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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte SEIJI HIDAKA and KO YAMANAGA

Appeal 2019-002688
Application 14/936,060
Technology Center 2100

Before LINZY T. McCARTNEY, NORMAN H. BEAMER, and
MATTHEW J. McNEILL, *Administrative Patent Judges*.

McCARTNEY, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants seek review under 35 U.S.C. § 134 of the Examiner's final rejection of claims 1–17. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

BACKGROUND

This patent application concerns “an inductor simulation method of simulating nonlinear characteristics of inductors when a direct current is superimposed and an inductor nonlinear equivalent circuit model is used in the simulation.” Specification ¶ 2, filed November 9, 2015 (“Spec.”).

Independent claims 1 and 2 illustrate the claimed subject matter:

1. An inductor simulation method for simulating nonlinear characteristics of an inductor, comprising:

representing an equivalent circuit of the inductor by using a passive circuit element;

expressing a characteristic change ratio of the passive circuit element when a direct current is superimposed as an approximate function that uses current as a variable, based on actually measured values; and

referring to the direct current flowing in the inductor, generating, using a computer, a difference voltage between a voltage occurring in the passive circuit element when a direct current is superimposed and a voltage occurring in the passive circuit element when no direct current is superimposed, based on the characteristic change ratio calculated in accordance with the referred current by using the approximate function and based on the voltage occurring when no direct current is superimposed, by using a control voltage source connected in series to the passive circuit element whose characteristics are changed by the superimposition of a direct current, and superimposes the difference voltage on the voltage occurring when no direct current is superimposed, thereby simulating the nonlinear characteristics of the inductor when the direct current is superimposed.

2. A computer program product, comprising:

a non-transitory computer-readable memory that includes an inductor nonlinear equivalent circuit model program that, when accessed by a computer, causes the computer to:

represent, using a passive circuit element, an equivalent circuit of an inductor;

refer to, using a current referring element, a current flowing in the inductor; and

generate, using a control voltage source, a difference voltage between a voltage occurring in the passive circuit element when a direct current is superimposed and a voltage occurring in the passive circuit element when no direct current is superimposed, based on a characteristic change ratio of the passive circuit element when a direct current is superimposed which is calculated in accordance with the current referred to by the current referring element and by using an approximate function expressed with current as a variable from actually measured values, and based on the voltage occurring when no direct current is superimposed, the control voltage source being connected in series to the passive circuit element whose characteristics are changed by the superimposition of a direct current.

Appeal Brief 9, filed October 11, 2018 (“App. Br.”).

REJECTIONS

Claims	Basis	References
1–17	§ 101	
1–17	§ 112	
1–17	Double Patenting	'902 Application ¹ and Tachibana ²

DISCUSSION

We have reviewed the Examiner’s rejections and Appellants’ arguments. Except for the rejection of claims 1, 3–8, 10, and 11 under § 101 and the rejection of claims 1–17 under § 112, we disagree with Appellants that the Examiner erred. As consistent with the discussion below, we adopt

¹ US Patent App. No. 14/934,902; Nov. 6, 2015.

² Tachibana et al. (US 2011/0181274 A1; July 28, 2011).

the Examiner's reasoning, findings, and conclusions in the Final Office Action mailed April 6, 2018 ("Final Act.") and the Answer mailed December 27, 2018 ("Ans."). We address the rejections in turn.

Section 101 Rejection

Section 101 of the Patent Act provides that "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof" is patent eligible. 35 U.S.C. § 101. But the Supreme Court has long recognized an implicit exception to this section: "Laws of nature, natural phenomena, and abstract ideas are not patentable." *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014) (quoting *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013)). To determine whether a claim falls within one of these excluded categories, the Court has set out a two-part framework. The framework requires us first to consider whether the claim is "directed to one of those patent-ineligible concepts." *Alice*, 573 U.S. at 217. If so, we then examine "the elements of [the] claim both individually and 'as an ordered combination' to determine whether the additional elements 'transform the nature of the claim' into a patent-eligible application." *Alice*, 573 U.S. at 217 (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 78, 79 (2012)). That is, we examine the claim for an "inventive concept," "an element or combination of elements that is 'sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.'" *Alice*, 573 U.S. at 217–18 (alteration in original) (quoting *Mayo*, 566 U.S. at 72–73).

