



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.
14/187,695	02/24/2014	Kevin T. Ousdigian	C0005396.USU2/LG10126.L33	8235

27581 7590 04/27/2018
Medtronic, Inc. (CRDM)
710 MEDTRONIC PARKWAY NE
MS: LC340 Legal Patents
MINNEAPOLIS, MN 55432-9924

EXAMINER

LEVICKY, WILLIAM J

ART UNIT	PAPER NUMBER
----------	--------------

3762

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

04/27/2018

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):

medtronic_crmd_docketing@cardinal-ip.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte KEVIN T. OUSDIGIAN, JOEL R. LAUER, and
ADAM C. RICHARDSON

Appeal 2017-004256
Application 14/187,695¹
Technology Center 3700

Before JEFFREY N. FREDMAN, ELIZABETH A. LAVIER, and
RICHARD J. SMITH, *Administrative Patent Judges*.

LAVIER, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellants seek review of the Examiner’s rejections of claims 1–27. We have jurisdiction under 35 U.S.C. § 6(b). For the reasons set forth below, we AFFIRM.

BACKGROUND

The Specification describes “an electrogram (EGM) summary generated by an external computing device for presentation at a display device.” Spec. 1:10–11.

Claim 1 is illustrative:

¹ Appellants state the real parties in interest are Medtronic, Inc. and Medtronic plc. Appeal Br. 3.

A method comprising:

receiving cardiac electrogram (EGM) signal data collected from a medical device associated with a patient, wherein the EGM signal data is representative of a detected cardiac episode identified as one of a plurality of episode types;

selecting, by one or more processors and based on the identified one of the plurality of episode types, a plurality of non-overlapping portions of the EGM signal data associated with the detected cardiac episode, wherein each episode type of the plurality of episode types is associated with a respective selection of portions of the EGM signal data; and

outputting, by the one or more processors, the selected plurality of non-overlapping portions of the EGM signal data as an episode summary for the detected cardiac episode.

Appeal Br. 43 (Claims Appendix).

REJECTIONS MAINTAINED ON APPEAL

1. Claims 1–27 stand rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter. Ans. 2.
2. Claims 1–8, 11–20, and 23–27 stand rejected under 35 U.S.C. § 102(a)(1) as anticipated by Gunderson.² Ans. 6.
3. Claims 1–8, 11–20, and 23–27 stand rejected under 35 U.S.C. § 102(a)(1) as anticipated by Dong.³ Ans. 9.
4. Claims 1–8, 11–20, and 23–27 stand rejected under 35 U.S.C. § 102(a)(1) as anticipated by Sauer.⁴ Ans. 11.

² Gunderson et al., US 2013/0085406 A1, published Apr. 4, 2013.

³ Dong et al., US 2011/0077541 A1, published Mar. 31, 2011.

⁴ Sauer et al., US 2008/0125824 A1, published May 29, 2008.

DISCUSSION

A. Claim Construction

Before turning to the rejections at issue on appeal, we begin by addressing the meaning of “a detected cardiac episode,” as recited in claim 1. Specifically, this phrase implicates three issues⁵ of claim construction: (1) whether “a detected cardiac episode” and “the detected cardiac episode” as recited in claim 1 can encompass more than one cardiac episode, (2) the definition of “cardiac episode,” and (3) the definition of “plurality of non-overlapping portions of the EGM signal data.”

1. “a”

“[A]n indefinite article ‘a’ or ‘an’ in patent parlance carries the meaning of ‘one or more’ in open-ended claims containing the transitional phrase ‘comprising.’” *KCJ Corp. v. Kinetic Concepts, Inc.*, 223 F.3d 1351, 1356 (Fed. Cir. 2000). Furthermore:

That “a” or “an” can mean “one or more” is best described as a rule, rather than merely as a presumption or even a convention. The exceptions to this rule are extremely limited: a patentee must “evinced [] a clear intent” to limit “a” or “an” to “one.” The subsequent use of definite articles “the” or “said” in a claim to refer back to the same claim term does not change the general plural rule, but simply reinvokes that non-singular meaning. An exception to the general rule that “a” or “an” means more than one only arises where the language of the claims themselves, the specification, or the prosecution history necessitate a departure from the rule.

⁵ More precisely, the phrase implicates two issues of claim construction that are necessary to fully resolve the issues before us on appeal. *See Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (“[O]nly those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy.”).

Baldwin Graphic Sys., Inc. v. Siebert, Inc., 512 F.3d 1338, 1342–43 (Fed. Cir. 2008).

Here, we discern nothing in the claims themselves or the record that would necessarily limit “a detected cardiac episode” as recited in claim 1 to a single episode. Insofar as claim 1 also recites that the detected episode is “identified as one of a plurality of episode types,” this does not exclude multiple episodes, so long as they are of the same “type,” as further discussed below. Accordingly, we find that the broadest reasonable interpretation of “a detected cardiac episode” is “one or more detected cardiac episodes.”

2. “*cardiac episode*”

Claim 1 places no limitations on the detected “cardiac episode” except that such episode(s) must be “identified as one of a plurality of episode types.” Claim 2, which depends from claim 1, recites various episode types, involving abnormal heart rhythms such as ventricular tachycardia:

The method of claim 1, wherein the plurality of episode types comprise at least two of a treated ventricular tachycardia/ventricular fibrillation (VT/VF) episode, a monitored VT episode, a non-sustained ventricular tachycardia (VTNS) episode, a high-rate non-sustained ventricular tachycardia (VTNS) episode, a VT/VF episode with treatment withheld, a supraventricular tachycardia (SVT) episode, a ventricular oversensing (VOS) episode, a fast atrial and ventricular rate episode, a treated atrial tachycardia/atrial fibrillation (AT/AF) episode, and a monitored AT/AF episode.

Appeal Br. 43 (Claims Appendix). Claim 8, which also depends from claim 1, describes “events” associated with the plurality of non-overlapping portions of the data regarding the cardiac episode, which can “comprise one or more of an onset of the cardiac episode, a medical device detection of the

cardiac episode, a delivered therapy, or a termination of the cardiac episode.” *Id.* at 45. This open-ended claim language tells us that a cardiac episode could (but need not necessarily) include some or all of the events recited in claim 8. As is often the case, the dependent claims here provide useful examples identifying subject matter that falls within the bounds of the independent claim, but little direction as to the nature of those bounds.

Thus, we agree with the Examiner that “a cardiac episode is broad enough to include anything from arrhythmia to fibrillation to normal sinus rhythm.”

Advisory Action 2⁶ (*see also* Ans. 10 (“Appellant has not defined cardiac episode to be a particular cardiac episode and therefore includes anything from the PVT episode of Dong to the identification of each R-wave.”)).

Appellants direct us to nothing in the claims, the Specification, or the record as a whole that counters the Examiner’s interpretation, and we discern none.

3. *“plurality of non-overlapping portions of the EGM signal data”*

Claim 1 does not meaningfully limit the “plurality of non-overlapping portions of the EGM signal data,” insofar as claim 1 does not, for example, delineate how the “portions” are distinguished or divided from one another. Claim 9 describes “comparing time windows for each portion of the respective selection of portions of EGM signal data” (Appeal Br. 45), indicating that, at the very least, the “non-overlapping portions” of claim 1 include data divided into segments by time, and which do not include common time points. The Examiner finds, and we agree, that “the selection of EGM signal data is broad enough to include any portion of the heart pumping which is shown in a P-wave or any other characteristic represented

⁶ Advisory Action dated June 21, 2016.

by the PQRST segments.” Advisory Action 2. By extension, a “plurality of non-overlapping portions” of those data includes (but is not necessarily limited to)⁷ any set of more than one of such portions, for which no two portions encompass data from common time points.

B. Rejection 1: § 101

Section 101, which provides that a patent may be obtained for the invention of “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof,” is limited implicitly insofar as “[l]aws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice Corp. Pty. Ltd. 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, 2116 (2013)). The Supreme Court has established a two-step framework for this analysis, wherein a claim does not satisfy § 101 if

(1) it is “directed to” a patent-ineligible concept, *i.e.*, a law of nature, natural phenomenon, or abstract idea, and (2), if so, the particular elements of the claim, considered “both individually and ‘as an ordered combination,’” do not add enough to “transform the nature of the claim into a patent-eligible application.”

Elec. Power Grp., LLC v. Alstom S.A., 830 F.3d 1350, 1353 (Fed. Cir. 2016) (quoting *Alice*, 134 S. Ct. at 2355).

The Examiner finds that the appealed claims are directed to an abstract idea without significantly more, because:

⁷ We need not reach how or if other kinds of non-overlaps (*i.e.*, not related to time) fall within the scope of claim 1, as doing so is unnecessary to resolve the issues before us in this appeal.

the claims receive EGM signal data and associate a cardiac episode with the EGM signal data without significantly more. The claims use a generic identifier of a processor to associate the EGM signal data with the detected cardiac episode and output the selected one or more portions of the EGM signal data as a summary. Associating data using a processor and outputting the selected one or more portions of the EGM signal data does not contribute “significantly more” than the mere idea of associating well known medical conditions shown on EGM signal data with the arrhythmia/episode detected on the EGM signal.

Final Action 6.

We discern no reversible error in the Examiner’s rejection. Appellants’ arguments to the contrary (*see* Appeal Br. 7–16; *see also* Reply Br. 2–5) are not persuasive, as discussed below.

1. Alice Step 1

Appellants assert that the Examiner has “overly generalized the features of claim 1.” Appeal Br. 8. In particular, Appellants allege that the “selecting, by one or more processors and based on the identified one of the plurality of episode types, a plurality of non-overlapping portions of the EGM signal data associated with the detected cardiac episode” element of claim 1 is not abstract but rather “is explicitly directed to the concrete step of selecting a plurality of non-overlapping portions of EGM signal data. The claimed features require a specific technical data type (i.e., EGM signal data) and performing specific actions on that EGM signal data.” *Id.* at 10. This is not persuasive. That the data are specific (here, from EGM signals) does not make their manipulation any less abstract. Nor does the specificity of such manipulation change its intrinsic abstractness. *See Elec. Power Grp.*, 830 F.3d at 1353 (“Accordingly, we have treated collecting

information, including when limited to particular content (which does not change its character as information), as within the realm of abstract ideas.”).

Appellants’ suggestion that “without the Examiner identifying court decisions in which abstract ideas were identified, the Examiner has failed to establish a *prima facie* case of non-patentability for the claims” (Appeal Br. 9), mistakes one manner of illustrating the ineligibility of subject matter as the exclusive means of doing so. In any event, the “receiving,” “selecting,” and “outputting” data elements of claim 1 are similar to the abstract ideas that courts have deemed outside the scope of § 101. For example, in *Electric Power Group*, “[t]he focus of the asserted claims . . . [was] on collecting information, analyzing it, and displaying certain results of the collection and analysis.” 830 F.3d at 1353. And contrary to Appellants’ implication that the Examiner erred in “not [having] shown that the features of claim 1 could even be performed mentally” (Appeal Br. 10), *Electric Power Group* also stands for the proposition that “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,” 830 F.3d at 1354 (emphasis added).

Nor is this a case in which “the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks,” *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257 (Fed. Cir. 2014), as Appellants suggest (*see* Appeal Br. 11). Unlike the claims in *DDR Holdings*, which “address[ed] a business challenge (retaining website visitors), . . . a challenge particular to the Internet,” 773 F.3d at 1257, the data in claim 1 are “collected from a medical device associated with a patient.”

Accordingly, we discern no error in the Examiner’s finding that claim 1 is directed to an abstract idea.

