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EXAMINER
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ERIC KUO

Appeal 2017-005675
Application 13/605,949
Technology Center 2100

Before JOHN A. JEFFERY, MICHAEL R. ZECHER, and JOYCE CRAIG, *Administrative Patent Judges*.

CRAIG, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant[1] appeals under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1–49, which are all of the claims pending in this application. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

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[1] According to Appellant, the real party in interest is Align Technology, Inc. App. Br. 1.

INVENTION

Appellant's invention relates to creating a subsequent dental appliance. Abstract. Claim 1 is illustrative and reads as follows:

> 1. A method usable in creating a subsequent dental appliance prior to removal of a current dental appliance from a set of physical teeth for a patient, the method comprising:
>
> receiving a current digital dental model that includes a representation of the set of physical teeth for the patient with the current dental appliance attached to the physical teeth or oral cavity, wherein the current digital dental model is a direct digital scan of the set of physical teeth and the current dental appliance and wherein the physical teeth are at a position in treatment when all or a part of the current dental appliance is desired to be removed from one or more of the set of physical teeth and it is desired to use a subsequent appliance, wherein the position in the treatment is an intermediate teeth arrangement that is not a final teeth arrangement;
>
> creating based on the current digital dental model, a new digital dental model that includes the representation of the set of physical teeth without including the current dental appliance; and
>
> providing digital data suitable for use in manufacturing the subsequent dental appliance based on electronic data included in the new digital dental model prior to removal of all or part of the current dental appliance from the set of physical teeth,
>
> wherein the receiving and the creating are performed by one or more computer processors.

REJECTIONS[2]

Claims 1–3, 5, 8, 9, 12, 14, 15, 17–31, 34, 35, 37–39, and 45–49 stand rejected under pre-AIA 35 U.S.C. § 103(a) as unpatentable over the

[2] In the Final Action, the Examiner withdrew (1) the non-statutory subject matter rejection of claims 26–33 under 35 U.S.C. § 101; and (2) the indefiniteness rejection of claims 2, 6, and 32 under pre-AIA 35 U.S.C. § 112, second paragraph. Final Act. 2.

combination of Cinader, Jr. et al. (US 2011/0004331 A1; published Jan. 6, 2011) ("Cinader") and Wen et al. (US 2010/0009308 A1; published Jan. 14, 2010) ("Wen").

Claims 4, 6, 7, 10, 11, 13, 16, 32, 33, and 36 stand rejected under pre-AIA 35 U.S.C. § 103(a) as unpatentable over the combination of Cinader, Wen, and Sporbert et al. (US 2006/0263740 A1; published Nov. 23, 2006) ("Sporbert").

Claims 40–44 stand rejected under pre-AIA 35 U.S.C. § 103(a) as unpatentable over the combination of Cinader, Wen, and Kuo (US 2009/0208897 A1; published Aug. 20, 2009).

ANALYSIS

We have reviewed the Examiner's obviousness rejections of claims 1–49 in light of Appellant's arguments that the Examiner erred. We have considered in this decision only those arguments Appellant actually raised in the Briefs. Any other arguments Appellant could have made, but chose not to make, in the Briefs are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Appellant's arguments are not persuasive of error. We agree with and adopt as our own the Examiner's findings of facts and conclusions as set forth in the Answer (Ans. 2–6) and in the Action from which this appeal was taken (Final Act. 5–40). We provide the following explanation for emphasis.

In rejecting claim 1, the Examiner found Cinader teaches all of the recited limitations, except the limitation "wherein the position in the treatment is an intermediate teeth arrangement that is not a final teeth

arrangement," for which the Examiner relied on Wen. Final Act. 6 (citing Wen ¶ 106).

Appellant contends the cited portions of Cinader do not teach or suggest the limitation for which the Examiner relied on Wen. App. Br. 10. Specifically, Appellant argues Cinader teaches away from the limitation because "Cinader's intended purpose is to provide a dental retainer for the patient to wear to maintain their teeth in the final position that has been achieved after treatment has completed." *Id.* (citing Cinader Title, Abstract, ¶¶ 7, 10, 53).

Appellant's "teaching away" argument is not persuasive because Appellant has not identified where Cinader actually criticizes, discredits, or otherwise discourages "the position in the treatment is an intermediate teeth arrangement that is not a final teeth arrangement." *See In re Fulton*, 391 F.3d 1195, 1201 (Fed. Cir. 2004); *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1327 (Fed. Cir. 2009) ("A reference does not teach away, however, if it merely expresses a general preference for an alternative invention but does not 'criticize, discredit, or otherwise discourage' investigation into the invention claimed") (citing *Fulton*).

Here, not only does Cinader not criticize, discredit or discourage an intermediate teeth arrangement that is not a final teeth arrangement, but Cinander explicitly teaches teeth appearing in "near desired finished positions," which the Examiner explained "*could be* interpreted as any position before the 'final position.'" *See* Ans. 4 (citing Cinader ¶ 50). Appellant has not persuasively rebutted the Examiner's findings. In the Reply Brief, Appellant argues that "near desired finished positions **are not and would never be** understood to refer to as starting positions,

intermediate positions, etc." Reply Br. 5. Appellants do not provide any basis for this argument, however. It is well settled that mere attorney arguments and conclusory statements, which are unsupported by factual evidence, are entitled to little probative value. *In re Geisler*, 116 F.3d 1465, 1470 (Fed. Cir. 1997); *see also In re Pearson*, 494 F.2d 1399, 1405 (CCPA 1974) (attorney argument is not evidence).

Appellant next contends the combined teachings of Cinader and Wen would change the principle of operation of the Cinader reference and render Cinader unsuitable for its intended purpose. App. Br. 10–11. In particular, Appellant argues combining Cinader and Wen as the Examiner proposed would modify Cinader's principle of operation, which Appellant describes as "creating a virtual dentition model 52 of the teeth 36 in finished or post-treatment positions." App. Br. 11. Appellant further argues, "if Cinader's intended purpose, e.g., principal of operation, is to maintain the teeth in the final position (which is the most normal intended use of a retainer); then, retaining them in an intermediate teeth arrangement would be, by definition, a change in the principal of operation." Reply Br. 3 (citing *In re Ratti*, 270 F.2d 810 (CCPA 1959)).

We are not persuaded that Cinader's principle of operation should be unduly limited to maintaining teeth in a final position, as described by Appellant. *See* App. Br. 11; Reply Br. 3. Instead, the principle of operation that more accurately epitomizes Cinader is using digital data representing the patient's oral structure to prepare a virtual dentition model and to fabricate a dental retainer. *See* Cinader ¶¶ 13–26.

Appellant has not identified or otherwise described how the digital data representing the patient's oral structure, used to prepare a virtual

dentition model and to fabricate a dental retainer, would be affected by retaining the teeth in an intermediate, rather than final, arrangement. Moreover, we agree with the Examiner that the principle of operation of Cinader already accounts for non-final teeth arrangements. *See* Cinader ¶ 50; Ans. 4.

Thus, Appellant has not persuaded us that modifying Cinader with the teachings of Wen alters Cinader's operating principle. *See In re Umbarger*, 407 F.2d 425, 430–31 (CCPA 1969) (finding *Ratti* inapplicable where the modified apparatus will operate "on the same principles as before").

For these reasons, we are not persuaded that the Examiner erred in finding that the combination of Cinader and Wen teaches or suggests the disputed limitations of claim 1.

Accordingly, we sustain the Examiner's § 103(a) rejection of independent claim 1,[3] as well as the Examiner's § 103(a) rejection of independent claims 25, 26, and 34, which Appellant argues are patentable for similar reasons. App. Br. 11–16. We also sustain the Examiner's rejection of dependent claims 2–24, 27–33, 35–49, not argued separately with particularity. *See* 37 C.F.R. § 41.37(c)(1)(iv).

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[3] In the event of further prosecution, we leave it to the Examiner to consider whether the claimed subject matter is judicially-excepted from patent eligibility under 35 U.S.C. § 101. Although the Board is authorized to reject claims under 37 C.F.R. § 41.50(b), no inference should be drawn when the Board elects not to do so. *See* Manual of Patent Examining Procedure § 1213.02.

DECISION

We affirm the Examiner's decision rejecting claims 1–49.

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