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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte LOKI JORGENSON and ALFRED YU-HAN PANG

Appeal 2019-001947
Application 14/248,094
Technology Center 3600

Before CHARLES N. GREENHUT, WILLIAM A. CAPP, and
FREDERICK C. LANEY, *Administrative Patent Judges*.

CAPP, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant¹ seeks our review under 35 U.S.C. § 134(a) of the final rejection of claims 1–19, 21–41, and 43–45. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ We use the word “Appellant” to refer to “Applicant” as defined in 37 C.F.R. § 1.42(a). Appellant identifies Inetco Systems Limited, as the Applicant and real party in interest. Appeal Br. 3.

THE INVENTION

Appellant's invention relates to network message monitoring. Spec.

¶ 1. Claim 1, reproduced below, is illustrative of the subject matter on appeal.

1. A method for monitoring performance of an application system which is distributed across a plurality of network connected nodes, comprising:

using a processor, monitoring network traffic between the plurality of network connected nodes of the application system to gather network traffic data;

assembling the network traffic data into application messages;

correlating the application messages into sets of one or more application messages that constitute transactions corresponding to a lowest level of a plurality of levels of a hierarchical model of the application system, each level including components having a span of network connected nodes specific to that level, and each level and the span of each level being defined by function; and

generating records for one or more of the transactions.

THE REJECTIONS

The Examiner relies upon the following as evidence in support of the rejections:

NAME	REFERENCE	DATE
Ramanathan	US 6,701,459 B2	Mar. 2, 2004
Chaar	US 6,857,020 B1	Feb. 15, 2005
Kelly	US 2006/0277288 A1	Dec. 7, 2006
Pfuntner	US 2010/0070447 A1	Mar. 18, 2010
Bansal	US 7,805,510 B2	Sept. 28, 2010
Urban	US 7,822,837 B1	Oct. 26, 2010

The following rejections are before us for review:

1. Claims 1–19, 21–41, and 43–45 are rejected under 35 U.S.C. § 101 as directed to a judicial exception to patent eligible subject matter.

2. Claims 1–19, 21–41, and 43–45 are rejected under 35 U.S.C. § 112(a) for failing to comply with the written description requirement.

3. Claims 1–6, 12, 13, 19, 22–29, 35, 41, 44, and 45 are rejected under 35 U.S.C. § 103 as being unpatentable over Bansal and Pfuntner.

4. Claims 7, 8, 10, 11, 36, 37, 39, and 40 are rejected under 35 U.S.C. § 103 as being unpatentable over Bansal, Pfuntner, and Kelly.

5. Claims 9, 21, 38, and 43 are rejected under 35 U.S.C. § 103 as being unpatentable over Bansal, Pfuntner, and Ramanathan.

6. Claims 14–17 and 30–33 are rejected under 35 U.S.C. § 103 as being unpatentable over Bansal, Pfuntner, and Urban.

7. Claims 18 and 34 are rejected under 35 U.S.C. § 103 as being unpatentable over Bansal, Pfuntner, Urban, and Chaar.

OPINION

Patent Eligibility under 35 U.S.C. § 101

Claim 1

An invention is patent-eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101.

However, the courts recognize certain judicial exceptions to Section 101, namely: (1) laws of nature, (2) natural phenomena, and (3) abstract ideas.

See Mayo Collaborative Servs. v. Prometheus Labs, Inc., 566 U.S. 66, 70–71 (2012).

The Supreme Court has set forth “a framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas

from those that claim patent-eligible applications of those concepts.” *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 217 (2014) (citing *Mayo*, 566 U.S. at 72–73). According to the Supreme Court’s framework, we must first determine whether the claims at issue are directed to one of those concepts. *Id.* If so, we must secondly “consider the elements of each claim both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Id.*

Courts treat collecting information as well as analyzing information by steps people go through in their minds as essentially mental processes within the abstract-idea category. *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093 (Fed. Cir. 2016). In situations where an abstract idea is implemented on a computer, the first step in the *Alice/Mayo* analysis asks whether the focus of the claims is on a specific improvement in computer capabilities or, instead, on a process that qualifies as an “abstract idea” for which computers are invoked merely as a tool. *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335–36 (Fed. Cir. 2016).