The Patent Office recently revised its guidance about this framework. See 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg.

50 (Jan. 7, 2019) (“Revised Guidance”). Under the Revised Guidance, to decide whether a claim is directed to an abstract idea, we evaluate whether the claim (1) recites subject matter that falls within one of the abstract idea groupings listed in the Revised Guidance and (2) fails to integrate the recited abstract idea into a practical application. *See Revised Guidance*, 84 Fed. Reg. at 51, 54. If the claim is directed to an abstract idea, as noted above, we then determine whether the claim has an inventive concept. The Revised Guidance explains that when making this determination, we should consider whether the additional claim elements add “a specific limitation or combination of limitations that are not well-understood, routine, conventional activity in the field” or “simply append[] well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality.” *Revised Guidance*, 84 Fed. Reg. at 56.

With these principles in mind, we turn to the § 101 rejection.

Claims 2, 9, and 12–17

Abstract Idea

The Examiner determined that claim 2 recites steps that fall within the “mathematical concepts” and “mental processes” abstract idea groupings identified in the Revised Guidance. *See, e.g.*, Final Act. 12 (determining that claim 2 recites steps that “relate to performing mathematical computations”); Ans. 4–5 (determining that the pending claims recite tasks that can “be performed mentally or with . . . pen and paper”); *see also Revised Guidance*, 84 Fed. Reg. at 52 (explaining that the abstract idea exception includes mathematical concepts and mental processes). For the reasons discussed below, Appellants have not persuaded us that the Examiner erred.

Claim 2 recites (1) “represent, using a passive circuit element, an equivalent circuit of an inductor” (the “represent” limitation) and (2) “refer to, using a current referring element, a current flowing in the inductor” (the “refer to” limitation). App. Br. 9. Claim 2 also recites (3) “generate . . . a difference voltage . . . based on [i] a characteristic change ratio . . . calculated in accordance with the current referred to . . . and by using an approximate function expressed with current as a variable from actually measured values” and “[ii] the voltage occurring when no direct current is superimposed” (the “generate” limitation). App. Br. 9.

Each of these limitations encompasses a mental process. The “represent” limitation requires representing an equivalent circuit of an inductor. *See* App. Br. 9. The written description indicates that this limitation encompasses a circuit diagram in which a series circuit of inductive and resistive elements represents an equivalent circuit of an inductor. *See, e.g.,* Spec. ¶¶ 62 (“A series circuit of an inductor element L_1 and a resistive element R_1 in each equivalent circuit model constitutes a passive circuit element representing an equivalent circuit of the inductor being a target for simulation.”), Figs. 1(a), 1(b) (showing circuit diagrams with a series circuit of inductive and resistive elements). People can draw such a circuit diagram using pen and paper, so this limitation encompasses a mental process. *See, e.g., CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372 (Fed. Cir. 2011) (“It is clear that unpatentable mental processes are the subject matter of claim 3. All of claim 3’s method steps can be performed in the human mind, or by a human using a pen and paper.”).

As for the “refer to” limitation, this limitation requires referring to a current flowing in the inductor. *See* App. Br. 9. People can mentally perform this step by looking at a device (for example, a computer screen or an ammeter) that displays this information. *Cf. CyberSource*, 654 F.3d at 1372 (determining that a claim limitation that “requires ‘obtaining information about other transactions that have utilized an Internet address that is identified with the [] credit card transaction’ . . . can be performed by a human who simply reads records of Internet credit card transactions from a preexisting database”). This limitation thus also encompasses a mental process. In any case, even if this limitation involved physical steps such as entering values into a computer or connecting an ammeter to a circuit, these steps would not make claim 2 patent eligible. *See CyberSource*, 654 F.3d at 1372 (“[E]ven if some physical steps are required to obtain information from the database (e.g., entering a query via a keyboard, clicking a mouse), such data-gathering steps cannot alone confer patentability.”).

Finally, the “generating” limitation requires generating a “difference voltage” based on “[i] a characteristic change ratio . . . calculated in accordance with the current referred to . . . and by using an approximate function expressed with current as a variable from actually measured values” and “[ii] the voltage occurring when no direct current is superimposed.” *See* App. Br. 9. The written description indicates that generating a difference voltage in this way involves calculations that people can perform in their minds or using pen and paper. *See, e.g.,* Spec. ¶¶ 72–81 (discussing expressions (7)–(13)), Figs. 15(a)–16(b) (showing graphs of measured characteristic change ratio values); *see also* App. Br. 3 (mapping the difference voltage recited in claim 2 to paragraph 80 of the written

description). This limitation therefore recites a mental process. *See CyberSource*, 654 F.3d at 1372.³

Appellants' conclusory arguments to the contrary have not persuaded us otherwise. Appellants assert that claim 2 does not recite mental processes or mathematical concepts, but offer no persuasive reasoning or evidence to support this assertion. *See* Reply Brief 2, filed February 14, 2019 ("Reply Br."). Appellants also contend the Examiner provided no evidence that the limitations recited in claim 2 are abstract, but Appellants have not shown that the Examiner had to do so. *See* App. Br. 6.

In sum, the "represent," "refer to," and "generate" limitations together recite a process that people can perform in their heads or using pen and paper. Because people can perform this process mentally or by hand, the recited process is not meaningfully different from other processes that courts have determined are mental processes. *See, e.g., CyberSource*, 654 F.3d at 1373. This is true even though claim 2 requires that computers perform the recited functions. "Courts have examined claims that required the use of a computer and still found that the underlying, patent-ineligible invention could be performed via pen and paper or in a person's mind." *Versata Dev.*

³ This limitation also falls within the mathematical concepts abstract idea grouping, as the limitation recites at least a mathematical calculation and a mathematical formula. *See* Revised Guidance, 84 Fed. Reg. at 52 (explaining that the mathematical concepts grouping includes mathematical calculations, relationships, formulas, and equations). Claim 2 recites generating the difference voltage based on "a characteristic change ratio . . . *calculated* in accordance with the current referred to . . . and by using an *approximate function*." App. Br. 9 (emphases added). And as noted above the written description indicates this limitation encompasses mathematical calculations. *See, e.g., Spec.* ¶¶ 72–81.

Grp., Inc. v. SAP Am., Inc., 793 F.3d 1306, 1335 (Fed. Cir. 2015). *See also* Revised Guidance, 84 Fed. Reg. at 52 n.14 (“If a claim, under its broadest reasonable interpretation, covers performance in the mind but for the recitation of generic computer components, then it is still in the mental processes category unless the claim cannot practically be performed in the mind.”). We therefore determine that claim 2 recites a mental process, one of the abstract idea groupings in the Revised Guidance. *See* Revised Guidance, 84 Fed. Reg. at 52. Claim 2 thus recites an abstract idea.

Because we agree with the Examiner that claim 2 recites an abstract idea, we next evaluate whether claim 2 integrates the abstract idea into a practical application. *See* Revised Guidance, 84 Fed. Reg. at 51. In doing so, we consider whether there are any additional elements beyond the abstract idea that, individually or in combination, “integrate the [abstract idea] into a practical application, using one or more of the considerations laid out by the Supreme Court and the Federal Circuit.” Revised Guidance, 84 Fed. Reg. at 54–55.

The additional elements recited in claim 2 include “a passive circuit element,” “a control voltage source,” “a current referring element,” “a non-transitory computer-readable memory that includes an inductor nonlinear equivalent circuit model program,” and “a computer.” *See* App. Br. 9. The written description indicates that these elements encompass generic computer software and hardware and that the claimed invention uses these elements as tools to perform an abstract idea. For example, the written description teaches that the disclosed invention uses generic circuit simulation software. *See, e.g.*, Spec. ¶¶ 60 (“Embodiments applied to LTspice supplied from Linear Technology Corporation of an inductor

simulation method and inductor nonlinear equivalent circuit model according to the present disclosure are described below.”), 132 (“Circuit simulators to which the equivalent circuit models are applicable are not limited to LTspice. For example, they are also applicable to other circuit simulators”). The written description also indicates that the claimed invention uses this software to represent the recited “passive circuit element,” “control voltage source,” and “current referring element” with generic circuit simulation components that perform in a generic manner. *See, e.g.*, Spec. ¶¶ 62 (explaining that a passive circuit element consists of a “series circuit of an inductor element L_1 and a resistive element R_1 in each equivalent circuit model”), 63 (“These voltage source models V_0 and V_1 are components that are set for the sake of convenience in LTspice The voltage source models V_0 and V_1 constitute current referring elements”), 65 (“The control voltage source B_1 is a component handled as a behavior voltage source model in LTspice”).

