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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte NATHAN J. PETERSON, JOHN SCOTT CROWE, AMY LEIGH ROSE, JENNIFER LEE-BARON, JAMES C. LOEBACH, and NAGANANDA CHUMBALKAR

Appeal 2018-008706
Application 14/100,738
Technology Center 2400

Before ALLEN R. MACDONALD, MICHAEL J. ENGLE, and IFTIKHAR AHMED, *Administrative Patent Judges*.

AHMED, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant[1] appeals under 35 U.S.C. § 134(a) from a non-final rejection of claims 1, 8, 15, 20–21, and 28–43, which are all of the claims pending in the application. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM-IN-PART.

Technology

The application "relates generally to peer to peer server networks." Spec. 1.

[1] We use the word Appellant to refer to "applicant" as defined in 37 C.F.R. § 1.42(a). According to Appellant, the real party in interest is Lenovo Singapore PTE. Ltd. Appeal Br. 2.

Illustrative Claim

Claim 1 is illustrative and reproduced below with the limitation at issue under 35 U.S.C. § 103 underlined and certain limitations at issue under 35 U.S.C. § 101 italicized (all emphasis, reformatting, and bracketed material added):

1. An apparatus, comprising:

[A.] a processor; and

[B.] storage accessible to the processor and bearing instructions executable by the processor to:

[i.] determine that a new computer system is present that has not had settings other than at most default settings applied to a basic input output system (BIOS) executable by the new computer system to boot the new computer system;

[ii.] based at least in part on a determination that the new computer system at least one of[:]

[a.] is the same model of computer as the apparatus,

[b.] has the same BIOS version as the apparatus, and

[c.] has the same baseboard management controller (BMC) version as the apparatus,

facilitate at least first settings to be provisioned to the new computer system to establish the first settings in the new computer system at least in part based on:

[a.] *encapsulation of the first settings in an extensible markup language (XML) document*;

[b.] <u>omission of at least a second setting from the XML document</u>, the omission being made based at least in part on a determination that the new computer system at least one of:

> [(i).] is not the same model of computer as the apparatus,
>
> [(ii).] does not have the same BIOS version as the apparatus, and
>
> [(iii).] does not have the same baseboard management controller (BMC) version as the apparatus; and
>
> [c.] *transmission of the XML document to the new computer system.*

Appeal Br. 44 (Claims Appendix).

REJECTIONS

Claims 1, 8, 15, 20–21, and 28–43 stand rejected under 35 U.S.C. § 101 as being directed to ineligible subject matter without significantly more. Final Act. 3. We select claim 1 as representative for this rejection.

Claim 42 stands rejected under 35 U.S.C. § 112(b) as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventors regards as the invention. Final Act. 6.[2]

Claims 21 and 42 stand rejected under 35 U.S.C. § 102(a) as anticipated by Gillingham (US 2009/0073896 A1; Mar. 19, 2009). Final Act. 6.

Claim 1 stands rejected under 35 U.S.C. § 103 as obvious over the combination of Fulginiti (US 2003/0120827 A1; June 26, 2003) and Lee (US 2008/0130517 A1; June 5, 2008). Final Act. 9.

[2] The Answer does not discuss the 35 U.S.C. § 112(b) rejection of claim 1 and its dependent claims (Final Act. 6). We deem that rejection to be overcome by an amendment in the reply filed on May 9, 2017 (after the Final Action), and entered by the Examiner on June 14, 2017. Advisory Action 1.

Claims 8 and 33–36 stand rejected under 35 U.S.C. § 103 as obvious over the combination of Zintel (US 2005/0097503 A1; May 5, 2005), Porel (US 2009/0228649 A1; Sept. 10, 2009), and Brown (US 7,827,394 B2; Nov. 2, 2010). Final Act. 13, 23, 24.

Claims 15 and 39 stand rejected under 35 U.S.C. § 103 as obvious over the combination of Gillingham, Zintel, and Chen (US 2007/0288662 A1; Dec. 13, 2007). Final Act. 15.

Claims 28 and 29 stand rejected under 35 U.S.C. § 103 as obvious over the combination of Fulginiti, Lee, Porel, and Agarwal (US 2014/0126410 A1; May 8, 2014). Final Act. 19.

Claims 30 and 31 stand rejected under 35 U.S.C. § 103 as obvious over the combination of Fulginiti, Lee, Porel, and Olsen (US 2009/0282328 A1; Nov. 12, 2009). Final Act. 20.

Claim 32 stands rejected under 35 U.S.C. § 103 as obvious over the combination of Fulginiti, Lee, Porel, and Chen. Final Act. 22.

Claim 37 stands rejected under 35 U.S.C. § 103 as obvious over the combination of Zintel, Porel, Brown, and Agarwal. Final Act. 25.

Claim 38 stands rejected under 35 U.S.C. § 103 as obvious over the combination of Zintel, Porel, Brown, and Chen. Final Act. 26.

Claims 40 and 41 stand rejected under 35 U.S.C. § 103 as obvious over the combination of Gillingham, Zintel, Chen, and Olsen. Final Act. 27.

