## UNITED STATES DISTRICT COURT

### NORTHERN DISTRICT OF FLORIDA GAINESVILLE DIVISION

THE UNIVERSITY OF FLORIDA RESEARCH FOUNDATION, INC.,

Plaintiff,

v.

CASE NO. 1:17cv171-MW/GRJ

GENERAL ELECTRIC COMPANY, GE MEDICAL SYSTEMS INFORMATION TECHNOLOGIES, INC., AND GE MEDICAL SYSTEMS, INC.

Defendants.

### ORDER GRANTING DEFENDANTS' MOTION TO DISMISS

This is a patent case. The University of Florida Research Foundation, Inc. ("UFRF") sues the General Electric Company, GE Medical Systems Information Technologies, Inc., and GE Medical Systems, Inc. (collectively "GE") for direct and indirect patent infringement under 35 U.S.C. § 271(a)–(b). GE moves to dismiss under Rule 12(b)(6), arguing that UFRF's patent is ineligible under 35 U.S.C. § 101 because it claims an abstract idea. ECF No. 17. This Court, following a hearing on November 8, 2017, **GRANTS** GE's motion to dismiss.

#### I. Factual Background

UFRF is a direct support organization to the University of Florida, a non-profit public university located in Gainesville, Florida. UFRF holds more than 2,400 active patents. ECF No. 1, at ¶ 4. Among them is the patent at issue, U.S. Patent No. 7,062,251 (the "251 patent"), officially entitled "Managing Critical Care Physiologic Data Using Data Synthesis Technology." *Id.* at ¶¶ 4, 12; *see also* ECF No. 1-1 (attaching the '251 patent as exhibit). UFRF licensed the patent to ICU DataSystems, which developed a product known under its tradename, "iCuro." ECF No. 1, at ¶¶ 63–65. ICU DataSystems "faced capital concerns," and various entities acquired its assets, including the license to the '251 patent. *Id.* at ¶ 86. As of 2016, the license to the patent "became non-exclusive so that UFRF could recoup from market free-riders." *Id.* at ¶ 90.

UFRF asserts that GE is directly infringing on the '251 patent with a product known as the CARESCAPE Network that uses a "Unity Network Interface Device," or UNITY NETWORK ID. Id. at ¶¶ 96–104. GE is also charged with indirect infringement of the '251 patent by distributing marketing, training, and instructional materials related to CARESCAPE and the UNITY NETWORK ID. Id. at ¶ 106.

An honest and thorough description of the '251 patent is helpful and necessary in determining whether it is patent eligible under 35 U.S.C. § 101. Patent '251, in short, "utilizes data synthesis technology . . . to integrate

physiologic data from at least one bedside machine with data from other data sources" in medical facilities. ECF No. 1-1, at 11. The patent permits medical personnel to quickly access critical, complex, and organized data. ECF No. 1, at  $\P\P$  30–33. In the pre-computer and early-computer eras, medical personnel "were faced with a large amount of available data but had no reliable means to collect or consolidate that data in real-time." *Id.* at  $\P$  19; *see also id.* at  $\P$  37. In response to this need, the patent's inventors worked to perfect technology that permitted medical personnel to obtain data from multiple bedside devices, organize that data, create translation tables, and present that data in a "singular display." *Id.* at  $\P$  28. The iCuro technology is grounded on the patent's concepts.

The technology uses "drivers," which UFRF describes as "sets of rules." Id. at ¶ 53. These drivers serve to, among other things, translate or interpret data that has been inputted into a "data stream" from a bedside machine. See id. at ¶¶ 47–49; see also ECF No. 1-1, at 13 (describing drivers in similar terms). Drivers are able to identify different data streams from various bedside machines; in turn, each bedside machine's drivers can "correctly interpret the segment data stream for the machine." ECF No. 1, at ¶ 51. Drivers also can help to cross-reference multiple data sets from databases or machines to create standardized data. Id. at ¶ 54. This process allows data to be "combined, compared, and analyzed" in formats independent from the specific bedside

machine. ECF No. 1-3, at  $\P$  35. In other words, the '251 patent converts data from bedside machine-dependent to machine-independent format. ECF No. 1, at  $\P$  54–56; see also ECF No. 1-3, at  $\P$  37 ("[T]he '251 patent details how data from multiple monitors can be read into a common data store."). Overall, drivers "improve[] the existing technological process by allowing the automation of . . . tasks." Id. at  $\P$  53. They assist the '251 patent to use medical computer technology to present solutions that have synthesized "vast amounts of synthesized data in a manner that can help save lives." Id. at  $\P$  57.

Technology based on the '251 patent performs tasks that allow for "true clinical decision support, including multi-variate graphs collected from different machines, review of trends over time, and multiple-variable alerts to detect true clinical issues." Id. at ¶ 59. In doing so, the technology "collect[s], manipulate[s], interpret[s], and display[s] information in a manner that could not be and was not performed by humans." Id. at ¶ 60.

#### II. Threshold Issues

Before diving into the muddy waters of patent eligibility, this Court must first dip its toes into threshold issues that impact the substantive analysis.

#### a. No Claim-Construction Hearing is Necessary

UFRF identifies terms that it argues GE has erroneously construed as "mere generic." ECF No. 25, at 42. These terms are "bedside," "bedside

machine," "bedside device," "central data repository," "machine-independent," "machine-dependent," "convert," and "graphical user interface." *Id*.

District courts are tasked with the responsibilities for claim construction as a matter of law. Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996). "It is a 'bedrock principle' of patent law that 'the claims of a patent define the invention to which the patentee is entitled the right to exclude." Phillips v. AWH Corp., 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc) (quoting Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111, 1115 (Fed. Cir. 2004)). Words in patents' claims "are generally given their ordinary and customary meaning" known to "a person of ordinary skill in the art in question at the time of the invention." Phillips, 415 F.3d at 1313. Claims are only shed of their ordinary and customary meanings "if the patentee acted as his own lexicographer and clearly set forth a definition of the disputed claim term." CCS Fitness, Inc. v. Brunswick Corp., 288 F.3d 1359, 1366 (Fed. Cir. 2002).

This Court acknowledges a split among the Federal Circuit's judges on claim construction. Some judges construe patents' claims to capture an invention's scope. See, e.g., Retractable Techs., Inc. v. Becton, Dickinson & Co., 653 F.3d 1296, 1305 (Fed. Cir. 2011) ("[W]e strive to capture the scope of the actual invention, rather than strictly limit the scope of the claim to disclosed embodiments or allow claim language to become divorced from what the

specification conveys is the invention."). Other judges—Judge Moore in particular—emphasize that the claims themselves define an invention's boundaries and that specifications cannot narrow claim terms by themselves unless the patentee has offered his own definitions. See generally Retractable Techs., Inc. v. Becton, Dickinson & Co., 659 F.3d 1369, 1370–76 (Fed. Cir. 2011) (Moore, J., dissenting from en banc denial). With this split in mind, this Court follows *Phillips* as articulated in the *Retractable Techs*. majority and in Judge Moore's dissent from the court's denial of an en banc petition in that case. See Retractable Techs., 653 F.3d at 1303 ("To ascertain the scope and meaning of the asserted claims, we look to the words of the claims themselves, the specification, the prosecution history, and any relevant extrinsic evidence") (citing Phillips, 415 F.3d at 1315–17); see also Retractable Techs., 659 F.3d at 1371 (Moore, J., dissenting from denial of en banc petition) (stating that "claim terms are to be given their plain and ordinary meaning to one of skill in the art" and "claims are to be construed in the context of the entire patent").

A claim construction hearing is not necessary here. This Court can construe the terms using their plain and ordinary meaning and—when the patent so directs—using "the inventor's lexicography." *Phillips*, 415 F.3d at 1316. For example, the patent defines the term "bedside" as meaning "an environment in close proximately [sic] to a patient being treated" that does not

necessarily need to include a bed. ECF No. 1-1, at 11. The terms that are not explicitly defined in the '251 patent have plain and ordinary meanings.

District courts may need to hold a claim construction hearing even if the terms' plain meanings are clear. "A determination that a claim term 'needs no construction' or has the 'plain and ordinary meaning' may be inadequate when a term has more than one 'ordinary' meaning or when reliance on a term's 'ordinary' meaning does not resolve the parties' dispute." *O2 Micro Intern. Ltd.* v. Beyond Innovation Tech. Co., 521 F.3d 1351, 1361 (Fed. Cir. 2008) (citations omitted in original). Neither exception applies here. None of the terms UFRF identifies has more than one ordinary meaning in the context of the '251 patent nor does reliance on the terms' ordinary meaning fail to resolve the dispute.

Rather, any claim-construction-related disputes are over how broad or narrow these terms should be construed. Based on the procedural posture of a motion to dismiss, this Court construes these terms narrowly and within their ordinary meaning to a skilled individual familiar with the art. For example, the term "convert"—likely the broadest term that UFRF flags as potentially problematic—refers to its plain and ordinary meaning "to change or turn into another substance or form." WEBSTER'S DICTIONARY 400 (2d. ed. 1983). The act of converting in this context, however, narrowly refers to converting data from bedside machine-dependent to machine-independent formatting—not the conversion of just any object to something else.