The Supreme Court characterizes the second step of the analysis as “a search for an ‘inventive concept’ — *i.e.*, 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.’” *Alice*, 573 U.S. at 217–18 (brackets in original) (quoting *Mayo*, 566 U.S. at 72–73). Where the claim is directed to an abstract idea that is implemented on a computer, merely stating the abstract idea while adding the words “apply it” is not enough to establish such an inventive concept. *See Alice*, 573 U.S. at 223.

[I]f that were the end of the § 101 inquiry, an applicant could claim any principle of the physical or social sciences by reciting a computer system configured to implement the relevant concept.

Id. at 224.

The PTO recently published revised guidance on the application of Section 101. *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50 (Jan. 7, 2019) (“*2019 Guidelines*”). Under such guidelines, in conducting step one of the *Alice* framework, we first look to whether the claim recites:

(1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human interactions such as a fundamental economic practice, or mental processes); and

(2) additional elements that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)–(c), (e)–(h)).

In other words, under prong 1 of an abstract idea analysis, we look to whether the claim recites an abstract idea. Then, if it does, under prong 2, we look at the claim, as a whole, and determine whether the claim is “directed to” the abstract idea or, instead, is “directed to” a “practical application” of the abstract idea.

Step 1, Prong 1

The *2019 Guidelines* identifies three key concepts identified as abstract ideas:

(a) mathematical concepts including “mathematical relationships, mathematical formulas or equations, mathematical calculations”;

(b) certain methods of organizing human activity, such as “fundamental economic principles or practices,” “commercial

or legal interactions,” and “managing personal behavior or relationships or interactions between”; and

(c) mental processes including “observation, evaluation, judgment, [and] opinion.”

84 Federal Register at 52.

With respect to the first step, the Examiner determines that the claims are directed to an abstract idea. Final Action 8. According to the Examiner, the steps are directed to an abstract in the form of collecting, assembling, and correlating information. *Id.* citing *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350 (Fed. Cir. 2016); *Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1351 (Fed. Cir. 2014); and *Parker v. Flook*, 437 U.S. 584 (1978).

Here, Appellant argues that claim 1 is not directed to an abstract idea, analogizing their invention to that of *BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016). However, Appellant’s reliance on *BASCOM* for the proposition advanced in the Appeal Brief is misplaced. The *BASCOM* court found that the claims at issue were, indeed, directed to an abstract idea. *Id.* at 1348. (“We agree with the district court that filtering content is an abstract idea”).

There is little question here that claim 1 recites an abstract idea. Appellant’s Specification explains that the invention relates to methods for monitoring the performance of an application system that is distributed across a plurality of network connected nodes. Spec. ¶ 7. In furtherance thereof, the method gathers network traffic data, assembles such data into messages, correlates such messages into sets, and generates records of transactions occurring within the system. *Id.*

“Information as such is an intangible,” hence abstract. *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016). Consequently, claims focused on “collecting information, analyzing it, and displaying certain results of the collection and analysis” are directed to an abstract idea. *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093 (Fed. Cir. 2016). The claims here relate to monitoring information, assembling data, and generating records. Claims App. This concept is captured in the recitations of claim 1 and is considered to be a mental process under the *2019 Guidelines*.

Step 1, Prong 2

Under Prong 2 of Step 1 of the *2019 Guidelines*, we do not assume that such claims are directed to patent ineligible subject matter because “all inventions [at some level] embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *In re TLI Commc’ns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016) quoting *Alice*. Instead, “the claims are considered in their entirety to ascertain whether their character as a whole is directed to excluded subject matter.” *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1312 (Fed. Cir. 2016). If the claims are not directed to an abstract idea, the inquiry ends. *2019 Guidelines*. If the claims are “directed to” an abstract idea, then the inquiry proceeds to the second step of the *Alice* framework. *Id.*

Consequently, we consider whether the claimed monitoring method includes additional elements that integrate the judicial exception into a practical application. A claim that integrates a judicial exception into a practical application will apply, rely on, or use the judicial exception in a manner that imposes a meaningful limit on the judicial exception, such that

the claim is more than a drafting effort designed to monopolize the judicial exception. 2019 *Guidelines*.

Here, Appellant argues that the claims are directed to a specific method for monitoring performance of an application system which, according to Appellant, “is not an abstract idea.” Appeal Br. 35. In response, the Examiner states that, unlike *BASCOM*, Appellant’s claim merely recites an abstract idea along with what amounts to instructions to apply it using a computer. Ans. 10.

Although automating certain tasks may be patent eligible if properly claimed (*See McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1313 (Fed. Cir. 2016)), we are not persuaded by Appellant’s effort to characterize a specific method for monitoring performance of an application system as a technological improvement analogous to that of *McRO*. Here, the method of claim 1 generally comprises four functional method steps, namely:

- (1) monitoring network traffic . . . ,
- (2) assembling the network traffic . . . ,
- (3) correlating . . . messages into sets . . . , and
- (4) generating records . . .

Claims App. In short, the method collects, processes, and presents information about the performance of a computer application over a network.

Appellant argues that it employs “technical means” for gathering and correlating network data. Appeal Br. 33. However, the only “technical means” recited in claim 1 is “using a processor.” Claims App. The prospect that Appellant’s method uses a computerized “tool” does not render the

claims less abstract. An abstract idea does not become nonabstract by limiting the invention to a particular technological environment. *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1367 (Fed. Cir. 2015); *see also Affinity Labs of Tex., LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1259 (Fed. Cir. 2016) (Merely limiting the field of use of the abstract idea to a particular existing technological environment does not render the claims any less abstract); *see also Alice*, 573 U.S. at 224 (the fact a computer exists in the physical realm is beside the point). Unlike *Enfish*, the focus of the instant claims is not on improving a computer, but rather on a process for which computers are invoked merely as a tool. *See Enfish*, 822 F.3d at 1335–36. The following passages from Appellant’s Specification are exemplary:

[I]n the case of monitoring network data traffic, the lowest level of events may be the arrival of network IP packets at a monitoring interface placed within the IP network of an IT system 800. The monitoring interface 350 may receive a copy of all packets arriving at all of the network interfaces within the IT system 800, such as when a SPAN (switched port analyzer) port is created on a network switch. With knowledge of IP addresses and the nature of the TCP and IP protocols, packets may be selected from the stream of arriving packets and grouped by timestamp, source and destination IP addresses, TCP sequence number, TCP port number, and the like. The monitoring system 300 can assemble IP packets into TCP segments, and subsequently assemble the segments into application protocol messages.

Spec. ¶ 88.

With respect to metrics, in this view, transactions associated with each level of the implementation may be analyzed by one or more metrics specific to that level. Each metric may then produce a measure of performance that is responsive to factors specific to that level. These factors may include the following:

(1) The individuals, groups, or roles who are involved in testing, managing, or troubleshooting related aspects of the business system. For example: network operators may be most interested in the performance of link transactions; application developers, systems integrators, and service operators, including those responsible for relationships with third parties, may be most interested in the performance of service transactions; and, business managers, customer relations agents, and end-users may be most interested in the performance of application transactions; (2) Typical or standardized metrics used within an existing and related sphere of IT management.

Id. ¶ 103.

The *FairWarning* case entailed a method of detecting improper access of a patient’s protected health information in a computer environment. *FairWarning*, 839 F.3d at 1092. The claimed method in *FairWarning* generated a rule for monitoring data, applied the rule, stored events in computer memory, and notified users that an event has occurred. *Id.* The Federal Circuit found that such claim was directed to an abstract idea. *Id.* at 1093. Appellant’s claimed method of monitoring, assembling, correlating, and reporting is no more directed to a practical application than that of *FairWarning*. The Examiner is correct that “the mere mention or involvement of particular signals or structures is not enough to preclude the claims from being directed to an abstract idea.” Ans. 12.

The claims, thus, fail to integrate the judicial exception into a practical application and, therefore, is “directed to” an abstract idea.

Step 2

Turning to step 2 of the *Alice/Mayo* analysis, we look more precisely at what the claim elements add in terms of whether they identify an “inventive concept” in the application of the ineligible matter to which the claim is directed to. *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1167

(Fed. Cir. 2018). “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].’” *Alice*, 573 U.S. at 221 (quoting *Mayo*, 566 U.S. at 77–78). Those “additional features” must be more than well-understood, routine, conventional activity. *Mayo*, 566 U.S. at 79.

Under step two of the *Alice/Mayo* framework, the Examiner determines that the steps of Appellant’s monitoring method, considered both individually and in combination, do not amount to significantly more than the abstract idea. Final Action 8–9. Specifically, the Examiner finds that:

Moreover, the elements in the claims other than the abstract idea amount to no more than (i) mere instructions to implement the idea on a computer; (ii) recitation of generic computer structure that serves to perform generic computer functions that are well-understood, routine, and conventional activities previously known to the pertinent industry; (iii) insignificant extra-solution activity; and/or (iv) limitations that link the abstract idea to a particular technological environment or field of use but do not impose meaningful limits on the abstract idea . . . Viewed as a whole, these additional claim elements do not provide meaningful limitations to transform the abstract idea into a patent eligible application of the abstract idea such that the claims amount to significantly more than the abstract idea itself.

Id.

Appellant argues that the method is not directed to monitoring “in the abstract” as it recites limitations and an inventive concept that practically applies the abstract idea when the claim elements are considered both individually and in combination. Appeal Br. 35–36. Appellant further argues that claim 1 does not operate on a “generic” computer structure. *Id.* at 36. Appellant further argues that it provides an improvement to “another

technology or technical field,” namely, network performance monitoring.
Id.

In response, the Examiner points out that claim 1 merely recites a generic “processor.” Ans. 13. In response to Appellant’s argument about providing an improvement to the technical field of network monitoring, the Examiner states that the claims do not recite an improved computer or monitoring device, rather, they recite an abstract idea implemented on a generic “processor.” *Id.* at 14.

The Examiner’s position is the correct one. What Appellant points to as “inventive” is just the abstract idea itself. Appeal Br. 35–37. We may assume that the techniques claimed are “[g]roundbreaking, innovative, or even brilliant,” but that is not enough for eligibility. *SAP Am.*, 898 F.3d at 1163 (quoting *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 591 (2013)). Appellant’s steps of monitoring, assembling, correlating, and recording merely tell a computer to “apply” the abstract idea of step 1. However, it does not matter how innovative Appellant’s abstract idea is, as a claim for a new abstract idea is still an abstract idea. *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (Fed. Cir. 2016).

According to Appellant’s Specification, the data processing system used by the invention may be a server or a personal computer system. Spec. ¶ 35. The system includes an input device such as a mouse and keyboard. *Id.* The system display may be a computer screen. *Id.* The system memory may include a variety of storage devices including internal memory and external mass storage typically arranged in a hierarchy of storage as understood by those skilled in the art, such as databases, random access memory, read-only memory, flash memory, and disk devices. *Id.* The

system may include one or more network connections and be adapted for communication with other data processing systems. *Id.*

Appellant uses a computer processor to gather, assemble, and report data. Claims App. claim 1. There is no indication in the Specification that Appellant has achieved an advancement or improvement in computer processing technology. *See generally* Spec. There is similarly no indication in the Specification that Appellant has achieved an advancement or improvement in network technology. *Id.*

Appellant argues that the Examiner's rejection fails to comport with Office Guidance that was published after *Berkheimer v. HP Inc.*, 881 F.3d 1360 (Fed. Cir. 2018). Appeal Br. 33. Appellant further argues that the instant claims are similar to those at issue in *Berkheimer*. These arguments are not persuasive. In the first instance, *Berkheimer* is an appeal from a District Court that dealt with an issue of pre-trial motion practice and, contrary to Appellant's position, did not determine that the claims in that case were patent eligible.

We do not decide today that claims 4–7 are patent eligible under § 101. We only decide that on this record summary judgment was improper, given the fact questions created by the specification's disclosure.

Id. at 1370. In the second instance, having reviewed the Examiner's rejection and Appellant's Specification, it is our view that the rejection complies with applicable PTO guidelines. Among other things, it is established that a patent applicant is required to submit a specification that contains a written description of the invention in "full, clear, concise, and exact terms." 35 U.S.C. § 112(a). In the instant case, Appellant describes the computer technology used by the invention at a high level of generality

that presumes familiarity on the part of the reader. *See, e.g.*, Spec. ¶ 35. Appellant provides neither evidence nor persuasive argument to the contrary. For purposes of the *Alice/Mayo* analysis, a specification demonstrates the well-understood, routine, conventional nature of step 2 “*additional elements*” when it describes them in a manner that indicates they are sufficiently well-known that they need not be described with particularity to satisfy 35 U.S.C. § 112(a).² That is the case here.

Essentially, all Appellant has done here is use generic computer equipment to monitor and analyze network traffic and generate records related thereto. This is quintessentially collecting information, analyzing it, and displaying certain results of the collection and analysis. *FairWarning*, 839 F.3d at 1093–94. Appellant’s method recites an “abstract idea” for which computers are invoked merely as a tool. *Enfish*, 822 F.3d at 1335–36. In short, claim 1 is directed to an abstract idea that is implemented on a computer in a manner that merely states the abstract idea while adding the words “apply it.” *See Alice*, 573 U.S. at 223. This is not sufficient for patent eligibility. *Id.*

Appellant argues that claim 1 does not tie up or preempt the abstract idea. Appeal Br. 35. This argument is not persuasive as it is well settled that “[w]here a patent’s claims are deemed only to disclose patent ineligible subject matter under the *Mayo* framework, as they are in this case, preemption concerns are fully addressed and made moot.” *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015).

² Memorandum from the U.S. Patent & Trademark Office, *Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (Berkheimer v. HP, Inc.)* (Apr. 19, 2018).

We have considered Appellant's remaining arguments and find them to be without merit. Accordingly, for the above reasons, the recited elements of claim 1, considered individually and as an ordered combination, do not constitute an "inventive concept" that transforms independent claim 1 into patent-eligible subject matter. On this record, we affirm the Examiner's § 101 rejection of claim.

Claims 2–19, 21–41, and 43–45

Appellant does not argue for the patentability of claims 2–19, 21–41, and 43–45 apart from arguments presented with respect to claim 1, which we have previously considered. We sustain the Examiner's Section 101 rejection of claims 2–19, 21–41, and 43–45.

Written Description

The Examiner determines that the phrase "*each level and the span of each level being defined by function*" recited in each of independent claims 1, 22, 23, and 45 lacks written description support. Final Action 11. In so doing, the Examiner observes that such language was added to the claims by amendment during prosecution. *Id.*

Appellant argues that paragraphs 33, 45, 48, 53, 54, 66, 67, 68, 88, and 106 of the Specification support the amended claim language. Appeal Br. 31. More specifically, Appellant argues that the following language provides the requisite support:

The UTM describes the structures, relationships, and message events that are particular to message-based transactional systems. The UTM is beneficial for information technology ("IT") systems (e.g., 800 in FIG. 8) that are distributed, multi-tier, and composed of multiple network links, and thus complex. In implementation, **it decomposes the IT system 800 into a nested set of regions or "spans" according to the**

network topology 810 and functional implementation of its components.

Id. (emphasized portion quoted in the Appeal Brief).³

The Examiner, in response, is unable to locate support for the phrase at issue in any of the paragraphs cited by Appellant in the Appeal Brief.

Ans. 8–9. In particular, the Examiner finds that the “*decomposes*” phrase quoted in the preceding paragraph is not enough to support “each level” and “the span of each level” being “defined by function.” *Id.* at 9. The Examiner briefly discusses and then makes similar observations as to paragraphs 45, 48, 53, 54, 66–68, 88, and 106 of the Specification. *Id.*

Paragraph 32 of the Specification cross-references Figure 8 in Appellant’s drawings. Figure 8 depicts a distributed, multi-tier information technology systems composed of multiple network links. Spec. ¶ 32, Fig. 8. Figure 8 depicts a plurality of nodes (e.g., element 110) distributed among interconnected Web-Banking Clients, Web Servers, Business Logic Servers, Search Engines, a Transaction Aggregator, and a Transaction Processor. *Id.* The system is further connected to a Database Server, an ATM Network, a Payment Network, and Bank Branch clients. *Id.*

Appellant’s invention aggregates transactions that are causally related to and span one or more links of the system. *Id.* ¶ 30, Fig. 18. A hierarchical model is applied to the network topology and determines the span of links across which individual transactions are associated. *Id.* The hierarchy of levels extends across the network topology, each level corresponding to a degree of span, from the individual network links up to

³ Appellant’s Appeal Brief erroneously states that the recited portion is from paragraph 33 of the Specification. Our review of the Specification reveals that recited portion is from paragraph 32, not 33, of the Specification.

the entire system, with a definition of transaction specific to each level. *Id.* Transactions on each level are defined as comprising one or more transactions from a next lower level, across one or more spans of that level of the network topology. *Id.* In summary, Appellant's invention encompasses both structural and functional features.

The written description requirement of 35 U.S.C. § 112 provides, in pertinent part, that “[t]he specification shall contain a written description of the invention.” That requirement is satisfied only if the inventor conveys with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention, and demonstrates that by disclosure in the specification of the patent. *Centocor Ortho Biotech, Inc. v. Abbott Labs.*, 636 F.3d 1341, 1348 (Fed. Cir. 2011). “The essence of the written description requirement is that a patent applicant, as part of the bargain with the public, must describe his or her invention so that the public will know what it is and that he or she has truly made the claimed invention.” *AbbVie Deutschland GmbH & Co. v. Janssen Biotech, Inc.*, 759 F.3d 1285, 1298 (Fed. Cir. 2014); *see also Nuvo Pharmaceuticals (Ireland) Designated Activity Company v. Dr. Reddy's Labs Inc.*, 923 F.3d 1368, 1377 (Fed. Cir. 2019).

Having reviewed Appellant's Specification, we cannot agree with Appellant's argument that the paragraphs of the Specification cited in the Appeal Brief provide written description for the claim limitation “*each level and the span of each level being defined by function.*” Appellant's invention requires the monitoring of multiple levels in a hierarchical model and the effective claim language requires that each level and the span of each level be defined by function. Appellant's method is applied to a physical system

that necessarily is comprised of a plurality of physical, structural components. According to Appellant's Specification, the term "data processing system" refers to any machine for processing data, including the computer systems, wireless devices, and network arrangements. Spec. ¶ 29. The Specification further states that: "certain software, circuits, structures and methods have not been described or shown in detail in order not to obscure the invention." *Id.* A reasonable and fair reading of the Specification allows for one or more levels of Appellant's claimed "plurality of levels" to be defined by structure, as opposed to "by function." Appellant fails to provide written description support for an invention where "each" level is "defined" – "by function."

In view of the foregoing, we sustain the Examiner's Section 112 written description rejection of independent claims 1, 22, 23, and 45. The remaining claims subject to this ground of rejection are dependent claims that fall with the independent claims.

