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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/105,758	12/13/2013	William T. Matthews	014593/000012	6116
135716	7590	12/16/2019	EXAMINER	
Lincoln Electric-Tucker Ellis LLP 950 Main Avenue Suite 1100 Cleveland, OH 44113			WARD, THOMAS JOHN	
			ART UNIT	PAPER NUMBER
			3761	
			NOTIFICATION DATE	DELIVERY MODE
			12/16/2019	ELECTRONIC

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* WILLIAM T. MATTHEWS and JOSEPH A. DANIEL

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Appeal 2019-002804  
Application 14/105,758  
Technology Center 3700

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Before STEFAN STAICOVICI, JAMES P. CALVE, and  
WILLIAM A. CAPP, *Administrative Patent Judges*.

STAICOVICI, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant<sup>1</sup> appeals under 35 U.S.C. § 134(a) from the Examiner's decision in the Final Office Action (dated July 26, 2018) rejecting claims 1–12. We have jurisdiction over this appeal under 35 U.S.C. § 6(b).

SUMMARY OF DECISION

We REVERSE.

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<sup>1</sup> We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Lincoln Global, Inc. is identified as the real party in interest in Appellant's Appeal Brief (filed Oct. 30, 2018). Appeal Br. 3.

## INVENTION

Appellant's invention relates to a system that employs a computerized eyewear device to provide "visualization and communication capabilities to a welder using a welding system." Spec. para. 2.

Claim 1, the sole independent claim, is representative of the claimed invention and reads as follows:

1. An arc welding system, comprising:
  - a welding power source; and
  - a computerized eyewear device configured to be worn by a user as eye glasses are worn, while also wearing a protective welding helmet, wherein the computerized eyewear device includes a transparent head-up display (HUD), which displays an augmented reality image to the user performing a welding operation with the welding power source, a wireless communication interface, a processor, and a memory storing computer-executable instructions, wherein the computer-executable instructions configure the computerized eyewear device to:
    - communicate with the welding power source via the wireless communication interface,
    - display information related to the welding power source on the HUD as part of the augmented reality image, and
    - provide weld sequence support to the user to guide the user through a sequence of two or more welds associated with a workpiece through incorporation of support information in the augmented reality image displayed on the HUD, wherein, upon completion of a weld of the sequence, the augmented reality image displays the support information indicating a next weld of the sequence to be performed on the workpiece.

## REJECTIONS

- I. The Examiner rejects claims 1, 2, 4, and 12 under 35 U.S.C. § 103(a) as being unpatentable over Batzler,<sup>2</sup> Zboray,<sup>3</sup> and Pfeifer.<sup>4</sup>
- II. The Examiner rejects claims 3 and 5 under 35 U.S.C. § 103(a) as being unpatentable over Batzler, Zboray, Pfeifer, and Becker.<sup>5</sup>
- III. The Examiner rejects claims 6–11 under 35 U.S.C. § 103(a) as being unpatentable over Batzler, Zboray, Pfeifer, and Olsson.<sup>6</sup>

## ANALYSIS

### *Rejection I*

The Examiner finds that the combined teachings of Batzler and Zboray disclose a user worn computerized eyewear device including most of the limitations of independent claim 1. *See* Final Act. 3–5. However, the Examiner finds that the eyewear device of Batzler, as modified by Zboray, does not “display information related to . . . provid[ing] weld sequence support . . . to guide the user through a *sequence of two or more welds*,” as called for by claim 1. *See* Appeal Br. 20 (Claims App.) (emphasis added); *see also* Final Act. 5. Nonetheless, the Examiner finds that because the limitation “sequence of two or more welds” does not require “separate welds,” Pfeifer’s markings 154 are “indicative of a series of weld spots in

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<sup>2</sup> Batzler et al., US 9,352,411 B2, issued May 31, 2016.

<sup>3</sup> Zboray et al., US 2010/0062406 A1, published Mar. 11, 2010.

<sup>4</sup> Pfeifer et al., US 2013/0206741 A1, published Aug. 15, 2013.

<sup>5</sup> Becker et al., US 2010/0223706 A1, published Sept. 9, 2010.

<sup>6</sup> Olsson et al., US 2013/0044042 A1, published Feb. 21, 2013.

between each indicator 154.” Final Act. 10 (citing, Pfeifer, Fig. 5) (emphasis omitted); *see also id.* at 5 (“and markings **154** (sequence a weld, Fig. 5)”). Thus, according to the Examiner, “the limitation of a sequence has been interpreted to mean a step of a weld and not necessarily distinct different welds.” *Id.* at 10.

