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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 2018-005963 ¹
Application 14/611,093
Technology Center 2100

Before ST. JOHN COURTENAY III, JASON J. CHUNG, and
NORMAN H. BEAMER, *Administrative Patent Judges*.

COURTENAY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

This is an appeal under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1, 3–5, 7, 9, 12–15, 17, 18, 20–24, 26, and 29–52. Claims 2, 6, 8, 10, 11, 16, 19, 25, 27, and 28 are cancelled. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ Appellants identify the real party in interest is Splunk Inc. App. Br. 3.

Invention

The claimed invention on appeal “relates generally to data presentation management, and more particularly, but not exclusively, to providing real time display of data field values based on manual editing of extraction rules.” Spec. ¶ 2.

Representative Claim

1. A computer-implemented method, comprising:
accessing a set of events, each event associated with a timestamp and including in textual form a portion of machine data that was created to record activity that has previously occurred in an information technology environment, the timestamp including both a time and date;

causing display of at least a first event from the set of events, the display including the portion of machine data included in the first event;

receiving from a user a selection of a portion of text from the portion of machine data included in the displayed first event;

automatically determining a text extraction rule that, when applied to the portion of machine data included in the first event, would extract the selection of the portion of text in the displayed first event;

for a second event in the accessed set of events, causing display of the second event and an indication of a value that would be extracted by applying the text extraction rule to the portion of machine data included in the second event;
and

based on user input indicating that development of a text extraction rule is complete, storing the completed text extraction rule in computer memory as a definition for a field that can be referenced by a field name in search queries for processing events in a field-searchable data store that acts as a persistent

repository for the events, the events including portions of raw machine data and corresponding timestamps.

(Emphasis added regarding the contested limitations).

Rejections

- A. Claims 1, 3–5, 7, 9, 12–15, 17, 18, 20–24, 26, and 29–52 are rejected under pre-AIA 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Final Act. 2.
- B. Claim 1 is rejected on the ground of nonstatutory obviousness type double patenting (OTDP) as being unpatentable over claim 31 of copending Application No. 13/748,313, now US Patent 8,682,906, issued March 25, 2014. Final Act. 5.
- C. Claim 1 is rejected on the provisional ground of nonstatutory obviousness type double patenting (OTDP) as being unpatentable over claim 31 of co-pending Application No. 14/169,268. Final Act. 7.
- D. Claims 1, 3–5, 7, 9, 13–15, 17, 18, 20, 22–24, 26, 29–31, 33–38, 40–45, and 47–52 are rejected under pre-AIA 35 U.S.C. § 103(a) as being obvious over the combined teachings and suggestions of Ginter et al. (US 2005/0015624 A1) (hereinafter “Ginter”), Inanov et al. (US 2007 /0198565 A1) (hereinafter “Inanov”), Subrahmanyam et al. (US 2011/0066585 A1) (hereinafter “Subrahmanyam”), and Kubaitis (US 2001/0032205 A1).
- E. Claims 12 and 21 are rejected under pre-AIA 35 U.S.C. § 103(a) as being obvious over the combined teachings and suggestions of Ginter, Inanov, Subrahmanyam, Kubaitis, and Satish et al. (US 9,077,715 B1) (hereinafter “Satish”).

F. Claims 32, 39, and 46 are rejected under pre-AIA 35 U.S.C. § 103(a) as being obvious over the combined teachings and suggestions of Ginter, Inanov, Subrahmanyam, Kubaitis, and Madireddi et al. (US 2012/0227004 A1) (hereinafter “Madireddi”).

Grouping of Claims

Based on Appellants’ arguments, we decide the appeal of all claims rejected under § 103 rejection D on the basis of representative claim 1. *See* 37 C.F.R. § 41.37(c)(1)(iv). We address rejections A–C, E, and F separately, *infra*.

ANALYSIS

We have considered all of Appellants’ arguments and any evidence presented.