2. *Alice Step 2*

Appellants argue that, even if claim 1 recites an abstract idea, it “provide[s] and improvement to a technical field” and therefore amounts to “significantly more” than an abstract idea. Appeal Br. 13–14 (discussing *Bascom Global Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016)). We are not persuaded. Appellants quote the Examiner’s statement that “the steps being performed are a part of solving a specific technical problem” (*id.* at 13 (quoting Final Action 2)), and then present a logic-based argument: “[i]f the features of claim 1 solve a specific technical problem, a contention to which the Office appears to agree, the claim 1 must provide an improvement to a technical field” (*id.* at 13–14). The problem with this line of reasoning is that it reads out the Examiner’s qualification that the claimed steps “are a part of” the solution to a technical problem. Further, Appellants purport to give an example of how claim 1 improves a technical field, but the example is merely a recitation of much of the language of claim 1, not an explanation. *See* Appeal Br. 14. Appellants’ suggestion that because (in Appellants’ view) “no art of record discloses the claimed features, claim 1 does not merely include purely conventional activity” (*id.*) conflates § 102 with § 101. Although “in evaluating the significance of additional steps, the § 101 patent-eligibility inquiry and, say, the § 102 novelty inquiry might sometimes overlap,” *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66, 90, (2012), these inquiries are not the same. If the novelty of the claim lies in the abstraction, law of nature, or other unpatentable subject matter, the claim may be novel

or nonobvious and yet still fail under § 101. *See Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1377 (Fed. Cir. 2015) (“For process claims that encompass natural phenomenon, the process steps are the additional features that must be new and useful.” (citing *Parker v. Flook*, 437 U.S. 584, 591 (1978) (“The process itself, not merely the mathematical algorithm, must be new and useful.”))).

The Examiner finds that “[i]t is well known in the art to select non-overlapping portions of EGM signal data and output the results” (Ans. 4), a finding supporting our affirmance of the several anticipation rejections below. The Examiner explains:

[o]ne such example is a heart beat monitor which identifies a cardiac episode (peak of an R-wave) and then identifies the next peak of an R-wave in the next heart beat to determine the time difference and uses that time difference to identify beats per minute. In this example the peak R-waves do not occur during the same period of time and therefore are non-overlapping portions of the EGM signal data. Or in the identification of P-R intervals the device identifies the episode corresponding to the P-wave and the episode corresponding to the R-wave and calculates a time differential from the two episodes which can be used to indicate a first degree heart block.

Id. at 4–5.

As the Examiner’s analysis and examples amply demonstrate, claim 1 does not recite “significantly more” than an abstract idea. Accordingly, we affirm the Examiner’s rejection of claim 1 under § 101. Appellants organize some of the claims as part of different groups from the group containing claim 1, but argue only by way of reference to claim 1. *See* Appeal Br. 14–15 (discussing Groups 2 and 3)). These do not amount to separate arguments. *See* 37 C.F.R. § 41.37(c)(1)(iv) (2011). Accordingly, claims 2–27 fall with claim 1.

C. *Rejection 2: § 102 (Gunderson)*

Gunderson describes an implantable device that “transmits EGM signal data for a number of cardiac episodes to an external computing device,” which “selects a subset of the cardiac episodes for which information or images are displayed to the user.” Gunderson, Abstract. The Examiner finds:

Gunderson et al teaches a method/system comprising: receiving cardiac electrogram (EGM) signal data collected from a medical device associated with a patient, wherein the EGM signal data is representative of a detected cardiac episode identified as one of a plurality of episode types (e.g. Paragraphs [0001], [0011], [0057] discloses receiving cardiac electrogram signal data from an implantable medical device, the EGM signal data including a plurality of detected cardiac episodes); selecting, by one or more processors and based on the identified one of the plurality of episode types, a plurality of non-overlapping portions of the EGM signal data associated with the detected cardiac episode, wherein each episode type of the plurality of episode types is associated with a respective selection of portions of the EGM signal data (e.g. Paragraph [0093] and processor(s) 106 discloses associating images of EGM signals with cardiac episodes); outputting, by the one or more processors, the selected plurality of non-overlapping portions of the EGM signal data as an episode summary for the detected cardiac episode (e.g. Paragraphs [0055], [0093], and [0122] discloses processor generating a EGM summary report).

Final Action 6–7.

Appellants argue that Gunderson’s disclosure “relate[s] to comparing or displaying two episodes,” not “selecting a plurality of non-overlapping portions of EGM data associated with a detected cardiac episode, as recited by claim 1.” Appeal Br. 17. This argument (and those like it (*see id.* at 17–19; *see also* Reply Br. 5–7)) fails because it presumes an unduly narrow construction of claim 1.

As the Examiner explains:

in Gunderson the physician selects the episodes to view, therefore using a user interface the physician controls the processor to select the episodes. The examiner notes that the claims as currently written does not prohibit the viewing of overlapping portions, but requires the selecting of a plurality of portions that are non-overlapping. Gunderson et al discloses in Paragraph [0140] a user selecting an EGM snippet from a first episode and a second EGM snippet from a second episode and any intervening episodes are hidden so the two episodes are adjacent to one another. Therefore, disclosing that the two episodes are non-overlapping, since there are intervening episodes that are hidden, and outputting the plurality of non-overlapping portions of the EGM signal data so that the user can compare the morphology of the two EGM snippets (portions).

Final Action 3–4.

Further, the “snippets” in Gunderson may comprise various segments of a given “episode”:

For example, an EGM snippet window may show a portion of the EGM used by IMD **16** to make its final classification decision. In some examples the EGM snippet may include both the EGM before and after anti-tachycardia pacing, both the EGM before and after shock or episode termination, or enough of the EGM snipped to show a change in ventricular morphology. The portion of the snippet shown may also be based on information from the retrospective analysis performed by computing device **104**.

Gunderson ¶ 118. Indeed, Gunderson’s inclusion of snippets of, for example, “both the EGM before and after” treatment or termination of the episode (*id.*) tracks closely the types of “events” described in claim 8 of the present appeal. Thus, even under Appellants’ more restrictive interpretation of “a detected cardiac episode,” Gunderson teaches selecting a plurality of non-overlapping portions of the EGM signal data (e.g., the before and after

data) from a single episode (e.g., of tachycardia). To the extent Gunderson conceives of the before and after data as a single “snippet” rather than multiple “snippets,” this is a matter of labeling, leaning too heavily on Gunderson’s choice of terminology instead of that of claim 1. Contrary to Appellants’ suggestion (*see* Appeal Br. 18 (“The Examiner has still failed to show how selection of the ‘snippet’ for ‘each selected cardiac episode’ discloses or suggests selecting a plurality of nonoverlapping portions of the EGM data associated with a detected cardiac episode, as recited by claim 1.”)), this is a distinction without a difference given the breadth of claim 1. Claim 1 does not require, for example, that its “plurality of non-overlapping portions of the EGM signal data” are discontinuous, or otherwise recite any limitations on how the portions are divided or distinct from one another, as discussed above. The “before” data from Gunderson and the “after” data from Gunderson read on “a plurality of non-overlapping portions of the EGM signal data associated with the detected cardiac episode.”

As Appellants have not persuaded us of any reversible error by the Examiner in rejecting claim 1 over Gunderson, we affirm the rejection of claim 1. Claims 2–8, 11, and 12 are argued together with claim 1. *See* Appeal Br. 16–19. Appellants group claims 13–20, and 23–27 together under headings separate from claim 1, but offer no separate arguments in support. *See id.* at 22, 24. Accordingly, claims 2–8, 11–20, and 23–27 fall with claim 1.

D. Rejection 3: § 102 (Dong)

Dong relates to a “method for automatically analyzing a cardiac signal, including the step of providing an episode database.” Dong, Abstract. The Examiner finds:

Dong et al teaches a method/system comprising: receiving cardiac electrogram (EGM) signal data collected from a medical device associated with a patient, wherein the EGM signal data is representative of a detected cardiac episode identified as one of a plurality of episode types (e.g. Paragraphs [0019] and [0069]); selecting, by plurality of non-overlapping processors and based on the identified one of the plurality of episode types, one or more portions of the EGM signal data associated with the detected cardiac episode, wherein each episode type of the plurality of episode types is associated with a respective selection of portions of the EGM signal data (e.g. Paragraph [0067-0071]); outputting, by the one or more processors, the selected plurality of non-overlapping portions of the EGM signal data as an episode summary for the detected cardiac episode (e.g. Paragraphs [0083], [0089] and [0109]).

Final Action 11–12.

As with the rejection over Gunderson, Appellants' arguments in regard to Dong largely rely on an overly narrow construction of claim 1. *See* Appeal Br. 25–27; *see also* Reply Br. 8–9. For example, Appellants argue that even under the Examiner's interpretation of "cardiac episode,"

the Examiner has failed to show how the disclosure of Dong including that "[t]he episode data can also include electrocardiogram (EGM) recorded before, during and after the duration of the episode" discloses or suggests selecting a plurality of non-overlapping portions of the EGM signal data associated with a detected cardiac episode.

Appeal Br. 26–27 (quoting Dong ¶ 71). This is not persuasive. Again, as discussed above with respect to Gunderson, EGM data from before and after (to which Dong expressly adds "during") a cardiac episode read on the claimed "plurality of non-overlapping portions of the EGM signal data," because data from each of "before," "during," and "after" a cardiac episode can each constitute such a non-overlapping portion.

As Appellants have not persuaded us of any reversible error by the Examiner in rejecting claim 1 over Dong, we affirm the rejection of claim 1. As with Rejection 2, Appellants again ostensibly divide some of the rejected claims into separate groups from the group including claim 1, but fail to articulate distinct arguments on behalf of those claims. *See generally* Appeal Br. 16–19, 22, 24. Accordingly, claims 2–8, 11–20, and 23–27 fall with claim 1.

E. Rejection 4: § 102 (Sauer)

Sauer describes methods “for identifying tachyarrhythmia episode types and delivering therapy,” using an implanted cardiac device to sense and store electrogram signals. Sauer, Abstract. The Examiner finds:

Sauer et al teaches a method/system comprising: receiving cardiac electrogram (EGM) signal data collected from a medical device associated with a patient, wherein the EGM signal data is representative of a detected cardiac episode identified as one of a plurality of episode types (e.g. Paragraph [0010] and Figure 3, Element 370); selecting, by one or more processors and based on the identified one of the plurality of episode types, plurality of nonoverlapping portions of the EGM signal data associated with the detected cardiac episode, wherein each episode type of the plurality of episode types is associated with a respective selection of portions of the EGM signal data (e.g. Paragraph [0073] and Figure 3, Element 366); outputting, by the one or more processors, the selected plurality of non-overlapping portions of the EGM signal data as an episode summary for the detected cardiac episode (e.g. Paragraph [0075] and Figure 3, Element 368).

Final Action 16–17. The Examiner further explains that “Paragraph [0010] discloses the device identifies tachyarrhythmia **episodes** (the examiner emphasizes that this is **episodes**, plural, and not a single episode). It is further noted that a plurality of tachyarrhythmia episodes would be

nonoverlapping otherwise it would be a long continuous tachyarrhythmia episode.” *Id.* at 5.

Appellants’ arguments again presuppose an erroneously narrow interpretation of claim 1. *See* Appeal Br. 33–36; *see also* Reply Br. 9–11. As applied to Sauer in particular, however, we note that because “a detected cardiac episode” as recited in claim 1 encompasses more than one detected cardiac episode, Appellants cannot distinguish Sauer on the basis of its detection of “many episodes” (Appeal Br. 34).

As Appellants have not persuaded us of any reversible error by the Examiner in rejecting claim 1 over Sauer, we affirm the rejection of claim 1. As with Rejection 2 and 3, Appellants again ostensibly divide some of the rejected claims into separate groups from the group including claim 1, but fail to articulate distinct arguments on behalf of those claims. *See generally* Appeal Br. 33–35, 39, 41. Accordingly, claims 2–8, 11–20, and 23–27 fall with claim 1.

CONCLUSION

The rejection of claims 1–27 under 35 U.S.C. § 101 is affirmed. The rejections of claims 1–8, 11–20, and 23–27 under 35 U.S.C. § 102 are affirmed.

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).

AFFIRMED