As for the recited computer and non-transitory computer-readable memory, the written description mentions computers and computer hardware only in passing. *See, e.g.*, Spec. ¶¶ 3 (explaining that people used personal computers to access certain prior art circuit simulators over the Internet), 135 (explaining that people can use a personal computer to access a server with the disclosed computer program). The written description thus describes these components in a manner that indicates the components and the functions they perform are generic. *See Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1384 (Fed. Cir. 1986) (explaining that “a patent need not teach, and preferably omits, what is well known in the art”); *see also Intellectual Ventures I LLC v. Erie Indem. Co.*, 850 F.3d 1315, 1331

(Fed. Cir. 2017) (“The claimed mobile interface is so lacking in implementation details that it amounts to merely a generic component (software, hardware, or firmware) that permits the performance of the abstract idea, i.e., to retrieve the user-specific resources.”).

Appellants do not address these aspects of claim 2. Instead, Appellants argue that claim 2 integrates the recited abstract idea into a practical application because the claim is “explicitly directed toward[] the representation and simulation of inductors” like claim 1. Reply Br. 2 (emphases omitted). But as discussed below, claim 1 explicitly recites using a difference voltage to simulate the nonlinear characteristics of an inductor. *See* App. Br. 9. In contrast, although claim 2 recites generating a difference voltage, claim 2 does not recite *applying* the voltage, much less applying the voltage to simulate an inductor. *See* App. Br. 9.

At bottom, claim 2 uses generic computer software and hardware as tools to implement an abstract idea. Claim 2 thus does not integrate the recited abstract idea into a practical application. *See Alice*, 573 U.S. at 223–24 (“[W]holly generic computer implementation is not generally the sort of ‘additional featur[e]’ that provides any ‘practical assurance that the process is more than a drafting effort designed to monopolize the [abstract idea] itself.’” (second and third alterations in original) (quoting *Mayo*, 566 U.S. at 77)). Claim 2 is thus directed to an abstract idea.

Inventive Concept

Finally, because claim 2 is directed to an abstract idea, we consider whether claim 2 has an inventive concept, that is, whether the additional claim elements in the claim “‘transform the nature of the claim’ into a patent-eligible application.” *Alice*, 573 U.S. at 217 (quoting *Mayo*, 566 U.S.

at 78, 79). As discussed above, this requires us to evaluate whether the additional claim elements add “a specific limitation or combination of limitations that are not well-understood, routine, conventional activity in the field” or “simply append[] well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality.” Revised Guidance, 84 Fed. Reg. at 56.

The Examiner determined that the additional elements recited in claim 2 perform well-understood, routine, and conventional functions. *See* Final Act. 13–14. Although Appellants contend that this determination lacks supporting evidence, *see* App. Br. 6, the written description adequately supports this determination. For the reasons discussed above, the written description indicates that the additional elements encompass conventional software and hardware elements that perform well-known functions. *See, e.g.,* Spec. ¶¶ 3, 60, 62, 63, 65, 132, 135; *see also* Robert W. Bahr, Memorandum on Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (*Berkheimer v. HP, Inc.*) 3 (Apr. 19, 2018), available at <https://www.uspto.gov/sites/default/files/documents/memo-berkheimer-20180419.PDF> (explaining that a specification that describes additional elements “in a manner that indicates that the additional elements are sufficiently well-known that the specification does not need to describe the particulars of such additional elements to satisfy 35 U.S.C. § 112(a)” can show that the elements are well understood, routine, and conventional).

Appellants also point out that the Examiner withdrew a prior art rejection for the pending claims and argue that this shows the claimed features are not well understood, routine, and conventional. *See* App. Br. 6.

But at best the Examiner’s withdrawal of the prior art rejection shows that the Examiner determined that the cited prior art does not disclose or suggest aspects of the recited abstract idea. *See* Notice of Panel Decision from Pre-Appeal Brief Review, mailed September 13, 2018 (withdrawing a § 103 rejection and maintaining the § 101 rejection). That the Examiner determined certain prior art references do not disclose or suggest aspects of the recited abstract idea does not show that the additional elements perform unconventional functions, let alone that claim 2 is patent eligible.

For the above reasons, the additional elements recited in claim 2 “simply append[] well-understood, routine, conventional activities previously known to the industry.” Revised Guidance, 84 Fed. Reg. at 56. These elements therefore do not “transform the nature of the claim’ into a patent-eligible application.” *Alice*, 573 U.S. at 217 (quoting *Mayo*, 566 U.S. at 78, 79). Claim 2 thus does not contain an inventive concept.

Conclusion

Because claim 2 is directed to an abstract idea and does not have an inventive concept, we sustain the Examiner’s rejection of claim 2 under § 101. Appellants do not present separate arguments for the claims that depend from claim 2 (claims 9 and 12–17), so we also sustain the Examiner’s rejection of these claims under § 101.

Claims 1, 3–8, 10, and 11

While we disagree with Appellants that claim 2 integrates the recited abstract idea into a practical application, we agree with Appellants that claim 1 does so. Claim 1 recites an “inductor simulation method for simulating nonlinear characteristics of an inductor” that includes limitations largely similar to those recited in claim 2. *See* App. Br. 9. But claim 1 differs from

claim 2 in an important respect: claim 1 recites “superimpos[ing] the difference voltage on the voltage occurring when no direct current is superimposed, thereby simulating the nonlinear characteristics of the inductor when the direct current is superimposed.” App. Br. 9. Claim 1 thus *generates and applies* a difference voltage, while claim 2 merely *generates* a difference voltage.

The method recited in claim 1 represents a technological improvement. The written description explains that prior art circuit simulators and models either did not reflect certain changes caused by superimposing a direct current or did so using circuit models that have several drawbacks. *See* Spec. ¶¶ 18–19. The written description teaches that the claimed method overcomes these drawbacks and enables dynamic simulation of nonlinear characteristics of the inductor when the direct current is superimposed. Spec. ¶¶ 20, 40. Claim 1 specifically recites applying the difference voltage to achieve this end. *See* App. Br. 9 (claim 1 reciting “superimposes the difference voltage on the voltage occurring when no direct current is superimposed, *thereby simulating the nonlinear characteristics of the inductor when the direct current is superimposed*” (emphasis added)).

We thus determine that claim 1 integrates the recited abstract idea into a practical application. Claim 1 is therefore patent eligible. *See* Revised Guidance, 84 Fed. Reg. at 55 (explaining that an additional element reflecting an improvement to another technology or technical field may show that the element integrates a judicial exception into a practical application). Because claims 3–8, 10, and 11 depend from claim 1 or recite similar limitations, we also determine that these claims are patent eligible.

Section 112 Rejection

Claim 1 recites the “referring to the direct current flowing in the inductor, generating, using a computer, a difference voltage” limitation reproduced in full above. App. Br. 9. The Examiner determined that the meaning of the limitation is “indefinite and ambiguous” because, among other things, the limitation does not make clear what it generates and includes unclear terms such as “control voltage source.” Final Act. 15–16. The Examiner also determined that claim 1 lacks antecedent basis for the words “the direct current flowing in the inductor.” *See* Final Act. 17.⁴ The Examiner determined that the other pending claims suffer from similar deficiencies. *See* Final Act. 16, 17.⁵

Claim 1 also recites “expressing a characteristic change ratio of the passive circuit element when a direct current is superimposed as an approximate function that uses current as a variable, based on actually measured values.” App. Br. 9. The Examiner determined that this limitation is indefinite because, among other things, the “superimposed” and “actually measured values” aspects of the limitation are unclear. *See* Final Act. 16–17.

Appellants argue that claim 1 “clearly recites” that a difference voltage is generated and that the written description “makes it clear” what a “control voltage source” is. *See* App. Br. 6. Appellants contend that the

⁴ The Examiner referred to “the current flowing in the inductor,” Final Act. 17, but this language does not appear in claim 1. Given the citation that accompanies this part of the rejection, we understand the Examiner to have meant “the direct current flowing in the inductor.”

⁵ The Examiner does not specifically address claim 4. *See* Final Act. 15–17. But because the Examiner rejected claims 1–17 as indefinite and independent claim 4 includes a similar limitation, we understand the Examiner to have rejected claim 4 for the same reasons.

Examiner concluded otherwise because the Examiner incorrectly believed that the Examiner had “full latitude to interpret each claim in the broadest reasonable sense.” Reply Br. 3 (emphasis omitted) (quoting Ans. 8). For the remaining aspects of the Examiner’s rejection, Appellants assert that the Examiner “conflate[d] claim breadth for lack of clarity” and that the “specification makes clear what each and every limitation encompasses.” App. Br. 6; *see also* Reply Br. 3–4.

Appellants have persuaded us that the Examiner erred. As argued by Appellants, the disputed terms and limitations are sufficiently clear in light of the surrounding claim language and the written description. *See* App. Br. 6; Reply Br. 3–4. We thus do not sustain the Examiner’s rejection of claims 1–17 under § 112.

Double Patenting Rejection

The Examiner provisionally rejected claims 1–17 on the ground of nonstatutory obviousness-type double patenting over claims 1–18 of the ’902 Application and Tachibana. *See* Final Act. 6–11.

Appellants contend that the Examiner erred because “each independent claim of one application contains several limitations not found in the independent claims of the other application.” App. Br. 7. For example, Appellants point out that claim 1 of this patent application recites “referring to the direct current flowing in the inductor” but claim 1 of the ’902 Application does not. App. Br. 7 (emphases omitted). Appellants also argue that the Examiner’s statement in the Answer that ““the core concept and most of the claim limitations in both the application[s] . . . are very similar is spurious to a double patenting rejection.” Reply Br. 4 (emphasis omitted) (quoting Ans. 9). Appellants assert “that the disclosures of each

application are similar[] is not grounds for a double patenting rejection.”
Reply Br. 4 (emphases omitted).

We find these arguments unpersuasive. The Examiner concluded that claims 1–17 would have been obvious over the combination of the claims of the ’902 Application and Tachibana. *See* Final Act. 7–11. Appellants’ argument against the claims of the ’902 Application alone have not established that the Examiner erred because the argument does not adequately address this combination. *See In re Keller*, 642 F.2d 413, 426 (CCPA 1981) (“[O]ne cannot show non-obviousness by attacking references individually where, as here, the rejections are based on combinations of references.”). As for the Examiner’s statement about the core concept of the applications, the Examiner’s rejection relies on a combination of the claims of the ’902 Application and Tachibana, *see* Final Act. 7–11, so we see no reversible error in this statement.

Appellants argue for the first time in the Reply Brief that the combination of the claims of the ’902 Application and Tachibana does not teach or suggest the claimed subject matter. *See* Reply Br. 4. Appellants argue that combining “Tachibana with the claims of the ’902 [A]pplication would merely result in a method for simulating the characteristics of a *capacitor that uses an inductor as the passive circuit element.*” Reply Br. 4 (second emphasis modified). But Appellants forfeited this argument by failing to present it in the Appeal Brief. *See* 37 C.F.R. § 41.41(b)(2) (explaining that, absent good cause, “[a]ny argument raised in the reply brief which was not raised in the appeal brief, or is not responsive to an argument raised in the examiner’s answer, including any designated new ground of

rejection, will not be considered by the Board for purposes of the present appeal”).

For the above reasons, we sustain the Examiner’s provisional nonstatutory obviousness-type double patenting rejection of claims 1–17.

DECISION

Claims Rejected	Basis	References	Affirmed	Reversed
1–17	§ 101		2, 9, and 12–17	1, 3–8, 10, and 11
1–17	§ 112			1–17
1–17	Double Patenting	’902 Application and Tachibana	1–17	
Outcome			1–17	

Because we affirm at least one ground of rejection for each claim on appeal, we affirm the Examiner’s decision. *See* 37 C.F.R. § 41.50(a)(1). No period for taking action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1). *See* 37 C.F.R. §§ 1.136(a)(1)(iv), 41.50(f), 41.52(b).

AFFIRMED