Rejection A under § 112, first paragraph (written description)

In the Appeal Brief, Appellants advance no arguments regarding all claims 1, 3–5, 7, 9, 12–15, 17, 18, 20–24, 26, and 29–52, as rejected by the Examiner for failing to comply with the written description requirement. Arguments not made are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Appellants advance new arguments in the Reply Brief: “Appellant does not concede the 112(a) rejection. Indeed, in the Appeal Brief, Appellant cites to various paragraphs and figures for support for this aspect of the claim.” Reply Br. 2 (emphasis omitted).

However, Appellants proffered support (Summary of Claimed Subject Matter) is required in every Appeal Brief under 37 C.F.R. § 41.37(c)(1)(iii). *See* App. Br. 3–6. Appellants’ new arguments in the Reply Brief are not in

response to any shift in the Examiner's position in the Answer and are therefore untimely. We note arguments raised in a Reply Brief that were not raised in the Appeal Brief or are not responsive to arguments raised in the Examiner's Answer will not be considered except for good cause. *See* 37 C.F.R. § 41.41(b)(2); *compare* App. Br.; Ans. *with* Reply Br.

In particular, Appellants have not shown good cause why we should consider Appellants' untimely arguments in the Reply Brief (2–4) regarding Rejection A of all claims on appeal. Accordingly, we sustain the Examiner's Rejection A under 35 U.S.C. § 112, first paragraph of all claims 1, 3–5, 7, 9, 12–15, 17, 18, 20–24, 26, and 29–52.

Rejections B and C under Non-Statutory OTDP

Appellants advance no arguments regarding claim 1 as rejected by the Examiner under Rejections B and C. Arguments not made are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv). Accordingly, we *pro forma* sustain the Examiner's Rejections B and C of claim 1 on the grounds of non-provisional and provisional non-statutory OTDP, respectively.

Rejection D of Representative Claim 1 under § 103(a)

Appellants contest the following conditional limitation of representative independent claim 1:

based on user input indicating that development of a text extraction rule is complete, storing the completed text extraction rule in computer memory as a definition for a field that can be referenced by a field name in search queries for processing events in a field-searchable data store that acts as a persistent repository for the events, the events including portions of raw machine data and corresponding timestamps.

(emphasis added).

Appellants focus on paragraphs 7, 11, 15, and 92 of Subrahmanyam, and contend:

Initially, events in log data as used in Subrahmanyam are not events, in a field-searchable data store, that can be processed via a search query referencing a field name, as in independent claim 1. In contrast, the log file described in Subrahmanyam is not a field searchable data store. That is, the log file in Subrahmanyam does not enable a search query referencing a field name to be executed against the events in a field-searchable data store via an extraction rule defining the field. Instead, in Subrahmanyam, the log data “events” are normalized into a structured format so that they “can be effectively analyzed and used for reporting, correlation, etc.” Subrahmanyam at ¶ [0007].

As such, at best, the “events” in the log data of Subrahmanyam are not field-searchable until they are normalized into a structured format. Accordingly, Subrahmanyam cannot teach or suggest *storing the completed text extraction rule in computer memory as a definition for a field that can be referenced by a field name in search queries for processing events in a field-searchable data store that acts as a persistent repository for the events*, as in independent claim 1. The Office has conceded this point by stating “Subrahmanyam does not explicitly teach storing a completed extraction rule that can be referenced by a field name in search queries.” *Final Office Action mailed June 08, 2017*, pg. 13.

App. Br. 9.

In response, the Examiner further explains the basis for the rejection:

First, Subrahmanyam teaches in paragraph [0007], that events can be, for example, an entry in a log file or a syslog server, an alert, an alarm, a network packet, an email, or a notification page. Second, Subrahmanyam teaches in paragraph [0011] that a “regex creator” receives an event that is in unstructured form and outputs a regular expression that matches and/or extracts token values from the event. Paragraph [0022] of the specification

describes event records as including unstructured data as well. Therefore, the regular expression in Subrahmanyam are able to search through events that are unstructured, and therefore, before they are normalized into a structured format. As such[,] based on a reasonable interpretation in view of the specification, Subrahmanyam teaches the claimed limitation.

Ans. 5–6.

We have reviewed Appellants’ arguments in the Briefs, the Examiner’s obviousness rejections, and the Examiner’s responses to Appellants’ arguments. Appellants do not proffer sufficient argument or evidence to persuade us of error regarding the Examiner’s underlying factual findings and ultimate legal conclusion of obviousness. *See Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential). For at least the reasons discussed below, we agree with and adopt the Examiner’s findings and legal conclusions in the Final Action and Answer.

Appellants acknowledge that “at best, the ‘events’ in the log data of Subrahmanyam are not field-searchable until they are normalized into a structured format.” App. Br. 9. We particularly note that Appellants address this same issue as a known problem with prior art approaches, as discussed in the Background of the Specification:

However, prior to such processing, field values may need to be extracted from the received data. Sometimes the received data may be *unstructured*, which may make it difficult for systems to efficiently analyze the received data to determine what data may be of interest and/or how to generate a field value extraction rule.

Spec. ¶ 4 (emphasis added).

Appellants provide a non-limiting, exemplary description for the term *unstructured data* in the Specification: “In some embodiments, the machine

data may be *unstructured data, structured data, and/or a combination thereof*. Unstructured data *may* refer to data that does not include at least one predefined field.” Spec. ¶ 21 (emphasis added).

However, we find Subrahmanyam ¶ 8 addresses essentially the same problem of automatically extracting information from an *unstructured event* and mapping the information contained therein to a structured schema using an unstructured event parser that *analyzes an event that is in unstructured form and generates an event that is in structured form*:

When the format of an event is not known beforehand or when an event includes free-form plain text, the event is referred to as being in “unstructured form.” It is difficult to automatically extract information from an unstructured event and map the information to a structured schema. In one embodiment, this normalization is achieved by using an “unstructured event parser.” *An unstructured event parser analyzes an event that is in unstructured form and generates an event that is in structured form.*

Subrahmanyam ¶ 8 (emphasis added).

Appellants also provide a non-limiting, exemplary description for the term *event record* in the Specification:

As used herein, the term “event record” may refer to computing data that is collected about an event for a computing system, including, for example, an action, characteristic, condition (or state) of the computing system. For example, such events may be about a computing system’s performance, actions taken by the computing system, or the like. Event records may be obtained from various computing log files generated by the computer’s operating system, and/or other monitoring application. However, event records are not restricted by a file format or structure from which the event data is obtained. In various embodiments, event records *may include structured and/or unstructured machine data, and/or a combination thereof*.

Spec. ¶ 22 (emphasis added). *Cf. with* “events” as recited in claim 1.

In light of the context provided by the Specification (*id.*), we find Subrahmanyam ¶ 8 analyzes an event that is in *unstructured form* and generates an event that is in *structured form*. Once the event is converted to a structured form, the event can then be stored as a definition for a field that could be referenced by a field name in search queries for processing events.

As for the claim language: “*storing* the completed text extraction rule in computer memory as a definition for a field that can be referenced by a field name in search queries for processing events in a field-searchable data store that acts as a persistent repository for the events” (claim 1), Subrahmanyam ¶ 92 describes: “In one embodiment, a normalized event generator is parameterized so that the regular expression and the token mappings are *stored* in a “parameter file” that exists separately from the rest of the normalized event generator. In one embodiment, the regular expression and the token mappings are expressed as properties in a properties file.”

As found by the Examiner, Kubaitis teaches a field-searchable data store (i.e., a database) that, in combination with the other cited references, would act as a persistent repository for the events:

Subrahmanyam does not explicitly teach storing a completed extraction rule that can be referenced by a field name in search queries, however, Kubaitis teaches: for a field that can be referenced by a field name in search queries for processing events in a field-searchable data store that acts as a *persistent repository for the events*, (Kubaitis, [0100] - The text editor allows a user to create and modify database-structured queries.

Final Act. 13 (emphasis omitted and added in italics).

