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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* DANIEL J. WIGDOR and MEGAN TEDESCO

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Appeal 2019-003267  
Application 13/044,895  
Technology Center 2600

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Before KALYAN K. DESHPANDE, CHARLES J. BOUDREAU,  
and SHARON FENICK, *Administrative Patent Judges*.

DESHPANDE, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant<sup>1</sup> appeals from the Examiner's decision to reject claims 1, 3–6, 8, 11, 13, and 19–29, which are all of the pending claims. We have jurisdiction under 35 U.S.C. § 6(b)(1).

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. Appellant identifies Microsoft Technology Licensing, LLC as the real party in interest. Appeal Br. 3.

## CLAIMED SUBJECT MATTER

Appellant's invention relates to an augmented reality system, which "augment[s] the user's perception of a real-world environment with graphics, sounds, etc." Spec. ¶ 1.

Claims 1, 13, and 19 are independent. Claim 1, reproduced below, is illustrative of the subject matter on appeal (emphases added):

1. On a see-through display configured to provide a photorepresentative view from a user's vantage point of a physical environment via one or more sufficiently transparent portions of the see-through display through which the physical environment is viewable, a method of providing theme-based augmenting of the photorepresentative view, the method comprising:

*receiving, from the user, an input selecting an augmentation theme for use in augmenting the photorepresentative view, the augmentation theme comprising a plurality of possible augmentations and selected from among at least two augmentation themes available for selection;*

obtaining, optically and in real time, environment information of the physical environment;

generating in real time a three-dimensional spatial model of the physical environment including representations of objects present in the physical environment based on the environment information;

identifying, via analysis of the three-dimensional spatial model, one or more features within the three-dimensional spatial model that each corresponds to one or more physical features in the physical environment;

based on such analysis, displaying, on the see-through display, an augmentation of a feature of the one or more features identified via analysis of the three-dimensional spatial model, the

augmentation being associated with the augmentation theme and being visible while portions of the physical environment remain viewable through the see-through display, the augmentation selected from the plurality of possible augmentations based on one or more of a size and a shape of the feature identified;

as the user moves about the physical environment, updating the three-dimensional spatial model in real time based on the environment information; and

as a result of the updating of the three-dimensional model, displaying, on the see-through display, an augmentation change.

Appeal Br. 31–32 (Claims App.).

## REJECTIONS

The Examiner rejects claims 1, 3–6, 8, 11, 13, 19–22, and 24–29 under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Woo<sup>2</sup> and Meier.<sup>3</sup> Final Act. 5–14.

The Examiner rejects claim 23 under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Woo, Meier, and Benko.<sup>4</sup> Final Act. 14–15.

## OPINION

The Examiner relies on Woo for the limitation of “receiving, from the user, an input selecting an augmentation theme for use in augmenting the photorepresentative view, the augmentation theme comprising a plurality of possible augmentations and selected from among at least two augmentation themes available for selection,” as recited in independent claim 1 and similarly recited in independent claims 13 and 19. Final Act. 2–3, 6 (citing

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<sup>2</sup> Woo et al., US 2011/0216090 A1 (pub. Sept. 8, 2011).

<sup>3</sup> Meier et al., US 2010/0208057 A1 (pub. Aug. 19, 2010).

<sup>4</sup> Benko et al., US 2014/0051510 A1 (pub. Feb. 20, 2014).

Woo ¶¶ 43); Ans. 14–15, 17 (citing Woo ¶¶ 18, 42, 43, 48, 49, 95, Abstr.). The Examiner finds that “Woo discloses receiving input for interaction between real environment and virtual contents in consideration of a planned story and determines virtual content according to that input.” Ans. 15. According to the Examiner, “Woo discloses providing a plurality of prepared content, from which content is selected to correspond to the story” (*id.*) and “the ‘planned story’ of Woo is analogous to the claimed ‘theme’” (*id.* at 17; *see* Woo ¶¶ 18, 43, 49, Abstr.).

Appellant argues that Woo “does not disclose a plurality of augmentation themes that could be selected by a user,” but rather “merely discloses selecting augmentation contents to create a single ‘planned story,’ without disclosing multiple types of stories (themes) that could be selected by a user to automatically augment real-world objects.” Appeal Br. 18 (citing Woo ¶ 43). According to Appellant, Woo’s “‘story’ is authored by a user, using ‘contents authoring tools based on a GUI,’ i.e., via manually selecting and assembling story elements.” Reply Br. 4 (citing Woo ¶ 48).

We agree with Appellant. Woo teaches “interactive technology between miniatures in real environment and digital contents in virtual environment” that “can be used for story telling using a digilog-type contents experience system and augmented reality technology in a showroom.” Woo ¶ 95. User input information is acquired “for an interaction between real environment and virtual contents in consideration of [a] planned story.” *Id.* ¶ 18; *see id.* ¶ 43. For example, a user may simulate weather changes, such as snow or rain, on a miniature of buildings or structures. *Id.* ¶¶ 41, 73, Fig. 9. As Appellant points out, the virtual contents are created using a GUI-based authoring tool and “animation

control according to a story is possible and converting or editing of the contents is also possible.” *Id.* ¶ 48; *see* Appeal Br. 20. Although the Examiner finds that “the ‘planned story’ of Woo is analogous to the claimed ‘theme’” (Ans. 17) and that “[t]he story telling system of Woo, which can select virtual content to create a single story, is also used to create multiple stories” (*id.* at 15), Woo is silent with regard to the user *selecting* a type of story or theme for augmentation *from among multiple themes available for selection*. In other words, we do not agree with the Examiner that “selecting an augmentation theme . . . the augmentation theme comprising a plurality of possible augmentations and selected from among at least two augmentation themes available for selection,” as claimed includes simply creating a story or theme. Accordingly, we determine that the Examiner erred in finding that Woo teaches or suggests “receiving, from the user, an input selecting an augmentation theme for use in augmenting the photorepresentative view, the augmentation theme comprising a plurality of possible augmentations and selected from among at least two augmentation themes available for selection.”

For the foregoing reasons, we do not sustain the Examiner’s § 103 rejection of claims 1, 3–6, 8, 11, 13, and 19–29.<sup>5</sup>

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<sup>5</sup> The Examiner cites Mullen, US 9,703,369 B1 (iss. July 11, 2017), as pertinent prior art. Final Act. 4. Appellant argues that Mullen is not pertinent prior art. Appeal Br. 28–29; Reply Br. 6–7. We do not consider Mullen because it is not a basis for the rejections.

CONCLUSION

The Examiner's rejections of claims 1, 3-6, 8, 11, 13, and 19-29 under 35 U.S.C. § 103 are reversed.

DECISION SUMMARY

In summary:

| <b>Claims Rejected</b>          | <b>35 U.S.C. §</b> | <b>Reference(s)/ Basis</b> | <b>Affirmed</b> | <b>Reversed</b>                 |
|---------------------------------|--------------------|----------------------------|-----------------|---------------------------------|
| 1, 3-6, 8, 11, 13, 19-22, 24-29 | 103                | Woo, Meier                 |                 | 1, 3-6, 8, 11, 13, 19-22, 24-29 |
| 23                              | 103                | Woo, Meier, Benko          |                 | 23                              |
| <b>Overall Outcome</b>          |                    |                            |                 | 1, 3-6, 8, 11, 13, 19-29        |

REVERSED