

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

Technology Development and)	
Licensing, LLC)	
)	
Plaintiff,)	
)	
v.)	Case No. 08-cv-3584
)	Case No. 09-cv-430
)	
)	
Comcast Corporation, Dish Network)	
Corporation and Echostar)	
Corporation,)	
)	
Defendants.		

MEMORANDUM OPINION AND ORDER

In these twin patent infringement suits, plaintiff Technology Development and Licensing, LLC, alleges that defendants Comcast (in No. 08-cv-3584) and Dish and Echostar (in No. 09-cv-430) infringe various claims of U.S. Patent Re. 35,952, titled "Television Receiver Having Memory Control for Tune-By-Label Feature." The claimed invention provides a "television control system for selecting a television channel corresponding to a preassigned channel designation." '952 Pat., Exh. A to Pl.'s Resp. at col. 2:24-26.

Before me are defendants' motions for judgment on the pleadings, which argue that claims 1 and 2 of the patent—the only claims now at issue—are directed to patent-ineligible subject

matter under 35 U.S.C. § 101. For the reasons explained below, I grant the motions.

I.

The '952 patent generally relates to a television control system that offers novel ways of selecting and tuning to television channels provided by cable and satellite providers. Claims 1 and 2 are directed to a system that allows an "operator" to assign individualized labels identifying the various channels on which programming is broadcast, and thereafter allows a viewer to use those labels, rather than the preassigned channel numbers, to select programming. The Background of the Invention explains that historically, television channels were identified by numbers corresponding to both a particular signal frequency and a number on the control of the television receiver. With the advent of cable and satellite television, however, whose providers broadcast programming on different frequencies from traditional over-the-air providers, it became increasingly difficult for viewers to find the channels and programs they were looking for. Accordingly, viewers needed a "conversion chart" to locate their desired channels, which the specification explains was awkward and inconvenient to use, particularly in large cities with more than one cable service provider, or for travelers or other viewers unfamiliar with the local system. '952 Pat. at 2:2-8 (Pl.'s Resp., Exh. A). Claims 1 and 2 of the '952 patent aim to solve this

problem by allowing a TV operator to assign labels, or "channel select designations," to various "channel tuning designations," the latter of which correspond to particular signal frequencies. The viewer can then use the operator-assigned labels to select programming.

TDL filed the instant cases in June of 2008 and January of 2009, respectively, but both cases were stayed in 2009 and again in 2014 pending reexamination by the Patent and Trademark Office. TDL also asserted many—but not all—of the claims asserted here in another case, captioned *Technology Development and Licensing, LLC v. General Instrument Corp.* No. 07-cv-04512 (N.D. Ill.) ("*Motorola*"), which was also stayed pending reexamination.¹ By early 2015, all of these cases had returned to active status. Then, in December of 2016, Judge Lefkow granted summary judgment in the defendant's favor in *Motorola* on the ground that that the asserted claims—claims 8, 9, 37, and 38—were directed to patent-ineligible subject matter. See Order of December 6, 2016 (the "*Motorola* Order").

Although the *Motorola* Order is now final, it did not resolve the § 101 patent eligibility of claims 1 and 2, which are conceptually distinct from the claims at issue in *Motorola*.

¹ Although the case caption has since changed to reflect a change in corporate ownership, I continue to refer to this case as "*Motorola*" for the sake of consistency with my claim construction order.

Specifically, claims 1 and 2 are drawn to the "tune-by-label" feature described above, while claims 8, 9, 37, and 38 are directed to a distinct, "favorites list" feature of the invention, which allows an operator to create multiple lists of favorite channels that are stored in memory for later use by a viewer to select programming. Indeed, at step 1 of the *Alice* inquiry, Judge Lefkow described the claims before her as concerning the "routine, conventional activity...of making multiple lists of selected television channels and storing them so a user can readily choose a desired channel without having to go through the cable provider's full viewer guide." *Motorola* Order at 8. In this case, by contrast, defendants assert that claims 1 and 2 are drawn to the abstract idea of a conversion chart—an argument that was neither raised nor resolved in *Motorola*. Accordingly, my analysis begins on a clean slate.

I.