We note Ginter § 146 expressly teaches raw data: “raw data gathered by the agents.” Ginter ¶ 9 also teaches the use of timestamps:

In accordance with another aspect of the invention is a method of event reporting by an agent comprising: receiving data; determining if said data indicates a first occurrence of *an event of interest* associated with a metric *since a previous periodic reporting*; . . . be performed by an agent that sends a report, said report including one of: *a timestamp* which increases with time duration, and a sequence number which increases with time duration, used by a receiver of said report. The receiver may use said one of said *timestamp* or said sequence number in authenticating a report received by said receiver as being sent by said agent, said receiver processing received reports having said one of a *timestamp* or sequence number which is greater than another one of a *timestamp* or sequence number associated with a last report received from said agent.

Ginter ¶ 9 (emphasis added).

The Examiner relies on Inanov for teaching or suggesting the claimed “user input:”

receiving from a user a selection of a portion of text from the portion of machine data including in the displayed first event (Ivanov, [0011] and [0044] – The user can select data from a body of text);

automatically determining a text extraction rule that when applied to the portion of machine data included in the first event would extract the selection of the portion of text in the displayed first event (Ivanov, [0011] and [0044] - The user can select data from a body of text whereas the system can automatically generate a regular expression that matches the graphically selected text)

Final Act. 11 (emphasis added).

On this record, we find Appellants’ contentions are not persuasive, because Appellants attack the teachings of the references in isolation and do

not specifically rebut the Examiner’s ultimate legal conclusion of obviousness, which is based on the *combined* teachings and suggestions of Ginter, Inanov, Subrahmanyam, and Kubaitis.² Our reviewing court guides: “[c]ombining two embodiments disclosed adjacent to each other in a prior art patent does not require a leap of inventiveness.” *Boston Sci. Scimed, Inc. v. Cordis Corp.*, 554 F.3d 982, 991 (Fed. Cir. 2009). An obviousness inquiry is not limited to the prior art’s preferred embodiment. *See, e.g., Pfizer, Inc. v. Apotex, Inc.*, 480 F.3d 1348, 1370 (Fed. Cir. 2007).

Moreover, we find the Examiner proffered combination of features from the cited references would have been nothing more than a predictable result. *See KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 401 (2007) (“[A] combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.”).

Based upon a preponderance of the evidence, Appellants have not persuaded us of error regarding the Examiner’s underlying factual findings and ultimate legal conclusion of obviousness. Accordingly, we find the Examiner’s cited combination of Ginter, Inanov, Subrahmanyam, and Kubaitis teaches or at least suggests the contested limitation of representative independent claim 1:³

² *See In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. *Id.*

³ “[T]he question under 35 USC 103 is not merely what the references expressly teach but what they would have *suggested* to one of ordinary skill in the art at the time the invention was made.” *Merck & Co. v. Biocraft Labs., Inc.*, 874 F.2d 804, 807 (Fed. Cir. 1989) (quoting *In re Lamberti*, 545

based on user input indicating that development of a text extraction rule is complete, storing the completed text extraction rule in computer memory as a definition for a field that can be referenced by a field name in search queries for processing events in a field-searchable data store that acts as a persistent repository for the events, the events including portions of raw machine data and corresponding timestamps.

Claim 1 (emphasis added).

In addition, we note the conditional language employed in the contested “*based on user input indicating that development of a text extraction rule is complete*” limitation recited in claim 1 (i.e., the condition precedent) (emphasis added). *See Ex parte Schulhauser*, Appeal No. 2013-007847, 2016 WL 6277792, at *9 (PTAB, Apr. 28, 2016) (precedential) (holding “The Examiner did not need to present evidence of the obviousness of the remaining method steps of claim 1 that are not required to be performed under a broadest reasonable interpretation of the claim (e.g., instances in which the electrocardiac signal data is not within the threshold electrocardiac criteria such that the condition precedent for the determining step and the remaining steps of claim 1 has not been met.”); *see also Ex parte Katz*, Appeal No. 2010-006083, 2011 WL 514314, at *4–5 (BPAI Jan. 27, 2011).

Applying the controlling guidance of *Schulhauser* here, we additionally find the Examiner need not present evidence of the obviousness of the conditional method step “storing the completed text extraction rule in

F.2d 747, 750 (CCPA 1976)). (emphasis added); *see also* MPEP § 2123 (9th ed. 2018).

computer memory” of claim 1 *that is not required to be performed* under a broadest reasonable interpretation of the claim.⁴

In particular, we conclude that claim 1 does not recite positively that the condition precedent (i.e., “*user input indicating that development of a text extraction rule is complete*”), actually occurs, or is ever required to occur, within a broadest reasonable interpretation of the claim:

*based on user input indicating that development of a text extraction rule is complete, **storing the completed text extraction rule in computer memory** as a definition for a field that can be referenced by a field name in search queries for processing events in a field-searchable data store that acts as a persistent repository for the events, the events including portions of raw machine data and corresponding timestamps.*

Claim 1 (emphasis added).

Even assuming *arguendo* that the completed text extraction rule is actually stored in computer memory, we further conclude the claim language is directed to a statement of intended purpose: i.e., “as a definition for the field definition data *that can be referenced* by a field name in search queries

⁴ See, also e.g., *Applera Corp. v. Illumina, Inc.*, 375 Fed. App’x. 12, 21 (Fed. Cir. 2010) (unpublished) (affirming a district court’s interpretation of a method claim as including a step that need not be practiced if the condition for practicing the step is not met); *Cybersettle, Inc. v. Nat’l Arbitration Forum, Inc.*, 243 Fed. App’x. 603, 607 (Fed. Cir. 2007) (unpublished) (“It is of course true that method steps may be contingent. If the condition for performing a contingent step is not satisfied, the performance recited by the step need not be carried out in order for the claimed method to be performed.”).

for processing events in a field-searchable data store.”⁵ Claim 1 (emphasis added).

Therefore, on this record, and based upon a preponderance of the evidence, we are not persuaded of error regarding the Examiner’s underlying factual findings and ultimate legal conclusion of obviousness for representative independent claim 1.

Accordingly, we sustain the Examiner’s § 103 rejection D of representative independent claim 1. The remaining claims rejected under rejection D (not argued separately) fall with claim 1. *See “Grouping of Claims” supra.*

Rejection E of Claims 12 and 21 under § 103(a)

Claims 12, and 21 depend from independent claims 9 and 18, respectively. Appellants advance no further separate substantive arguments regarding these claims. App. Br. 13–14. Instead, Appellants merely restate the contested limitations from claim 1, and assert that these limitations are not taught or suggested by the combination of references cited by the Examiner. *Id.* Arguments not made are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv). Accordingly, we sustain the Examiner’s § 103 rejection E

⁵ “An intended use or purpose usually will not limit the scope of the claim because such statements usually do no more than define a context in which the invention operates.” *Boehringer Ingelheim Vetmedica, Inc. v. Schering-Plough Corp.*, 320 F.3d 1339, 1345 (Fed. Cir. 2003). Although “[s]uch statements often . . . appear in the claim’s preamble,” *In re Stencel*, 828 F.2d 751, 754 (Fed. Cir. 1987), a statement of intended use or purpose can appear elsewhere in a claim. *Id.*

Appeal 2018-005963
Application 14/611,093

of dependent claims 12, and 21, for the reasons discussed above regarding claim 1.

Rejection F of Claims 32, 39, and 46 under § 103(a)

Claims 32, 39, and 46 depend from independent claims 1, 9 and 18, respectively. Appellants advance no further separate substantive arguments regarding these claims. App. Br. 14–15. Instead, Appellants merely restate the contested limitations from claim 1, and assert that these limitations are not taught or suggested by the combination of references cited by the Examiner. *Id.* Arguments not made are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv). Accordingly, we sustain the Examiner’s § 103 rejection F of dependent claims 32, 39, and 46, for the reasons discussed above regarding claim 1.

DECISION

We affirm the Examiner’s rejections of claims 1, 3–5, 7, 9, 12–15, 17, 18, 20–24, 26, and 29–52.

No time for taking any action connected with this appeal may be extended under 37 C.F.R. § 1.136(a)(1). *See* 37 C.F.R. § 41.50(f).

AFFIRMED