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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte R. DAVID CARASSO, MICAH JAMES DELFINO, and
JOHNVEY HWANG

Appeal 2019-002279
Application 15/011,392
Technology Center 2100

Before KRISTEN L. DROESCH, JENNIFER L. McKEOWN, and
SCOTT E. BAIN, *Administrative Patent Judges*.

BAIN, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant¹ appeals under 35 U.S.C. § 134(a) from the Examiner's decision to reject claims 1–6, 8–16, 18–26, 28–30, and 34, which constitute all claims pending in the application. Claims 7, 17, 27, and 31–33 have been canceled. 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 the real party in interest as Splunk Inc. Appeal Br. 3.

BACKGROUND

The Claimed Invention

The invention relates to data presentation management, and “more particularly . . . providing real time display of statistics and data field values based for selected extraction rules.” Spec. ¶ 2.

Claims 1, 11, and 21 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, comprising:
 - accessing* a set of events in a field-searchable *data* store, each event including a portion of raw machine *data* that reflects activity in an information technology environment and is produced by a component of the information technology environment, each event *associated with a timestamp* extracted from the portion of raw machine data associated with the event and having a plurality of fields with corresponding field values;
 - applying an extraction rule* to extract field values for a particular field in association with the set of events, including the portion of raw machine data, accessed in the field-searchable data store;
 - based on the extracted field values for the particular field, *determining* one or more *unique field values* from the extracted field values for the particular field in the plurality of events;
 - for each unique field value, *determining a statistic* associated with each of the one or more unique field values in a subset of the one or more unique field values based on the determining of the one or more unique field values for the particular field in the plurality of events, wherein the statistic indicates a number of events having the unique field value extracted in association with the particular field;
 - causing *display* of the subset of the one or more unique field values;

causing *display* of information related to the statistic associated with the displayed unique field value among the subset of the one or more unique field values;

wherein the method is performed by one or more computing devices.

Appeal Br. 38–39 (Claims App.) (emphases added).

References

The references relied upon by the Examiner are:

Name	Reference	Date
Ivanov et al. (“Ivanov”)	US 2007/0198565 A1	Aug. 23, 2007
Ward et al. (“Ward”)	US 2010/0275128 A1	Oct. 28, 2010
Subrahmanyam et al. (“Subrahmanyam”)	US 2011/0066585 A1	Mar. 17, 2011
Hsieh et al. (“Hsieh”)	US 2011/0246528 A1	Oct. 6, 2011

The Rejections on Appeal

Claim 1 stands provisionally rejected on the grounds of nonstatutory double patenting, as being unpatentable over claim 7 of copending Application 15/582,669, and claim 1 of copending Applications 15/582,668, 15/582,667, 14/816038 and 14/816036. Final Act. 4.

Claims 1–6, 8–16, 18–26, 28–30, and 34 stand rejected under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter. Final Act. 17–21.²

² Portions of the Final Action and the Briefs refer to claims “1–30” as being rejected, but this appears to be a typographical error because the only pending claims are 1–6, 8–16, 18–26, 28–30, and 34. Appeal Br. 38–45 (Claims App.).

Claims 1, 3–8, 11, 13–18, 21, and 23–28 stand rejected under 35 U.S.C. § 103 as being unpatentable over Hsieh and Ward. Final Act. 21–26.

Claims 2, 12, and 22 stand rejected under 35 U.S.C. § 103 as being unpatentable over Hsieh, Ward, and Subrahmanyam. Final Act. 26–28.

Claims 9, 10, 19, 20, 29, and 30 stand rejected under 35 U.S.C. § 103 as being unpatentable over Hsieh, Ward, and Ivanov. Final Act. 28–29.

DISCUSSION

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, Appellant’s arguments do not persuade us of error. To the extent consistent with our discussion below, we adopt as our own the findings and reasons set forth in the rejection from which the appeal is taken and in the Examiner’s Answer. We provide the following for highlighting and emphasis.

Nonstatutory Double Patenting Rejection

Appellant does not address the Examiner’s provisional rejection of claim 1 on the ground of double patenting. Final Act. 4; Ans. 3. We, therefore, summarily sustain that rejection.

Rejection Under 35 U.S.C. § 101

The Examiner determined that claim 1 is directed merely to “collecting information, analyzing it, and displaying certain results,” which constitutes an abstract idea. Final Act. 17–18; *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 217 (2014) (describing two-step framework “for

distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts”). Further, the Examiner found that additional elements of claim 1 are “recited at a high level of generality” and involve only “conventional” computer functions and, therefore, do not amount to significantly more than the abstract idea. Final Act. 17–18. Accordingly, the Examiner concluded that claim 1 constitutes ineligible subject matter.

Appellant argues that claim 1 is “directed to an improvement in computer-related technology (e.g. applying effective extraction rules via effective data presentation management)” through unique “statistics.” Appeal Br. 10–14; Reply Br. 2–4. Appellant argues that claim 1 recites “novel” features to facilitate “analysis of extracted values (e.g., via the statistic indicating number of events having the unique field value extracted in association with the particular field)” in order to enable “effective extraction rules utilization.” Reply Br. 2–3.

Pursuant to the USPTO’s “Revised Subject Matter Eligibility Guidance,” which synthesizes case law and provides agency instruction on the application of § 101, we must look to whether a claim recites:

(1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activity such as a fundamental economic practice, or mental processes) (“Step 2A, Prong One”); and

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

See USPTO, 2019 Revised Patent Subject Matter Eligibility Guidance 84 Fed. Reg. 50, 54–55 (Jan. 7, 2019) (“Guidance”).

Only if a claim recites a judicial exception and does not integrate that exception into a practical application, do we then look to whether the claim:

(3) adds a specific limitation beyond the judicial exception that is not “well-understood, routine, conventional” in the field (*see* MPEP § 2106.05(d)); or

(4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.

See id. at 56 (collectively “Step 2B”).

We begin our review with Step 2A, Prong One of the Guidance, as applied to Appellant’s claim 1.³

As the Examiner determined, claim 1 is directed to a “method performed on one or more computing devices,” including the steps of “accessing” data reflecting an “activity” and having a “timestamp,” applying a “rule” to extract values, “determining” values and “statistics,” and causing “display” of “values” and “information.” Final Act. 17–18; Appeal Br. 38–39. Each of the foregoing steps simply recites collecting, analyzing, or displaying information according to rules, which is a mental process (or, alternatively, a mathematical concept to the extent the “rules” apply a mathematical formula). *See Elec. Power Grp. v. Alstom S.A.*, 830 F.3d

³ The Guidance refers to “Step One” as determining whether the claimed subject matter falls within the four statutory categories identified by 35 U.S.C. § 101: process, machine, manufacture, or composition of matter. This step is not at issue in this case.

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”). The fact that the collection and analysis is performed on a general purpose computer does not make the claim patent-eligible. *See id.*

Thus, upon review of claim 1, we agree with the Examiner’s determination that the foregoing steps individually, and in combination, recite one or more of the categories deemed abstract under the Guidance.

We next proceed to Step 2A, Prong 2 of the Guidance. Under this step, if the claim “as a whole” integrates the abstract idea into a “practical application,” it is patent eligible. Appellant argues that claim 1 is directed to improving technology, and specifically, improves “computer related technology” by “applying effective extraction rules via effective data presentation management.” Reply Br. 5.

Improving the functioning of a computing device or system can reflect integration of an idea into a “practical application.” Guidance Section III; *see also DDR*, 773 F.3d 1245; *Bascom Global Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016). Appellant, however, does not explain, and we do not discern, any improvement in technology from the claimed invention. *Cf. Bascom*, 827 F.3d at 1350 (“harness[ing a] technical feature of network technology in a filtering system” to customize content filtering); *DDR*, 773 F.3d at 1258 (Fed. Cir. 2014) (“[T]he claims at issue here specify how interactions with the Internet are manipulated to yield a desired result—a result that overrides the routine and conventional sequence of events ordinarily triggered by the click of a hyperlink.”) (emphasis added). The claims in *Bascom* and *DDR*, for example, were “necessarily

rooted in computer technology” in order to overcome a problem specifically arising in the realm of computer networks, *see, e.g., DDR*, 773 F.3d at 1257, but Appellant’s claim 1 recites instructions to obtain (extract) and display data, without reciting any particular technical application. Further, claim 1 uses a computer in its ordinary capacity, and does not recite any specific improvement to the way computers operate. Appeal Br. 38–39; Spec. ¶¶ 31, 32, 37, 39. *Cf. Enfish*, 822 F.3d at 1330–33, 1336.

Appellant also does not direct us to any evidence that claim 1 recites any unconventional rules, transforms or reduces an element to a different state or thing, or otherwise integrates the idea into a practical application.

Finally, under Step 2B of the Guidance, we must look to whether the claims include any “additional limitation that is not well-understood, routine [or] conventional.” The “question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field is a question of fact.” *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018); *see also Mortg. Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d. 1314, 1325 (Fed. Cir. 2016) (holding that patent eligibility inquiry may contain underlying issues of fact).

Claim 1 recites “an extraction rule” that operates to “determine” various values and statistics, and “display” data. *See supra*. According to the Specification, the steps of claim 1 are performed using general purpose, conventional computing devices and program instructions. Spec. ¶¶ 31, 32, 37, 39. We agree with the Examiner’s finding that simply using standard, generic computer elements to implement the foregoing managing of resources is well understood, routine, and conventional, and is not a

meaningful limitation that amounts to significantly more than an abstract idea. Ans. 6. Further, although Appellant asserts that claim 1 includes “novel” or unconventional elements, Appellant provides no evidence or persuasive argument to rebut any of the Examiner’s foregoing findings. Reply Br. 2–4. For example, Appellant does not address the Examiner’s finding that the Specification describes only generic, standard computing elements implementing the steps in claim 1.

Accordingly, we agree with the Examiner’s determination that claim 1 merely uses computer elements in the implementation of an abstract idea, which does not equate to providing a technical solution to a technical problem. Ans. 4–6.

For the foregoing reasons, we are not persuaded of error. We also are not persuaded of error regarding the remaining claims, which are not argued separately. We, therefore, sustain the Examiner’s subject matter-eligibility rejection of all pending claims.