Appellant argues that the Examiner “is using an unreasonably broad interpretation of ‘weld sequence’ and ‘two or more welds’ and ‘next weld.’” Appeal Br. 14; Reply Br. 5 (emphasis omitted).<sup>7</sup> Appellant contends that Pfeifer’s weld 152 is “a single weld” and that “markings 154 displayed across the weld 152 simply indicate points along the weld 152.” Reply Br. 6.

In response, the Examiner takes the position that because “[t]he markings 154 denote a portion of weld 152 where the space in between each markings 154 is a step of a weld,” a skilled artisan would understand that “[t]he incremental markings 154 of Pf[ei]fer each define a weld.” Ans. 7.<sup>8</sup> Thus, according to the Examiner, “[t]he weld 152 is made up of multiple welds . . . where each step between each marking [154] is a weld and therefore weld 152 is made up of multiple weld steps.” *Id.*

Claim language should be read in light of the Specification, as it would be interpreted by one of ordinary skill in the art. *In re Suitco Surface, Inc.*, 603 F.3d 1255, 1260 (Fed. Cir. 2010). Here, we do not agree with the Examiner’s position that a person of ordinary skill in the art of welding would reasonably construe the material deposited between Pfeifer’s adjacent

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<sup>7</sup> Appellant’s Reply Brief, filed Feb. 21, 2019.

<sup>8</sup> Examiner’s Answer, dated Feb. 15, 2019.

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markings 154 as separate welds, such that “weld 152 . . . is made up of multiple welds.” Ans. 7.

“Prior art references may be ‘indicative of what all those skilled in the art generally believe a certain term means . . . [and] can often help to demonstrate how a disputed term is used by those skilled in the art.’” *In re Cortright*, 165 F.3d 1353, 1358 (Fed. Cir. 1999). In this case, Pfeifer describes generating an electric arc between workpiece 14 and torch 26, which melts part of workpiece 14 (i.e., material) and welding wire 24 (i.e., filler material), and, thus, forms a “weld.” Pfeifer, para. 21. As such, a skilled artisan would understand that a “weld” represents the deposition of material in the presence of an electric arc between workpiece 14 and welding wire 24, that is, the deposition of material that occurs between the initiation and the end of the electric arc. Therefore, as Pfeifer does not disclose establishing separate (distinct) electric arcs for each successive portion between adjacent markings 154, so that multiple welds result, as per the Examiner’s position, we agree with Appellant that weld 152 is “a single and continuous deposition of metal on the workpiece.” Reply Br. 6 (emphasis omitted); *see also* Pfeifer, Fig. 5 (weld 152 is illustrated as a continuous deposition of material).

Accordingly, in contrast to the Examiner’s position, we construe the limitation of a “sequence of two or more welds” to require two or more separate (distinct) welds that are formed sequentially, e.g., when welding a part or assembly at multiple weld locations. *See* Final Act. 10; Spec. ¶ 36. As Pfeifer’s weld 152 constitutes a single deposition of metal in the presence of a single electric arc, Pfeifer fails to disclose a “sequence of two or more welds,” as understood by a person of ordinary skill in the art, and as called for by claim 1.

In conclusion, for the foregoing reasons, we do not sustain the rejection under 35 U.S.C. § 103(a) of independent claim 1, and its dependent claims 2, 4, and 12, as unpatentable over Batzler, Zboray, and Pfeifer.

*Rejections II and III*

The Examiner's use of the Becker and Olsson disclosures does not remedy the deficiency of the Examiner's combination of Batzler, Zboray, and Pfeifer. *See* Final Act. 7–10.

Accordingly, for the same reasons discussed *supra*, we also do not sustain the rejections, under 35 U.S.C. § 103(a), of claims 3 and 5 as unpatentable over Batzler, Zboray, Pfeifer, and Becker, and of claims 6–11 as unpatentable over Batzler, Zboray, Pfeifer, and Olsson.

CONCLUSION

In summary:

<b>Claim(s) rejected</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
1, 2, 4, 12	103(a)	Batzler, Zboray, Pfeifer		1, 2, 4, 12
3, 5	103(a)	Batzler, Zboray, Pfeifer, Becker		3, 5
6–11	103(a)	Batzler, Zboray, Pfeifer, Olsson		6–11
<b>Overall outcome</b>				<b>1–12</b>

REVERSED