. Cir. 2013), *vacated sub nom. on other grounds WildTangent v. Ultramercial*, 134 S. Ct. 2870 (2014); *Teva Pharms. USA v. Sandoz*, 574 U.S. ___, 6-7 (Jan. 20, 2015) (similarly finding claim construction an issue of law with underlying factual issues). Factual issues include (1) "whether the patent embraces a scientific principle or abstract idea," (2) whether the claims recite "routine, well-understood, or conventional" steps, (3) "any inquiry into the scope of preemption—how much of the field is 'tied up' by the claim," and (4) whether the claimed inventions can be performed in the human mind or using pencil and paper. *Id.*; *TQP Dev. v. Intuit*, No. 12-180, 2014 U.S. Dist. LEXIS 20077, at *17 (E.D. Tex. Feb. 19, 2014) ("While the defendants assert that the encryption and decryption process can be performed in the human mind . . . TQP has offered evidence to the contrary, in the form of an expert's declaration . . . *That factual dispute by itself is enough to foreclose the entry of summary judgment in the defendants' favor. . . .*"). Because these facts are disputed and Netflix has not adduced any evidence, much less the required clear and convincing evidence, to invalidate the 44 asserted claims under § 101, summary judgment is inappropriate here as a matter of law. *Ex. 30, Ameranth* at 8 ("[T]he Court must consider all elements of each challenged claim" under § 101).

B. Netflix Relies on a "Dissection" Approach Rejected by the Supreme Court

As discussed above, Netflix violates the Supreme Court's 30-year mandate that a claim under § 101 must be viewed "as a whole." *See, e.g.*, Netflix Br. 6, 16, 18 (incorrectly focusing on individual elements instead of whole claim); Appendix to Netflix Br. (literally dissecting each claim into different colors). *Diehr* emphasized that "[t]his is particularly true in a process claim because a new combination of steps in a process may be patentable even though all the constituents of the combination were well known and in common use before the combination was made." *Diehr* at 188-189. Netflix's reliance on *McRO v. Sega of America*, No. 12-10327, 2014 U.S. Dist. LEXIS 135267 (C.D. Cal. Sep. 22, 2014) (Wu, J.), is misplaced because *McRO* applied

the dissection approach rejected by *Diehr*. See also *Caltech* at **33-34 (criticizing *McRO* on same grounds). Netflix's piecemeal approach invites the Court to engage in clear legal error and therefore should be denied as a matter of law.⁷

III. THE '906 PATENT IS VALID UNDER A CORRECT APPLICATION OF ALICE

A. Step 1 – The Purpose is to Pause and Resume Delivery of Media in Different Formats on Different Devices

Alice follows the two-step test for patent eligibility set forth in *Mayo*. *Mayo* at 1294. In step 1, this Court must identify whether each claim is directed to an abstract idea. To do this, the Court must understand what the patentee invented. *Alice* at 2355. “[T]he characterization of the claim is essential to the § 101 inquiry.” *Caltech* at **41-42 (following *Alice* and the *Diehr* majority’s “correct approach of asking what the claim was trying to achieve, instead of examining the point of novelty”). Netflix distorts the ’906 patent based on one isolated step of “bookmarking” and reads out other crucial elements.⁸ Netflix Br. 15. At the time of the claimed invention in 1999, originally developed and owned by IBM, the growth in broadband, media-on-demand services, and customer devices created a new technological problem. Ex. 11, ’906 patent, 2:5-20. The ’906 specification explains that “[c]urrent systems lack functionality for accessing specific digital media on a first access device . . . and subsequently continuing the viewing session by allowing access of the same digital media from a second access device.” *Id.* at 2:20-24. For example, someone watching a video on-demand on television at home could not pause the video, go to the airport, and resume watching the video on a different device with different capabilities, such as a laptop. The inventors of the ’906 patent solved this problem by inventing a novel process of delivering media in different formats to different devices over

⁷ Summary judgment should also be denied because Netflix failed to disclose its § 101 defense in its invalidity contentions served on October 31, 2014, which only included one boilerplate sentence on § 101 for each patent. See Ex. 16, Netflix’s Invalidity Contentions 43. Netflix therefore waived its § 101 defense. In *Ferguson Beauregard/Logic Controls v. Mega Sys.*, 350 F.3d 1327, 1347 (Fed. Cir. 2003) (affirming district court’s refusal to consider prior art defendant failed to disclose prior to trial, even though plaintiff learned of prior art from other sources, including defendants’ petition for reexamination and interrogatory responses); *MediaTek v. Freescale Semiconductor*, No. 11- 5341, 2014 U.S. Dist. LEXIS 22442, at *9-11 (N.D. Cal. Feb. 21, 2014) (Rogers, J.) (striking § 112 defense based on boilerplate disclosures in defendant’s invalidity contentions under L. Pat. R. 3-3(d)).

⁸ In the ITC action, Netflix initially alleged the ’906 patent was invalid under § 101 but later abandoned this defense after close of discovery.

different communications links. In so doing, the invention records a bookmark specifying a position in the media where delivery to the first device was interrupted and where delivery of the media may be resumed in a different format on a second device with different capabilities. *Id.* at claims 1 and 10; Shamos Decl. ¶ 22. Claims 1 and 6, among others, reflect this technological improvement to existing media-on-demand systems:⁹

1. A method for providing configurable access to media in a media-on-demand system comprising the steps of:

delivering the media to a first client device through a first communications link, wherein the media is configured in a format compatible with identified device properties of said first client device and said first client device is associated with a first user;

recording a bookmark specifying a position in the media; and

delivering the media to a second client device through a second communications link, said delivery to said second client device beginning at said position specified by said recorded bookmark, wherein the media is configured in a format compatible with identified device properties of said second client device and said second client device also is associated with said first user.

6. The method according claim 3, further comprising: storing the media in selected ones of a plurality of media-on-demand servers, each MODS in said plurality of media-on-demand servers storing the media in at least one format compatible with a selected device type; selecting a MODS for delivering the media to said first client device, said selected MODS having stored thereon the media in a format compatible with said first client device; and delivering from said selected MODS the media in a format compatible with said first client device.

