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PROCOPIO, CORY, HARGREAVES & SAVITCH LLP
525 B STREET
SUITE 2200
SAN DIEGO, CA 92101

EXAMINER
ARAQUE JR, GERARDO

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte NICOLE ANN SHANAHAN

Appeal 2019-005945
Application 15/482,517
Technology Center 3600

Before CAROLYN D. THOMAS, JAMES B. ARPIN, and ADAM J. PYONIN, *Administrative Patent Judges.*

PYONIN, *Administrative Patent Judge.*

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant[1] appeals from the Examiner's rejection of claims 6–14. Final Act. 2. Claims 1–5 are cancelled. *Id.* We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

[1] We use the word "Appellant" to refer to "applicant" as defined in 37 C.F.R. § 1.42(a). Appellant identifies the real party in interest as ClearAccessIP. Appeal Br. 3.

STATEMENT OF THE CASE

Introduction

The claimed invention relates to "an interface of a software platform for managing the creation, monitoring, sharing, distributing and aggregation of information relating to intellectual property assets." Spec. ¶ 7. Claims 6–14 are pending; claims 6 and 12 are independent. Appeal Br. 29–32 (Claims App.). Claim 6 is reproduced below for reference (emphases added):

> 6. A machine learning engine to manage digital assets in a multi-phase management comprising:
>
> a database to store digital assets, wherein the digital assets can be associated with one or more phases of an asset lifecycle, wherein the *asset lifecycle* comprises at least an *asset generation phase*, an *asset examination phase*, an *asset diligence phase*, and an *asset transfer phase*;
>
> a processing device operatively coupled to memory comprising instructions, wherein the processing device is configured to:
>
> generate a binary file for each digital asset based on a *machine learning model* comprising a vector representation based on paragraph vector classification using an *unsupervised learning model* and an asset similarity metric based on comparison of the vector representation with the other digital assets; and
>
> provide a *multi-phase* management interface to enable different analytical analysis for each phase of the asset lifecycle, wherein the analytical analysis for each phase comprises at least a ranked set of results.

References and Rejections[2]

Claims 6–14 are rejected under 35 U.S.C. § 112(a), as failing to comply with the written description requirement. Final Act. 3; Ans. 4.

Claim 8 is rejected under 35 U.S.C. § 112(b), as indefinite. Final Act. 2; Ans. 4.[3]

Claims 6–13 are rejected under 35 U.S.C. § 103, as obvious over Van Luchene (US 2007/0220041 A1; Sept. 20, 2007) and "Le et. al., Distributed Representations of Sentences and Documents, Proceedings of the 31st International Conference on Machine Learning (2014)" ("Le"). Final Act. 25; Ans. 3.

Claim 14 is rejected under 35 U.S.C. § 103, as obvious over Van Luchene, Le, and "Wen et al., A Discriminative Feature Learning Approach for Deep Face Recognition, ECCV 2016, Part VII, LNCS 9911, 499–515 (2016)" ("Wen"). Final Act. 36; Ans. 3.

ANALYSIS

We have reviewed the Examiner's rejections in light of Appellant's arguments. Arguments Appellant did not make are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv) (2018).

We disagree with Appellant that the Examiner erred and adopt as our own the findings and reasons set forth by the Examiner, to the extent

[2] The Examiner has withdrawn various rejections under 35 U.S.C. §§ 112(a), 112(b), and 103. *See* Ans. 4.

[3] Appellant does not challenge the indefiniteness rejection. *See* Appeal Br. 7. Accordingly, we summarily affirm this rejection.

consistent with our analysis below. We add the following primarily for emphasis.

Written Description

The Examiner presents two separate bases in rejecting independent claim 6 for lack of written description support: (1) the Specification includes "no disclosure for multiple phases" as claimed; and (2) "the specification, as originally filed, fails to adequately disclose how the [recited] model is being generated and intended to be trained." Final Act. 5, 6.

Regarding the first basis:

> Appellant submits the specification including the Figures (e.g., Figs. 2 of the system diagram and Figs. 3-17 depicting the interfaces) and originally filed claims sufficiently describe the portfolio management 201, invention disclosure front-end 210, and virtual IP deal room front end 212 as parts of the multi-phase lifecycle used with the machine learning analytics engine 214.

Appeal Br. 9. Regarding the second basis, Appellant contends the "specification describes and depicts model training throughout with regard to the machine learning analytics engine 214." *Id*.

With respect to the first basis, the Specification makes no mention of the term *phase*, and we agree with the Examiner that "the specification, as originally filed, fails to disclose that the asset lifecycle is comprised of an 'asset generation phase,' an 'asset examination phase,' an 'asset diligence phase,' and an 'asset transfer phase,' and, accordingly, fails to provide a 'multi-phase' management interface." Ans. 4. Appellant refers to the Application's disclosure of "the portfolio management 201, invention disclosure front-end 210, and virtual IP deal room front end 212," but does

not explain how these features show the inventor had possession of the claimed phase-related terms at the time of filing. Appeal Br. 9; *see* Examining Computer-Implemented Functional Claim Limitations for Compliance with 35 U.S.C. 112, 84 Fed. Reg. 57, 61 (Jan. 7, 2019). Thus, we are not persuaded the Examiner errs in finding a lack of written description support for the particularly recited limitations. *See* Final Act. 4, 5. We sustain the rejection on this basis.