Finally, this Court finds Claim 1 representative of the other claims. 1 See, e.g., Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n., 776 F.3d 1343, 1348 (Fed. Cir. 2014) (finding more than one patent claims as representative because they were "substantially similar in that they recite little more than the same abstract idea"). The remaining seventeen dependent claims do not add anything to this Court's analysis. They simply explain what is already set out in the specifications. And this Court analyzes Claim 1 in light of those specifications. Even if, however, this Court construed the dependent claims separate and apart from Claim 1, the following analysis and its conclusions over the '251 patent's eligibility would not change.

#### b. Expert Declarations Attached to the Complaint May Be Considered

UFRF attaches two declarations to the complaint, both attesting to the benefits of the '251 patent, particularly in the application of patent-based technology in the declarants' practices. GE objects, arguing generally that this Court need not consider anything beyond the patent's language in analyzing patentability. ECF No. 17, at 26–30.

<sup>&</sup>lt;sup>1</sup> During the November 8, 2017 hearing, the parties discussed whether Claim 1 could be considered representative. UFRF agreed that it could as long as Claim 1 is construed in light of the details outlined in the other dependent claims and the specifications as this Court has done.

Federal Rule of Civil Procedure 10(c) says that "[a] statement in a pleading may be adopted by reference elsewhere in the same pleading or in any other pleading or motion. A copy of a written instrument that is an exhibit to a pleading is a part of the pleading for all purposes." The Eleventh Circuit has stated that a district court at the motion to dismiss phase must "limit its consideration to the pleadings and exhibits attached thereto." Grossman v. Nationsbank, N.A., 225 F.3d 1228, 1231 (quoting GSW, Inc. v. Long County, 999 F.2d 1508, 1510 (11th Cir. 1993)). See also Dig. Media Tech., Inc. v. Amazon.com, Inc., No. 4:16-cv-244, at 7 (N.D. Fla. July 3, 2017) (quoting Miljkovic v. Shafritz & Dinkin, P.A., 791 F.3d 1291, 1297 n.4 (11th Cir. 2015) (stating courts must "treat [exhibits attached to the complaint] as part of the complaint for Rule 12(b)(6) purposes")). Additionally, courts "must assume [supporting affidavits] to be true at the motion to dismiss stage." Arthur v. Thomas, 674 F.3d 1257, 1262 (11th Cir. 2012).

Accordingly, to the extent that the declarations of Dr. Bryan Bergeron and Dr. Michael D. Weiss are not conclusory, this Court considers these documents in its deliberations of this dispute.

### III. Legal Discussion

#### a. Standard of Review

The issue of the '251 patent's eligibility is appropriate at the motion to dismiss phase. The Federal Circuit has "repeatedly recognized that in many

cases it is possible and proper to determine patent eligibility under 35 U.S.C. § 101 on a Rule 12(b)(6) motion." *Genetic Techs. Ltd. v. Merial L.L.C.*, 818 F.3d 1369, 1373–74 (Fed. Cir. 2016).

A party challenging the validity of a patent must overcome "the added burden of the deference that is due to a qualified government agency presumed to have properly done its job." Shire, LLC v. Amneal Pharms., LLC, 802 F.3d 1301, 1307 (Fed. Cir. 2015) (citation omitted). The deference comes from "one or more examiners who are assumed to have some expertise in interpreting the references and to be familiar from their work with the level of skill in the art and whose duty it is to issue only valid patents." Id. While such deference represents a hurdle for GE to overcome, it is far from an absolute bar to challenging a patent. A qualified government agency can—and, at times, does—mistakenly construe an otherwise abstract patent as an eligible one.

#### b. The Alice Two-Step

The Patent Act describes patent-eligible subject matter as "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof." 35 U.S.C. § 101. Although expansive, the Patent Act's definition for patent-eligible subject matter is not unlimited and "contains an important explicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable." *Alice Corp. Pty. Ltd. v. CLS Bank* 

Intern., 134 S.Ct. 2347, 2355 (2014) (quoting Assoc. for Molecular Pathology v.Myriad Genetics, Inc., 133 S.Ct. 2107, 2116 (2013)).

The Supreme Court has warned courts to "tread carefully" in considering patents' ineligibility, "lest [the Patent Act's exclusions] swallow all of patent law." Alice, 134 S.Ct. at 2354. "[A]ll inventions . . . embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas." Mayo Collaborative Servs. v. Prometheus Labs., Inc., 132 S.Ct. 1289, 1293 (2012).

