UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/636,804	12/14/2009	William Nathan Stearns	P-79278-US	2084

49443 7590 09/06/2018

Pearl Cohen Zedek Latzer Baratz LLP
1500 Broadway
12th Floor
New York, NY 10036

EXAMINER
SCHEUNEMANN, RICHARD N

ART UNIT	PAPER NUMBER
3624	

NOTIFICATION DATE	DELIVERY MODE
09/06/2018	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USPTO@PearlCohen.com
Arch-USPTO@PearlCohen.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte WILLIAM NATHAN STEARNS

Appeal 2017-002450
Application 12/636,804[1]
Technology Center 3600

Before THU A. DANG, JAMES R. HUGHES, and SCOTT E. BAIN, *Administrative Patent Judges*.

BAIN, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's Non-Final Rejection of claims 1–5, 7–9, 11–14, and 16–20, which constitute all claims pending in the application. Claims 6, 10, and 15 have been cancelled. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

---

[1] Appellant identifies IEX Corporation and NICE-Systems Ltd. as the real parties in interest. App. Br. 1.

STATEMENT OF THE CASE

The Claimed Invention

The claimed invention relates to workforce management and, specifically, forecasting and scheduling when a task's ("work item's") average handling time ("AHT") is longer than the work interval(s) of the applicable workers. Spec. 1. Claims 1, 11, and 12 are independent. Claim 1 is illustrative of the invention and the subject matter of the appeal, and reads as follows:

> 1. A computer-implemented method for determining staff distribution for a workforce management (WPM) system:
>
> for a statistics interval defined by the workforce management system and in a forecast range, wherein the given statistics interval is insufficient to account for given work items that temporally cross from one statistics interval into at least one or more following statistics intervals because a forecast average handling time (AHT) for a given work item is greater than or equal to a statistics interval length, or because the work item is forecast to arrive late in the given statistics interval and cannot be completed before the given statistics interval ends:
>
> *determining, by a processor, a total number of work items in progress, wherein the total number of work items in progress is based in part on work that continues from one or more prior statistics intervals*;
>
> for the given statistics interval, determining, by the processor, staff required based on the total number of work items in progress; and
>
> transmitting, by the processor, the staff required to a display.

App. Br. 9 (Claims App.) (emphasis added).

The Rejections on Appeal

Claims 1–5, 7–9, 11–14, and 16–20 are rejected under 35 U.S.C. § 101 as directed to patent-ineligible subject matter. Final Act. 5–6.

Claims 1, 5, 7–9, 11–14, 16, and 20 stand rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Adhikari et al. (US 7,222,082 B1; May 22, 2007) ("Adhikari") and Castonguay et al. (US 5,911,134; June 8, 1999) ("Castonguay"). Final Act. 7–17.

Claims 2–4 stand rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Adhikari, Castonguay, and Chee et al. (US 6,526,397 B2; Feb. 25, 2003) ("Chee"). Final Act. 17–19.

Claims 17–19 stand rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Adhikari, Castonguay, and Schoenberger et al. (US 7,382,773 B2; June 3, 2008) ("Schoenberger"). Final Act. 19–22.

ANALYSIS

We have reviewed the Examiner's rejections in light of Appellant's arguments presented in this appeal. Arguments which Appellant could have made but did not make in the Briefs are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(iv). On the record before us, we are not persuaded the Examiner erred. We adopt as our own the findings and reasons set forth in the rejections from which the appeal is taken and in the Examiner's Answer, and provide the following discussion for highlighting and emphasis.

Rejection Under 35 U.S.C. § 101

Appellant argues the Examiner erred in rejecting the claims as directed to ineligible subject matter, namely, the abstract idea of determining

staff distribution in a workforce.[2] App. Br. 7; Reply Br. 2–3; Final Act. 5. Appellant contends the claims are not abstract because the claims solve a problem rooted in computer technology, namely, "the scheduling is done by a computer [and] computers require discrete time intervals [whereas] a human does not need to work in discrete time intervals." Reply Br. 2; *see also* App. Br. 6–7. Appellant's arguments, however, do not persuade us of error.

Section 101 of the Patent Act provides "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title." 35 U.S.C. § 101. The Supreme Court has long held that this provision contains an implicit exception: "[l]aws of nature, natural phenomena, and abstract ideas are not patentable." *Alice Corp. Pty. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2354 (2014) (quoting *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107 (2013)). The Court has set forth a two-part inquiry to determine whether this exception applies. First, we must "determine whether the claims at issue are directed to one of those patent-ineligible concepts." *Alice*, 134 S. Ct. at 2355. Second, if the claim is directed to one of those patent-ineligible concepts, we 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*, 134 S. Ct. at 2355 (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1297

[2] Appellant argues the claims as a group, and we choose claim 1 as representative. 37 C.F.R. § 41.37(c)(iv).

(2012)). Put differently, we must search the claims for an "inventive concept," that is, "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*, 134 S. Ct. at 2355 (quoting *Mayo*, 132 S. Ct. at 1294).

Regarding step one of the *Alice* analysis, as the Examiner observes, Appellant's claims recite steps for using data to determine staff distribution, including acquiring, manipulating, and reporting such data. Non-Final Act. 6. Claims involving data collection, analysis, and display are directed to an abstract idea. *Elec. Power Grp. v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (holding that "collecting information, analyzing it, and displaying certain results of the collection and analysis" are "a familiar class of claims 'directed to' a patent ineligible concept"); *see also In re TLI Commc'ns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016); *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093–94 (Fed. Cir. 2016).

Although Appellant's claims require *use* of a computer, we are not persuaded by Appellant's argument that the claims are directed to a problem *rooted in* computer technology, as was the case in *DDR*. Reply Br. 3 (citing *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014). Here, in contrast to *DDR*, no claim limitations are directed to any means or method that improves a processor, computer, memory, network, or other computer element. Rather, the claims recite steps supplementing a mathematical process of scheduling, with a computer to make calculations. Ans. 3.

Accordingly, we are not persuaded the Examiner erred under step one of *Alice*, and we proceed to step two.

> In the second step of our analysis under *Alice*,
>
> > we must examine the elements of the claim to determine whether it contains an "inventive concept" sufficient to "transform" the claimed abstract idea into a patent-eligible application. 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 Corp.*, 134 S. Ct. at 2357 (internal citations omitted).

Appellant does not identify any specific error under step two of *Alice*. As discussed above, Appellant conflates the claims' *use* of a computer with an invention *rooted in* computer technology, and we are not persuaded for the reasons discussed above.

Appellant also briefly asserts, without further explanation, that the claims are analogous to those found patent-eligible in *Bascom*. Reply Br. 3 (citing *Bascom Global Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016). We, however, find Appellant's claims are dissimilar to the claims at issue in *Bascom*, which were directed to technical improvements in a computer or network. *See Bascom*, 827 F.3d at 1350 ("harness[ing] this technical feature of network technology in a filtering system" to customize content filtering); *see also McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1315 (Fed. Cir. 2016) ("improvement in computer animation," for "achieving automated lip-synchronization"). Appellant's invention, in contrast, is performed by standard, generic data processing and storage elements. *See supra*. The use of such generic computing elements "do[es] not alone transform an otherwise abstract idea into patent-eligible subject matter." *FairWarning*, 839 F.3d at 1096 (Fed. Cir. 2016) (citing *DDR Holdings, LLC, v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014)); Ans. 3.

For the foregoing reasons, we are not persuaded the Examiner erred. We sustain the rejection of claims 1–5, 7–9, 11–14, and 16–20 as directed to ineligible subject matter.

Rejection Under 35 U.S.C. § 103

Appellant argues the Examiner erred in finding the prior art teaches or suggests "determining . . . a total number of work items in progress, wherein the total number of work items in progress *is based in part on work that continues* from one or more prior statistics intervals," as recited in claim 1.[3] App. Br. 4–6 (emphasis added). Specifically, Appellant argues the Examiner relies on Castonguay as teaching this limitation, but Castonguay "teaches that scheduling is to be done in discrete intervals, [not] work that continues across one or more prior statistics intervals." *Id.* at 5. Appellant's arguments, however, do not persuade us of error.

As the Examiner finds, Castonguay teaches a system for workflow forecasting and management. Ans. 2; Non-Final Act. 7–8. Castonguay provides that during a "work shift," a management system monitors "statistics concerning incoming calls" and the "activities of agents in responding to those calls." Castonguay col. 7, ll. 16–35. The system may process data "based [o]n thirty (30) minute intervals," and the "revised data is then used [to] generate forecast[s]." Castonguay col. 7, ll. 21–33. The forecasts in turn generate staffing requirements. *Id.* at col. 7, ll. 35–37. Accordingly, we agree with the Examiner's finding that Castonguay teaches the disputed limitation.

[3] Appellant argues the claims as a group, and we choose claim 1 as representative. 37 C.F.R. § 41.37(c)(iv).

Appellant contends that Castonguay does not teach the recited "intervals," and specifically, work that "continues from [across] one or more prior statistics intervals." App. Br. 5. Appellant, however, appears to be relying on an overly narrow interpretation of "intervals." As defined in Appellant's Specification, an "interval" is an "*arbitrary* time period, typically 15 minutes, 30 minutes, 60 minutes, or the like, although shorter or longer intervals are contemplated as well." Spec. 6. Accordingly, an interval as recited in Appellant's claims could be *any* period of time. *In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004) (claim terms given their "their broadest reasonable interpretation consistent with the specification"). As the Examiner finds, just because Castonguay teaches *scheduling* in discrete intervals does not mean those are the only relevant *work* (statistics) intervals – a statistics interval (in the context of claim 1) could be any period of time during which a staff member in Castonguay is working, and thus that staff member's work continues "across" intervals. Ans. 2.

Accordingly, we are not persuaded the Examiner erred. For the foregoing reasons, we sustain the obviousness rejections of claims 1–5, 7–9, 11–14, and 16–20.

DECISION

We affirm the Examiner's decision rejecting claims 1–5, 7–9, 11–14, and 16–20.

Because we have affirmed at least one ground of rejection with respect to each claim on appeal, the Examiner's decision is affirmed. *See* 37 C.F.R. § 41.50(a)(1).

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). *See* 37 C.F.R. § 41.50(f).

AFFIRMED