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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ROBERT PAUL SEVERN, DAVID STONE, and
MATTHEW SULLIVAN

Appeal 2019-003601
Application 15/515,275
Technology Center 2600

BEFORE ALLEN R. MACDONALD, JEREMY J. CURCURI, and
MICHAEL M. BARRY, *Administrative Patent Judges*.

CURCURI, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 1, 3–6, and 8–15. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

¹ We use the word Appellant to refer to “applicant” as defined in 37 C.F.R. § 1.42(a). Appellant identifies Hewlett-Packard Development Company, LP as the real party in interest. Appeal Br. 1.

CLAIMED SUBJECT MATTER

The claims are directed to “[a]ugmented reality consumption data analysis. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A non-transitory computer-readable storage medium storing instructions that, when executed by a processor, cause the processor to:

analyze consumption data generated from an augmented reality (AR) experience by determining which of a plurality of AR overlay sets were consumed by a plurality of users of the AR experience via a plurality of user devices that displayed the AR experience, and by determining frequencies with which users navigated to the AR overlay sets from other of the AR overlay sets;

display on a display device a graphical representation of the analyzed consumption data, including graphically displaying visual indications of the determined frequencies; and

alter the AR overlay sets based on the displayed graphical representation, the users subsequently consuming the altered AR overlay sets via the user devices displaying the AR experience.

REFERENCES

The prior art relied upon by the Examiner is:

Name	Reference	Date
Goldthwaite et al. (“Goldthwaite”)	US 2003/01180087 A1	June 26, 2003
Flores et al. (“Flores ’045”)	US 7,490,045 B1	Feb. 10, 2009
Flores et al. (“Flores ’879”)	US 2010/0198879 A1	Aug. 5, 2010
Kumamoto	US 2014/0282118 A1	Sept. 18, 2014
Poulos et al. (“Poulos”)	US 2015/0007114 A1	Jan. 1, 2015

REJECTIONS

Claims 1, 4–6, and 8–15 are rejected under 35 U.S.C. § 103 as obvious over Kumamoto, Flores ’879 (incorporating Flores ’045 by reference), and Poulos. Final Act. 15–41.

Claims 3–5, 8–10, and 14 are rejected under 35 U.S.C. § 103 as obvious over Kumamoto, Flores ’879 (incorporating Flores ’045 by reference), Poulos, and Goldthwaite. Final Act. 41–56.

OPINION

The Obviousness Rejection of Claims 1, 4–6, and 8–15 over Kumamoto, Flores ’879 (incorporating Flores ’045 by reference), and Poulos

The Examiner finds Kumamoto, Flores ’879 (incorporating Flores ’045 by reference), and Poulos teach all limitations of claim 1. Final Act. 15–20. The Examiner finds Kumamoto’s browsing history chain as a sequence of nodes discloses “determining user navigated to the sets from other of the sets.” Final Act. 16 (citing Kumamoto ¶ 28, Fig. 1) (emphasis omitted). The Examiner finds Kumamoto does not disclose “determining frequencies with which users navigated to the AR overlay sets from other of the AR overlay sets” as recited in claim 1. *See* Final Act. 16–17. The Examiner finds Flores ’879’s tracking content usage discloses “determining frequencies with which users [accessed sets].” Final Act. 17 (citing Flores ’879 ¶¶ 25–27) (emphasis omitted). Thus, the Examiner finds Kumamoto and Flores ’879, when combined, teach “determining frequencies with which users navigated to the . . . sets from other of the . . . sets” as recited in claim 1. *See* Final Act. 16–17; *see also* Ans. 46–48. The Examiner reasons:

It would have been obvious to one of ordinary skill in the art at the time the invention was made, with reasonable

expectation of success, to modify the graphical user interface system for displaying user interactivity with software elements of **Kumamoto** by using the usage measurement and tracking data for applications among multiple devices provided by **Flores**, using known electronic interfacing and programming techniques. The modification merely substitutes one form of known type of usage data for another form of usage data within a visualized chart of user interaction, resulting in predictable results of displaying application data usage from multiple users across devices rather than multiple usage data from a single user within a displayed visualization of data. Furthermore, the modification results in an improved chart for visualizing user history by accounting for more than one user to allow a more complete data representation of application usage, rather than limiting the display to only a single user (Par. 9 of Flores: allows developers and authors a good idea of how games or documents are used).

Final Act. 18; *see also* Ans. 48.

Among other arguments, Appellant presents the following principal argument:

[T]he final action states that the applied art teaches “determining frequencies with which users navigated to the AR overlay sets from other of the AR overlay sets” insofar as Flores describes “determining frequencies with which users [accessed sets]” (p. 17). However, even assuming *arguendo* that Flores teaches determining frequencies with which users accessed the AR overlay sets, this is not what is being claimed in the claim language. Claim 1 recites the frequencies with which users navigated to the AR overlay sets from other of the AR overlay sets. For example, a user may first navigate to set A all the time, and then navigate to B 60% of the and to C 40% of the time. From both B and C, the user always navigates to D. Therefore, the claim language would reflect that the user navigates to B from A 60% of the time and to C from A 40% of the time. By comparison, determining frequencies with which users accessed sets, as Flores allegedly describes, would reflect that the user frequents B 60% of the time and frequents C 40%

of the time, and would not indicate whether the user frequents B/C from A or D.

Appeal Br. 11; *see also* Reply Br. 1–4 (“[M]odifying Kumamoto in view of Flores leads one of ordinary skill within the art at most to determining the frequency at which the web page (i.e., content set) of each node was accessed.”).

Appellant persuades us that the Examiner erred in finding Kumamoto and Flores ’879, when combined, teach the key limitation of “determining frequencies with which users navigated to the . . . sets from other of the . . . sets” as recited in claim 1.

The claim language requires “determining frequencies with which users *navigated to* the . . . sets *from* other of the . . . sets.” Claim 1 (emphasis added). Thus, a determined frequency, according to the plain language of the claim, does not merely correspond to an overlay (set, or content item such as described in Flores ’879); rather, a determined frequency corresponds to an edge connecting two overlays. *See* Figures 6 (depicting edges connecting overlays), 7 (depicting frequencies corresponding to edges), 8 (depicting frequencies corresponding to edges); *see also* Appeal Br. 11 (“[T]he claim language would reflect that the user navigates to B from A 60% of the time and to C from A 40% of the time. By comparison, determining frequencies with which users accessed sets, as Flores allegedly describes, would reflect that the user frequents B 60% of the time and frequents C 40% of the time, and would not indicate whether the user frequents B/C from A or D.”).

Given our interpretation of the claim language requiring a determined frequency corresponds to an edge connecting two overlays, we agree with Appellant that Kumamoto and Flores ’879, when combined, do not teach “determining frequencies with which users navigated to the . . . sets from

other of the . . . sets” as recited in claim 1 because such combination would, at best, result in a determined frequency corresponding to an overlay rather than corresponding to an edge connecting two overlays.

We, therefore, do not sustain the Examiner’s rejection of claim 1.

We also do not sustain the Examiner’s rejection of claims 4 and 5, which depend from claim 1.

Independent claims 6 and 11 recite the same key limitation. We, therefore, do not sustain the Examiner’s rejection of claims 6 and 11.

We also do not sustain the Examiner’s rejection of claims 8–10 and 12–15, which variously depend from claims 6 and 11.

The Obviousness Rejection of Claims 3–5, 8–10, and 14 over Kumamoto, Flores ’879 (incorporating Flores ’045 by reference), Poulos, and Goldthwaite

The Examiner does not find Goldthwaite cures the deficiency of Kumamoto and Flores ’879 discussed above. *See* Final Act. 41–56.

We, therefore, sustain the Examiner’s rejection of claims 3–5, 8–10, and 14.

CONCLUSION

The Examiner's decision to reject claims 1, 3-6, and 8-15 is reversed.

DECISION SUMMARY

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1, 4-6, 8-15	103	Kumamoto, Flores '879 (incorporating Flores '045 by reference), Poulos		1, 4-6, 8-15
3-5, 8-10, 14	103	Kumamoto, Flores '879 (incorporating Flores '045 by reference), Poulos, Goldthwaite		3-5, 8-10, 14
Overall Outcome				1, 3-6, 8-15

REVERSED