In Alice, the Supreme Court attempted to tread carefully. The Court engaged in a now-familiar two-step analysis to determine whether a particular patent was abstract. A court first determines whether a patent's claims are "directed to" a patent-ineligible concept, such as an abstract idea. Alice, 134 S.Ct. at 2355. If not, the inquiry ends. If the patent is directed to an abstract idea, the court then asks whether it contains "an element or combination of elements that is 'sufficient to ensure that the patent in practice amounts to significantly more than a patent" of the abstract idea. Id. at 2355 (quoting Mayo, 132 S.Ct. at 1294). The Court referred to this step-two analysis as "a search for an 'inventive concept." Id. (quoting Mayo, 132 S.Ct. at 1294).

# i. The '251 patent is directed to an abstract idea under *Alice* step one.

The abstract idea inquiry is a murky one. This step is sometimes described as one "looking at the focus of the [patent's] claims" and "their

character as a whole." Elec. Power Grp., LLC v. Alstom, S.A., 830 F.3d 1350, 1353 (Fed. Cir. 2016) (internal quotation marks omitted). Neither the Supreme Court nor the Federal Circuit has defined "abstract idea" with any specificity. Instead, district judges must "compare claims at issue to those claims already found to be directed to an abstract idea in previous cases." Enfish, LLC v. Microsoft Corp., 822 F.3d 1327, 1334 (Fed. Cir. 2016). In doing so, district courts engage in "the classic common law methodology for creating law when a single governing definitional context is not available." Amdocs (Isr.) Ltd. v. Openet Telecom, Inc., 841 F.3d 1288, 1294 (Fed. Cir. 2016). This process to distinguish patent-eligible inventions and patent-ineligible abstract ideas "can be difficult, as the line separating the two is not always clear." DDR Holdings, LLC v. Hotels.com, L.P., 773 F.3d 1245, 1255 (Fed. Cir. 2014).

At the outset, it is helpful to delineate what courts have deemed an abstract idea. Mathematical algorithms are abstract. *Gottschalk v. Benson*, 409 U.S. 63, 71–72 (1972). Using mathematical algorithms to "manipulate existing information to generate additional information" is also abstract. *Digitech Image Techs.*, *LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1350 (Fed. Cir.

<sup>&</sup>lt;sup>2</sup> The Federal Circuit has indicated that this exercise need not be the judicial equivalent to the years-long Siege of Leningrad. "[D]iscussing in an opinion only the most relevant prior opinions, rather than every prior opinion in an actively-litigated field, is a necessary discipline if opinions are to be read, rather than just written." *Amdocs*, 841 F.3d at 1295. Even so, the volume of relevant case law ensures that this judicial analysis will hardly be a *Blitzkrieg*.

2014). So too are basic economic and conventional business practices. *Bilski v. Kappos*, 591 U.S. 593, 611–12 (2010). Performing those abstract economic and business practices on a conventional computer are similarly abstract. *DDR Holdings*, 773 F.3d at 1256 (explaining how "many . . . claims recited various computer hardware elements, [but] in substance were directed to nothing more than the performance of an abstract business practice on the Internet or using a conventional computer"). And collecting, analyzing, and presenting information is "within the realm of abstract ideas." *Elec. Power Grp.*, 830 F.3d at 1353.

UFRF argues that the '251 patent is not abstract because it "discloses discrete methods and systems" that provide "real-time access to data created by multiple bedside machines . . . using machine-dependent protocols." ECF No. 25, at 27. That data, as the patent explains, is then converted into a machine-independent format using drivers. See, e.g., ECF No. 1-1, at 16 (describing the process "converting at least a portion of said discrete elements into said standard data format"). UFRF compares these drivers—or "set[s] of rules that improve the technological process"—to other sets of rules that the Federal Circuit has deemed not abstract. ECF No. 25, at 28 (citing McRO, Inc. v. Bandai Namco Games Am. Inc., 837 F.3d 1299, 1313–14 (Fed. Cir. 2016)). UFRF also contends that the '251 patent provides sufficient detail for this data conversion process and that the patent is limited in subject matter to bedside

machines and related technology. *Id.* at 26–27. This limitation to medical environments, UFRF argues, means the '251 patent is "narrowly drawn not to preempt any and all generic enhancement of data in a similar system." *Id.* at 27 (quoting *Amdocs*, 841 F.3d at 1301). In short, UFRF asserts that the '251 patent provides detailed specifications for a concrete and specific invention.

GE, meanwhile, argues that the '251 patent is abstract because it is directed to "collecting, manipulating[,] and displaying information." ECF No. 17, at 10. Although the collected information is limited to data received from bedside machines, the patent does not extend to "any particular inventive technology" to collect, manipulate, and display the information. *Id.* at 14. GE further argues that the '251 patent's language lacks the detail and specificity to overcome charges of abstractness. This alleged lack of detail extends to any assertions UFRF makes over the patent's task in improving computer technology. *See id.* at 17.

This Court has previously conveyed reservations with *Alice*'s step-one abstract inquiry. In particular, the "relative level of abstraction" a court engages in is not clear. *Dig. Media Tech., Inc. v. Amazon.com Inc.*, 4:16-cv-244, at \*9 (N.D. Fla. July 3, 2017) (quoting *Amdocs*, 841 F.3d at 1299). This Court is mindful of the Federal Circuit's caution that courts "must be careful to avoid oversimplifying the claims' by looking at them generally and failing to account for the specific requirements of the claims." *McRO*, *Inc.*, 837 F.3d at 1313

(quoting *TLI Commc'ns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016)).<sup>3</sup> From 30,000 feet, the '251 patent could be construed merely as collecting, manipulating, and displaying information—a conception UFRF decries as oversimplification. ECF No. 25, at 34. Closer to the ground, however, the '251 patent could be seen as "discrete methods" for converting bedside machine-specific data to machine-independent data, with all of the transport protocols, conversion tables, and drivers in clear view. *Id.* at 21.

Even viewed from a closer level of abstraction, the '251 patent is directed to a patent-ineligible abstract idea. The '251 patent is focused on collecting, analyzing, manipulating, and displaying data. The patent's language describes these abstract ideas with technical-sounding verbosity and elaborate synonyms, yet the character of the patent as a whole remains directed to the abstract concepts of data collection, analysis, manipulation, and presentation. That manipulation may include transport protocols, conversion tables, and drivers—but these are technical tools used to execute the abstract idea of data

<sup>&</sup>lt;sup>3</sup> This Court notes that some Federal Circuit decisions have viewed patents from what seems to be an inter-planetary view. One patent has been found directed to the abstract idea "of organizing human activity"—which conceivably encompasses virtually anything. *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1367 (Fed. Cir. 2015).

<sup>&</sup>lt;sup>4</sup> With the full understanding that modern medical technology is not synonymous with farm animals, the point persists that a patent's prolixity does not present a patent as not abstract. "You can't make a race horse of a pig." JOHN STEINBECK, EAST OF EDEN 260 (Penguin Books 2016) (1952).

collection, manipulation, and analysis. UFRF's complaint characterizes the patent as much. "The inventions claimed in the '251 patent . . . collect, manipulate, interpret, and display information in a manner that could not be and was not performed by humans." ECF No. 1, at ¶ 60.

The patents at issue in *Electric Power Group* are most analogous to the '251 patent. There, three patents "describe and claim systems and methods for performing real-time performance monitoring of an electric power grid by collecting data from multiple data sources, analyzing the data, and displaying the results." 830 F.3d at 1351. One can replace "electric power grid" with "bedside machines" and "performance monitoring" with "physiologic data input and analysis" without losing much accuracy. Though the patents in *Electric* Power Group limited their content to information collected from electric power grids, the Federal Circuit emphasized that "collecting information . . . [is] within the realm of abstract ideas." Id. at 1353. Similarly, data analysis whether "by steps people go through in their minds, or by mathematical algorithms, without more"—is abstract. Id. at 1354. Also abstract is the presentation of the results of abstract methods. Presenting analyzed data is merely "an ancillary part of such collection and analysis." *Id*.

Here, the '251 patent is focused on collecting data from multiple bedside machines. The data may be highly technical and require trained individuals to interpret. The data may be critically important to medical personnel making

quick and informed decisions. Yet the "character as a whole" of the '251 patent involves the abstract idea of assembling data from multiple sources. *Id.* at 1353. And the patent's limitation to bedside machine-generated data fails to make it less abstract. *See Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1340 (Fed. Cir. 2017) ("Such limitations do not make an abstract concept any less abstract under step one."); *see also TLI Commc'ns*, 823 F.3d at 614 ("Although the claims limit the abstract idea to a particular environment . . . that does not make the claims any less abstract for the step 1 analysis.").

The '251 patent is also focused on analyzing and manipulating data—indeed, that seems to be the heart of the patent's claimed inventions. See ECF No. 1, at ¶¶ 45–62. These processes have repeatedly been held as patent-ineligible abstract ideas. See, e.g., Elec. Power Grp., 830 F.3d at 1355 (explaining that "requiring the selection and manipulation of information . . . does not transform the otherwise-abstract processes of information collection and analysis"); see also Intellectual Ventures I LLC, 850 F.3d at 1340 (holding that a patent "directed to . . . collecting, displaying, and manipulating data" was abstract). Further, part of the patent's data analysis process involves recognizing data: each bedside machine receives a data stream, which is then given a "transport protocol" and then "segment[ed] . . . into discrete elements."

ECF No. 1-1, at 16. Data recognition, however, is an "undisputedly well-known"—and abstract—idea. *Content Extraction*, 776 F.3d at 1347.

Along with data analysis is the '251 patent's claimed method for converting data from machine-specific to machine-independent formats. This conversion method is analogous to various data manipulation claims that the Federal Circuit has found abstract. For example, in *Intellectual Ventures I LLC*, a method of customizing information and presenting it based on particular characteristics was found abstract. 850 F.3d at 1340. And in *Content Extraction*, a patent that extracted data from one document and entered the data into appropriate fields was also found patent-ineligible. 776 F.3d at 1347.

Additionally, the language of the '251 patent does not save it. The "specification[s] fail[] to provide any technical details for the tangible components, instead predominantly describ[ing] the system and methods in purely functional terms." *TLI Commc'ns*, 823 F.3d at 612. The conversion method described in the '251 patent boils down to "converting at least a portion of [discrete elements of data streams] into standard data format." ECF No. 1-1, at 16. This description, like its other claims, is purely functional and fails to describe the conversion process with specificity. This description indicates the process of data analysis and conversion does not "require[] anything other than . . . conventional [bedside machines], network[s], and display technology for

gathering, sending, and presenting the desired information." *Elec. Power Grp.* 830 F.3d at 1355.

The speed and complexity of the '251 patent's data collection and manipulation also does not save it. In *Content Extraction*, the Federal Circuit grappled with four patents that—largely in the context of checks and automated teller machines—together recited a method of extracting data from documents, recognizing information in that data through a scanner, and storing that information. *See* 776 F.3d at 1345. The court explained that data collection, recognition, and storage are functions "humans have always performed." *Id.* at 1347. The presence of a scanner and its advanced technology—from which "human minds are unable to process and recognize the stream of bits output by a scanner"—failed to render the patents any less abstract. *Id.* 

Similarly, the '251 patent undoubtedly involves processes that most human minds would be unable to perform accurately and speedily. See, e.g., ECF No. 1, at ¶ 60 (describing the patent as allowing collecting, manipulating, interpreting, and displaying information "in a manner that could not be and was not performed by humans"). The presence of data synthesis technology, however, does not bootstrap the patent into the land of the non-abstract. Rather, the '251 patent's claims "merely recite the use of this existing . . .

technology to recognize and store data from specific data fields" gathered from more than one bedside machine. *Content Extraction*, 776 F.3d at 1348.

UFRF relies on cases that each conclude a patent is not abstract. These non-abstract patents are distinguishable from the '251 patent. For example, in *McRO*, *Inc.* v. *Bandai NAMCO Games America Inc.*, the Federal Circuit determined a patent for the automatic synchronization of animated lips and facial expressions in 3-D characters was not abstract. 837 F.3d at 1303. That detailed patent, in short, involved a series of rules that helped animators make characters' speech-related movements more realistic. *See id.* at 1307. The court concluded that the rules permitted the task of computer animation to be further automated, an improvement over the prior art. *Id.* at 1314.

In contrast, the '251 patent is focused on "organizing information into a new form" through collecting and manipulating pre-existing data—not on specific and detailed rules. *Digitech*, 758 F.3d at 1351. Data inputted into multiple bedside machines are reconfigured and redisplayed into new forms *based* on various sets of rules. The mere presence of rules that automate tasks, however, does not render an invention patent-eligible. Courts distinguish between patents' claims that focus on "specific means . . . that improve[] the relevant technology or are instead directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery." *McRO*, 837 F.3d at 1314. The '251 patent falls in the latter category. Although the patent

uses drivers as a "combined order of specific rules that renders information into a specific format"—from bedside machine-specific data into machine-independent data—the rules' result is simply existing information structured and displayed into a new form. *Id.* at 1313. It is not a specific improvement to relevant technology but a reorganized, reanalyzed, and reordered set of already accessible information. *Id.* The patent refashions what and how information is organized and displayed—and merely "invoke[s] computers in the collection and arrangement of data." *Smart Systems Innovations, LLC v. Chicago Transit Auth.*, 2017 WL 4654964, at \*7 (Fed. Cir. Oct. 18, 2017).

Further, the '251 patent's drivers can be distinguished from the patenteligible "combined order of specific rules" in *McRO*. 837 F.3d at 1315. To be
clear, the '251 patent is not a patent for the drivers. The patent provides for a
system to let the drivers operate; that is, the drivers are discrete tools that,
among other things, "translate" and "interpret" data as part of the overall
process of collecting, manipulating, and analyzing data. *See* ECF No. 1-1, at
13. And UFRF has developed 40 drivers to help collect and manipulate data
from various bedside machines—a laudable effort, to be sure. ECF No. 1, at ¶
53. In contrast, *McRO*'s rules themselves were explicitly "rendered in a specific
way" in the patent's claims. 837 F.3d at 1315. These rules served as specific
limitations to the patent, which narrowed the patent's scope and negated any
potential concerns over preemption. *See id*. If the '251 patent had detailed the

specific rules and purposes of particular drivers in the claims' specifications, then this Court would possibly be whistling a different tune. Yet the drivers themselves are merely discrete—albeit important—components of the patent's overall focus.<sup>5</sup>

UFRF also relies on *DDR Holdings, LLC v. Hotels.com, L.P.* There, the Federal Circuit found a patent directed to systems and methods generating composite websites using visual elements from a "host" website and content of a third-party merchant as not abstract. *DDR Holdings*, 773 F.3d at 1259. The court reasoned that the patent "is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks." *Id.* at 1257. UFRF argues that the sharp increase in bedside machines' use created a technical problem that the '251 patent aims to overcome. ECF No. 25, at 31. The *DDR Holdings* patent, however, is distinguishable from the '251 patent because the latter "recite[s] the performance of some . . . practice known from the pre-[bedside machine] world"—the collection, aggregation, manipulation, and display of data, which was performed either by hand or less efficient electronic methods. *DDR* 

<sup>&</sup>lt;sup>5</sup> A simple illustration is to conceive of the drivers as keys to a lock on a door. The '251 patent is directed to the abstract idea of opening a door. The keys are important ways to open the door, yet the patent does not detail specifically how the keys will open the door. When this Court asked UFRF's counsel what was unique about the drivers his response was that the drivers were tailored to particular bedside machines—in other words, the keys fit certain locks. UFRF has not identified anything specifically inventive about the way that the drivers function.

Holdings, 773 F.3d at 1257. Although the proliferation of bedside machines made effective data aggregation and manipulation more difficult, and technology based on the '251 patent streamlined activities previously done by hand or less efficient electronic methods, the '251 patent's solutions remain rooted in the performance of abstract processes.

The Supreme Court has identified one way an otherwise abstract idea can succeed under *Alice*'s step one: a specific improvement to computer technology. *See Alice*, 134 S.Ct. at 2358–59 (explaining how claims that "purport to improve the functioning of the computer itself" or "improve the technological process" are not abstract). The key inquiry is whether the patent is directed to a specific improvement to computer functionality or whether computers are "invoked merely as a tool" to implement the patent's abstract idea. *Enfish*, 822 F.3d at 1336.

In Enfish, LLC v. Microsoft Corp., the Federal Circuit determined that the patents at issue—relating to a "self-referential" database—were "directed to a specific improvement to the way computers operate." Id. Similarly, in Visual Memory LLC v. NVIDIA Corp., 867 F.3d 1253 (Fed. Cir. 2017), the patent at issue focused on improving computer memory by "creating a memory system with programmable operational characteristics that can be tailored for

<sup>&</sup>lt;sup>6</sup> For the purposes of this discussion, this Court construes "bedside machine" and "computer" as analogous terms.

use with multiple different processors without accompanying reduction in performance." 867 F.3d at 1256. This improved memory system permitted different processors to possess the same memory system but not suffer reduced performance. Id. at 1255. Although the district court found the patent directed to the abstract idea of "categorical data storage," id. at 1257 (quotations omitted), the Federal Circuit determined the patent was directed to an improved computer memory system—a specific technological improvement directed to enhanced computer functionality in the form of "an allegedly new, improved, and more efficient memory system." Id. at 1260.

In contrast, the '251 patent does not improve computer functionality. This Court is again mindful to not oversimplify the '251 patent's claims. Yet in determining whether the patent is "directed to an improvement to computer functionality versus being directed to an abstract idea," the '251 patent clearly falls in the latter category. Enfish, 822 F.3d at 1335. The '251 patent is distinguishable from chip architecture, an LED display, a self-referential database, or a computer memory system that connects to a processor and has programmable characteristics. See, e.g., Visual Memory LLC, 867 F.3d at 1258–60 (summarizing case law finding improvements to computer functionality as not abstract). Those concepts specifically improve the function of computers in some concrete and identifiable way. The '251 patent, on the other hand, uses computers as tools for independently abstract ideas—data

collection, manipulation, analysis, and display. This dooms the patent under Alice step one.