Claim 43 stands rejected under 35 U.S.C. § 103 as obvious over the combination of Gillingham and Olsen. Final Act. 28.

ISSUES

1. Did the Examiner err in concluding that claim 1 is directed to ineligible subject matter without significantly more under § 101?
2. Did the Examiner err in concluding that claim 42 is indefinite for failing to particularly point out and distinctly claim the subject matter which the inventors regards as the invention under 35 U.S.C. § 112(b)?
3. Did the Examiner err in concluding that Gillingham teaches "present[ing] a prompt on a display accessible to the processor, the prompt requesting configuration of the second server," "responsive to a determination that there is no device available from which receive settings," as recited in claim 42?
4. Did the Examiner err in concluding that Lee teaches or suggests "omission of at least a second setting from the XML document," as recited in claim 1?
5. Did the Examiner err in concluding that Zintel teaches or suggests "responsive to a new computer system (NCS) establishing communication with a peer-to-peer network, determining whether an existing computer system (ECS) can provide boot settings to the NCS," as recited in claim 8?
6. Did the Examiner err in concluding that the combination of Zintel and Chen teaches or suggests "responsive to the communication being established, present a user interface (UI) on a display accessible to the system, the UI comprising a

prompt regarding whether to transmit a pull request for settings to apply to the system," as recited in claim 15?

ANALYSIS

§ 101 Rejection of Claims 1, 8, 15, 20–21, and 28–43

Section 101 defines patentable subject matter: "Whoever 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." 35 U.S.C. § 101. The Supreme Court, however, has "long held that this provision contains an important implicit exception" that "[l]aws of nature, natural phenomena, and abstract ideas are not patentable." *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 70 (2012) (quotation omitted). "Eligibility under 35 U.S.C. § 101 is a question of law, based on underlying facts." *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1166 (Fed. Cir. 2018). To determine patentable subject matter, the Supreme Court has set forth a two part test.

"First, we determine whether the claims at issue are directed to one of those patent-ineligible concepts" of "laws of nature, natural phenomena, and abstract ideas." *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 217 (2014). "The inquiry often is whether the claims are directed to 'a specific means or method' for improving technology or whether they are simply directed to an abstract end-result." *RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1326 (Fed. Cir. 2017). A court must be cognizant that "all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas" (*Mayo*, 566 U.S. at 71), and "describing the claims at . . . a high level of abstraction and untethered from the language of

the claims all but ensures that the exceptions to § 101 swallow the rule." *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1337 (Fed. Cir. 2016). Instead, "the claims are considered in their entirety to ascertain whether their character as a whole is directed to excluded subject matter." *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015).

If the claims are directed to an abstract idea or other ineligible concept, then we continue to the second step and "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." *Alice*, 573 U.S. at 217 (quoting *Mayo*, 566 U.S. at 79, 78). The Supreme Court has "described step two of this 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." *Id.* at 217–18 (quotation omitted).

The U.S. Patent & Trademark Office has published revised guidance on the application of § 101. USPTO, *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50 (Jan. 7, 2019) ("Guidance"). Under that guidance, we look to whether the claim recites

(1) a judicial exception, such as a law of nature or any of the following groupings of abstract ideas:
    (a) mathematical concepts, such as mathematical formulas;
    (b) certain methods of organizing human activity, such as a fundamental economic practice; or
    (c) mental processes, such as an observation or evaluation performed in the human mind;

(2) any additional limitations that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)–(c), (e)–(h)); and

(3) any additional limitations beyond the judicial exception that, alone or in combination, were not "well-understood, routine, conventional" in the field (*see* MPEP § 2106.05(d)).

See Guidance 52, 55, 56. Under the Guidance, if the claim does not recite a judicial exception, then it is eligible under § 101 and no further analysis is necessary. *Id.* at 54. Similarly, under the Guidance, "if the claim as a whole integrates the recited judicial exception into a practical application of that exception," then no further analysis is necessary. *Id.* at 53, 54.

A) Claim 1

The Examiner concludes that claims 1, 8, 15, 20–21, and 28–43 are directed to patent-ineligible subject matter. Final Act. 3–5. We select independent claim 1 as representative for this rejection. The Examiner determines that claim 1 is directed to "an abstract idea of provisioning settings to a new computer system," including the steps of "1) collecting and comparing know[n] information (i.e. based at least in part on a determination that the new computer system at least one of is the same model of computer as the apparatus, has the same BIOS version as the apparatus, and has the same baseboard management controller (BMC) version as the apparatus), and 2) collecting information, analyzing it, and displaying certain results of the collection and analysis (i.e. based at least in part on a determination that the new computer system at least one of is the same model of computer as the apparatus, has the same BIOS version as the apparatus, and has the same baseboard management controller (BMC) version as the apparatus, facilitate

at least some settings in the apparatus to be provisioned to the new computer system to establish the at least some settings in the new computer system)." *Id*. at 4. The claimed concept, the Examiner determines, "can be carried out in existing computers long in use, [with] no new machinery being necessary." *Id*. The Examiner further determines that by Appellant's own admission, the "claimed invention is simply automation of an ***existing manual technique[]***." *Id*. (citing Spec. ¶ 2) (emphasis added).

