

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

|                             |   |                      |
|-----------------------------|---|----------------------|
| TECHNOLOGY DEVELOPMENT AND, | ) |                      |
| LICENSING, LLC,             | ) |                      |
|                             | ) |                      |
| Plaintiff,                  | ) |                      |
|                             | ) | Case No. 07 C 4512   |
| v.                          | ) |                      |
|                             | ) | Judge Joan H. Lefkow |
| GENERAL INSTRUMENT          | ) |                      |
| CORPORATION,                | ) |                      |
|                             | ) |                      |
| Defendant.                  | ) |                      |

**OPINION AND ORDER**

Technology Development and Licensing, LLC (TD&L) filed suit against Motorola, Inc. claiming infringement of U.S. Patent No. RE 35,952 (the '952 patent). After a reorganization of Motorola, Inc., the seller of the accused devices, General Instrument Corporation (GI), was substituted as defendant. GI has moved for summary judgment on the bases of non-infringement and invalidity of asserted claims 8, 9, 37, and 38. (Dkt. 231). For the reasons stated below, GI's motion for summary judgment (dkt. 231) is granted as to invalidity of the patent and GI's motion to exclude the expert opinions of Joseph Gemini (dkt. 228) is denied as moot.<sup>1</sup>

**BACKGROUND<sup>2</sup>**

The '952 patent relates to "[a] television control system . . . for selecting a television

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<sup>1</sup> The court has jurisdiction under 28 U.S.C. § 1331. Venue is proper under 28 U.S.C. § 1391(b).

<sup>2</sup> Unless otherwise noted, the facts in this section are taken from the parties' Local Rule 56.1 statements and are construed in the light most favorable to the non-moving party. The court will address many but not all of the factual allegations in the parties' submissions, as the court is "not bound to discuss in detail every single factual allegation put forth at the summary judgment stage." *Omnicare, Inc. v. UnitedHealth Grp., Inc.*, 629 F.3d 697, 704 (7th Cir. 2011) (citation omitted). In accordance with its regular practice, the court has considered the parties' objections to the statements of fact and includes in this background only those portions of the statements and responses that are appropriately supported and relevant to the resolution of this motion. Any facts that are not controverted as required by Local Rule 56.1 are deemed admitted.

channel corresponding to a preassigned channel tuning designation.” (Dkt. 233, Defendant’s Local Rule 56.1 Statement of Facts (Def.’s L.R. 56.1) ¶ 12.) On August 9, 2007, TD&L filed suit alleging that certain Motorola products infringe the ’952 patent. (*See* dkt. 1; dkt. 233-1, Ex. N at 16–17.)

In April, August, and December of 2009, the United States Patent and Trademark Office (PTO) granted three separate requests for *ex parte* reexamination of the ’952 patent and merged the three reexamination proceedings into one. (Def.’s L.R. 56.1 ¶ 14.) In July 2009, this court stayed the litigation pending reexamination by the PTO. (Dkt. 112.) On May 2, 2011, the PTO examiner issued a final rejection of all claims but claims 3 and 4. (Def.’s L.R. 56.1 ¶ 15.) TD&L appealed. (*Id.* ¶ 16.)

The Patent Trial and Appeal Board (PTAB) reversed the examiner’s rejection of claims 8, 9, 37, and 38. (*Id.* ¶ 17.) The PTAB construed “claim 8 as requiring an apparatus for selecting a television channel corresponding to any one of a plurality of preassigned channel tuning designations and retaining the (plurality of) channel tuning designations in a plurality of ordered cues.” (*Id.* ¶ 21 (quoting PTAB Decision on Appeal, 2012-012562 at 9).) The PTAB explained that, “[u]nder this construction, we agree with the Examiner that a list of ‘favorite’ television programs [disclosed in the prior art] constitutes an ‘ordered cue’ of television programs but we disagree with the Examiner that a list of audio programs also constitutes an ‘ordered cue’ of television channels. Hence, [the prior art] appears to disclose one list of television programs (*i.e.*, one ‘ordered cue’) rather than a plurality of ordered cues of television channels.” (*Id.* ¶ 22.)<sup>3</sup> Accordingly, the PTAB did not sustain the Examiner’s rejection of claims 8, 9, 37, and 38. (*See id.*)

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<sup>3</sup> Essentially, the Examiner interpreted the claims such that the patent did not limit the “ordered cue” to television programs and the PTAB concluded that it did.

