UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD
NIANTIC, INC., Petitioner
v.
NANT HOLDINGS IP, LLC, and NANTWORKS, LLC, Patent Owners
Case No. IPR2021-01119 U.S. Patent No. 10,664,518 B2

## PETITIONER'S REPLY TO PATENT OWNER'S PRELIMINARY RESPONSE



Patent Owner NantWorks' Preliminary Response ("POPR") contradicts NantWorks' arguments in District Court. NantWorks is talking out of both sides of its mouth, and its POPR should be given little to no weight. NantWorks argued for a broad reading of "augmented reality" in District Court, seeking to cover applications ranging from virtual icons on digital maps to graphical overlays on real-time camera imagery. (Ex. 1038, Ex. 3 at 014.)¹ But now the POPR proposes a new, narrower construction for "augmented reality" or "AR" never disclosed in District Court that NantWorks claims excludes overlays on maps. (*See* POPR at 8-9, 13-14; Ex. 1042 (Joint Claim Construction Statement).)

Petitioner addressed NantWorks' District Court constructions, including for "AR content objects," throughout the Petition, and all Grounds satisfy those constructions. (*E.g.*, Petition at 7, 27-29, 63.) All Grounds also satisfy NantWorks' improper new construction. Therefore, the Board should institute review.

Contrary to NantWorks' argument, "augmented reality" (or "AR") has a plain meaning and can take multiple forms. (*Cf.* Ex. 1002 ("Zyda"), ¶¶28-31.) As shown in the prior art, including Langseth, "augmented reality" can refer to overlaying virtual objects on a graphical representation of the real world, such as a map, <u>and</u> to overlaying virtual objects on a camera image of the real world. (*E.g.*, Ex. 1006)

<sup>&</sup>lt;sup>1</sup> NantWorks' contentions point to <u>no</u> specific features of the accused products for the "augmented reality" term in the preamble. (*See* Ex. 1038, Ex. 3 at 009.)



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("Langseth"), ¶¶0032-0034 (map view is an "augmented reality"); id., ¶0012 (live view is "an augmented reality"); Zyda ¶¶33-47, 95, 99, 103-104.) The '518 Patent encompasses at least these two understandings of AR: As NantWorks quotes, AR "can involve overlaying the content on real-world imagery" (Ex. 1001 ("'518"), 7:20-23 (emphasis added)) while at the same time a "view of interest 132 is a digital representation of a physical location in real-world space that is to be enabled with AR content." (Id., 10:35-37; POPR at 8.) The real-world imagery of the '518 Patent is akin to Langseth's camera-enabled "live view" while a "digital representation of a physical location in real-world space" is akin to a digital map of the real world, as in Altman and Langseth's map views. NantWorks' infringement contentions likewise appear to accuse Niantic of infringement under these same two forms of AR—a map view (i.e., a "digital representation") and an overlay on real-world camera imagery: "The Pokémon Go game Map View displays Pokémon, Pokéstops (#4) and Gyms (#2) are depicted [sic] on the device's display as depicted above. These are AR content objects.... The Pokémon Go game also combines Pokémon AR objects with image data captured with the device's camera to create a view of interest displaying the Pokémon AR object." (Ex. 1038, Ex. 3 at 014.)

Moreover, NantWorks' new construction of "augmented reality" as "the presentation of virtual objects in a scene alongside of real-world elements" is satisfied by the Grounds in the Petition. For Grounds 1-3, Altman teaches presenting



virtual objects on a map alongside digital representations of real-world elements for the area covered by the map. (E.g., Petition at 11-12; Ex. 1003 ("Altman"), Abstract, ¶0108; Zyda ¶¶95-97, 104.) Langseth's map view likewise teaches the presentation of virtual objects alongside real-world elements on a map. (E.g., Petition at 12-13; Langseth,  $\P 0008$ , 0032-0034; Zyda  $\P 95$ , 98-99, 103-104.) Langseth's "live view" additionally teaches that the virtual objects can be overlaid on a live camera image (called a "physical reality image"). (E.g., Petition at 13; Langseth, ¶¶0011-0012; Zyda ¶¶95, 99, 101, 103.) In Langseth's live view, the camera image provides the real-world elements alongside which the virtual objects are displayed. (See id.) As described in the Petition, it would have been obvious to combine Altman and Langseth to allow the presentation of virtual objects according to either the map view of Altman/Langseth or the live view of Langseth, both of which satisfy NantWorks' construction of "augmented reality." (Petition at 14-16; Zyda ¶¶95-104.)

Likewise, in Ground 4, Sterkel displays virtual objects on a map view that can be a digital road map or a satellite image of a real-world location. (*E.g.*, Ex. 1007 ("Sterkel"), Abstract, 1:29-48, 10:65-11:4; Zyda ¶¶332-335.) Either way, Sterkel teaches displaying the virtual object alongside real-world elements representing the real-world landmarks and features shown in Sterkel's map. (*See* Petition at 55-57; Sterkel, Fig. 3; Zyda ¶¶332-342.) This too satisfies NantWorks' new construction of "augmented reality." The Court should thus institute review on the Petition.



DATED: October 14, 2021

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