According to the Examiner, "[t]he claim does not purport to identify new computer hardware: it assumes the availability of physical components for routine input, memory, look-up, comparison, and output capabilities." *Id.* (citing *Elec. Power Grp. v. Alstom S.A.*, 830 F.3d 1350 (Fed. Cir. 2016)). Viewed as a whole, the Examiner concludes, the claim elements "do not provide meaningful limitation(s) to transform the abstract idea into a patent eligible application of the abstract idea such that the claim[] amounts to significantly more than the abstract idea itself." *Id*. at 5.

Appellant argues that the Examiner's proposed "abstract ideas drastically oversimplify the language of the claims." Appeal Br. 5. Instead, Appellant argues, the concept of provisioning computer settings to a new computer system and the explicit language of the claims themselves are directed to a solution that is "necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks." *Id*. at 6 (citing *DDR Holdings, LLC v. Hotel.com, LP*, 773 F.3d 1245 (Fed. Cir. 2014)). According to Appellant, "the claims are not abstract because they recite specific steps and computer activities that never have been held to be abstract." *Id*. at 9.

Further, Appellant argues, claim 1 recites "additional elements of encapsulation of settings in an extensible markup language (XML) document, omission of at least one setting from the XML document, and transmission of the XML document to the new computer system," which might add significantly more than the abstract idea. *Id*. at 10.

We are persuaded by Appellant's arguments that the Examiner has not satisfied the proper burden for making a case for patent ineligibility under 35 U.S.C. § 101.

B) USPTO Step 2A, Prong 1

Claim 1 recites, in part, (A) "determin[ing] that a new computer system is present that has not had settings other than at most default settings applied"; (B) "determin[ing] that the new computer system at least one of is the same model of computer as the apparatus, has the same BIOS version as the apparatus, and has the same baseboard management controller (BMC) version as the apparatus as the [given] apparatus"; and (C) "facilitat[ing] at least first settings to be provisioned to the new computer system to establish the first settings in the new computer system." Appeal Br. 21. Additionally, claim 1 recites the steps of (D) "encapsulation of the first settings in an extensible markup language (XML) document"; (E) "omission of at least a second setting from the XML document"; and (F) "transmission of the XML document to the new computer system." *Id.*

Step (B) recites comparing version model and version information of two computers, e.g., determining if the model numbers and BIOS/BMC versions are the same. For purposes of this decision, we agree with the Examiner that claim 1 recites a mental process because step (B) listed above is recited at a high level of generality such that it could practically be

performed in the human mind or by a human with a pen and paper. *See Elec. Power Grp.*, 830 F.3d at 1354 ("we have treated analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, as essentially mental processes within the abstract-idea category"). Further, at a high level, step (A) recites determining that a computer is new (e.g., by a system administrator looking at it), and step (C) simply recites a process of facilitating settings to be provisioned to the new computer system based on the comparison done in step (B) (e.g., by a system administrator entering those settings into the new computer).

The process recited by step (B) can undoubtedly be performed within the human mind (e.g., a system administrator simply looking at model numbers or BIOS/BMC versions of two computers) or with a pen and paper. *See CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372 (Fed. Cir. 2011) (reasoning that when a person may implement claimed steps by simply writing down the claimed data elements, those steps can all be performed in the human mind); *see also Univ. of Utah Research Found. v. Ambry Genetics Corp.*, 774 F.3d 755, 763 (Fed. Cir. 2014) (holding that claims for comparing BRCA sequences, where such comparison can practically be performed in the human mind, are directed to an abstract idea); Guidance 52 & n.14 (listing cases).

Therefore, on the record before us, we determine that the Examiner's articulated reasoning is sufficient on USPTO Step 2A, Prong 1, and determining settings for a new computer based on a comparison of that computer with an existing one comprises a mental process, which is an abstract idea.

C) USPTO Step 2A, Prong 2

Although we agree with the Examiner that claim 1 recites a mental process, the Examiner has not shown that the claim, as a whole, fails to "integrate[] the recited judicial exception into ***a practical application*** of the exception." Guidance 54 (emphasis added). Put another way, the Examiner has not sufficiently addressed whether the claims "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." *Id.* (emphasis added). Further, the analysis under prong 2 considers the claim ***as a whole***, i.e., "the limitations containing the judicial exception as well as the additional elements in the claim besides the judicial exception need to be evaluated together to determine whether the claim integrates the judicial exception into a practical application." October 2019 Patent Eligibility Guidance Update, at 12, available at http://www.uspto.gov/PatentEligibility.

