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DUKE W. YEE YEE & ASSOCIATES, P.C. P.O. BOX 190809 DALLAS, TX 75219			TUNG, KEE M	
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte BRIAN N. SLACK, THOMAS ALEXANDER BROWN,
JENNIFER DIANE MACKAY, GUY STOCKIE,
YANXIN EMILY WANG, and LORI LYNNE WOODBURY

Appeal 2018-009208
Application 15/056,536
Technology Center 2600

Before JUSTIN BUSCH, JENNIFER L. McKEOWN, and
SCOTT E. BAIN, *Administrative Patent Judges*.

McKEOWN, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant¹ appeals under 35 U.S.C. § 134(a) from the Examiner's decision to reject claims 1 and 3–20. Claim 2 is cancelled. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ The Boeing Company (“Appellant”) is the applicant as provided in 37 C.F.R. § 1.46 and is identified as the real party in interest. App. Br. 2.

STATEMENT OF THE CASE

Appellant's disclosed and claimed invention relates to "systems for tracking non-conformances in manufactured objects, and specifically, to a system for mapping and visualizing areas on the object containing multiple non-conformances." Spec. ¶ 2.

Claim 1 is illustrative of the claimed invention and reads as follows:

1. A method of mapping and visualizing non-conformances on an object, comprising:

determining, using a detection apparatus, a location of each of the non-conformances on the object;

generating an electronic record, by a processor, containing spatial coordinates of the non-conformances within a 3-D coordinate system, wherein generating the electronic record comprises:

generating, automatically by the processor, a 3-D electronic display of the object;

selecting, automatically by the processor, points on the 3-D electronic display respectively corresponding to the locations of the non-conformances; and

converting, automatically by the processor, the points selected on the 3-D electronic display into the spatial coordinates within the 3-D coordinate system;

calculating boundaries, by the processor, of an area on the object containing the non-conformances based on the spatial coordinates contained in the electronic record; and

generating an electronic image of the object, including displaying, on a display device, the boundaries of the area containing the non-conformances to allow visualization of the area containing the non-conformances.

THE REJECTIONS

The Examiner rejected claims 1, 3–8, and 10–20 under 35 U.S.C. § 103 as unpatentable over Yuen (US 2015/0062123 A1; Mar. 5, 2015) and Maresca (US 9,488,592 B1; Nov. 8, 2016). Final Act. 2–10.

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The Examiner rejected claim 9 under 35 U.S.C. § 103 as unpatentable over Yuen, Maresca, and Kitagawa (US 2011/0311097 A1; Dec. 22, 2011).
Final Act. 10.

ANALYSIS

THE OBVIOUSNESS REJECTION BASED ON YUEN AND MARESCA

Claims 1, 3–8, and 10–20

Based on the record before us, we are not persuaded that the Examiner erred in concluding that claims 1, 3–8, and 10–20 are unpatentable over Yuen and Maresca.

Appellant contends that the combination of Yuen and Maresca fails to teach or suggest “calculating boundaries, by the processor, of an area on the object containing the non-conformances based on the spatial coordinates contained in the electronic record,” as recited in claim 1. In particular, Appellant asserts that Yuen’ user manually draws boundaries, so “while Yuen certainly performs a calculation to draw a ‘boundary’, such calculation is based in response to *a human’s use of a stylus 50*, and not based on spatial coordinates of the nonconformance 55.” App. Br. 10. According to Appellant, the recited calculating boundaries from an electronic record,

requires more than calculating boundaries using ‘essentially anything electronic inside and/or on the user input device’, as asserted by the Examiner. Rather, the claim specifies calculating boundaries from an electronic record that includes, for example, points in spatial coordinates within a 3-D coordinate system. Clearly manually drawing boundaries, as taught by Yuen, does not include such calculations as featured in the claims.

Reply Br. 3.

We are not persuaded of error. Yuen relates to a “method for adding an annotation to a 3D graphics model in augmented reality.” Yuen ¶ 2. More specifically, Yuen merges a real object, from an image or video, with a

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3D model using designated alignment points. Yuen, Abstract. As the Examiner points out, Yuen's merged imaged is set along *a coordinate system*, and, thus, Yuen teaches using a mapping coordinate system in order to receive and render the bounded areas. Ans. 10–11; Yuen ¶ 37. Namely, when the user enters a boundary with a pen sensor or other input device, Yuen's processor calculates the boundary based on the spatial coordinates, i.e. calculates the location of the received input within the coordinate system, to generate the depicted boundary lines. As such, we are not persuaded that the Examiner erred in rejecting the claimed invention as unpatentable over Yuen and Maresca.

Accordingly, based on the record before us, we affirm the rejection of claims 1, 3–8, and 10–20 as unpatentable over Yuen and Maresca.

THE OBVIOUSNESS REJECTION BASED ON YUEN, MARESCA, AND KITAGAWA

Claim 9

With respect to claim 9, Appellant relies on the arguments presented for claim 1. *See* App. Br. 17. For the reasons discussed above, we find these arguments unpersuasive. As such, we also are not persuaded that the Examiner erred in rejecting claim 9 as unpatentable over Yuen, Maresca, and Kitagawa and affirm the rejection.

DECISION

We affirm the Examiner's decision to reject claims 1 and 3–20.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED