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## Synchronizing Media Content In A Shared Virtual Reality Environment

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## **SYNCHRONIZING MEDIA CONTENT IN A SHARED VIRTUAL REALITY ENVIRONMENT**

### **ABSTRACT**

Disclosed herein is a mechanism for synchronizing media content in a shared virtual reality environment. The mechanism can cause a shared virtual reality space to be presented on multiple user devices corresponding to multiple users participating in the shared virtual reality space. In some instances, users in the shared virtual reality space can be viewing different media content items. The mechanism can cause indications of the media content items being viewed by each user to be presented within the shared virtual reality space. In response to receiving a selection from a first user device of an indication of a media content item being presented on a second user device, the mechanism can transmit, to the first user device, metadata indicating an identifier of the media content item being presented on the second user device and a current playback position of the media content item on the second user device. The mechanism can then cause the media content item to be presented on the first user device at the playback position indicated in the transmitted metadata.

### **BACKGROUND**

Users are increasingly interested in participating in virtual reality environments. Additionally, users may be interested in interacting with other users in a shared virtual reality environment. For example, users may be interested in viewing media content with other users in a shared virtual reality environment, or in viewing different media content within the same shared virtual reality environment. However, it can be difficult to synchronize media playback for different users within the shared virtual reality environment. Thus, there is a need for a better approach to synchronize media content in a shared virtual reality environment.

## DESCRIPTION

The systems and techniques described in this disclosure relate to synchronizing media content in a shared virtual reality environment. In particular, the systems and techniques relate to presenting indications of media content items being viewed by different users who are within a shared virtual reality environment and, in response to receiving a selection of one of the indications from a user within the shared virtual reality environment, causing the media content item associated with the selected indication to be presented to the user who selected the indication.

FIG. 1 shows an illustrative example of a user interface 100 for synchronizing presentations of media content in a shared virtual reality environment. User interface 100 can be presented on a user device of each user participating in the shared virtual reality environment.

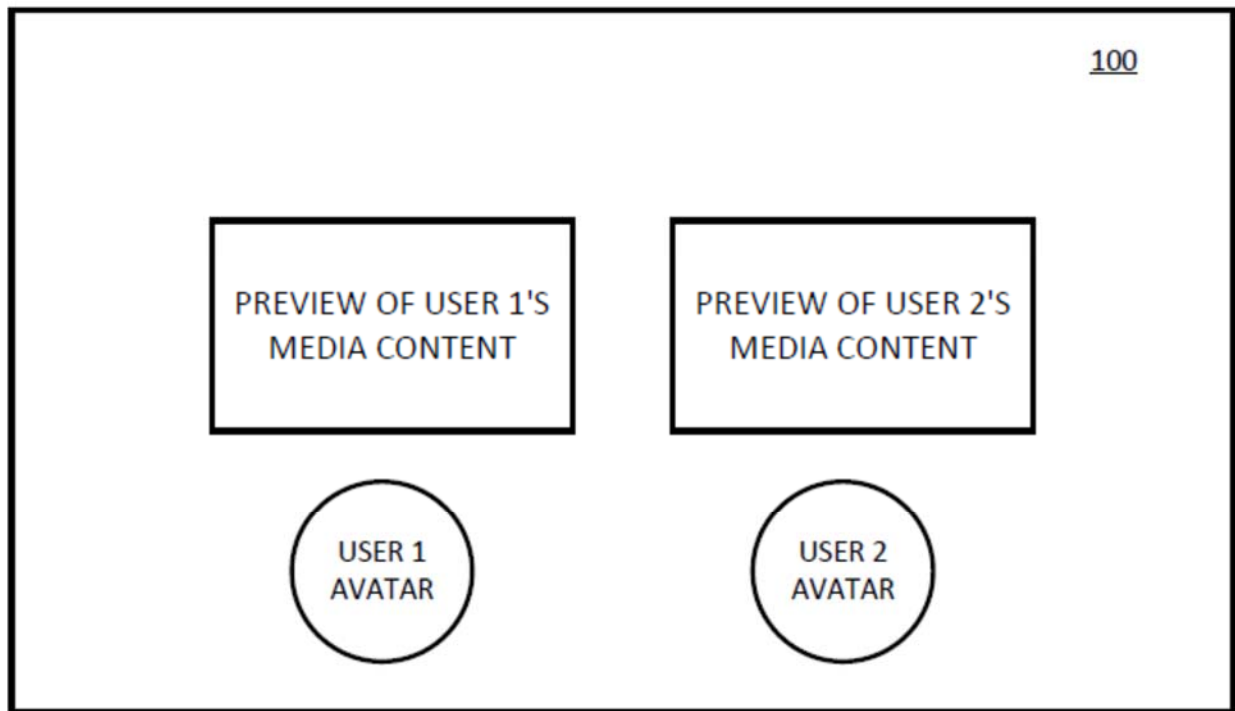


FIG. 1

As shown in FIG. 1, user interface 100 can include an avatar for each user (e.g., an image associated with the user, a name or username corresponding to the user, and/or any other suitable

content) participating in the shared virtual reality environment. Additionally, user interface 100 can include an indication of media content being viewed by a corresponding user within the shared virtual reality environment. For example, the indication of the media content being viewed can be a preview (e.g., a thumbnail image, a short video segment from a video content item being viewed, and/or any other suitable type of preview) of the media content being viewed.

Note that, although two user avatars and two indications of media content being viewed are shown in user interface, any suitable number of avatars and any suitable number of media content indications can be presented. Note also that user interface 100 can be presented in any suitable manner, such as in two-dimensional space, three-dimensional space, and/or in any other suitable manner. Additionally, in some instances, users viewing user interface 100 can interact with and manipulate user interface 100 in any suitable manner. For example, in some instances, users can change a viewpoint within user interface 100, rotate or translate a position of user interface 100, and/or manipulate user interface 100 in any other suitable manner.

FIG. 2 shows an illustrative example of a process 200 for synchronizing media content in a shared virtual reality environment.

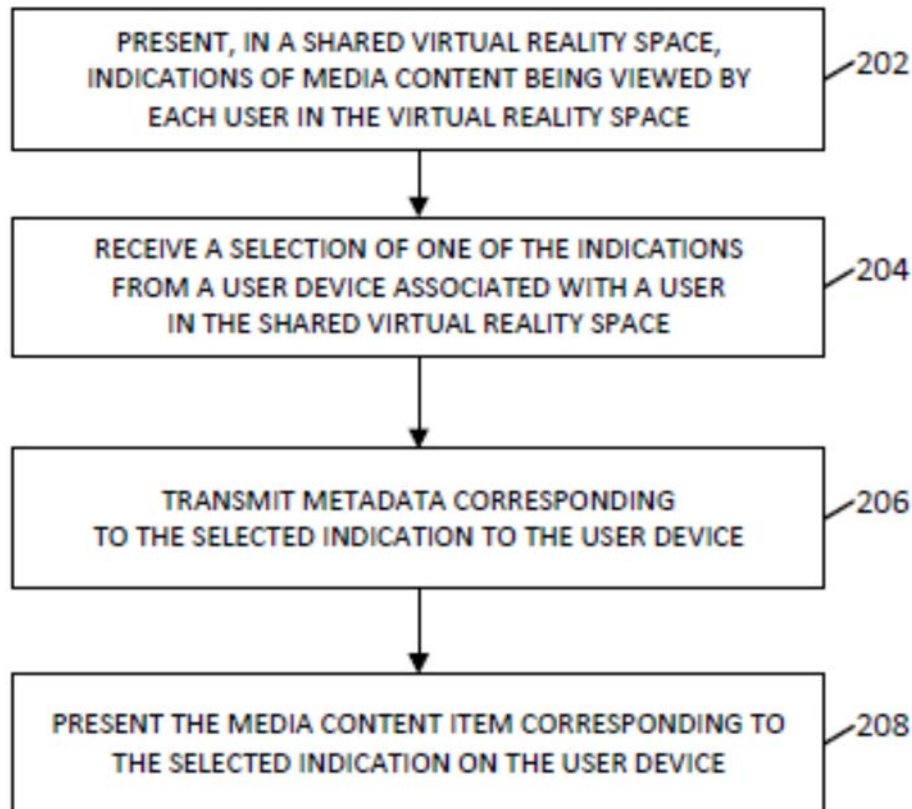
200

FIG. 2

At step 202, the system can present a shared virtual reality environment to multiple users (e.g., two, three, five, ten, and/or any other suitable number). As shown in FIG. 1, the virtual reality environment can include indications of media content currently being viewed by each user in the shared virtual reality environment. For example, the indications of media content being viewed by each user can include a preview of the media content item (e.g., a thumbnail image, an animation of frames of a video being viewed, a segment of a video being viewed, and/or any other suitable type of preview). Additionally, as shown in FIG. 1, the system can present an avatar corresponding to each user in the shared virtual reality environment. For

example, the avatar can include an image associated with the user, a name of the user, and/or any other suitable information corresponding to the user. As shown in the example of FIG. 1, the avatar can be presented in connection with a corresponding indication of the media content being viewed by the user.

At step 204, the system can receive, from a user device corresponding to a first user of the users participating in the shared virtual reality environment, a selection of one of the indications of media content being viewed by a second user participating in the shared virtual reality environment. The selection can be received in any suitable manner. For example, the selection can be received in response to a determination that the first user has selected a preview of media content currently being viewed by the second user.

At step 206, the system can transmit metadata corresponding to the media content item associated with the selected indication to the user device associated with the first user. The metadata can correspond to any suitable information, such as a Uniform Resource Locator (URL) identifying the media content item, a playback position of the media content item on a second user device associated with the second user currently viewing the media content item on the second user device, and/or any other suitable information.

At step 208, the system can cause the first user device to begin presenting the media content item corresponding to the selected indication using the metadata. For example, the first user device can access the media content item using a URL included in the received metadata. As another example, the first user device can cause the media content item to begin being presented at a playback position indicated in the received metadata, thereby allowing the presentation of the media content item on the first user device to be synchronized with the presentation of the media content item on the second user device.

Note that, in instances where the first user selects an indication of a media content item being viewed by a second user (e.g., as described above in connection with step 204) that is restricted and/or is not available to the first user, the system can cause process 200 to terminate at step 204. In some instances, the system can cause a message to be presented on the first user device to the first user that indicates that the first user does not have permission to view the selected media content item.

Accordingly, a mechanism for synchronizing media content in a shared virtual reality environment is provided.