Here, Appellant argues that "'[p]rovisioning settings to a new computer system' in the way claimed is indeed an improvement to computer functionality, and 'the plain focus of the claims is on an improvement to computer functionality' rather than an economic or other task for which a computer is merely used for automation." Appeal Br. 7. Moreover, Appellant argues, claim 1 recites "additional elements of encapsulation of settings in an extensible markup language (XML) document, omission of at least one [setting] from the XML document, and transmission of the XML document to the new computer system," which amount to significantly more than the abstract idea determined by the Examiner. *Id*. at 10. Appellant argues that the Examiner's rejection of claim 1 fails to consider those

additional elements both individually and as an ordered combination. *Id*. at 11–12. According to Appellant, even though claim 1 recites "provisioning settings to a new computer system," it recites doing so "in explicit, concrete steps that involve XML encapsulation." *Id*. at 6.

We are persuaded that the Examiner has erred. In the context of revised Step 2A, claim limitations "that reflect an improvement in the functioning of a computer, or an improvement to other technology or technical field" are indicative of a recited judicial exception being integrated into a practical application. Guidance 55 (citing *DDR Holdings*, 773 F.3d at 1257); *see also* MPEP § 2106.05(a). A limitation that "applies or uses the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment" similarly integrates the exception into a practical application. Guidance 55 (citing *Diamond v. Diehr*, 450 U.S. 175, 184 (1981)); *see also* MPEP § 2106.05(e).

Here, claim 1 is specifically directed to provisioning settings to a new computer system ***using XML encapsulation***. As noted in the Background of the invention, at the time of the invention,

> configuring and replicating BIOS, BMC, RAID, settings etc. when deploying new servers in a network can be ***very time consuming***. A system administrator is often required to boot every new computer or server and either run scripts or manually set configurations, settings, parameters, etc. As a result, businesses typically ***invest a great deal of money and time*** for such purposes, while simultaneously having at least part of the ***network being nonoperational*** while each server is booted up and/or configured.

Spec. 1 (emphasis added).

The Specification explains how an administrator can configure a single server manually, to subsequently configure a plurality of identical new servers that come online and communicate over a peer-to-peer network with the first server. *Id*. at 11. The Specification discloses the use of broadcast packets on the peer-to-peer network to announce the presence of a new server. *Id*. Once the network administrator has configured one server, new servers that come online, identical in at least some respects to the existing server are automatically provisioned with configuration settings. *Id*. at 21. We therefore agree with Appellant that automatically provisioning settings to a new computer system in the manner claimed improves the technical functioning of the servers by efficiently configuring them as soon as they come online.

Moreover, claim 1 recites that the provisioning of settings is done using "encapsulation of the . . . settings in an extensible markup language (XML) document" (Appeal Br. 44), thereby requiring a specific document format to be used for configuration of the new server. Claim 1 further recites "omission of at least a second setting from the XML document" and "transmission of the XML document to the new computer system." *Id.* The claim language, when read in view of the Specification, thus supports that claim 1 is limited to the technical field of provisioning settings to new computers ***via XML documents*** and that such XML documents must have or omit the specified settings.

Claim 1 therefore improves the technical functioning of the computer by reciting a specific technique for using XML documents to improve configuration of new servers by allowing servers on a network to be configured automatically where a system administrator has already

configured another identical server. *See SRI Int'l, Inc. v. Cisco Sys., Inc.*, 930 F.3d 1295, 1303 (Fed. Cir. 2019) (concluding that a claim that recites using a plurality of network monitors to analyze specific network traffic data and integrate generated reports from the monitors to identify hackers and intruders on the network constitutes an improvement in computer network technology); *see also BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016) (holding that even though the claim at issue recites the abstract idea of filtering, the claimed invention improves technology when the filtering limitations are considered in combination with the remaining limitations).

Because claim 1 *as a whole* integrates the recited abstract idea into a practical application of that idea and reflects an improvement in the functioning of a computer, under the Guidance, it is not "directed to" the recited abstract idea and thus qualifies as eligible subject matter under § 101. The Examiner thus erred in rejecting independent claim 1. Because the Examiner rejects claims 8, 15, 20, 21, and 28–43 for the same reasons as claim 1 (Final Act. 3–5), we do not sustain the rejection of claims 1, 8, 15, 20, 21, and 28–43 under § 101.

§ 112 Rejection of Claim 42

Claim 42 depends from independent claim 21 and recites "responsive to a determination that ***there is no device available from which receive settings***, [sic] present[ing] a prompt on a display accessible to the processor, the prompt requesting configuration of the second server." Appeal Br. 29 (emphasis added). In rejecting claim 42 as indefinite under § 112(b), the Examiner concludes that the determination "there is no device available

from which receive settings" is not clear. Final Act. 6.[3] The Examiner finds that the Specification does discuss this feature, "but fails to provide a mechanism for determining 'whether a (e.g.[,] pre-existing on the peer network) server with settings from which to pull is present on the network.'" Ans. 14 (citing Spec. ¶¶ 49, 50).[4] According to the Examiner, "even when settings are known to exist, some settings may be pulled while others are not," and therefore "[i]t is unclear ***how*** the system determines if settings may be pulled and if so, which ones." *Id*. (emphasis added).

Appellant argues that "the specification discloses that the determination step regarding no device being available might be performed [in] a number of ways." Reply Br. 23 (citing Spec. ¶¶ 34, 35, Fig. 2). Appellant points to portions of the Specification that disclose that network communication for the claimed system can occur using the Internet, a WAN, or a LAN. *Id*. (citing Spec. ¶¶ 47, 49). Therefore, Appellant argues, "the specification makes very clear how the servers might be available to each other using one of the types of network communication that the specification describes," and "sets forth ways for determining whether 'no device' is available through the example network and example communication protocols that it describes, with the devices either communicating or not

[3] The Examiner rejected claims 1 and 28–32 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to recite antecedent basis for the claim term "the document." Final Act. 6. As discussed above, we deem that rejection to be overcome by an amendment in the reply filed on May 9, 2017 and entered by the Examiner. Advisory Action dated June 14, 2017; Appeal Br. 12, 44.

[4] The Specification, as filed, includes no paragraph numbers. We therefore cite to the Specification by page number. In its brief, however, Appellant cites paragraph numbers from the published version the Application. *See* US 2015/0163294 A1.

communicating depending on whether the devices are connected to the same example network 200 that is shown in Figure 2." *Id*. at 23–24. Appellant further argues that the Specification discloses "a 'mechanism' for the determination that there is no device available from which to receive settings [as recited in] Claim 42 — using broadcast packets." *Id.* at 24 (citing Spec. ¶¶ 48, 49). As for specific settings, Appellant argues that because the Specification discloses a pull request that a new server may use to pull configuration settings and then skip certain settings received, the Specification discloses "determining whether there is no device available from which to receive settings, whether that is because (1) another applicable device is not communicating over the same network or (2) because it does not have settings specified in a pull request even if communicating over the same network." *Id.* at 25 (citing Spec. ¶ 46, Fig. 4).

We are persuaded that the Examiner has erred. Claim 42 recites that "responsive to a determination that there is no device available from which [to] receive settings, present a prompt on a display accessible to the processor, the prompt requesting configuration of the second server." The claims, when read in light of the Specification and the prosecution history, and under the broadest reasonable interpretation, must provide objective boundaries for those of skill in the art. *See In re Packard*, 751 F.3d 1307, 1313 (Fed. Cir. 2014); *see also Ex parte McAward*, Appeal No. 2015-006416, 2017 WL 3669566, at *5 (PTAB Aug. 25, 2017) (precedential) (reaffirming that "we apply the approach for assessing indefiniteness approved by the Federal Circuit in *Packard*, i.e., a claim is indefinite when it contains words or phrases whose meaning is unclear") (quotations omitted). We are persuaded that a person ordinarily skilled in the art, in view of the

Specification, would have determined the scope of this claim limitation, i.e., understood how the determination of no device available from which to receive settings is made. The Specification details the steps in finding a server from which configuration settings may be received.

> Then at block 258 the logic broadcasts packets over e.g. a peer-to-peer network. The packets may be sent to the internal network and not necessarily beyond the router within the peer-to-peer network, if desired. Also if desired, the recipients of such broadcast packets may be configured within the network but need not necessarily be so configured.

Spec. 15 (discussing Fig. 4). We agree with Appellant that a person of ordinary skill in the art would have understood the Specification as disclosing "ways for determining whether 'no device' is available through the example network" based on whether the devices are connected to the same network and are already communicating. Reply Br. 24 (citing Spec. Fig. 2). Further, the Specification lists at least a few settings which may be pulled: "model settings, HDD capacity, BIOS version, and BMC version." Spec. 15. When read in light of the specification, claim 42 would have provided objective boundaries to a person ordinarily skilled in the art, and therefore, it is not indefinite.[5].

§ 102 Rejection of Claims 21 and 42

Claim 42 depends from independent claim 21 and further requires "responsive to a determination that there is no device available from which [to] receive settings, ***present[ing] a prompt on a display*** accessible to the

[5] Appellant is advised that claim 42 includes a typographical error, missing the word "to," where it recites "responsive to a determination that there is no device available from ***which receive*** settings." Appeal Br. 29 (emphasis added).

processor, the prompt requesting configuration of the second server." Appeal Br. 29 (emphasis added). The Examiner finds claims 21 and 42 anticipated by Gillingham. Final Act. 6–8.

Appellant does not appeal the rejection of independent claim 21 under 35 U.S.C. § 102(a). Final Act. 6–8. We therefore sustain the Examiner's rejection of claim 21.

With regard to dependent claim 42, the Examiner determines that Gillingham teaches "present[ing] a prompt on a display" because it discloses a method for "auto-partitioning of a multi-node processing system" that "can include establishing connection data, identifying a primary node, and automatically transmitting partitioning commands to other nodes to configure them as secondary nodes," where "[t]he partitioning commands can adjust the BIOS settings and board controller settings of the primary and secondary nodes such that the system boot as a single partition system." *Id.* at 8 (citing Gillingham ¶ 13).

Appellant argues that Gillingham does not disclose anything being presented on a display. Appeal Br. 14. In fact, Appellant contends, "[d]isplays are not even mentioned, nor are 'prompts' of some kind that might be presented on them." *Id.* According to Appellant, Gillingham "merely discloses establishing connection data, identifying a primary node, and automatically transmitting partitioning commands." *Id.* (citing Gillingham ¶ 13).

We are persuaded of Examiner error. Claim 42 requires "***present[ing] a prompt on a display*** accessible to the processor, the prompt requesting configuration of the second server." Gilligham discloses "automatically transmitting partitioning commands to other nodes to configure them as

secondary nodes." Gillingham ¶ 13. Although Gillingham teaches transmitting commands related to configuration of a system, we agree with Appellant that the Examiner has not sufficiently explained how Gillingham discloses presenting a prompt on a display in order to request those commands. Thus, we agree with Appellant that the Examiner has not shown that Gillingham teaches "present[ing] a prompt on a display accessible to the processor, the prompt requesting configuration of the second server," as recited in claim 42. Accordingly, we do not sustain the Examiner's rejection of claim 42 as being anticipated by Gillingham, but we do sustain the Examiner's rejection of claim 21.

§ 103 Rejection of Claims 1, 28–32

Independent claim 1 recites "omission of at least a second setting from the XML document"[6] (Appeal Br. 17), which the Examiner finds is taught by Lee. Final Act. 11. The Examiner determines that Lee teaches an "automatic reconfiguration apparatus [that] compares a hardware version of the new network device to the stored hardware version of the former network device located at a corresponding position in the prime topology to see whether they are identical," and if so, "the . . . apparatus can duplicate and load the corresponding prime configuration . . . stored in the database of the automatic reconfiguration apparatus into the new network device." *Id.* (citing Lee ¶¶ 23, 24). The Examiner finds that to be "equivalent to sending

[6] We note that as drafted, the "omission" and "transmission" limitations of claim 1 are not further indented below the "facilitate" limitation, which recites "facilitate at least first settings to be provisioned to the new computer system to establish the first settings in the new computer system at least in part ***based on:***." Appeal Br. 44 (emphasis added). For the purposes of this Appeal, we read claim 1 to have those two limitations as sub-parts of the "facilitate" limitation.

the settings to the new computer only if the new computer and the existing computer are identical, otherwise the settings will not be sent." *Id*.

Appellant argues that Lee "merely disclose[s] comparing hardware versions of devices to see if they are identical . . . and then duplicating and loading Lee's prime configuration into the new network device so that the new network device can work with the prime configuration." Appeal Br. 17 (citing Lee ¶¶ 23, 24). When the devices in Lee are not identical, Appellant contends, "Lee merely loads a default configuration into the new network device and performs automatic reconfiguration with the default configuration." *Id.* (citing Lee ¶ 23). That, Appellant contends, "do[es] not disclose ***omitting*** anything from a document based on a ***determination***." *Id.*

We are persuaded of Examiner error. Claim 1 requires "***omission*** of at least a ***second*** setting ***from the XML document***, the omission being made based at least in part on a determination that the new computer system at least one of is not the same model of computer as the apparatus, does not have the same BIOS version as the apparatus, and does not have the same baseboard management controller (BMC) version as the apparatus." Although we agree with the Examiner that Lee "teaches that when the devices are not identical, the prime configuration is not copied," and "the prime configuration settings are ***omitted from application to the new device*** in lieu of default configurations" (Ans. 17), there is no teaching or suggestion in Lee of omission of a setting, specifically a ***second*** setting, from an XML document being used in claimed invention. In fact, Lee teaches a determination based solely on the "hardware version" of the network device, and where the version does not match the existing one, Lee teaches "load[ing] a default configuration previously stored therein into the

new network device and perform automatic reconfiguration with the default configuration." Lee ¶ 26, Fig. 2. That is, Lee teaches loading the ***entire*** default configuration to the new device, and only "[a]fterwards, manual adjustment and verification of the parameters are conducted by the administrator to ensure the new network device is working normally." *Id.* ¶ 26. We therefore agree with Appellant that the Examiner has failed to sufficiently explain how Lee teaches "omission of at least a second setting from the XML document," in the manner recited in claim 1.

The Examiner also does not rely on Fulginiti or Porel as teaching this limitation. Final Act. 11. Accordingly, we do not sustain the Examiner's obviousness rejection of claim 1, and its dependent claims 28–32.

§ 103 Rejection of Claims 8, 33–38

Independent claim 8 recites "responsive to a new computer system (NCS) establishing communication with a peer-to-peer network, determining whether an existing computer system (ECS) can provide boot settings to the NCS" (Appeal Br. 45), which the Examiner finds is taught by Zintel. Final Act. 13. The Examiner finds that Zintel discloses devices that "interoperate on an ad hoc peer-to-peer networking connectivity basis," which "enables any networked device to initiate a communication with any other networked device." *Id.* (citing Zintel ¶ 4). The Examiner further determines that Zintel discloses "self-bootstrapping or automatic dynamic self-configuring of devices for ad hoc peer networking with other devices." *Id.* (citing Zintel ¶ 42). Together, the Examiner concludes, these disclosures teach the limitation as claimed. *Id.*; Ans. 21.