## ii. The Patent's Claims and Their Ordered Combination Under Alice Step Two Are Abstract.

Under *Alice* step two, an otherwise-abstract patent may become patenteligible if it contains an "inventive concept" in either one or more claims or in the ordered combination of its limitations. See Content Extraction, 776 F.3d at 1348. Courts consider the elements of the patent's claims to see if they "transform the nature of the claim into a patent-eligible application of the abstract idea." Secured Mail Sols. LLC v. Universal Wilde, Inc., 2017 WL 4582737, at \*5 (Fed. Cir. Oct. 16, 2017). "An inventive concept that transforms the abstract idea into a patent-eligible invention must be significantly more than the abstract idea itself, and cannot simply be an instruction to implement or apply the abstract idea on a computer." BASCOM Global Internet Servs., Inc. v. AT&T Mobility LLC, 827 F.3d 1341, 1349 (Fed. Cir. 2016). The Federal Circuit explained that when a court engages in an Alice step two analysis, "it might become clear that the specific improvements in the recited computer technology go beyond 'well-understood, routine, conventional activit[ies] and render the invention patent-eligible." Id. at 1348 (quoting Alice, 134 S.Ct. at 2359).

The '251 patent does not recite any method or invention beyond routine and conventional actions like collecting, analyzing, manipulating, and displaying data originated from multiple sources. Taken together—both individually and as an ordered combination—these multiple processes articulated in the '251 patent's language do not transform it into an inventive concept. The patent describes these abstract concepts lengthily and breaks them into smaller dependent claims. But this particular descriptive method does not make the patent inventive.

In BASCOM v. AT&T, the patent at issue was directed to a system of filtering Internet content. The Federal Circuit found that this system was an abstract idea, "a longstanding well-known method of organizing human behavior." BASCOM, 827 F.3d at 1348. Under step two, however, the Federal Circuit found the patent detailed enough for an inventive concept in "the installation of a filtering tool at a specific location, remote from the end-users, with customizable filtering features specific to each end user." Id. at 1350.

UFRF argues that BASCOM's finding that a remote filtering device as part of an inventive concept is analogous to the '251 patent's remote data conversion claims. See ECF No. 25, at 37. This analogy fails on two grounds. First, "programmed conversion of numerical information" is patent-ineligible. Gottschalk, 409 U.S. at 64. The issue, then, is whether the remote nature of this conversion transforms the '251 patent into an inventive concept. The '251

patent describes the conversion process as first receiving data streams from a bedside machine, determining a transport protocol within it, segmenting that data stream into discrete elements, and then "converting at least a portion of said discrete elements into . . . standard data formation"—that is, a machineindependent format. ECF No. 1-1, at 16. The location of this conversion is a remote centralized data repository, which is "configured to convert data" from machine-dependent to machine-independent formatting. Id. It is this remote conversion that is alleged to be the inventive concept, but this process is merely the culmination of routine steps of data collection. Reciting the use of a "centralized data repository" with the words "convert" in front of or within the repository's description is similar to "adding the words 'apply with a computer"—a rhetorical device that has failed to transform an abstract idea into an inventive concept. Secured Mail Sols., 2017 WL 4582737, at \*5 (quoting Versata Dev. Grp., Inc. v. SAP Am., Inc., 793 F.3d 1306, 1332 (Fed. Cir. 2015)).

Finally, UFRF argues that the '251 patent enables medical personnel to "provide more efficient and accurate treatment." ECF No. 25, at 38. This Court acknowledges the technology based on '251 has almost certainly benefitted doctors and nurses in their life-saving work. And saving lives is among the most important actions that an individual can take. Technology that assists these noble endeavors should be applauded and celebrated. But that does not mean they are patent-eligible. "The fact that [one component of a patent] can

be used to make a process more efficient, however, does not necessarily render

an abstract idea less abstract." Secured Mail Sols., 2017 WL 4582737, at \*4.

For the reasons articulated above, the '251 patent is an abstract concept

and its claims, individually and in their ordered combination, lack an inventive

concept. Accordingly, GE's motion to dismiss for unpatentability is

GRANTED.

IT IS ORDERED:

1. Defendants' Motion to Dismiss, ECF No. 17, is **GRANTED**.

2. The Clerk shall enter judgment stating, "Plaintiff's claims

against Defendants are dismissed with prejudice."

3. The Clerk shall close the file.

SO ORDERED on November 16, 2017.

<u>s/Mark E. Walker</u>

**United States District Judge** 

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