Rejections Under Pre-AIA 35 U.S.C. § 103(a)

Appellant argues the Examiner erred in finding the prior art teaches or suggests “applying an extraction rule to extract field values” for a particular field in association with the set of events “accessed in the field-searchable data store,” as recited in claim 1. Appeal Br. 28–30. Specifically, Appellant asserts that the Examiner relies on Hsieh, but in Hsieh, “events” are not accessed in a field-searchable data store until after a regular expression is applied. *Id.* Appellant also argues that Hsieh fails to teach “unique field values are determined from such extracted field values for the particular field in the events,” as Hsieh only “generally discusses a feature extractor

that can ‘scan raw data and pull out structured data (e.g., numbers).’” *Id.* at 30 (quoting Hsieh ¶ 139). We, however, are not persuaded of error.

As the Examiner finds, Hsieh teaches that a regular expression can be used to “scan raw data and pull out structured data.” Hsieh ¶ 139; Ans. 6–7. This teaching corresponds to the “raw machine data accessed in a field-searchable data store,” because “field-searchable” means (according to Appellant’s Specification) that a regular expression can extract specific portions of the data. *See* Spec. ¶¶ 25, 27 (describing “data field extraction rule” as applied to identify and extract field values from data, and may include regular expressions). Accordingly, we are not persuaded the Examiner erred in finding Hsieh teaches or suggests the “applying an extraction rule” limitation of claim 1.

Regarding the “unique field values” recited in claim 1, the Examiner finds, and we agree, that Hsieh teaches displaying a “histogram” of the frequency of certain words in a data stream. Hsieh ¶ 119; Ans. 7. Appellant’s Specification similarly describes the claimed “unique data fields” as counting the number of times a specific term (e.g., “Bob,” “Ralph,” and “John”) appears in a paragraph. Spec. ¶ 88. We, therefore, are not persuaded of error.

Accordingly, we are unpersuaded of error as to claim 1, as well as claims 3–8, 11, 13–18, 21, and 23–28 (all of which were not argued separately).

Appellant argues that the Examiner erred in rejecting claims 9, 10, 19, 20, 29, and 30 for the same reasons as claim 1, and that the additional citation of Ivanov does not cure the deficiencies. For the same reasons as discussed above, however, we are unpersuaded of error.

Appellant also argues the rejection of claims 2, 12, and 22 separately (as a group) from claim 1. Appellant argues that the Examiner's reliance on Ward's teaching of a "topic of interest" does not satisfy "a selection of a particular unique field value among a subset of unique field values that have been displayed," as recited in claim 2 (and substantively repeated in claims 12 and 22). Appeal Br. 33–34; Reply Br. 10. Appellant asserts that the Examiner switched from relying on Subrahmanyam (in the Final Action) to relying on Ward (in the Answer) as teaching the disputed limitation. Reply Br. 10. Again, however, we are not persuaded of error.

The Examiner relies on a combination of Subrahmanyam with Ward, together modifying Hsieh for teaching the disputed limitation. The Examiner finds:

Ward teaches in paragraph [0103], that a topic of interest can be selected, wherein this is equivalent to selecting a unique field value among a subset of unique field values that have been displayed. Also, in paragraph [0133], Ward teaches that a summary dashboard can include a topic summary for selected topics of interest, wherein this is equivalent to determining a set of events which include the selected field values.

Subrahmanyam goes into detail about selection of a value, wherein this is closer to the language of field value as recited in the claims. However, Ward teaches selection of a displayed value and determining the events which contain the value.

Paragraph [0106] of the specification describes a user selects an extracted value and the event records with the extracted value may be displayed. Based on a reasonable interpretation in view of the specification, Hsieh as modified teaches the claimed limitation.

Ans. 9.

Appellant's arguments are directed to Subrahmanyam (in the Opening Brief) and Ward (in the Reply Brief) individually, rather than addressing the

Examiner’s combination of references and identifying error therein. Because “one cannot show non-obviousness by attacking references individually where . . . the rejections are based on combinations of references,” *In re Keller*, 642 F.2d 413, 426 (CCPA 1981), we are not persuaded the Examiner erred.

For the foregoing reasons, we sustain the obviousness rejections of 1–6, 8–16, 18–26, and 28–30.

SUMMARY

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1	N/A	Nonstatutory Double Patenting	1	
1–30	101	Eligibility	1–6, 8–16, 18–26, 28–30, 34	
1, 3–8, 11, 13–18, 21, 23–28	103	Hsieh, Ward	1, 3–8, 11, 13–18, 21, 23–28	
2, 12, 22	103	Hsieh, Ward, Subrahmanyam	2, 12, 22	
9, 10, 19, 20, 29, 30	103	Hsieh, Ward, Ivanov	9, 10, 19, 20, 29, 30	
Overall Outcome			1–6, 8–16, 18–26, 28–30, 34	

DECISION

We affirm the Examiner’s decision rejecting all pending claims, i.e., claims 1–6, 8–16, 18–26, 28–30, and 34.

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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). *See* 37 C.F.R. § 41.50(f).

AFFIRMED