Appellant argues that claim 8 "recites a causal chain where determining whether the ECS can provide certain settings to the NCS is

done ***responsive to*** the NCS establishing communication with a peer-to-peer network," and that "[t]hat causal chain does not manifest itself simply by cobbling together two paragraphs from separate portions of Zintel." Appeal Br. 19–20 (citing Zintel ¶¶ 4, 42).

The Examiner responds that the term "['r]esponsive to[']' does not require that the determining happen immediately after the communication establishment, because the broadest reasonable interpretation does not require some sort of temporal requirement." Ans. 21. According to the Examiner, "the system cannot determine if the configuring can be performed until there is a communication link established, because the communication link is . . . necessary to report device settings." *Id.* at 21–22. The Examiner concludes that Zintel's teaching is "sufficient to render the claim language obvious because the arrangement of functions (performing determining after establishing a connection) are functions that Appellant does not dispute the reference teaches and they perform the same in sequence as they do in their 'separate portions.'" *Id*. at 22.

We are persuaded of Examiner error. Claim 8 requires "determining whether an existing computer system (ECS) can provide boot settings to the NCS" "***responsive to*** a new computer system (NCS) establishing communication with a peer-to-peer network." We agree with the Examiner that Zintel teaches establishing a peer-to-peer network and that such a network "allows for a device to be capable of both initiating and accepting connections to/from other devices." Zintel ¶ 4. The Examiner however fails to sufficiently explain how Zintel teaches "determining whether an ***existing*** computer system (ECS) can provide boot settings." As Appellant points out, Zintel merely discloses "self-bootstrapping or automatic dynamic self-

configuring of devices ***for*** ad hoc peer networking with other devices on a computing network." Reply Br. 31. The Examiner has not sufficiently explained why the Examiner's interpretation would have been obvious rather than, for example, merely Appellant's interpretation that Zintel's devices are "***preconfigured*** by the manufacturer with the ability to 'automatic dynamic self-configure' ***without*** having to also communicate with other devices."[7] *Id.* (emphasis added). Thus, we agree with Appellant that the Examiner has not shown that Zintel teaches or suggests "responsive to a new computer system (NCS) establishing communication with a peer-to-peer network determining whether an existing computer system (ECS) can provide boot settings to the NCS," as recited in claim 8. The Examiner also does not rely on Porel or Brown as teaching this limitation. Final Act. 13. Accordingly, we do not sustain the Examiner's obviousness rejection of claim 8, and its dependent claims 33–38.[8]

§ 103 Rejection of Claims 15, 20, 39–41

Independent claim 15 recites "present[ing] a user interface (UI) on a display accessible to the system, the UI comprising a prompt regarding whether to transmit a pull request for settings to apply to the system" (Appeal Br. 45), which the Examiner finds is taught by the combination of

[7] For example, Zintel discusses that Universal Plug and Play, one possible implementation of self-bootstrapping (Zintel ¶ 42), "is built on top of networking and enables ad hoc peer-to-peer connectivity" (*id.* ¶ 53), and therefore occurs prior to, not responsive to, "establishing communication with a peer-to-peer network."

[8] We note that claim 8 is a method claim which further recites "wherein the method, to make the boot settings available, comprises: encapsulating . . . ; omitting . . . ; and providing . . . ." Appeal Br. 45. For the purposes of this Appeal, we read the three steps following that limitation also as sub-steps of "the method."

Zintel and Chen. Final Act. 17. The Examiner finds that Zintel discloses "provid[ing] remote access and control of connected devices and services from another device with user interface capabilities (e.g., a universal remote controller, handheld computer or digital assistant, cell phones, and the like)," which the Examiner determines teaches "present[ing] a user interface (UI) on a display accessible to the system." Final Act. 17. The Examiner further finds that Chen discloses "an interactive data query module (equivalent to the apparatus) for accepting a pulling request from a remote client device (equivalent to new computer system)," which according to the Examiner teaches "the UI comprising a prompt regarding whether to transmit a pull request for settings to apply to the system."

Appellant argues "(1) that nothing in the relied-upon portions of Zintel is disclosed as presented on a display, much less a UI specifically, and (2) the causal chain required by the claim is also not disclosed" by Zintel. Appeal Br. 23 (citing Zintel ¶¶ 3, 4). Appellant further contends "nothing from [the cited] paragraphs indicates that anything is presented on a display responsive to communication of two devices being established." *Id.* With regard to Chen, Appellant argues that it only briefly discusses a user interface: "an interactive data query module for accepting a pulling request from a remote client device and sending the second kind of information to that client device according to the pulling request." *Id.* (citing Chen ¶¶ 26, 55). According to Appellant, Chen "appears to assume a 'pulling request' has already been provided and is therefore not concerned with 'whether to transmit' one." *Id.* Therefore, Appellant argues, Chen "does not even intimate that a 'prompt' of some kind be presented on a display, much less one regarding whether to transmit a pull request." *Id*. at 24.

