

## (19) United States

# (12) Patent Application Publication (10) Pub. No.: US 2024/0214512 A1

Daniels et al. (43) **Pub. Date:** 

Jun. 27, 2024

### (54) SYSTEMS AND METHODS FOR WIRELESS REAL-TIME MULTI-CHANNEL AUDIO AND VIDEO INTEGRATION

(71) Applicant: Mixhalo Corp., San Francisco, CA

(72) Inventors: Ty Daniels, Austin, TX (US); Jeffrey Thomas Miller, San Diego, CA (US);

Charles Edward Luckhardt, IV. San Francisco, CA (US); Vikram Singh,

San Francisco, CA (US)

(21) Appl. No.: 18/594,036

(22) Filed: Mar. 4, 2024

### Related U.S. Application Data

- (63) Continuation-in-part of application No. 18/219,778, filed on Jul. 10, 2023.
- Provisional application No. 63/389,219, filed on Jul. 14, 2022, provisional application No. 63/449,771, filed on Mar. 3, 2023.

#### **Publication Classification**

(51) Int. Cl. H04N 5/265 (2006.01)G06F 3/16 (2006.01)

U.S. Cl. CPC ...... H04N 5/265 (2013.01); G06F 3/162 (2013.01)

#### (57)ABSTRACT

A method of wireless capture of real-time multi-channel audio and video using a mobile computing device and a wireless access point includes detecting a first musical instrument and a second musical instrument via a multichannel audio interface wirelessly coupled to the instruments using a short-range communication protocol. The method also includes receiving a first live audio signal from the first musical instrument and a second live audio signal from the second musical instrument. The method also includes receiving a data representation of the first live audio signal and the second live audio signal via a wireless network. The method also includes processing the data representation of the first live audio signal and the second live audio signal into a live audio stream. The method also includes initiating a video capture and, concurrent with the video capture, producing a shareable video based on the captured video and the live audio stream.

200

