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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte GLENN ALAN HANCOCK, TRICIA HUGHES-PAULL, DAVID KANDA, PHILLIP SPECHT, and JERRY ZAYIC

Appeal 2019-000796
Application 15/132,673
Technology Center 3700

Before DANIEL S. SONG, STEFAN STAICOVICI, and BENJAMIN D. M. WOOD, *Administrative Patent Judges*.

SONG, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

The Appellant[1] appeals under 35 U.S.C. § 134(a) from the Examiner's Final Office Action ("Final Act.") rejecting claims 1–6, 8–12, and 14–19 in the present application. We have jurisdiction under 35 U.S.C. §§ 6(b) and 134(a).

We REVERSE.

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[1] We use the word "Appellant" to refer to "applicant" as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as The Boeing Company, which is identified as the real party in interest. Appeal Brief ("App. Br.") 2.

The claimed invention is directed to a system and method for assessing ergonomics utilizing visual sensing. Title; Spec. ¶ 1. Representative independent claim 1 reads as follows:

> 1. A method for assessing ergonomics of a human user in an environment, the method comprising:
>
> prompting the user via an output device to perform an interactive task;
>
> generating, using a visual sensor that monitors the human user in the environment, a first visual skeletal signal *while the user performs the interactive task*;
>
> determining, using an electronic controller, a first posture sample based on the first visual skeletal signal, the first posture sample including skeletal information, the skeletal information including one or both of joint information and positioning information;
>
> comparing, using the electronic controller, the first posture sample with an ergonomically ideal posture sample, the ergonomically ideal posture sample being specific to the human user alone;
>
> determining, using the electronic controller, an ergonomic report based on the comparing of the first posture sample and the ergonomically ideal posture sample; and
>
> providing the ergonomic report via an output device.

App. Br. 14, Claims App'x (emphasis added).

Independent claim 12 is directed to a system for assessing ergonomics, and independent claim 15 is directed to a user station configured to assess ergonomics. App. Br. 16, 17, Claims App'x.

REJECTIONS

The Examiner rejects various claims under 35 U.S.C. § 103 as follows:

1. Claims 1–6, 8–12, 14, and 15 as unpatentable over Firkus (US 2013/0321579 A1, pub. Dec. 5, 2013) in view of Baxi (US 2011/0080290 A1, pub. Apr. 7, 2011), and Meteyer (US 2005/0151722 A1, pub. July 14, 2005). Final Act. 4.

2. Claims 16–18 as unpatentable over Firkus in view of Baxi, Meteyer, and Carson (US 2010/0198374 A1, pub. Aug. 5, 2010). Final Act. 11.

3. Claim 19 as unpatentable over Firkus in view of Baxi, Meteyer, and Skiba (US 2012/0067255 A1, pub. Mar. 22, 2012). Final Act. 12.

PRINCIPLES OF LAW

The test for determining whether a prior art reference is analogous art is: "(1) whether the art is from the same field of endeavor, regardless of the problem addressed, and (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved." *In re Clay*, 966 F.2d 656, 659 (Fed. Cir. 1992). "A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem." *Id.*

ANALYSIS

In Rejection 1, the Examiner rejects independent claims 1, 12, and 15 as unpatentable over Firkus in view of Baxi and Meteyer, concluding that the combination of Firkus and Baxi renders obvious the invention substantially as claimed, but concedes that such a combination fails to

explicitly disclose "prompting the user via an output device to perform an interactive task" and gathering data while the user performs the interactive task. Final Act. 5. To remedy this deficiency, the Examiner finds that Meteyer describes ergonomic analysis that uses an input device 400, which includes a prompting module 322 for "prompt[ing] a user to interact with a graphic using the input device ([0044]) and a generation module **326** to generate a signal indicative of the ergonomic data collected from the user ([0044])." Final Act. 7. Based on these findings, the Examiner concludes,

> As Meteyer is also directed toward ergonomic evaluation and *is in a similar field of endeavor*, it would have been obvious to a person having ordinary skill in the art . . . to incorporate user prompting and generation steps similar to those described by Meteyer when using the method described by Firkus in view of Baxi, as doing so advantageously allows the ergonomic evaluation method to generate a more accurate representation of the user's ergonomic data over a wider array of movements.

Final Act. 7–8 (emphasis added).

The Appellant argues, *inter alia*, that Meteyer is non-analogous because it is "not from the same field of endeavor as the present invention, nor is it [] reasonably pertinent to the problem addressed by the inventor." App. Br. 8. In particular, the Appellant argues that "Meteyer is not from the same field of endeavor because the data collected in Meteyer is not visual and [is] only of a user's hand." App. Br. 8. The Appellant also points out that "Meteyer is about selecting optimal tools to minimize side-effects of performing repetitive tasks with the tools," and thus, "in Meteyer, all of the ergonomic [] data is gathered [and] is determined to aide in selection of a proper tool, rather than a comparison to an ideal sample for generation of an ergonomic report." App. Br. 9. The Appellant further argues that

> Because Meteyer is gathering data in a different manner (instrumented glove, not visually), of a different aspect of the user (only the hand, not the whole body), and for a different purpose (tool selection, not for comparison against ideal samples), the cited prior art is not reasonably pertinent to the problem being solved by the inventors of the present application.

App. Br. 9.

The Examiner appears to concede that Meteyer is not in the same field of endeavor in finding that Meteyer is "in a *similar* field of endeavor" rather than in the *same* field of endeavor as the Appellant's invention. Final Act. 7; *see also* Ans. 13 ("The Examiner respectfully maintains that Meteyer is in a similar field of endeavor to Firkus, Baxi, and the pending claims."). We agree with the Examiner and the Appellant that Meteyer is not in the same field of endeavor.

Thus, the continued analysis of analogousness requires determination of whether Meteyer is "reasonably pertinent to the particular problem with which the inventor is involved" such that it "would have commended itself to an inventor's attention in considering his problem." *In re Clay*, 966 F.2d at 659. In the present appeal, it is not apparent in the record before us where the Examiner undertakes this analysis. Specifically, the Examiner does not identify a particular problem being addressed by the Appellant's invention, and why Meteyer would have commended itself to the attention of the inventors in addressing that problem.

The Examiner responds that "it is the fact that the devices use sensors to obtain similar measurements from a user that makes the prior art references analogous to each other and to the pending claims." Ans. 12; *see also id.* at 11–12 ("Meteyer describes collecting and analyzing ergonomic

data in order to provide feedback to a user. This is similar to the teachings of Firkus, Baxi, and the pending claims."); *id.* at 13 ("Meteyer provides ergonomic data to a user, similar to the purpose of the data collection in the Firkus and Baxi references."). However, such general assertions of similarity are inadequate in properly analyzing whether Meteyer is reasonably pertinent to the problem being addressed by the inventor under the pertinent law. *See In re Clay*, 966 F.2d at 659.

Therefore, in view of the above discussed deficiency in the Examiner's analysis, we reverse the rejection of independent claims 1, 12, and 15 under Rejection 1. The Appellant's further arguments regarding lack of motivation to combine Meteyer with Firkus and Baxi (App. Br. 10–11; Reply Br. 6), as well as its argument directed to dependent claim 9 (App. Br. 12–13; Reply Br. 9), are moot. We also reverse the Examiner's rejections of dependent claims 2–6, 8–11, 14, and 16–19 (under Rejections 1, 2, and 3) for the same reason as for the rejection of claim 1, Rejections 2 and 3 raising the same analogousness issue as Rejection 1.

CONCLUSION

The Examiner's rejections are REVERSED.

REVERSED