Under 35 U.S.C. § 101, "[w]hoever invents or discovers any new and useful process, machine, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title." The Supreme Court has long recognized that this provision contains "an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable." *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347 (2014), (quoting *Ass'n for*

Molecular Pathology v. Myriad Genetics, Inc., 133 S.Ct. 2107, 2116 (2013)). The *Alice* Court cautioned, however, that because “[a]t some level, all inventions...embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas,” courts must “tread carefully in construing this exclusionary principle lest it swallow all of patent law.” *Id.* (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. at 1293-94) (ellipses in *Alice*, internal quotation marks omitted).

Alice established a two-part framework for determining whether patent claims are drawn to patent-eligible subject matter. First, the court must determine whether the claims at issue are directed to a patent-ineligible concept, such as an abstract idea. *Id.* at 2355. If so, the court must determine whether the claim elements, individually or in combination, contain an “inventive concept” that “transform[s] the nature of the claim” into a patent-eligible application. *Id.* (quoting *Mayo*, 566 U.S. 66, 72, 78 (2012)). Although the two steps are “plainly related” and involve “overlapping scrutiny of the content of the claims,” the first stage inquiry looks at the “focus” of the claims, i.e., their “character as a whole,” while the second stage inquiry looks “more precisely at what the claim elements add.” *Elec. Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (citations omitted).

"Whether a claim is drawn to patent-eligible subject matter under § 101 is an issue of law." *In re Bilski*, 545 F.3d 943, 951 (Fed. Cir. 2008) (en banc), *aff'd*, 561 U.S. 593 (2010). Patent eligibility may be resolved on the pleadings and the prosecution history when no material facts are in dispute. *Genetic Technologies Ltd. v. Merial L.L.D.*, 818 F.3d 1369, 1373 (Fed. Cir. 2016); *Joao Control & Monitoring Systems, LLC v. Telular Corp.*, 173 F. Supp. 3d 717, 724 (N.D. Ill. 2016).

Issued patents generally enjoy a presumption of validity under 35 U.S.C. § 282(a). In *Microsoft Corp. v. i4i Ltd. Partnership*, 564 U.S. 91 (2011), a case involving § 102(b)'s "on-sale bar,"² the Supreme Court held that to overcome this presumption, an accused infringer must present clear and convincing evidence of invalidity. *Id.* at 95. But as Justice Breyer observed in a concurring opinion joined by Justices Scalia and Alito, the standard announced by the Court applies only when the validity of a patent turns—as it did in the case before it—on disputed factual issues. *Id.* at 114. Where, by contrast, the ultimate question of patent validity turns "not upon factual disputes, but upon how the law applies to the facts as given," the clear and convincing standard "has no application." *Id.* But

² "[T]he on-sale bar of § 102(b) precludes patent protection for any 'invention' that was 'on sale in this country' more than one year prior to the filing of a patent application." *i4i*, 565 U.S. at 96.

neither the Supreme Court nor the Federal Circuit has offered definitive guidance on whether, or under what circumstances, the clear and convincing evidentiary standard applies in the § 101 context.

Meanwhile, district courts, and, indeed, individual judges of the Federal Circuit, have disagreed on the issue. *Compare CLS Bank Int'l v. Alice Co. Pty. Ltd.*, 717 F.3d 1269, 1304-05 (Fed. Cir. 2013) (Rader, J., concurring-in-part and dissenting-in-part) ("any attack on an issued patent based on a challenge to the eligibility of the subject matter must be proven by clear and convincing evidence") with *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 720-21 (Fed. Cir. 2014) (Mayer, J., concurring) ("no presumption of eligibility attends the section 101 inquiry."); *compare also Trading Technologies International, Inc. v. CQG, Inc.*, 05-cv-4811, 2015 WL 774655, *3 (N.D. Ill. Feb. 24, 2015) (Coleman, J.) (applying clear and convincing standard to deny motion for judgment as a matter of law under § 101), *aff'd* ---F. App'x.---, 2017 WL 192716, at *1 n. 1 (Jan. 18, 2017) (acknowledging, but declining to resolve, dispute over whether clear and convincing standard applies); with *Tranxition, Inc. v. Lenovo (U.S.) Inc.*, No. 3:12-cv-01065-HZ, 2015 WL 4203469, at *4 (D. Or. July 9, 2015) ("the clear and convincing evidentiary standard simply does not come into play" when resolving summary judgment motion based on § 101), *aff'd* 664 F. App'x 968, 972 n. 1 (declining to "address

the proper evidentiary standard"). See also *Berkheimer v. Hewlett-Packard Co.*, ---F.Supp.3d---, 2016 WL 7188159, at *3-*5 and n.3 (surveying case law and concluding that "the clear-and-convincing standard has no role to play in the § 101 determination" absent factual disputes to which the standard might apply).