TD&L decided to pursue claims 8, 9, 37 and 38 in this litigation. The text of each independent claim (8 and 37) and dependent claim (9 and 38) is almost identical, excepting that claims 8 and 9 use the term “ordered cues” where claims 37 and 38 use “scroll sequence(s).” That difference is irrelevant to the analysis here, so only claims 8 and 9 are recited below:

| Claim No. | Claim   |
|-----------|---|
| 8         | <p>In a television control system apparatus for selecting a television channel corresponding to a preassigned channel tuning designation, the system apparatus comprising:</p> <p>tuner means for receiving a processor signal and a multi-channel input signal, and in response to said processor signal, tuning out all but one channel corresponding to a selected one of said preassigned channel tuning designations;</p> <p>memory means for storing a marker value for at least one of said channel tuning designations, and means for retaining said channel tuning designations in a plurality of ordered cues;</p> <p>operator-actuated control means for generating a control output signal comprising one of (a) a first data set representative of the presence of said marker value associated with one of said channel tuning designations and one of said <i>cues</i>, and (b) a second data set representative of a command to advance to a subsequent channel tuning designation within a selected one of said cues;</p> <p>processor means for receiving said control output signal from said operator-actuator control means, and upon receipt of said first data set, causing said memory means to store any of said marker values associated with one of said channel tuning designations, and upon receipt of said second data set, reviewing the corresponding one of said cues to determine a next of said channel tuning designations to have one of said marker values associated therewith which corresponds to said cue, and generating said processor signal to correspond to said next channel tuning designation.</p> |
| 9         | <p>A television control apparatus as defined in claim 8, wherein said control means further includes means for generating a cue selection signal corresponding to one of said cues, and wherein said processor means, upon receipt of said cue selection signal reviews the one of said cues corresponding thereto.</p>   |

(Dkt. 233-1, Ex. D at 16:56–17:25; *see also id.* at 30:53–31:24 for claims 37 and 38).) By agreement of the parties, the court construed the term “cue” to mean “the listing in memory of the various programmed entries made by the viewer, wherein each select code is stored along

with its corresponding channel code and display code.” (Def.’s L.R. 56.1 ¶ 28.)<sup>4</sup>

### LEGAL STANDARD

Summary judgment obviates the need for a trial where there is no genuine issue as to any material fact and the moving party is entitled to judgment as a matter of law. Fed. R. Civ. P. 56(a). A genuine issue of material fact exists if “the evidence is such that a reasonable jury could return a verdict for the nonmoving party.” *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248, 106 S. Ct. 2505, 91 L. Ed. 2d 202 (1986). To determine whether any genuine fact issue exists, the court must pierce the pleadings and assess the proof as presented in depositions, answers to interrogatories, admissions, and affidavits that are part of the record. Fed. R. Civ. P. 56(c). In doing so, the court must view the facts in the light most favorable to the non-moving party and draw all reasonable inferences in that party’s favor. *Scott v. Harris*, 550 U.S. 372, 378 127 S. Ct. 1769, 167 L. Ed. 2d 686 (2007). The court may not weigh conflicting evidence or make credibility determinations. *Omnicare*, 629 F.3d at 704.

The party seeking summary judgment bears the initial burden of proving there is no genuine issue of material fact. *Celotex Corp. v. Catrett*, 477 U.S. 317, 323, 106 S. Ct. 2548, 91 L. Ed. 2d 265 (1986). In response, the non-moving party cannot rest on bare pleadings alone but must designate specific material facts showing that there is a genuine issue for trial. *Id.* at 324; *Insolia v. Philip Morris Inc.*, 216 F.3d 596, 598 (7th Cir. 2000). If a claim or defense is factually unsupported, it should be disposed of on summary judgment. *Celotex*, 477 U.S. at 323–24.

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<sup>4</sup> Thus, “cue” is used in the sense of “queue” rather than its typical meaning of “signal” or “prompt.”

## ANALYSIS

GI contends it is entitled to summary judgment of non-infringement and invalidity of claims 8, 9, 37, and 38 of the '952 patent because (1) the accused products, as sold by GI, were non-infringing because they are incapable of performing the functions recited by the claims—the creation of a plurality of scroll sequences or ordered cues; (2) TD&L has no evidence that the accused feature—the creation of multiple favorite channel lists—was ever tested or used by any GI personnel; (3) TD&L's technical expert admitted that the accused products did not infringe where the products do not include a key limitation of asserted claims 8 and 9; and (4) the asserted claims are invalid under 35 U.S.C. § 101. The court can resolve this motion under GI's fourth argument.

### **I. Timeliness of an Invalidity Argument Under 35 U.S.C. § 101**

TD&L contends that GI's invalidity argument under 35 U.S.C. § 101 is untimely because GI failed to raise it in any of its responses to TD&L's interrogatory requesting Motorola's invalidity contentions. (Dkt. 238 at 13.) GI replies that its argument is timely because it could not have asserted the contention before the close of discovery because *Alice Corporation Pty. Ltd. v. CLS Bank International*, 573 U.S. ---, 134 S. Ct. 2347, 189 L. Ed. 2d 296 (2014), on which the argument depends, was decided more than five years after the close of fact discovery and eight months after the close of expert discovery. (Dkt. 250 at 13.)

Whether or not GI could have disclosed a § 101 contention earlier, the court will not impose a forfeiture. Local Patent Rule 2.3 does not explicitly require the disclosure of a § 101 argument; it only requires the disclosure of arguments under §§ 102 and 112. Neither does Local Patent Rule 3.1 require a § 101 disclosure in a party's final invalidity contentions. Nor does either rule bar undisclosed § 101 challenges for failure to disclose. The courts that have

addressed the issue have relied on the text of local rules. *Compare Mobile Telecomm. Techs., LLC v. United Parcel Serv., Inc.*, No. 12-CV-3222-AT, 2016 WL 1171191, at \*7–8 (N.D. Ga. Mar. 24, 2016) (finding the defendant had not waived § 101 invalidity challenge by failing to include it in its responses to plaintiff’s interrogatories because the Northern District of Georgia’s Local Patent Rule 4.3 did not require such disclosure), *with Good Technology Corp. v. Mobileiron, Inc.*, No. 12–cv–5826, 2015 WL 3866019, at \*1 (N.D. Cal. May 4, 2015) (finding the defendant had waived its invalidity challenge under § 101 where the district’s local patent rules were clear and required “a party opposing a claim of patent infringement” to “include in its invalidity contentions ‘any grounds of invalidity’ based on 35 U.S.C. § 101”).<sup>5</sup>

Moreover, TD&L would not suffer any prejudice from allowing the argument to be presented after the close of fact and expert discovery where it addresses a purely legal issue that may be decided on the pleadings. *See buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1351 (Fed. Cir. 2014) (affirming district court’s decision granting judgment on the pleadings based on defendant’s § 101 invalidity argument).; *Chamberlain Group, Inc. v. Linear LLC*, 114 F. Supp. 3d 614, 623 (N.D. Ill. 2015) (“The Federal Circuit has treated Section 101 analyses like a jurisdictional inquiry and encouraged district courts to assess Section 101 patent eligibility at the outset of the litigation to preserve judicial resources.”) Although it would have been more efficient to raise the issue earlier, GI is not precluded from raising it now.

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<sup>5</sup> The court also declines to impose a forfeiture based on TD&L’s interrogatory argument. TD&L’s interrogatory was poorly written. It sought information regarding GI’s invalidity contentions and included a catchall clause—“and any other basis advanced by the defendant”—and then proceeded to list the type of information it was seeking. (*See* dkt. 242-13 at 2.) None of that information listed was relevant to a § 101 invalidity argument. (*Id.*) As such, it is not clear from the language of the interrogatory whether TD&L sought information relevant to a § 101 invalidity argument.

## II. Test for Patentability Under 35 U.S.C. § 101

GI argues that the '952 patent is directed at a patent-ineligible abstract idea, and that the claims do not contain any inventive concept that should make the claimed system apparatus patent-eligible. It argues, "The asserted claims merely computerize what people have done for years, which is the creation of lists of favorite television channels." (Dkt. 232 at 12). TD&L responds that GI is hardly in a position to make this argument when GI has obtained patents on an interactive television program guide in which it claimed inventiveness by pointing to "the sheer volume of entries" as "render[ing] the use of printed program guides expensive and inconvenient." (Dkt. 238 at 14). Furthermore, TD&L points out, the apparatus claims of the '952 patent include hardware: a tuner, a remote control, and a processor. (*Id.* at 14-15).

"Section 101 of the Patent Act defines the subject matter eligible for patent protection." *Alice*, 134 S. Ct. at 2354. This section provides that "[w]hoever invents or discovers any new and useful process, machine, manufacture, 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." *Id.* (quoting 35 U.S.C. § 101). The Supreme Court has long held that there are implicit exceptions to this provision: "[l]aws of nature, natural phenomena, and abstract ideas are not patentable." *Id.* (quoting *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, --- U.S. ---, 133 S. Ct. 2107, 186 L. Ed. 2d 124 (2013)).

*Alice* applied the framework set forth in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. ---, 132 S. Ct. 1289, 182 L. Ed. 2d 321 (2012), "for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts," 134 S. Ct. at 2355, to the question of patentability of a computer system and program code configured to carry out a method for intermediated

settlement of financial transactions. As described in *Alice*, a court must first “determine whether the claims at issue are directed to a patent-ineligible concept.” *Id.* If the patent is directed at a law of nature, natural phenomena, or abstract idea, the court must next consider whether the claims contain an “inventive concept” that “transform the nature of the claim” into patent-eligible subject matter. *Id.* at 2357.

**A. Whether the Claims of the ’952 Patent Are Directed to an Abstract Idea**

“The abstract ideas category embodies the longstanding rule that an idea of itself is not patentable.” *Alice*, 134 S. Ct. at 2355 (citations omitted). “[W]ell-understood, routine conventional activities” applying a law of nature are not patentable. *Mayo*, 132 S. Ct. at 1298. Further, “tying an abstract idea to a general purpose computer or to the Internet, without more, is generally insufficient to make an abstract idea patentable.” *In re TLI Commc’ns LLC Patent Litig.*, 87 F. Supp. 3d 773, 784 (E.D. Va. 2015) (citing *Ulramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715–17 (Fed. Cir. 2014)).

The ’952 patent implements on a microprocessor a routine, conventional activity, that 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. By 1993, remote control devices were used to jump from one channel to another. And since the advent of cable television, viewers have made paper or mental lists of channel numbers so as not to have to search through all available channels to find favorites. As such, the subject matter of the patent is directed at a routine, conventional activity that is not patentable unless it contains an inventive concept.

**B. Whether the Claims of the ’952 Patent Contain an Inventive Concept**

Section 101 analysis next requires the court to determine whether a claim directed at an

abstract idea contains an “inventive concept.” *See Alice*, 134 S. Ct. at 2355. In this step, the court looks for “an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the ineligible concept itself.” *Id.* (citations and brackets omitted). “A claim that recites an abstract idea must include additional features to ensure that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].” *Id.* (quoting *Mayo*, 132 S. Ct. at 1297) (alterations in *Alice* not *Mayo*). Those additional features must be more than “well-understood, routine, conventional activity.” *Mayo*, 132 S. Ct. at 1298. Claims must do more than simply instruct the practitioner to implement the abstract idea on a generic computer. *Alice*, 134 S. Ct. at 2359–60.

*Alice* provides no bright line for patentability under § 101, and the lower courts have since endeavored to draw the line in cases presenting *Alice*-based challenges to patentability.<sup>6</sup> One well-considered decision is *Market Track, LLC v. Efficient Collaborative Retail Marketing, LLC*, No. 14 C 4957, 2015 WL 3637740 (N.D. Ill. June 12, 2015), in which the court examined post-*Alice* opinions from the Federal Circuit. The court inferred from the decisions that it is important to consider (a) “whether claim elements using procedures that pre-date the filing of the patent provide the ‘inventive concept’ necessary to save a patent from a § 101 challenge,”<sup>7</sup> (b) “the nature of the problem to be solved; problems that arise uniquely in computing or in an internet context weigh in favor of finding an inventive concept,” and (c) whether the claims

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<sup>6</sup> *Alice* has generated a number of articles discussing whether and which computer-implemented concepts are patentable. *See, e.g.*, C. Moreno, “They Know It When They See It: Patentable Subject Matter After *Alice*,” 27 INTELL. PROP. & TECH. L.J. 6, 7 (Jan. 2015) (“Despite the outcome in *Alice*, patents based on software-implemented innovations have not been knocked out entirely, though they did take a pretty good punch to the gut.”)

<sup>7</sup> “Although patentable subject matter under § 101 follows a separate test from novelty or obviousness, under § 102(a) and § 103, respectively, certain facts that are relevant to novelty or obviousness are also relevant to *Mayo* step two.” *Mkt. Track*, 2015 WL 3637740, at \*5.

attempt “to transform an abstract idea to patentable subject matter simply by limiting the method to a particular industry or to a particular technological context.” *Id.* at \*5.

These criteria applied here point toward unpatentability. First, the claims are limited to a particular technological context: “devices for viewer control of a television receiver,” (dkt. 233-1, Ex. D at 1:15–16), and the inventor does not profess that the claimed system is innovative in the wider context of electronic circuitry or micro-processing. Second, the specification describes the problem being solved as the confusion and inconvenience that resulted from the advent of cable and satellite television services with their multiplicity of channels and unfamiliar and inconsistent numbering systems. It acknowledges that service providers provide conversion charts to the viewer but recites that a means was needed “by which cable and satellite television control devices may be made more convenient,” particularly to “enable control of television viewing using channel designations which match those with which the viewer is familiar.” (*See id.* at 1:15–2:21.) In short, the need was to put a conversion chart on a remote control in an easily usable format, a task that would not suggest that innovative technology would be required to accomplish.

Finally, the claim elements use procedures that pre-date the filing of the patent. Although unlike most of the cases finding unpatentability of software, the ’952 patent claims hardware (tuner, remote control, processor), but the apparatus is unconventional only in the programming of its microprocessor. As TD&L acknowledges, remote control devices that communicate via circuitry with a cable box for selecting channels from an on-screen program viewing guide existed in 1993. And the technology applied to make the patented device was “conventional” at

that time.<sup>8</sup> Prior art also disclosed the programming of a control device to store and label more than one selected channel in a list/cue of favorites. (Dkt. 238-37 at 10.) The PTAB found that the patented device differed from the prior art in its ability to create and store more than one such list/cue in the device. (*Id.*) In short, the claims disclose a computerized version of a conversion chart, further organized for the viewer to select favorite channels, label them with channel identifiers different from the provider's assigned number or name, and place them in multiple cues from which the viewer may select a particular channel to watch.

The claimed system is readily comparable to the electronic map found unpatentable for lack of an inventive concept in *Peschke Map Technologies LLC v. Rouse Properties Inc.*, 168 F. Supp. 3d 881 (E.D. Va. 2016). The court there explained that the patent merely described the use of widely-used and well-known tools (electronic maps, hyperlinks, servers, and databases) to implement on a computer the conventional activity of map reading. *Id.* at 890. Similarly, the '952 patent describes the use of widely-used and well-known tools (remote control device, conventional circuitry, programmable microprocessor) to implement the conventional activity of selecting a channel to watch from a written record of lists of favorite channels and entering the selection on a control. *See, e.g., Evolutionary Intelligence LLC v. Sprint Nextel Corp.*, 137 F. Supp. 3d 1157 (N.D. Cal. 2015) (finding computer-implemented system of storing information of what is popular, new, and preferred by a user, allowing for more efficient processing of the user's future searches, was directed at age-old function of storing information and thus not patentable); *RaceTech, LLC v. Kentucky Downs, LLC*, 167 F. Supp. 3d 853 (W.D. Ky. 2016) (finding computer-implemented wagering system, methods, and apparatus for pari-mutuel historical gaming was unpatentable abstract idea); *O2 Media, LLC v. Narrative Science Inc.*, 149

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<sup>8</sup> The specification refers to conventional circuitry for television receivers and speakers (dkt. 233-1, Ex. D at 4:46–59), a conventional programmable microprocessor (*id.* at 5:1–6), and conventional keys used in remote television control devices (*id.* at 6: 59–63).

F. Supp. 3d 984 (N.D. Ill. 2016) (finding that computerized system for organizing, analyzing, and presenting information was unpatentable).

**CONCLUSION AND ORDER**

For all of these reasons, GI's motion for summary judgment on its claim of invalidity (dkt. 231) is granted. All other issues are moot. This case is terminated.



Date: December 6, 2016

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U.S. District Judge Joan H. Lefkow