Unlike the non-technological, abstract ideas directed to intermediated settlement of financial transactions in *Alice*, hedging financial risk in *Bilski*, and using advertising as a currency in *Ultramercial*, the purpose of the '906 patent is neither abstract nor directed to an age-old business practice. Instead, the '906 patent is directed to a technological solution to a problem arising in the realm of media-on-demand services.

B. Step 2 – Viewed as a Whole, the '906 Patent Recites an Inventive Concept that Improves Pause and Resume Technology in Media-on-Demand Systems

If the claims somehow are deemed abstract at step 1, the next step is to “search for an inventive concept—*i.e.*, an element or combination of elements that is sufficient to ensure that the

⁹ Netflix’s conclusory assertion that claim 1 is representative of the 7 asserted claims of the '906 patent is insufficient to satisfy its burden of proving that each claim is invalid by clear and convincing evidence under § 101. Each asserted claim recites distinctive applications of the claimed pause-and-resume technology in independent claims 1 and 10. For example, claim 2 requires “identifying device properties . . . prior to commencing delivery of the media”; claims 3, 6, and 8 require the media to be stored and delivered to one or a plurality of MODS; claims 10 and 11 require “interrupting said delivery of said media.” '906 patent, 12:62-14:50.

1 patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.”
 2 *Alice* at 2355. Viewing each claim as a whole and in Rovi’s favor as the non-moving party, the
 3 elements of each claim combine together to provide this “inventive concept.” *Id.* at 2357.

4 **1. The Claims Are Tied to a Unique and Particular Media-on-Demand** 5 **Server**

6 In searching for an inventive concept, courts may apply the machine-or-transformation
 7 test to determine whether a method “is tied to a particular machine” or “transforms a particular
 8 article into a different state or thing.” *Bilski* at 593 (holding that machine-or-transformation test
 9 is not the definitive test for § 101 patentability, but “is a useful and important clue, an
 10 investigative tool”). The machine must “play a significant part in permitting the claimed method
 11 to be performed.” *SiRF Tech., Inc. v. Int’l Trade Comm’n*, 601 F.3d 1319, 1332-33 (Fed. Cir.
 12 2010) (holding claimed method patentable because it “could not be performed without the use of
 13 a GPS receiver”). By contrast, “the mere recitation of a generic computer cannot transform a
 14 patent-ineligible abstract idea into a patent-eligible invention.” *Alice* at 2358. Here, all asserted
 15 claims of the ’906 patent are tied to unique and particular machines—a “media-on-demand server
 16 (MODS),” “first client device,” and “second client device”—that play a significant part in the
 17 claimed method. For example, claim 1 recites a “media-on-demand system,” which “provides
 18 users with the ability to receive delivered media (such as a movie) across a network in a client
 19 device **through a communications link to a media-on-demand server.**” Shamos Decl. ¶ 32; *see*
 20 *also* ITC Witness Statement of Dr. Michael Shamos (Jan. 29, 2013);¹⁰ claims 3, 6, 8 (reciting
 21 specialized steps performed by “media-on-demand server (MODS)”). Thus, without the MODS,
 22 the media could not be “configured in a format compatible with identified device properties” of
 23 the first and second client devices and delivered in those different formats to the first and second
 24 client devices. Nor could a “bookmark” be “record[ed] specifying a position in the media.” *Id.*
 25 Without the claimed “first client device” and “second client device,” it would be impossible to

26 ¹⁰ The ITC Final Initial Determination (“ID”), Commission Opinion, and Witness Statement of
 27 Dr. Shamos filed in *Certain Products Containing Interactive Program Guide and Parental*
 28 *Controls Technology* (337-TA-845) were transferred to the Court and are located on public disk
 11, file number 512554-857365-72, public disk 11, file number 523802-886887, and confidential
 disk 4. *See* Dkt. 82, Official ITC record transferred to this Court.

1 pause and resume media *across different devices* with different formats. Unlike the *Ultramercial*
 2 advertising claims that recite “no particular concrete or tangible form,” the asserted claims of the
 3 ’906 patent expressly recite unique and particular machines that are integral to performance of the
 4 claimed method. *Ultramercial v. Hulu*, No.2010-1544, 2014 U.S. App. LEXIS 21633 at *10
 5 (Fed. Cir. Nov. 14, 2014). As such, the ’906 patent does not claim a mathematical formula itself,
 6 the concept of bookmarking, or an unimproved application of either.

7 **2. The Computer-Implemented Steps Do Not Operate in a Normal,** 8 **Expected Manner**

9 In finding an inventive concept, the Federal Circuit in *DDR* found the “claimed solution is
 10 necessarily rooted in technology” because the computer-implemented elements and steps did not
 11 “operat[e] in its normal, expected manner” and were “not broadly and generically” claimed.
 12 *DDR* at **26, 30-31. Unlike the generic computer functions of storage, tracking, and transmittal
 13 in *Alice* and *Bilski*, the “media-on-demand server (MODS),” “first client device,” and “second
 14 client device” are specially designed to pause and resume media across different devices in
 15 different formats. Like the “outsource provider” that did not “operat[e] in a normal, expected
 16 manner” in *DDR*, the asserted claims require the MODS to perform special functions, including
 17 (1) “delivering the media” to first and second client devices through respective “first and second
 18 communications links,” (2) configuring the “media . . . in a format compatible with identified
 19 device properties of” said first and second client devices, (3) “recording a bookmark specifying a
 20 position in the media,” and (4) delivering the media in “a position specified by said recorded
 21 bookmark.” Ex. 11, ’906 patent, claim 1; *see also* claims 6 and 8 (requiring MODS to be
 22 specially programmed to “stor[e] the media in at least one format compatible with a selected
 23 device type”). Similarly, the “first client device” and “second client device” do not function as
 24 generic computers in the asserted claims. Instead, the asserted claims require the delivery of
 25 configured media to the first and second client devices through respective “first” and “second
 26 communications links.” *Id.* at claims 1-8. Dr. Shamos explains that “from a technical perspective
 27 . . . the required first and second communications links are not a generic or conventional
 28 arrangement,” but instead “a particular arrangement that enables the media-on-demand server to

perform the specialized function of delivering media to different types of devices depending on the media format the device is capable of receiving.” Shamos Decl. ¶ 33. Rather than “function[ing] solely as an obvious mechanism for permitting a solution to be achieved more quickly,” the recited machines are specially designed to carry out the purpose of the claimed invention. *SiRF* at 1333. Dr. Shamos explains that “[b]ecause claim 1 requires numerous material objects and specialized machinery, claim 1 cannot possibly be performed in the human mind or using pen and paper.” Shamos Decl. ¶ 38. These particular machines meaningfully limit the scope of the asserted claims to provide an “inventive concept” and do not wholly preempt all practical applications of delivering media to different devices with different capabilities. In fact, Netflix appears to concede that the patents-in-suit do not pose preemption concerns as it identifies no evidence that any of the asserted claims wholly preempt any abstract idea.

3. The Bookmarking Step Transforms the Media File

The step of “recording a bookmark specifying a position in the media” meaningfully limits the ’906 patent claims. In *Card Verification*, the court concluded that “the claims may be sufficiently limited by the plausible transformation that occurs when the randomly generated-tag is added to the piece of confidential information.” *Card Verification* at *13. Although “[t]ypically, transforming data from one form to another does not qualify as the kind of transformation regarded as an important indicator of patent eligibility,” the court found that “the claimed invention goes beyond manipulating, reorganizing, or collecting data by actually adding a new subset of numbers or characters to the data, thereby fundamentally altering the original confidential information.” *Id.* Likewise here, the step of “recording a bookmark specifying a position in the media” goes beyond “manipulating, reorganizing, or collecting data,” by creating or altering a database entry of numbers or characters to record the paused location specified in the media file. Particularly when viewing the claim as a whole, “the step of ‘recording a bookmark specifying a position in the media’ requires a fundamental change to the data that cannot be performed in the human mind or using pen and paper.” Shamos Decl. ¶ 41. In this way, the bookmarking step, viewed as a whole with the other steps, also provides an “inventive concept.”

4. **Netflix Improperly Relies on an IBM Invention Disclosure Statement to Dissect the '906 Invention**

Netflix relies on IBM's Invention Disclosure Statement as purported proof that individual elements recited in the '906 patent claims are "conventional" and thus do not combine to provide an "inventive concept." Netflix Br. 16, 17, 19. The Supreme Court rejected this element-by-element approach in *Diehr*, and so should this Court. *Diehr* at 188. In any event, the ITC and the Central District of California have independently confirmed the validity of the '906 patent over the prior art under §§ 102 and 103 and hence the unconventional nature of the claims.¹¹ ID at 32-34, 94-95; ITC Comm'n Op. at 26; *Gemstar v. Hulu*, No. 12-4756 (C.D. Cal. Feb. 5, 2013), Dkt. 138 (denying summary judgment that '906 patent is invalid). The PTO allowed the '906 patent claims because they recited a new combination of steps. Ex. 17, '906 Notice of Allowance at 3 (Apr. 12, 2006) ("The prior art of record to Wistendahl and Hooper fails to either alone or combine to teach or suggest a method for providing a media-on-demand. . .as cited in claim 1 and similar in claim 17 [issued claim 10]").

IV. THE '762 PATENT IS VALID UNDER A CORRECT APPLICATION OF ALICE

A. Step 1 – The Purpose is to Visually Distinguish Programs Viewed from Those Not Viewed Regardless of Which Device the User Employs by Using a Unique Program Guide-Program Server Architecture

Netflix mischaracterizes the purpose of the '762 patent claims based on one isolated step of "identifying shows to watch based on a viewing history." Netflix Br. 11. Netflix reads out the unique program guide-program server architecture integral to the claimed invention. The ITC rejected the same arguments Netflix raises against the '762 and '709 patents. After an evidentiary hearing, the ITC applied *Mayo* (which *Alice* follows) and specifically found the '762 and '709 patent claims do not embody abstract ideas, but instead are directed to a "particular application for interactive program guides" where the "interactive program guide client device works in tandem with a remote interactive program guide server. ID 56-58, 127-29; Comm'n Op. 27.¹²

¹¹ Netflix contends that §§ 102 and 103 are relevant to the § 101 inquiry. *See, e.g.*, Netflix Br. at 12 n.6. By that same token, the ITC and *Gemstar* findings that the '906 patent is valid under §§ 102 and 103 and the PTO's allowance of the unique combination claimed by each patent-in-suit over the prior art under §§ 102 and 103 demonstrates that the claimed combinations are not "well-understood, routine, conventional activity" under § 101. *Mayo* at 1294.

¹² Because the ITC applied *Mayo*, which *Alice* follows, nothing in *Alice* supports a different conclusion. The ITC's findings are based on evidence and witnesses subject to cross

Claim 1, among others, reflects this technological improvement to existing interactive program guides:¹³

1. A method for use in a client-server interactive television program guide system for tracking a user's viewing history, comprising: tracking a user's viewing history; storing the user's viewing history on a program guide server;
- finding programs with the program guide server that are consistent with the user's viewing history; determining, with the program guide server, whether the programs found by the program guide server were not previously viewed on user television equipment; and
- displaying, with a program guide client implemented on the user television equipment, a display of program titles, wherein the display: includes the programs found by the program guide server, wherein some of the programs have been previously viewed on the user television equipment and some of the programs have not been previously viewed on the user television equipment; and
- visually distinguishes the programs determined by the program guide server to have been previously viewed from the programs that have not been previously viewed.

Ex. 12, '762 patent. Dr. Shamos explains the technological importance of the claimed "program guide application" and "program guide server" architecture: "Because the '762 patent requires a specific and unique program guide server arrangement working in tandem with the user's local program guide application (such as an application on the user's tablet device), the claimed invention is able to distinguish between programs viewed from those not viewed regardless of which device the user employs." Shamos Decl. ¶ 80. Unlike the non-technological, abstract ideas directed to using advertising as a currency in *Ultramercial* or guaranteeing a party's financial performance in an online transaction in *BuySafe*, the '762 patent is rooted in technology and not directed to an age-old business practice. *Ultramercial v. Hulu*, 2014 U.S. App. LEXIS 21633 at *5 (Fed. Cir. 2014); *buySAFE v. Google*, 765 F.3d 1350, 1355 (Fed. Cir. 2014).

B. Step 2 – Viewed as a Whole, the '762 Patent Claims an Inventive Concept that Improves Technology for Visually Distinguishing Programs Not Viewed Across User Devices in Interactive Program Guides

1. The Claims Are Tied to a Unique and Particular Program Guide-Program Server Architecture

examination. As such, the ITC's findings have persuasive value on identical issues in district court. *Cellco v. Broadcom*, 227 Fed. Appx. 889, 889-890 (Fed. Cir. 2007) ("Although the ITC's findings lack preclusive effect and cannot conclusively resolve the controversy between Cellco and Broadcom, they can be considered by federal courts for their persuasive value.").

¹³ Claim 1 is not representative of all asserted claims of the '762 patent, each of which recite distinctive applications of the claimed client-server architecture. For example, claims 6 and 17 require "collect[ing] program ratings information"; system claim 13 requires additional physical structure, including "user television equipment" and "communications path"; and claim 15 requires "user preference information." '762 patent, 24:33-26:48.

The recited steps of the '762 patent expressly tie the claims to a unique and particular “program guide server” working in tandem with a unique and particular “program guide client.” For example, claim 1 recites the step of “displaying, with a *program guide client* . . . the programs found by the *program guide server*.” ’762 patent, claim 1. Claim 13 is also tied to this unique program guide-program server architecture by reciting the step of “determin[ing] whether the programs found by the *program guide server* have been previously viewed on user television equipment, and to *indicate the programs to the interactive television program guide client over the communications path*). *Id.* at claim 13. Like the GPS receiver in *SiRF*, the unique program guide-program server architecture is integral to the claimed method. Without the program guide-program server, the claimed method could not perform the step of “visually distinguishes the programs determined by the program guide server to have been previously viewed from the programs that have not been previously viewed.” *Id.* at claim 1; Shamos Decl. ¶ 79. In addition, the ITC specifically found that “elements of claims 13 and 17 of the ‘762 patent are directed towards a ‘particular machine.’ A program guide server is a particular machine under either party’s construction . . . In all of the asserted claims, the claimed program guide client is implemented on the user television equipment. User television equipment implementing a program guide client is a ‘particular machine’ integral to the client-server system of the ‘762 patent.” *ID* at 129. These unique and particular machines provide an inventive concept.

2. The Computer-Implemented Steps Do Not Operate in a Normal, Expected Manner

Like the “outsource provider” specially programmed to communicate with a “web browser of a computer user” in *DDR*, the '762 patent recites specially programmed steps for the “program guide server” to communicate with the “program guide client.” Dr. Shamos explains that the following “steps in claim 13 recite how the ‘program guide server’ is specially designed to work in tandem with the ‘program guide client’ in a non-generic way: (1) ‘determine whether the programs found by the program guide server have been previously viewed on user television equipment,’ (2) ‘to indicate the programs to the interactive television program guide client over the communications path,’ and (3) ‘visually distinguishes the programs determined by the

1 program guide server to have been previously viewed from the programs that have not been
 2 previously viewed.’” Shamos Decl. ¶ 103; ’762 patent, claim 13; *see also* claim 15 (further
 3 limiting program guide-program server architecture such that the “interactive television program
 4 guide client is further programmed to provide user preference information to the program guide
 5 server over the communications path; and the program guide server is further programmed to . . .
 6 indicate the programs to the interactive television program guide client”). These steps recite
 7 specific, unconventional computer functions and thus are not “simply appending conventional
 8 steps, specified at a high level of generality.” *Mayo* at 1292. Netflix’s conclusory assertion that
 9 the claims recite “well-understood, routine, conventional activity” is insufficient to overcome the
 10 presumption that each claimed combination of the ’762 patent is valid under 35 U.S.C. § 282.
 11 Netflix Br. 14. The PTO allowed the ’762 patent claims specifically because it concluded that the
 12 unique claimed combination was not anticipated by or obvious over the prior art. Ex. 18, ’762
 13 Final Rejection at 4 (July 14, 2004) (explaining that the prior art of record fails to teach the
 14 claimed combination of steps, including “the step of determining, with the program guide server,
 15 whether the programs found by the program guide server were not previously viewed on user
 16 television equipment;” and “displaying;” and “visually distinguish[ing] the programs determined
 17 by the program guide server to have been previously viewed from the programs that have not
 18 been previously viewed”).

19 Further, Dr. Shamos explains that “a critical feature of the claimed invention is its unique
 20 program guide-program server architecture that precludes performance solely in the human mind
 21 or only using pen and paper . . . Given the voluminous amount of data about programs stored on a
 22 program guide server, a person of skill in the art at the time of the invention would understand
 23 that the claimed method could not be performed in the mind but would require the use of
 24 particular machines.” *Id.* at ¶¶ 87-88. Thus, in effecting an improvement over existing
 25 technology, the ’762 patent does not merely claim a mathematical formula itself, the concept of
 26 identifying shows to watch based on a viewing history, or an unimproved application of either.

V. **THE '709 PATENT IS VALID UNDER A CORRECT APPLICATION OF ALICE**

A. **Step 1 – The Purpose is to Generate Personal Viewing Recommendations Based on Programs Not Yet Watched Regardless of Which Device the User Employs by Using a Unique Program Guide-Program Server Architecture**

Instead of “treading carefully,” as *Alice* requires, Netflix repeats the same cookie-cutter arguments discussed above regarding the '762 patent for the '709 patent. This is insufficient to satisfy Netflix's burden of proving by clear and convincing evidence that each asserted claim of the '709 patent is invalid under § 101. While the '762 and '709 patents share a common specification and unique program guide-program server architecture, they solve different problems and thus do not rise or fall together under § 101. The PTO allowed the '709 patent claims once the step of “apply[ing] the at least one of the associated program criteria to the set of programs not yet watched ***to generate at least one personal viewing recommendation***” was added to the claims. Ex. 19, '709 Notice of Allowance at 2 (Jan. 11, 2006). Claims 13 and 14, among others, reflect this improvement over existing interactive program guides:

13. A method for use in an interactive program guide system for providing a customized viewing experience to a user, comprising: generating a viewing history database comprising program listings and associated program criteria; determining at least one of the associated program criteria from the viewing history database that meets a user preference profile; determining from a program listing database a set of programs not yet watched;

applying the at least one of the associated program criteria to the set of programs not yet watched to generate at least one personal viewing recommendation; and providing the personal viewing recommendation to a user.

14. The method defined in claim 13 wherein generating a viewing history database comprises storing the program listings and the associated program criteria for at least one of: programs that the user has watched; programs for which the user has scheduled reminders; programs for which the user has scheduled for recording; programs for which the user has searched; and programs for which the user has ordered.

Ex. 13, '709 patent. Dr. Shamos explains that “[t]he specific program guide-program server architecture recited in the '709 patent allows the identification of programs *not viewed* as criteria to generate personal viewing recommendations *regardless of which device the user employs*.” Shamos Decl. ¶ 116. These critical features of the '709 patent differ in a fundamental respect from the abstract methods of using a computer merely to calculate a pre-computer age mathematical problems in *Flook* and *Benson*, or using a computer merely to manage a pre-computer age bingo game in *Planet Bingo*. Dr. Shamos explains that “TV Guide magazines used

before the advent of interactive program guides do not include personal viewing recommendations, much less attempt to address problems with viewing personal viewing recommendations regardless of which device the user employs. These are problems unique to interactive program guides.” *Id.* Instead of merely applying a computer to solve a pre-computer age problem, as Netflix contends, the ’709 patent recites a technological solution to a specific problem arising in interactive television guides of generating personal viewing recommendations based on programs not yet watched regardless of which device the user employs.¹⁴

B. Step 2 – Viewed as a Whole, the ’709 Patent Recites an Inventive Concept that Improves the Technology for Generating Personal Viewing Recommendations Across User Devices in Interactive Program Guides

1. The Claims Are Tied to a Unique and Particular “Viewing History Database” and “Program Listing Database” on the Program Guide Server

The recited steps of the ’709 patent tie the claims to a unique and particular “viewing history database” and “program listing database” on the program guide server. For example, the ITC found the recited steps of the “viewing history database” and “program listing database” were performed by the program guide server. ID at 30 (“In describing how to provide personalized viewing recommendations based on a user viewing history, the specification explains that the *program guide server may apply a user preference profile criteria to programs in a database to generate personal viewing recommendations.*”). In addition, the ITC found the recited “database in the interactive program guide system is a particular type of machine.” *Id.* at 58. Claim 13 also recites the specially programmed steps of (1) “generating a *viewing history database* comprising program listings and associated program criteria;” and (2) “determining at least one of the associated program criteria from the *viewing history database* that meets a user preference profile” that tie the claim to the unique and particular viewing history database and

¹⁴ Claim 13 is not representative of the other ’709 patent claims, each of which recite distinctive applications of the program guide-program server architecture to generate personal viewing recommendations. For example, claims 14 and 18 recite five specific associated program criteria; claims 15 and 19 require the associated program criteria to comprise at least one of “program categories, ratings, casting, and languages”; claims 16 and 20 require “at least one criteria defined in the user preference profile”; claim 17 requires additional physical structure, including “user equipment on which an interactive program guide client is implemented,” “program guide server,” “first database,” “second database,” “processing circuitry,” and “communications path.”

1 program guide server. '709 patent, claim 13. Claim 14, among others, also ties the method to
 2 “generating a viewing history database comprises storing the program listings and the associated
 3 program criteria” to at least one of four separate criteria, “programs that the user has watched;
 4 programs for which the user has scheduled reminders; programs for which the user has scheduled
 5 for recording; programs for which the user has searched; and programs for which the user has
 6 ordered.” Claim 13 is also tied to a unique and particular “program listing database” by reciting
 7 the steps of “determining from a program listing database a set of programs not yet watched.” *Id.*
 8 These unique and particular machines provide the '709 patent claims with an inventive concept.

9 2. **The Computer-Implemented Steps Do Not Operate In a Normal, 10 Expected Manner**

11 Unlike generic database functions of storage, record keeping, and tracking in *Alice* and
 12 *Bilski*, the asserted claims of the '709 patent expressly require the “viewing history database” to
 13 perform the special function of “determining at least one of the associated program criteria from
 14 the viewing history database that meets a user preference profile.” *Id.* Dr. Shamos explains that
 15 “[f]rom a technical perspective of a person of ordinary skill in the art at the time of the invention,
 16 the step of ‘determining at least one of the associated program criteria from the viewing history
 17 database that meets a user preference profile’ is not a routine or conventional activity for a
 18 computer database.” Shamos Decl. ¶ 126. Likewise, the claims require the “program listing
 19 database” perform the special functions of “determining from a program listing database a set of
 20 programs not yet watched.” '709 patent, claim 13. Dr. Shamos explains that “[f]rom a technical
 21 perspective of a person of ordinary skill in the art at the time of the invention, the step of
 22 ‘determining from a program listing database a set of programs not yet watched’ is not a routine
 23 or conventional activity for a computer database and is tied to the particular program guide server
 24 disclosed in the '709 patent specification.” Shamos Decl. at ¶ 127. In making this improvement,
 25 the '709 patent does not merely claim a mathematical formula itself, the concept of identifying
 26 shows to watch based on a viewing history, or an unimproved application of either.

27 Like the claims directed to “tailor[ing] the delivery of information to a specific user”
 28 found patentable in *Intellectual Ventures*, the asserted claims of the '709 are directed to the non-

generic function of generating personal viewing recommendations based on programs not yet watched. *Intellectual Ventures I v. Mfrs. and Traders Trust*, No. 13-1274, 2014 U.S. Dist. LEXIS 174725, at *23 (D. Del. Dec. 18, 2014). Although the claimed method was purely functional and recited less hardware than the '709 patent, the court in *Intellectual Ventures* held the step of tailoring online information based on users' navigational histories was unconventional, "necessarily rooted in computer technology," and thus patentable under § 101. Likewise here, the asserted claims require the step of "generat[ing] at least one personal viewing recommendations" based on "the associated program criteria . . . of programs not yet watched." '709 patent, claim 13. Like *Intellectual Ventures*, the asserted claims recite unconventional activity "necessarily rooted in computer technology" and are thus patentable under § 101. The particular program guide-program server architecture sufficiently narrows the claims such that they do not wholly preempt all practical applications of generating personal viewing recommendations.

VI. THE '962 PATENT IS VALID UNDER A CORRECT APPLICATION OF ALICE

A. Step 1 – The Purpose is to Enable Users to Take Actions with Interactive Program Guides to Refine Their Searches Based on Selectable Categories and Individual Show Listings

Netflix distorts the purpose of the '962 patent as isolated to "requiring that some search results be grouped into 'selectable categories.'" Netflix Br. 9. "Selectable categories" is only one aspect of the invention. Netflix ignores the invention's critical aspect of subsequently "enabling a user to perform an action" to refine their search for programs of interest. Ex. 14, '962 patent, claims 1, 14, 27. At the time of the invention in 2005, search engines in interactive program guides did not simultaneously provide search results having both individual show listings and selectable categories from which users could take further action. *Id.* at 1:38-62. Instead, search engines merely provided individual show listings, such as *Star Wars* and *Tron*, or provided the results under pre-defined category headings, such as "science fiction" and "action." As a result, it was difficult for users to refine their searches to find programs of interest. *Id.* at 1:58-62. The inventors solved this problem by inventing an intelligent search engine application specially designed to enable users to take actions to refine their searches based on selectable categories. Claim 1, among others, reflects this improvement over existing search engine applications in

1 interactive program guides:

2 1. A method for searching for shows comprising: providing a search engine application;
 3 receiving one or more characters in said search engine application, wherein said one or more
 4 characters are entered in an alpha-numeric input area;
 5 matching said characters using said search engine application to one or more database
 6 entries; providing results corresponding to said database entries in a results listing, wherein
 7 said results comprise one or more show listings and one or more selectable categories of
 8 shows;
 9 receiving a user selection from said results listing of one of said selectable categories;
 10 providing at least one additional show listing corresponding to said selected selectable
 11 category in response to the user selection of said selected selectable category; and
 12 enabling a user to perform an action by selecting one of said at least one additional show
 13 listings.¹⁵

14 Rovi's technical expert, Dr. Schonfeld, explains that "[t]he '962 invention is not limited to
 15 purported 'groupings' of shows into selectable categories, as Netflix states in its Motion. In
 16 addition to 'selectable categories,' the steps in claims 1, 10, 13, 14, 24, 26, and 27 specifically
 17 recite how the search engine application is specially designed to enable users to refine their
 18 search." Schonfeld Decl. ¶ 33. For example, claims 1, 14, and 27 require "*receiving a user*
 19 *selection from said results listing of one of said selectable categories*" and "providing at least one
 20 additional show listing corresponding to said selected selectable category *in response to the user*
 21 *selection of said selected selectable category*"; claims 10 and 24 enable users to "watch[] a show
 22 corresponding to said selected additional show listing"; and claims 13 and 26 enable users to
 23 "obtain[] additional information corresponding to said selected additional show listing." *Id.*; '962
 24 patent, 12:57-14:58. Thus, irrespective of either party's construction of "selectable categories of
 25 shows," the claimed steps are directed to the critical feature of enabling users to refine their
 26 searches based on selectable categories. These critical features differ in a fundamental respect
 27 from the abstract methods of using a computer merely to calculate a pre-computer age
 28 mathematical problem in *Flook* and *Benson*, or using a computer merely to manage a pre-

¹⁵ Netflix's conclusory assertion that claim 1 is representative of the 15 asserted claims of the '962 patent is insufficient to satisfy its burden of proving that each claim is invalid by clear and convincing evidence under § 101. Netflix Br. 8. Each asserted claim requires distinctive features of the claimed search engine application. For example, claims 3 and 16 require "on-demand programming"; claims 5 and 18 require "titles of shows"; claims 6 and 19 require selection of characters from entries in "said alpha-numeric input area"; claims 9 and 23 require "a keyword search field"; system claim 14 requires additional structure, including an "input device," "output device," "display [of] . . . results listings," and "display [of] . . . additional show listing"; claim 27 requires a "computer readable medium . . . having computer readable program code."

1 computer age bingo game in *Planet Bingo*. The '962 patent is not directed to using a computer to
 2 create purported pre-computer age “groupings,” but instead recites a technological solution to a
 3 problem of refining user searches that arose in the realm of interactive program guides.

4 **B. Step 2 – Viewed as a Whole, the '962 Patent Claims an Inventive Concept that**
 5 **Improves Users' Ability to Refine Their Searches for Programs of Interest**
 6 **Using Selectable Categories**

7 The '962 patent does not recite insignificant pre- or post-solution activity merely limited
 8 to a particular technological environment. Instead, the ordered combination of steps taken
 9 together “effect an improvement” in interactive program guide technology itself and does not
 10 merely claim a mathematical formula itself, the concept of searching for shows using selectable
 11 categories, or an unimproved application of either.

12 **1. The Claims Are Tied to Unique and Particular Hardware, Software,**
 13 **and/or Firmware**

14 Both parties' constructions of “search engine application” in the '962 patent claims tie this
 15 term to a particular machine or apparatus. Specifically, Rovi's construction ties the “search
 16 engine application” to “**hardware, software, and/or firmware**, which receives search requests and
 17 **interfaces with one or more databases** to respond to search requests.” Dkt. 112, Jt. Claim
 18 Constr. Stmt. 17. Although Netflix's proposed construction is unduly narrow and obviously
 19 incorrect, Netflix's construction ties the “search engine application” for a “**video recorder**.” *Id.*
 20 Notably, Netflix's narrow construction of “search engine application” tying it to particular
 21 machine directly contradicts its § 101 motion, where Netflix broadly argues that the “claims are
 22 not drawn to any particular search engine” and “simply recite a generic search engine, which is
 23 non-inventive.” Netflix Br. 12. Both parties' construction of “search engine application” also
 24 demonstrates that *Digitech* is inapposite. *Digitech* held that the claimed method “recite[s] an
 25 ineligible abstract process of gathering and combining data that does not require input from a
 26 physical device.” *Digitech v. Elec. for Imaging*, 758 F.3d 1344, 1351 (Fed. Cir. 2014). Unlike
 27 *Digitech*'s broadly drafted claims that do “not require input from a physical device,” the '962
 28 patent expressly recites a specific “alpha-numeric input area” or “input device” where characters
 “are entered in an alpha-numeric input area.” '962 patent, claims 1, 9, 14, 23, 27. *Digitech* also

1 did not “claim any tangible part of the digital processing system,” whereas both parties’
 2 construction of “search engine application” tie the claims to tangible “hardware, software, and/or
 3 firmware” that “interfaces with one or more databases” under Rovi’s construction or to “a video
 4 recorder” under Netflix’s construction. *Digitech* at 1349.

5 2. **The Computer-Implemented Steps Do Not Operate in a Normal, 6 Expected Manner**

7 Like the “outsource provider” in *DDR*, the “search engine application” does not operate
 8 “in its normal expected manner.” *DDR* at **30-31. Instead, Dr. Schonfeld explains that claims 1,
 9 14, and 27 require the “search engine application” to perform the following non-generic computer
 10 functions of (1) “providing results corresponding to said database entries in a results listing,
 11 wherein said results comprise one or more show listings and one or more selectable categories of
 12 shows”; (2) “providing at least one additional show listing corresponding to said selected
 13 selectable category in response to the user selection of said selected selectable category”; and (3)
 14 “enabling a user to perform an action by selecting one of said at least one additional show
 15 listings”; (4) claims 10 and 24 require the non-generic functions of enabling said user to “watch[]
 16 a show corresponding to said selected additional show listing”; and (5) claims 13 and 26 require
 17 the non-generic functions of enabling said user to “obtain[] additional information corresponding
 18 to said selected additional show listing.” Schonfeld Decl. ¶¶ 36, 53, 55, 71, 73. Taken together,
 19 these unconventional steps, which are tied to a particular machine under either party’s
 20 construction, constitute inventive concepts.

21 3. **The Claims Transform “Characters” into “Selectable Categories”**

22 The ’962 patent claims also supply an inventive concept because they recite the
 23 transformation of “characters . . . entered in an alpha-numeric input area” into “results
 24 compris[ing] one or more show listings and one or more selectable categories of shows.” ’962
 25 patent, claims 1, 14, 27. Like “fundamentally altering the original confidential information” in
 26 *Card Verification*, the transformation from mere characters to actual, visual show listings and
 27 selectable categories that enable users to take further action “goes beyond manipulating,
 28 reorganizing, or collecting data.” *Card Verification* at *13. “The *interactive* nature of the
 selectable categories allowing ‘a user selection from said results listing one of said selectable

categories’ and ‘enabling a user to perform an action’ by ‘selecting . . . additional show listings’ in claims 1, 14, and 27, or ‘watching a show corresponding to said selected additional show listing,’ in claims 10 and 24, or ‘obtaining additional information corresponding to said selected additional show listing,’ as recited in claims 13, and 26, is a fundamental transformation from mere characters inputted in an alpha-numeric input area or device.” Schonfeld Decl. ¶ 39. These critical elements differ in a fundamental way from the generic functions of combining content and collaborating data in *I/P Engine*, and the generic functions of “collecting information in classified form, then separating and transmitting that information according to its classification” in *Cyberfone*, both non-precedential opinions.¹⁶ These critical elements also ensure that the claims do not preempt all search engine applications but capture only one effective method of refining user’s searches based on selectable categories.

VII. THE ’929 PATENT IS VALID UNDER A CORRECT APPLICATION OF ALICE

A. **Step 1 – The Purpose is to Provide Users Specific Programming Categories in Interactive Program Guides that More Accurately Reflect the User’s Interests**

Netflix distorts the purpose of the ’929 patent as limited to “[c]ategorization . . . one of the most basic functions of the human (indeed, any) brain.” Netflix Br. 10. Netflix ignores the invention’s critical aspect of generating “combination categories” from program listings associated with simple categories, a problem *which the prior art 17 years ago had not solved*. Ex. 15, ’929 patent, claim 11. Like generating composite web pages by combining elements from two different websites in *DDR*, the ’929 patent combines elements from different sources—multiple program listings associated with simple categories—to overcome a problem specifically arising in the realm of interactive program guides. *DDR* at **27 n.5 and 28 (“On a fundamental level, the creation of new compositions and products based on combining elements from different sources has long been a basis for patentable inventions.”). Dr. Schonfeld explains, “to understand the purpose of the ’929 patent, it is important to understand the technological context from which the ’929 patent arose . . . At the time of the invention—17 years ago—in 1998, many of the flexible search options that we take for granted today were not available.” Schonfeld Decl. ¶¶ 76-

¹⁶ *I/P Engine v. AOL*, 576 Fed. Appx. 982 (Fed. Cir. Aug. 15, 2014) (only discussing § 101 in concurrence); *Cyberfone v CNN*, 558 Fed. Appx. 988 at 992 (Fed. Cir. Feb. 26, 2014).

77. 17 years ago, interactive program guides only allowed users to search for programs using broad, simple categories, such as “sports” or “comedies.” ’929 patent, 1:55-57. If a user wanted to search for movies similar to *The Natural*, search results only yielded broad, simple categories, such as “sports” or “drama,” associated with the movie. *Id.* This created a specific problem where the search results were too voluminous, unmanageable and not useful to the user because “the user cannot narrow the search beyond, that of the standard categories (e.g., sports, comedies, etc.).” *Id.* at 1:52-57. What was needed was “a more sophisticated way in which, a program guide can handle programming categories” such that “more specific programming categories may be generated” that were “more reflective of a user’s interests.” *Id.* at 2:16-24. The inventors solved this problem by inventing a more flexible process that identifies and uses broad simple categories associated with program listings to generate narrower combination categories of programming enabling more refined searching of ever-expanding available programming, as reflected in claims 11 and 14, for example:

11. A system for locating programs of interest to a user, the system comprising: a receiver that receives a plurality of program listings, wherein at least one of the program listings is associated with two or more simple categories; and a processor that generates at least one combination category by: identifying the two or more simple categories associated with the at least one program listing; and combining at least a subset of the identified simple categories associated with the at least one program listing into the at least one combination category, wherein the combination category comprises more than one of the identified simple categories.

14. The system of claim 13, wherein the processor is configured to automatically identify a plurality of simple categories that are of high interest to the user by identifying a first simple category that received more user selections than a second simple category.

In allowing the ’929 patent claims, the PTO emphasized that “in light of applicant’s early filing date,” the prior art of record “fails to disclose nor sufficiently suggest the combination of features as claimed and arranged by applicant, [including] . . . two or more simple categories and generating at least one combination category.” Ex. 20, ’929 Notice of Allowance at 2-3 (Jan. 10, 2011). By providing users more flexible search options with “simple categories” and “combination categories” in a single level search, the ’929 patent claims are fundamentally different from the abstract, longstanding business practice of depositing a check in *Content Extraction* and claimed financial transactions in *Alice* and *Bilski*.

B. Step 2 – Viewed as a Whole, the '929 Patent Claims an Inventive Concept that Improves Upon Inflexible Search Options in Interactive Program Guides 17 Years Ago

1. Like *Caltech*, the Asserted Claims Create a Particular and Unique Computing Solution for a Computing Problem

In *Caltech*, software claims that recited no hardware or transformation were patentable because they claimed “a unique computing solution that addresses a unique computing problem.” *Caltech* at *62. The purely functional steps of “irregular repetition of bits and the use of linear transform operations” are “unconventional steps for achieving error correction” and therefore “sufficiently limit preemption concerns.” *Id.* at **53-55. Likewise in *Autoform*, software claims reciting no hardware or transformation were patentable because they “include numerous limitations that narrow the scope of the patent.” *Autoform* at *7. Similarly here, Dr. Schonfeld explains that “[f]rom a technical perspective of a person of ordinary skill in the art at the time of the invention 17 years ago, independent claim 11 recites the following unconventional steps for achieving more flexible search options in interactive program guides: (1) ‘generat[ing] at least one combination category by: identifying the two or more simple categories associated with the at least one program listing;’ (2) ‘combining at least a subset of the identified simple categories associated with the at least one program listing into the at least one combination category,’ and (3) ‘wherein the combination category comprises more than one of the identified simple categories.’” Schonfeld Decl. ¶ 83; ’929 patent, claim 11. Netflix’s conclusory assertion that claim 11 is representative of the 9 asserted claims of the ’929 patent is insufficient to satisfy its burden of proving that each claim is invalid by clear and convincing evidence under § 101. Netflix Br. 9. Each asserted claim recites unconventional ways of identifying and using “simple categories” from associated program listings to generate “combination categories” that independently supply inventive concepts. Schonfeld Decl. ¶ 92. For example, claim 12 requires “supported categories”; claim 13 requires “a plurality of simple categories that are of high interest to the user”; claim 14 requires a “first simple category that received more user selections than a second simple category”; claim 16 requires “associated metadata”; claim 17 requires a combination category assigned to a “program listing”; claims 18, 19, and 20 require specific hardware integral to the claimed method, like presenting the categories “on the display.” Like the

unconventional steps recited in *Caltech* and *Autoform*, the '929 patent contains “meaningful limitations that represent sufficiently inventive concepts” without requiring a machine-or-transformation. *Caltech* at **47-48. The '929 patent claims differ in a fundamental way from the claimed method for searching an online medical library in *Cogent Med. v. Elsevier*, No. 13-4479, 2014 U.S. Dist. LEXIS 139856, at *13 (N.D. Cal. Sep. 30, 2014). By merely supplying a “‘library interface,’ which principally comprises a set of electronic folders” (*id.*), *Cogent*’s claims suffer from the same problem as prior art interactive program guides 17 years ago—merely providing standard folders without flexible search options. '929 patent, 1:52-57. Therefore, the '929 patent is not a “mere variation on the basic idea of the claims invalidated in *Cogent*,” as Netflix contends. Instead, the '929 patent is directed to solving the precise problem raised in *Cogent* by identifying and using “simple categories” from program listings to generate “combination categories” to provide users with more flexible search options. In making this improvement, the '929 patent does not merely claim a mathematical formula itself, the concept of categorizing shows, or an unimproved application of either.

2. The Claims Are Not a Purely Mental Process

In *Caltech*, Judge Pfaelzer cautioned that “Courts should not view software as abstract simply because it exists in an intangible form.” *Caltech* at **49-50. “The problems of pencil-and-paper analysis are heightened in the context of software . . . [and] can mislead courts into ignoring a key fact: although a computer performs the same math as a human, a human cannot always achieve the same results as a computer.” *Id.* This Court should reject Netflix’s pencil-and-paper arguments for the same reasons. Dr. Schonfeld explains “the human mind cannot ‘automatically assign each of the plurality of program listings at least one of a plurality of simple categories based on the associated metadata,’” as recited in claim 16, for example. Schonfeld Decl. ¶ 97. Like the defendant in *Caltech*, Netflix “oversimplifies § 101” and ignores the fact that the '929 patent creates a “[computing] solution for a computing problem.” *Caltech* at *50.

VIII. CONCLUSION

The foregoing genuine issues of material fact warrant denial of Netflix’s motion. Also, for the reasons stated herein, the Court should find the asserted claims valid under § 101.

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