The Examiner responds that "[a] pull request is a command to get information (pull information) from a networked system," and "the teaching [of] a pull request, as in Chen, suggests it occur[s] responsive to an established communication." Ans. 23. The Examiner determines that "Chen teaches a client device sending a pull request, and Zintel . . . teaches user interface capabilities for remote access of devices." *Id.* at 24. The Examiner further determines that "the broadest reasonable interpretation of prompt encompasses not only prodding for a particular action, but simply a mechanism for entering input for actions," and therefore, "[t]he fact that a remote access action such as a pull request is made via a UI suggests a prompt for entering the request." *Id.*

We are persuaded that the Examiner has erred. Although we agree with the Examiner that the claim limitation should be given its broadest reasonable interpretation, we are not persuaded that Chen teaches "prompt[ing] regarding whether to transmit a pull request for settings to apply to the system" in the manner determined by the Examiner. The cited portion of Chen recites "an interactive data query module for ***accepting a pulling request*** from a remote client device and sending the second kind of information to that client device according to the pulling request." Chen ¶ 26. The Examiner fails to sufficiently explain how that disclosure teaches or suggests prompting regarding whether to transmit a pull request at the remote client device in Chen. Moreover, it is unclear from the record before us that the "pulling request" disclosed in Chen relates in any way to settings to be applied to the system. *See, e.g.*, *id.* ¶ 10.

The cited portion of Zintel fails to cure the deficiency found in Chen. For example, the cited portion of Zintel does not teach or suggest a user

interface being presented on a display. *See* Zintel ¶¶ 3 (simply mentioning "device[s] with user interface capabilities"), 5 (discussing "displays" in context of the "personal computer and its many peripheral devices").

The Examiner also does not rely on Gillingham as teaching this limitation. Final Act. 16–18. Accordingly, we do not sustain the Examiner's obviousness rejection of claim 15, and its dependent claims 20, 39–41.

§ 103 Rejection of Claim 43

Claim 43 depends from claim 21 and recites "responsive to the communication being established, present a first user interface (UI) on a display accessible to the processor, the first UI comprising a prompt regarding whether to transmit a pull request for settings to apply to the second server, the first UI further comprising a first selector element that is selectable to transmit the pull request and a second selector element that is selectable to configure the second server manually." Appeal Br. 49–50. The Examiner finds that this limitation is taught by Olsen. Final Act. 29. The Examiner determines that Olsen discloses "[c]onfiguration keys within the HTML code are detected by executing scanning logic, such as a script, to prompt requests for configuration data to configure the interface components in the UI." *Id.* (citing Olsen ¶ 13). The Examiner further determines Olsen discloses "a UI may present various selectable settings that a user can manipulate with input to the UI," and these settings "are typically configured through an application that renders various types of formatted interface components in the UI." *Id.* (citing Olsen ¶ 5, Fig. 1). The Examiner finds that "Olsen teaches a first selector, and the second selector for manual configuration is an obvious variant." Ans. 36.

Appellant incorporates arguments made with reference to the rejection of claims 15 and 39–41, and further argues that Olsen "fails to disclose any specific UIs and selector elements that fairly approach the ones claimed," and "[t]he causal chain required by Claim 43 is also not disclosed in paragraph 5 of Olsen." Appeal Br. 42.

We are persuaded that the Examiner has erred. The cited portions of Olsen disclose a user interface comprising various components, and disclose updating a user interface with data obtained from a server. *See* Olsen ¶¶ 5, 13. The Examiner fails to sufficiently explain how Olsen teaches or suggests "present[ing] a first user interface (UI)" "***responsive to*** the communication being established," as recited by claim 43. The Examiner also does not rely on Gillingham as teaching this limitation. Final Act. 29. Accordingly, we do not sustain the Examiner's obviousness rejection of claim 43.

DECISION

For the reasons above, we *affirm* the Examiner's decision rejecting claim 21 under § 102(a), but we reverse the Examiner's decision rejecting (A) claims 1, 8, 15, 20–21, and 28–43 under § 101; (B) claim 42 under § 102(a); (C) claim 42 under § 112(b); and (D) claims 1, 8, 15, 20, 28–41, and 43 under § 103.

Claims Rejected	35 U.S.C. §	Basis	Affirmed	Reversed
1, 8, 15, 20–21, 28–43	101	Ineligible subject matter		1, 8, 15, 20–21, 28–43
42	112(b)	Indefiniteness		42
21, 42	102(a)	Gillingham	21	42
1	103	Fulginiti, Lee		1

8, 33–36	103	Zintel, Porel, Brown		8, 33–36
15, 39	103	Gillingham, Zintel, Chen		15, 39
28, 29	103	Fulginiti, Lee, Porel, Agarwal		28, 29
30, 31	103	Fulginiti, Lee, Porel, Olsen		30, 31
32	103	Fulginiti, Lee, Porel, Chen		32
37	103	Zintel, Porel, Brown, Agarwal		37
38	103	Zintel, Porel, Brown, Chen		38
40, 41	103	Gillingham, Zintel, Chen, Olsen		40, 41
43	103	Gillingham, Olsen		43
Overall Outcome			21	1, 8, 15, 20, 28–43

TIME TO RESPOND

No time for taking subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 41.50(f).

AFFIRMED-IN-PART