US 20240214542A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2024/0214542 A1**

Leung et al. (43) **Pub. Date: Jun. 27, 2024**

(54) **TECHNIQUES TO CAPTURE AND EDIT DYNAMIC DEPTH IMAGES**

(71) Applicant: **Google LLC**, Mountain View, CA (US)

(72) Inventors: **Mira Leung**, Seattle, WA (US); **Steve Perry**, Mountain View, CA (US); **Fares Alhassen**, Redwood Shores, CA (US); **Abe Stephens**, San Mateo, CA (US); **Neal Wadhwa**, Mountain View, CA (US)

(73) Assignee: **Googe LLC**, Mountain View, CA (US)

(21) Appl. No.: **18/596,293**

(22) Filed: **Mar. 5, 2024**

Related U.S. Application Data

(62) Division of application No. 17/422,734, filed on Jul. 13, 2021, now Pat. No. 11,949,848, filed as application No. PCT/US19/62156 on Nov. 19, 2019.

(60) Provisional application No. 62/827,739, filed on Apr. 1, 2019.

Publication Classification

(51) **Int. Cl.**
H04N 13/271 (2006.01)
G06T 7/55 (2006.01)

(52) **U.S. Cl.**
CPC ***H04N 13/271*** (2018.05); ***G06T 7/55*** (2017.01); *G06T 2207/10028* (2013.01)

(57) **ABSTRACT**

Implementations described herein relate to a computer-implemented method that includes capturing image data using one or more cameras, wherein the image data includes a primary image and associated depth values. The method further includes encoding the image data in an image format. The encoded image data includes the primary image encoded in the image format and image metadata that includes a device element that includes a profile element indicative of an image type and a first camera element, wherein the first camera element includes an image element and a depth map based on the depth values. The method further includes, after the encoding, storing the image data in a file container based on the image format. The method further includes causing the primary image to be displayed.