Mindful of both the settled and the unsettled aspects of the legal landscape, I turn to my analysis of claims 1 and 2.

II.

Defendants assert that the essence of these claims is the abstract idea of a "conversion chart," i.e., a map or guide that directs TV viewers accustomed to accessing networks (NBC, for example) or programs ("Law and Order: Criminal Intent") on certain over-the-air channels to the potentially different channels on which these networks or programs are broadcast by cable or satellite providers.

Claim 1 recites:

In a televised control system apparatus for selecting a television channel corresponding to a preassigned channel tuning designation, the system apparatus comprising:

tuner means for receiving a processor signal and a multichannel input signal, and in response to said processor signal, tuning out all but one channel corresponding a selected one of said preassigned channel tuning designations;

memory means for storing at least one operator assigned channel select designation for at least one of said channel tuning designations;

first operator actuated control means for generating a first control output signal comprising a first data set representative of a desired channel select designation for one of said channel tuning designation;

second operator-actuated control means for generating a second control output signal comprising a second data set representative of a desired viewing channel identified by an operator selected one of said channel select designations;

processor means for receiving said first and second control output signals from said first and second operator-actuated control means, and upon receipt of said first data set, causing said memory means to store said desired channel select designation as corresponding to said one channel tuning designation, and upon receipt of said second data set, retrieving from said memory means the one of said channel tuning designations corresponding to said operator selected channel select designation, and generating said processor signal to correspond to said one channel tuning designation;

said first control output signal comprising a first one of said channels of said multi-channel input signal;

said processor means including means for generating said processor signal to cause said tuner means to tune out all but said first one of said channels, and for receiving from said [tuner] means said first one of said channels.

'952 patent at 14:18-56.³

³ Claim 2 depends from claim 1 and recites: "Apparatus as defined in claim 1, wherein said first operator actuated control means is remote from said second operator actuated control means." '952 patent at 14: 57-59. Because neither party discusses claim 2 separately, I assume they agree that claim 1 is representative of both claims. See *Alice*, 134 S. Ct. at 2359-60.

Dish and Echostar argue that claims 1 and 2 recite the use of generic computing and television equipment to implement the abstract idea of "mapping the correspondence" between one channel and another, Dish/Echostar Br. at 2, while Comcast argues that the focus of these claims is to "implement electronically what was previously done with a paper 'conversion chart'" of the kind published in *TV Guide*, for example, which Comcast submits has long "allowed viewers to find the correct channel number by looking up the television program (or the network or local broadcast service) they wished to view." Comcast Br. at 7.

TDL disputes these characterizations of the invention and faults defendants for citing "no evidence other than the conversion chart described in the '952 Patent" to support their argument that claims 1 and 2 are directed to an abstract idea.⁴ Resp. at 6. As noted above, however, subject matter eligibility is a question of law, and the Federal Circuit has "repeatedly recognized that in many cases it is possible and proper" to determine patent eligibility on the pleadings. *Genetic Technologies*, 818 F.3d at 1373 (Fed. Cir. 2016). Here, TDL does

⁴ TDL simultaneously faults Comcast for going outside of the record with a Wikipedia link apparently describing *TV Guide*. While it is true that under Rule 12(c), I may consider only the pleadings and matters of public record, it is common knowledge that *TV Guide* is a decades-old publication that informs television viewers of the days, times, and channels on which television shows are broadcast. I need not, and in fact did not, rely on the Wikipedia link for any part of my analysis.

not identify any disputed facts, nor does it explain how extrinsic evidence potentially bears on the ultimate legal issue. Because I share the view expressed by other courts that absent any suggestion of a factual dispute on which the legal question of subject-matter eligibility turns, I conclude that defendants need not come forward with clear and convincing evidence to prevail on their § 101 challenge. See *Nextpoint, Inc. v. Hewlett-Packard Co.*, No. 15 C 8550, 2016 WL 3181705, at *6 (N.D. Ill. June 8, 2016) (Bucklo, J.), *aff'd* ---F. App'x.---, 2017 WL 977036, at *1 (Fed. Cir. Mar. 14, 2017). Accordingly, I may resolve defendants' motions based on the text of the '952 patent, the prosecution history, and my claim construction order of November 7, 2016.⁵ See *Berkheimer*, 2016 WL 7188159, at *5 (conducting Alice inquiry based on the asserted claims and claim construction order) (citing *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass'n*, 776 F.3d 1343, 1349 (Fed. Cir. 2014) (§ 101 determinations may be made at the pleading stage, prior to development of the factual record); and *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 714-15 (Fed. Cir. 2014) (applying the two-part Alice framework by conducting an "examination of the claim limitations" on their face).

⁵ Actually, my analysis would be the same with or without the prosecution history; but because it is a matter of public record, and because TDL argues that the Examiner's comments on reexamination support § 101 subject matter eligibility, I address a portion of the prosecution history briefly below.

TDL argues that the fact that the patent disparages conversion charts means that its claims are drawn to something other than a conversion chart—specifically, a “television control system.” TDL insists that the claims “represent a new structure” that improves previously known television control systems. Resp. at 10, 5. This new structure comprises “three new things: channel select designations; the use of two controls, each issuing a different signal; and transmission of the first control signal via the multi-channel signal, with one control at the origin of the signal.” *Id.* at 10. Although examination of specific claim limitations is generally the province of *Alice’s* second step, *Elec. Power Group*, 830 F.3d at 1353 (Fed. Cir. 2016), TDL insists that the combination of the foregoing elements takes the invention claimed in claims 1 and 2 outside the realm of an abstract idea. I disagree.

First, TDL highlights the Examiner’s comments distinguishing the “channel select designation” from the “channel relocation table” disclosed in the Jeffers prior art reference. Resp. at 4. In TDL’s view, Jeffers describes a conversion chart because it simply maps one “tuning designation” to another “tuning designation.” Claims 1 and 2, by contrast, do not describe a conversion chart because the “channel select designation” is not a channel—it is a signal used to pick a channel. But I see no principled basis for concluding that the abstract idea of a

conversion chart is limited to a system that maps channel-to-channel conversions, and excludes systems like the one recited in claim 1, which maps channel select designations to corresponding channel tuning designations. Indeed, claim 1 recites that each "channel selection designation" is stored in the system's memory "as corresponding to...one channel tuning designation." '952 Pat. at 14:42-44. As the parties agree, each "channel tuning designation" is "a tuner designation at which a particular signal may be found." See Claim Construction Order at 3. At bottom, then, each channel select designation ultimately corresponds to a particular signal to which the system's "tuner means" can tune to receive programming. This correspondence describes the essence of a conversion chart, regardless of how the channel selection designations are labeled.⁶

TDL points out that unlike the conversion chart in Jeffers, the claimed system allows a viewer to select a program based on the program name alone, without knowing either the over-the-air

⁶ To illustrate, in a channel-to-channel conversion chart that could be created using pencil and paper, the fields in column one would be populated with over-the-air channels, while the corresponding fields in column two would be populated with cable channels. Alternatively, one could create a network-to-channel conversion chart in which column one is populated with names like "NBC" or "HBO," while column two is populated with cable channels on which these networks broadcast programs. In another alternative, one could create a program-to-channel conversion chart in which column one is populated with program names, such as "Law and Order: Criminal Intent," and column two is populated with the cable channels on which these programs are broadcast.

channel or the cable or satellite channel on which the program airs. Resp. at 5, 10 and Exh. F. While this feature may represent a technical advantage over channel-to-channel conversion charts such as the one in *Jeffers*, the operator's ability to assign a label corresponding to the name of a program that airs on a particular channel, rather than to the channel name or number, does not change the essence of claims 1 and 2. Nothing in the Examiner's observations suggests the contrary.⁷ In short, I conclude that claims 1 and 2 are drawn to an abstract idea and thus proceed to the second step of the *Alice* inquiry.