*Unpatentability of Claims 1–19, 21–41, and 43–45
over Combinations Based on Bansal and Pfuntner*

The Examiner finds that Bansal discloses the invention substantially as claimed except for, for each level, the span of network connected nodes is specific to that level, and each level and the span of each level being defined by function, for which the Examiner relies on Pfuntner. Final Action 12–13. The Examiner concludes that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Bansal's system with the teachings of Pfuntner to achieve the claimed invention. *Id.* at 13. According to the Examiner, a person of ordinary skill

in the art would have done this to simplify the process by which administrators configure how performance data is collected. *Id.*

Appellant first argues that Bansal fails to correlate messages into sets as claimed. Appeal Br. 20. Appellant argues that Bansal's hierarchy is not unique to a given business process. *Id.* Appellant argues that the claimed invention "is configured for the network topology of the application system being monitored." *Id.*

In response, the Examiner states, in essence, that Appellant's arguments attempt to read limitations from Appellant's Specification into the claims. Ans. 4. The Examiner points out that the claims do not require the model to be configured for the network topology of the application system being monitored. *Id.* The Examiner finds, and Appellant does not dispute, that Bansal discloses correlating messages into a plurality of levels of a hierarchy. *Id.*

Next, Appellant argues that the applied references do not teach each level being defined by function as claimed. Appeal Br. 5. In response, the Examiner notes that Appellant's arguments are not commensurate with the scope of claim 1. Ans. 5. The Examiner further finds, and Appellant does not dispute, that:

Pfuntner discloses . . . levels such as a web server level 204 composed of multiple web servers and a database level 206 composed of multiple databases, where nodes with a web server function are organized into the web server level and nodes with a database function are organized into the database level, and where the "span" of each level is limited to the span of servers having that level's respective function.

Id. at 5–6. Appellant fails to articulate a meaning of the phrase “defined by function” in a manner that distinguishes the spans of claim 1 from the spans of Pfuntner. *See generally* Appeal Br.

Finally, Appellant argues that Pfuntner is not properly combinable with Bansal. Appeal Br. 24. Appellant argues that combining Bansal and Pfuntner would change the principle of operation of Bansal and render Bansal inoperable for its intended purpose. Appeal Br. 24.

In response, the Examiner notes, in essence, that Appellant’s arguments concerning changing the principal of operation of Bansal and rendering it inoperable for its intended purpose are conclusory and unsupported. Ans. 6. We agree. Bansal is directed to a hierarchical application monitoring system. Bansal, Abstract. The Examiner’s rejection merely proposes to modify Bansal so that hierarchical levels are defined by function. We fail to see how such modification would change Bansal’s principle of operation or render it inoperable for its intended purpose.

We have considered Appellant’s remaining arguments and find them to be without merit. In view of the foregoing discussion, we determine the Examiner’s findings of fact are supported by a preponderance of the evidence and that the Examiner’s legal conclusion of unpatentability is well-founded. Accordingly, we sustain the Examiner’s unpatentability rejection of claim 1. Moreover, inasmuch as Appellant fails to offer separate arguments for the patentability of the remaining claims apart from arguments that we have considered with respect to claim 1, we sustain the Examiner’s unpatentability rejection of claims 1–19, 21–41, and 43–45.

CONCLUSION

In summary:

Claims Rejected	§	Reference(s)/Basis	Aff'd	Rev'd
1-19, 21-41, 43-45	101	Patent Ineligible Subject Matter	1-19, 21-41, 43-45	
1-19, 21-41, 43-45	112	Written Description	1-19, 21-41, 43-45	
1-6, 12, 13, 19, 22-29, 35, 41, 44, 45	103	Bansal, Pfuntner	1-6, 12, 13, 19, 22-29, 35, 41, 44, 45	
7, 8, 10, 11, 36, 37, 39, 40	103	Bansal, Pfuntner, Kelly	7, 8, 10, 11, 36, 37, 39, 40	
9, 21, 38, 43	103	Bansal, Pfuntner, and Ramanathan	9, 21, 38, 43	
14-17, 30-33	103	Bansal, Pfuntner, Urban	14-17, 30-33	
18, 34	103	Bansal, Pfuntner, Urban, Char	18, 34	
Overall Outcome			1-19, 21-41, 43-45	

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED