UNITED STATES PATENT AND TRADEMARK OFFICE

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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Ex parte HUNG TACK KWAN and SHIJU MATHAI[1]

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Appeal 2018-003304
Application 13/937,263
Technology Center 3600

_____

Before TERRENCE W. McMILLIN, KARA L. SZPONDOWSKI, and
SCOTT B. HOWARD, *Administrative Patent Judges.*

SZPONDOWSKI, *Administrative Patent Judge.*

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's
Final Rejection of claims 21–40, which constitute all of the claims pending
in this application. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

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STATEMENT OF THE CASE

Appellants' invention is directed to "the field of business process management and, more particularly, to dynamically modifying business processes based on real-time events." Spec. ¶ 1. Claims 21 and 22, reproduced below, is representative of the claimed subject matter:

> 21. A computer-implemented method, comprising:
>
> detecting a real-time event within a computing environment;
>
> performing, on the detected event, real-time analytics to identify event data;
>
> generating, based upon the event data, a process instance list of process instances;
>
> comparing, to the event data, context data associated with a selected one of the process instances; and
>
> interrupting, based upon the context data matching the event data; the selected one of the process instances, wherein
>
> the interrupting occurs during an instance activity within the selected one of the process instances, and
>
> the instance activity does not include exception handling capability.

> 22. The method of claim 21, further comprising:
>
> dynamically reconfiguring, based upon the interrupting and in real-time, the selected one of the process instances to react to a subsequent occurrence of the event.

REJECTIONS

Claims 21–40 stand rejected under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter. Final Act. 3.

Claims 21, 28, and 35 stand rejected under 35 U.S.C. § 103 as being unpatentable over Franke et al. (US 2012/0029969 A1; published Feb. 2, 2012) ("Franke") and Beringer (US 2006/0015382 A1; published Jan. 19, 2006). Final Act. 7.

Claims 22, 23, 29, 30, 36, and 37 stand rejected under 35 U.S.C. § 103 as being unpatentable over Franke, Beringer, and El-Rafei et al. (US 2009/0018983 A1; published Jan. 15, 2009) ("El-Rafei"). Final Act. 11.

Claims 24, 25, 31, 32, 38, and 39 stand rejected under 35 U.S.C. § 103 as being unpatentable over Franke, Beringer, and Fiszman et al. (US 7,580,994 B1; issued Aug. 25, 2009) ("Fiszman"). Final Act. 14.

Claims 26, 27, 33, 34, and 40 stand rejected under 35 U.S.C. § 103 as being unpatentable over Franke, Beringer, and Barros (US 2008/0127205 A1; published May 29, 2008). Final Act. 16.[2, 3]

ANALYSIS

Section 101 Rejections

An invention is patent-eligible if it claims a "new and useful process, machine, manufacture, or composition of matter." 35 U.S.C. § 101. However, the Supreme Court has long interpreted 35 U.S.C. § 101 to include implicit exceptions: "[l]aws of nature, natural phenomena, and abstract

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[2] Claim 34 is dependent on claim 33, which is rejected over Franke, Beringer, and Barros. The rejection for claim 34 relies on the Beringer reference, and claim 34 should be rejected under Franke, Beringer, and Barros, like its parent claim 33. *See* Final Act. 7.

[3] Claim 27 is dependent on claim 26, which is rejected over Franke, Beringer, and Barros. The rejection for claim 27 relies on the Franke reference, and claim 27 should be rejected under Franke, Beringer, and Barros, like its parent claim 26. *See* Final Act. 14.

ideas" are not patentable. *E.g.*, *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014).

In determining whether a claim falls within an excluded category, we are guided by the Supreme Court's two-step framework, described in *Mayo* and *Alice*. *Id.* at 217–18 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 75–77 (2012)). In accordance with that framework, we first determine what concept the claim is "directed to." *See Alice*, 573 U.S. at 219 ("On their face, the claims before us are drawn to the concept of intermediated settlement, *i.e.*, the use of a third party to mitigate settlement risk."); *see also Bilski v. Kappos*, 561 U.S. 593, 611 (2010) ("Claims 1 and 4 in petitioners' application explain the basic concept of hedging, or protecting against risk . . . .").

Concepts determined to be abstract ideas, and, thus, patent-ineligible, include certain methods of organizing human activity, such as fundamental economic practices (*Alice*, 573 U.S. at 219–20; *Bilski v. Kappos*, 561 U.S. 593, 611 (2010)); mathematical formulas (*Parker v. Flook*, 437 U.S. 584, 594–95 (1978)); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 69 (1972)). Concepts determined to be patent-eligible include physical and chemical processes, such as "molding rubber products" (*Diamond v. Diehr*, 450 U.S. 175, 191 (1981)); "tanning, dyeing, making water-proof cloth, vulcanizing India rubber, smelting ores" (*id.* at 182 n.7 (quoting *Corning v. Burden*, 56 U.S. 252, 267–68 (1854))); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

If the claim is "directed to" an abstract idea, we turn to the second step of the *Alice* and *Mayo* framework, where "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." *Alice*, 573 U.S. at 221 (internal quotation marks omitted). "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].'" *Id.* (quoting *Mayo*, 566 U.S. at 77). "[M]erely requir[ing] generic computer implementation[] fail[s] to transform that abstract idea into a patent-eligible invention." *Id.*

The PTO recently published revised guidance on the application of § 101. USPTO's January 7, 2019 Memorandum, *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50 (Jan. 7, 2019) ("Memorandum"). Under that guidance, we first look to whether the claim recites:

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

> (2) additional elements that integrate the judicial exception into a practical application (*see* MANUAL OF PATENT EXAMINING PROCEDURE (MPEP) § 2106.05(a)–(c), (e)–(h) (9th Ed., Rev. 08.2017, Jan. 2018)).

See Memorandum at 52, 55–56. Only if a claim (1) recites a judicial exception and (2) 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.

Furthermore, the Memorandum "extracts and synthesizes key concepts identified by the courts as abstract ideas to explain that the abstract idea exception includes the following groupings of subject matter, when recited as such in a claim limitation(s) (that is, when recited on their own or per se)":

> (a) Mathematical concepts—mathematical relationships, mathematical formulas or equations, mathematical calculations;

> (b) Certain methods of organizing human activity— fundamental economic principles or practices (including hedging, insurance, mitigating risk); commercial or legal interactions (including agreements in the form of contracts; legal obligations; advertising, marketing or sales activities or behaviors; business relations); managing personal behavior or relationships or interactions between people (including social activities, teaching, and following rules or instructions); and

> (c) Mental processes—concepts performed in the human mind (including an observation, evaluation, judgment, opinion).

Id. at 52 (footnotes omitted).

USPTO Memorandum, Step 2A, Prong 1

Under the first step of the *Alice/Mayo* framework, the Examiner concludes the claimed invention is directed to "the abstract idea of managing a business process[]" in that it "solves the problem of requiring an analyst to know and/or identify all possible event interruption points and define them in the business process." Final Act. 4; Ans. 19 (citing Spec. ¶ 3). The Examiner determines the claims are similar to other abstract ideas found

ineligible by the courts as mental processes, including those in *Electric Power Group, LLC v. Alstom, S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016), in that the claims "are also drawn to detecting events, and then analyzing the events." Final Act. 4–5. The Examiner also determines the claims are "similar to those that were held ineligible by the courts in *Accenture Global Services*," where the "claims were drawn to 'a task library database for storing rules for determining tasks to be completed upon an occurrence of an event,'" and the "instant claims are similar in that they also determine process steps to be completed based on rules and based upon the occurrence of an event." Final Act. 5 (citing *Accenture Global Services, GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336 (Fed. Cir. 2013)); *see* Ans. 27. According to the Examiner, "the claim does not state how the real-time analytics are performed" and "the broadly recited 'real-time analytics' and comparing steps are drawn to an analysis by steps people go through in their minds and without more are essentially mental processes within the abstract-idea category." Ans. 28.

Appellant argue "the claims are <u>not</u> 'directed to' [managing a business process]." App. Br. 10. According to Appellants, the Examiner overgeneralized the claimed invention and ignored "the vast majority of the claim language." App. Br. 11; Reply Br. 2, 4. Appellants argue the claims are not comparable to the facts in *Accenture Global Services* because "the claimed invention contemplates interrupting a process instance (i.e., an executing piece of software) based upon a certain set of conditions." App. Br. 16. Appellants also argue "the facts of the present application are substantively different than the facts within <u>Electric Power Group</u>" because the Examiner "has not made any findings that the claimed invention is

directed to nothing more than merely requiring the collection, analysis, and display of available information in a particular field." App. Br. 16. Appellants further argue "the <u>claimed</u> invention is not directed to a manual process," and just because "certain information used in the disclosed invention may be derived from manual input does not establish that the claimed invention, as a whole, is directed to a manual process." Reply Br. 2. Appellants contend the "claimed invention does more than detect and analyze events," such as "interrupting a computer process" in claim 21 and "dynamically reconfiguring the interrupted computer process" in claim 22. Reply Br. 3.

We are not persuaded by Appellants' arguments and agree with the Examiner's determination that the claims recite a mental process. *See* Ans. 19–22, 26–28. Appellants' invention is titled "Dynamically Modifying Business Processes Based on Real-Time Events." Appellants describe that business processes can be supported by various software categories, including process modeling, business process re-engineering, workflows, and project management. Spec. ¶ 2. Certain "business processes can be ideal candidates for automation as they involve moving a large numbers of 'cases' through the activities of relatively stable processes." Spec. ¶ 2. Appellants explain that the current business process design paradigm can be static, so processes cannot be rapidly adjusted or modified in response to new information from real-time analytics. Spec. ¶ 3. For dynamic modification, current business process handling "often requires human input to permit business processes to be dynamically modified," so an analyst must know "all possible event interruption points and define them in the business process." Spec. ¶ 3. Thus, business process modification can be

too rigidly defined and can require significant re-engineering to perform changes where interruption points are not defined. Spec. ¶ 3.

Appellants seek to solve this problem by allowing for dynamic modification of business processes based on real-time events. Spec. ¶ 4.

We agree with the Examiner that the claims at issue here—such as representative claims 21 and 22—have similarities to the claims found abstract in *Electric Power Group* and *Accenture*, in that they recite "detecting" an event (e.g., collecting information that an event occurred or the occurrence of an event) and then analyzing the event through the various steps of performing real-time analytics, "generating" a process instance list, "comparing" the event data to context data associated with one of the process instances, "interrupting" the selected one of the process instances based on the context data matching the event data, and "reconfiguring" the process instance (e.g., analyzing information or generating tasks based on rules). *See Electric Power Group*, 830 F.3d at 1353–54; *Accenture*, 728 F.3d at 1344; *see also* Final Act. 4–5; Ans. 21–22.

Moreover, Appellants have not persuasively argued why the claimed steps cannot be performed by a human, either mentally, manually, or with the use of pen and paper. *See, e.g.*, Spec. ¶ 20 ("event 114 can be manually detected"); ¶ 21 ("analytics 116 can determine the time of the event 114 occurrence and entities affected by the event 114"); ¶ 22 ("registry selection can be manually and/or automatically performed"); ¶ 22 ("business processes and/or instances 132, 152 can be manually and/or automatically subscribed to one or more categories 118"); ¶ 23 ("a process instance list 132 can be [] generated"); ¶ 24 ("analyze context data 134 associated with the instance . . . when context data 134 matches event 114 data, the

disclosure can perform an interrupt 140 action . . . interrupt 140 can stop process instance 132 from executing"); ¶ 27 ("reconfigure 142 can include manual and automated procedures"). Specifically the claim limitations identified above are directed to "detecting" an event and "generating" a process instance list based upon the event data, "comparing" context data of one selected process instance to the event data, and "interrupting" the selected one of the process instances based on the context data matching the event data. Each of these steps, both individually and as a combination, can be performed by a human, either mentally, manually, or with the aid of paper and pencil, which is similar to claims found patent-ineligible as mental processes. *See, e.g., CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1373 (Fed. Cir. 2011); *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1318 (Fed. Cir. 2016); *Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Canada (U.S.)*, 687 F.3d 1266, 1279 (Fed. Cir. 2012). Essentially, Appellants seek to automate a manual process. *See* Spec. ¶¶ 2– 3; s*ee, e.g., OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed. Cir. 2015).

Moreover, the mere mention of certain computer components in the claims (e.g. "computing environment," hardware processor," "computer readable hardware storage device," "computer usable program code," "computer hardware system") does not impose sufficiently meaningful limitations on claim scope beyond these mental steps. *Intellectual Ventures*, 838 F.3d at 1318; *Bancorp*, 687 F.3d at 1278–79.

Accordingly, we conclude the claims recites a mental process as identified in the Memorandum, and thus an abstract idea.

USPTO Memorandum, Step 2A, Prong 2

In determining whether the claims are "directed to" the identified abstract idea, we next consider whether the claims recite additional elements that integrate the judicial exception into a practical application. For the reasons set forth below, we discern no additional element (or combination of elements) recited in the claims that integrates the judicial exception into a practical application. *See* Memorandum at 54–55.

Appellants argue "[t]he selected one of the process instances," as claimed, "is a piece of executing software, and interrupting this necessarily requires the use of a machine" so "the claimed invention meets the machine or transformation test." App. Br. 11.

We are not persuaded by Appellants' arguments and agree with the Examiner's findings. *See* Ans. 23, 27, 28. The claims do not recite a particular machine or transformation for performing the claimed processing. *See* MPEP § 2106.05(b)–(c). The "machine" is recited at only a high level of generality – e.g., "computing environment," "hardware processor," "computer readable hardware storage device," "computer usable program code," and "computer hardware system." Neither the claims nor the Specification provides any details regarding the particular components, other than at a generic level. *See* Spec. ¶¶ 16, 46. In light of the generically recited device and Appellants' Specification, Appellants' arguments do not persuade us the device to be a particular machine. *Contra* 84 Fed. Reg. 50, 55 (explaining that, if "an additional element implements a judicial exception with, or uses a judicial exception in conjunction with, a particular machine," the additional element(s) may integrate the abstract idea into a practical application); 84 Fed. Reg. 50, 55 n.27 (citing MPEP § 2016.05(b)).

Instead, with respect to the device, Appellants' claims merely recite "'apply it' (or an equivalent) with the judicial exception, or merely includes instructions to implement an abstract idea on a [device], or merely uses a [device] as a tool to perform an abstract idea." 84 Fed. Reg. 50, 55. Thus, the "device" recited in the claims also fails to integrate the abstract mental process into a practical application.

Appellants further contend the "claims of the present application are necessarily rooted in computer technology and used to overcome problems specifically arising in the realm of computers." App. Br. 12 (citing *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014)). Specifically, Appellants argue the claimed invention "allows for both interrupting of process instances (i.e., executing computer programs) that do not include exception handling capability (i.e., the ability of the process instance to handle anomalous or exception conditions requiring special processing) and (in claim 22) the subsequent reconfiguring of these process instances." App. Br. 12; *see also* App. Br. 16. Appellants further argue "exception handling is a quintessential computer process," and therefore the claimed invention is "addressing a problem specifically necessarily rooted in computer technology." Reply Br. 3.

We are not persuaded by Appellants' arguments and agree with the Examiner that, unlike in *DDR Holdings*, the claims do *not* "present a solution *necessarily* rooted in the technology in order to overcome a problem specifically arising in the computer network (or other technological) realm" because the "claims seek to address a problem that existed and continues to exist outside of the realm of the technology associated with the additional recited elements (i.e., exception handling in business processes)." Ans. 24.

We further agree with the Examiner that the "proposed solution is one that could have been implemented directly by a human performing analogous functions by hand and/or with the assistance of a general purpose computer applied to facilitate the functions at a high level of generality or with the assistance of additional elements performing well-known, conventional functions," because the "central process could be substituted with a human user" and the "invention can be practiced in either a manual or an automated manner" using "a general purpose computer." Ans. 25 (citing Spec. ¶¶ 20, 22, 26, 27, 36, 29). We further agree with the Examiner that, unlike in *McRO, Inc. v. Bandai Namco Games America Inc.*, 837 F.3d 1299 (Fed. Cir. 2016), "the claims are not dr[a]wn to allowing a computer to perform a function that was [previously] only [achievable] by humans" and instead "the computer uses the same rules that a human user would follow to perform the method." Ans. 26.

We further are not persuaded Appellants' claims constitute an improvement to computer technology. *See* App. Br. 12. Rather, the claims merely adapt the mental process (managing a business process) to an execution of steps performed by a computer. We agree with the Examiner that "[i]nterrupting and reconfiguring manual processes are not technical improvements or improvements to the functioning of a computer." Ans. 27. Moreover, as discussed above, the claims only require generic computer components. *See also* Ans. 27. Relying on a computer to perform routine tasks more quickly or more accurately is insufficient to render a claim patent eligible. *See Alice*, 573 U.S. at 224 ("[U]se of a computer to create electronic records, track multiple transactions, and issue simultaneous instructions" is not an inventive concept); *Bancorp Servs., L.L.C. v. Sun Life*

Assurance Co. of Can. (U.S.), 687 F.3d 1266, 1278 (Fed. Cir. 2012) (a computer "employed only for its most basic function . . . does not impose meaningful limits on the scope of those claims"); MPEP § 2106.05(f)(2) ("Use of a computer or other machinery in its ordinary capacity for economic or other tasks (*e.g.*, to receive, store, or transmit data) or simply adding a general purpose computer or computer components after the fact to an abstract idea (*e.g.*, a fundamental economic practice or mathematical equation) does not provide significantly more.").

Moreover, to the extent the claimed "*interrupting . . .* the selected *one of the process instances . . .* during an instance activity within the selected one of the process instances" is distinct from the mental process, it is no more than insignificant post-solution activity – performing an action based on the comparison. Appellants' argument that the claimed invention is directed to using software when business process modification is too rigidly defined and requires significant re-engineering to perform changes where interruption points are not defined highlights that the claimed solution is directed to determining where an interruption should happen (i.e., based upon the compared context data matching the identified event data). *See* App. Br. 12 (citing Spec. ¶¶ 2–3). Therefore, the claimed solution is determining the context data for the process instances in order to interrupt, and the claimed interrupting is merely a post-solution activity that selects a particular data point, already identified in the comparing step, to be manipulated and does not support the invention having an "inventive concept." *See Mayo*, 566 U.S. at 73 ("[T]he prohibition against patenting abstract ideas 'cannot be circumvented by attempting to limit the use of the formula to a particular technological environment' or adding 'insignificant

postsolution activity.'") (Quoting *Diehr*, 450 U.S. at 191–92) (citing *Bilski*, 561 U.S. at 610–11).

Accordingly, for the foregoing reasons, the claims fail to integrate the abstract mental process into a practical application.

USPTO Memorandum, Step 2B

Turning to step 2 of the *Alice/Mayo* framework, we look to whether claim 21 (a) adds a specific limitation or combination of limitations that are not well-understood, routine, conventional activity in the field, or (b) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception. Memorandum at 56.

The Examiner determines the claimed additional elements (i.e., "a computer," "interrupting, based upon the context data matching the event data, the selected one of the process instances, wherein the interrupting occurs during an instance activity within the selected one of the process instances") are "recited at a high level of generality and . . . are simply generic computers performing generic computer functions." Final Act. 6; *see* Ans. 27. According to the Examiner, the claimed "[i]nterrupting a process when an anomaly or exception occurs is well-known and conventional, and not an improvement to another technology or technical field." Final Act. 6. The Examiner further concludes the claimed invention "has not demonstrated that anything more than a general purpose computer is required to carry out the invention." Ans. 23 (citing Spec. ¶ 16).

Appellants do not rebut the Examiner's determination. Specifically, Appellants do not argue the claimed additional limitations (i.e., a "computer," a "computing environment," "interrupting . . . one of the

process instances") adds limitations that are not well-understood, routine, conventional activities in the field.

As discussed above, claim 21 is directed to determining the context data for the process instances in order to interrupt, which can be performed mentally or manually. Similarly, the additional elements in the claim amount to no more than mere instructions to apply the abstract idea using generic computer components, which are insufficient to provide an inventive concept. Specifically, the Specification describes the computer elements as generic computer elements, including "a processor of a general purpose computer . . . or other programmable data processing apparatus to produce a machine, such that the instructions, which execute via the processor of the computer or other programmable data processing apparatus, create means for implementing the functions/acts." Spec. ¶ 16. Accordingly, we agree with the Examiner that the additional claim limitations besides the abstract idea are well-understood, routine, and conventional elements.

Appellants do not direct our attention to anything in the Specification that indicates the computer components perform anything other than well-understood, routine, and conventional functions. *See Elec. Power*, 830 F.3d at 1355 ("Nothing in the claims, understood in light of the specification, requires anything other than off-the-shelf, conventional computer, network, and display technology for gathering, sending, and presenting the desired information"); *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) ("That a computer receives and sends the information over a network——with no further specification——is not even arguably inventive"); *In re TLI Communications LLC Patent Litigation*, 823 F.3d 607, 614 (Fed. Cir. 2016) (server that receives data, extracts classification information from the

received data, and stores the digital images insufficient to add an inventive concept); *Alice*, 573 U.S. at 225–26 (receiving, storing, sending information over networks insufficient to add an inventive concept).

Accordingly, we sustain the Examiner's rejection of claim 21 as being directed to patent-ineligible subject matter, as well as independent claims 28 and 35 with commensurate limitations, dependent claim 22, and dependent claims 23–27, 29–34, and 36–40, which were not separately argued.

Section 103 Rejections

Dispositive Issue: Did the Examiner err in finding that the combination of Franke and Beringer teaches "interrupting . . . during an instance activity within the selected one of the process instances," wherein "the instance activity does not include exception handling capability" as recited in independent claim 21, and commensurately recited in independent claims 28 and 35?

The Examiner finds Beringer's dealing with ad-hoc workflows (i.e., exception handling) and specifically the workflow that "does not fall under the predefined exceptions" teaches "an instance activity that does not include exception handling capability." Final Act. 10 (citing Beringer ¶¶ 28, 26); *see* Ans. 37 (citing Beringer ¶¶ 28, 26).

Appellants contend Beringer "teaches the opposite" of a "process instance does not include exception handling capability." App. Br. 23–24. According to Appellants, Beringer provides for "more robust process management" by "including the exception handling." App. Br. 24. Specifically, Appellants argue "Beringer teaches the obviousness of including exception handling capability, which is the opposite of the claimed

'the instance activity does not include exception handling capability.'"
Reply Br. 14.

We are persuaded by Appellants' arguments. Here, the claim recites "instance activity [during which the interrupting occurs within the selected process instance] does not include exception handling capability." In other words, the claim requires that the interruption occurs during an instance activity that *does not include* exception handling *capability*.

The sections of Beringer cited by the Examiner (*see* Final Act. 10; Ans. 37) teach "[a]d-hoc workflow which does not fall under the predefined exceptions may also be covered and tracked" (Beringer ¶ 26) and "[d]ealing with ad-hoc work flow may also be referred to as exception handling" (Beringer ¶ 28).

As Beringer sets forth, the ad-hoc work flow *is* exception handling (i.e., includes exception handling capabilities); it just does not fall under a predefined exception. However, the claim requires the interrupted instance activity does *not include exception handling capability*. The Examiner does not sufficiently explain how Beringer's exception handling teaches an instance activity that is interrupted *not including exception handing capabilities*. Therefore, we find the Examiner has not provided sufficient findings that Beringer teaches the claimed "interrupting... during an instance activity within the selected one of the process instances," wherein "the instance activity does not include exception handling capability."

Because we agree with at least one of the arguments advanced by Appellants, we need not reach the merits of Appellants' other arguments. Accordingly, we are constrained on the record to reverse the Examiner's § 103(a) rejection of independent claim 21, as well as independent claims

28 and 35 with commensurate limitations. Moreover, because the Examiner has not shown that the additional references cure the foregoing deficiency regarding the rejection of the independent claims, we will not sustain the obviousness rejections of dependent claims 22–27, 29–34, and 36–40.

DECISION

We affirm the Examiner's rejection of claims 21–40 under 35 U.S.C. § 101.

We reverse the Examiner's rejections of claims 21–40 under 35 U.S.C. § 103.

Because we affirm at least one ground of rejection with respect to each claim on appeal, we affirm the Examiner's decision to reject all of the pending claims.

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