TDL suggests that claims 1 and 2 add an inventive concept because pencil-and-paper conversion charts cannot "transmit a control signal including a data set on a channel of a multi-channel signal transmitted from far away." Resp. at 12. That is plainly true, just as it is presumably true that the claimed system offers advantages in terms of convenience and efficiency over the use of pencil-and-paper conversion charts or published guides like *TV Guide*. But features and advantages that flow naturally from the use of computers to perform functions previously performed manually do not establish the existence of an inventive concept. See *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1371 (Fed. Cir. 2015) ("[s]teps that do

⁷ All agree that the Examiner's analysis on reexamination concerned only anticipation and obviousness under §§ 102 and 103 and did not address subject-matter patentability under § 101.

nothing more than spell out what it means to 'apply [an abstract idea] on a computer' cannot confer patent-eligibility."). See also *In re TLI Communications LLC Patent Litigation*, 823 F.3d 607, 613-14 (Fed. Cir. 2016) ("[f]or the role of a computer in a computer-implemented invention to be deemed meaningful in the context of this analysis, it must involve more than performance of well-understood, routine, [and] conventional activities previously known to the industry") (internal quotation marks and citation omitted, original alterations).

TDL cites *McRO, Inc. v. Bandai Namco Games America Inc.*, 837 F.3d 1299 (Fed. Cir. 2016), for the proposition that "[i]mprovements to computers—either hardware or software—can be non-abstract." Resp. at 4. That observation is correct, but it does not establish the subject matter eligibility of claims 1 and 2 because the '952 patent neither discloses nor claims an "improvement to computers." Instead, it describes a telephone control system that uses conventional technologies performing their well-known and expected functions. Indeed, the specification describes all of the system's physical components as "conventional," "typical," and "readily commercially available." '952 Pat. at cols. 4:45-58; 5:3; 5:60-63. Moreover, the factors supporting the court's decision in *McRO* simply are not present in this case.

The patents in *McRO* "relate[d] to automating part of a preexisting 3-D animation method." 837 F.3d at 1303. As the court explained, the preexisting animation technology required a combination of automated and human processes to produce realistic visual representations of human speech, which was both "very tedious and time consuming" and required "a visual and subjective process." *Id.* at 1306. The patent improved the preexisting technology by using "specific, limited mathematical rules" that obviated the need for human animators "to subjectively identify the problematic sequence and manually fix it." *Id.* at 1314, 1307. The court concluded that the "ordered combination of claimed steps, using unconventional rules that relate sub-sequences of phonemes, timings, and morph weight sets, is not directed to an abstract idea," *id.* at 1302-03, noting that it was "the incorporation of the claimed rules, not the use of the computer, that improved [the] existing technological process. *Id.* at 1314. (original alteration). As noted above, the system disclosed and claimed in the '952 patent uses only conventional elements performing their expected functions to achieve the kinds of improvements that one would expect from the automation of a manual process. Accordingly, *McRO* does not support its eligibility under § 101. See also *Bascom Global Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016) (claims that take an abstract idea and add the requirement "to perform it on a

set of generic computer components...would not contain an inventive concept.")

That the claims incorporate "a distant control that communicates with a viewer's television," does not change the analysis. TDL argues that the "spatial separation" of the two controls adds an inventive concept, citing *Finjan, Inc. v. Blue Coat Sys., LLC*, No. 15-cv-03295-BLS, 2016 WL 7212322, at *11 (N.D. Cal. Dec. 13, 2016). But the patent at issue in *Finjan* claimed improvements in the technology available for protecting devices and networks from malicious intrusions, which were achieved, in part, by "mov[ing] malware profiling from its traditional location on end-user computers to an intermediate location on the network." *Id.* at *11. In other words, the novel placement of an element of the system overcame problems associated with the traditional positioning of that element. Here, the problems the '952 patent purports to solve have nothing to do with the location of the claimed control units. As the specification explains, cable providers have long assigned channel identifiers remotely from viewers' TV receivers. '952 Pat. at 1:66-2:2. That is neither novel nor inventive.

Finally, TDL identifies the requirement "that the control signal travel over the multi-channel signal" as "something new," but it articulates no argument to explain how this features adds an inventive concept. Nor does the patent itself suggest an answer

to this question, as the claim element responsible for receiving the multi-channel signal is the "tuner means," the structure of which, as TDL emphasized during claim construction, was well-known in the art. See TDL's Resp. Br. in 08-cv-3584, at 10 ("Just as a television was known, so were a variety of tuners known to persons of skill in the art. The '952 patent says so explicitly, and nowhere describes all of the detail of any specific tuner."). Accordingly, I perceive no basis on which to conclude that the limitation requiring a control signal that travels over a multi-channel signal imparts an inventive concept to claims 1 and 2.

III.

For the foregoing reasons, defendants' motions for judgment on the pleadings are granted.

ENTER ORDER:



Elaine E. Bucklo

United States District Judge

Dated: June 19, 2017