With respect to the second basis, we find reasonable the Examiner's analysis showing a lack of written description support for the claimed models. *See* Final Act. 6–9; Ans. 5, 6. In contrast, Appellant merely provides a conclusory assertion of written description support, along with block quotations from the Specification. *See* Ans. 8–11. Such response to the Examiner's rejection is insufficient to show error. *Cf. In re Lovin*, 652 F.3d 1349, 1357 (Fed. Cir. 2011). Based on the record before us, we agree with the Examiner that "the specification, as originally filed, fails to adequately disclose how the model is being generated and intended to be trained," and thus the Specification does not show the inventor had possession of the claimed models at the time of filing. *See* Final Act. 6; 84 Fed. Reg. at 62 ("It is not enough that one skilled in the art could theoretically write a program to achieve the claimed function, rather the specification itself must explain how the claimed function is achieved to demonstrate that the applicant had possession of it."). We also sustain the rejection on this basis.

Obviousness

Appellant argues the Examiner errs in rejecting claim 6 under 35 U.S.C. § 103, because "Van Luchene's . . . general description of document analysis fails to disclose the features and are not capable of simple subst[itu]tion [with Le] as alleged." Appeal Br. 20. Appellant contends "Van Luchene relies on user inputted ratings and notes to curate a repository rather than generating a binary file for a corpus of different types of documents to perform train a machine-learning model as required by the claims," and "nothing in Le discloses machine learning on digital assets for the multi-phase life cycle as claimed." *Id*. at 20, 21.

Appellant's argument is not responsive to the Examiner's rejection, and does not show error therein. The Examiner finds, and we agree, that "**Van Luchene** discloses an online patent application submission, assignment, and docketing system" and "**Le** teaches that when comparing and analyzing textual documents using machine learning algorithms that it is old and well-known in the art to perform vector analysis and, more specifically, a machine learning model comprising vector representation analysis based on paragraph vector classification using an unsupervised learning model." Final Act. 25, 27; Van Luchene ¶¶ 131, 767–771; Le, Abstract. Appellant's argument focuses on what each reference is *not* cited for, rather than identifying potential errors in the Examiner's specific findings. *See* Appeal Br. 19–21; Ans. 8. Such argument is insufficient to persuade us of Examiner error. Further, the Examiner finds, "**Van Luchene** does, indeed, disclose providing a system and method with an interface to allow for a multi-phase solution using machine-learning," including the use of "artificial intelligence (AI)." Ans. 7. Appellant does not challenge these

findings, as no reply brief was filed. Accordingly, we see no error in the Examiner's rejection in light of Appellant's arguments.

Appellant further contends the Examiner's "rationale does not support a conclusion of obviousness":

> Appellant submits the general hindsight, improve accuracy of managed content, is too general because it could cover almost any alteration contemplated of Van Luchene and does not address why this specific proposed modification would have been obvious. Additionally, there is nothing in either of references that would suggest handling of differently formatted documents from different phases of the lifecycle with the machine-learning. Finally, although Le teaches a machine learning scheme that uses vector representation, there is no suggestion, other than Appellant's disclosure, to employ this scheme to promote, develop, and integrate the claimed machine learning for the multi-phase lifecycle.

Appeal Br. 22.

Appellant's combination contention is unpersuasive because these arguments merely make conclusory statements, whereas we find the Examiner's analysis to constitute articulated reasoning with rational underpinnings sufficient to justify the legal conclusion of obviousness.[4] *See* Final Act. 28; Ans. 8, 11. Combining Van Luchene's teachings of managing various intellectual property assets, with Le's teachings of particular machine learning techniques, was not "uniquely challenging or difficult for one of ordinary skill in the art" or "represented an unobvious step over the prior art." *Leapfrog Enters., Inc. v. Fisher-Price, Inc*., 485 F.3d 1157, 1162

[4] Appellant's arguments for claim 6, moreover, are not commensurate with the scope of the claim. Claim 6 does not recite "handling of differently formatted documents from different phases of the lifecycle." Appeal Br. 22, 29.

(Fed. Cir. 2007). *See* Final Act. 25–28; Ans. 9. Further, Appellant does not file a reply brief, and, thus, does not challenge the reasoning provided in the Examiner's Answer. *See* Ans. 11 ("Accordingly, one of ordinary skill in the art would have found it obvious to look to **Le** . . . for the benefits that **Le** taught."); Le, Abstract ("Empirical results show that Paragraph Vectors outperform bag-of-words models as well as other techniques for text representations.").

We are not persuaded the Examiner errs in finding the limitations of claim 6 obvious in view of the combined teachings of Van Luchene and Le. Appellant presents similar arguments for independent claim 12[5], which we find similarly unpersuasive for the reasons discussed above. *See* Appeal Br. 24–27. We sustain the Examiner's obviousness rejection of the independent claims, and the rejections of the claims dependent therefrom, which are not separately argued. *See* Appeal Br. 18, 27.

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
6–14	112(a)	Written Description	6–14	
8	112(b)	Indefiniteness	8	
6–13	103	Van Luchene, Le	6–13	
14	103	Van Luchene, Le, Wen	14	

[5] Appellant's arguments for claim 12, moreover, are not commensurate with the scope of the claim. Claim 12 recites "wherein the repository comprise digital assets in different formats," but is silent regarding "handling of differently formatted documents *from different phases of the lifecycle*." Appeal Br. 26 (emphasis added), 30.

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
Overall Outcome			**6–14**	

TIME PERIOD FOR RESPONSE

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED