US 20230231976A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2023/0231976 A1**

Bonham et al. (43) **Pub. Date: Jul. 20, 2023**

(54) **SYSTEM AND METHOD FOR EXCHANGING COMPRESSED IMAGES OVER LORAWAN GATEWAYS**

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(21) Appl. No.: **17/578,431**

(22) Filed: **Jan. 18, 2022**

Publication Classification

(51) **Int. Cl.**

H04N 7/18	(2006.01)
H04N 5/232	(2006.01)
H04N 1/00	(2006.01)

(52) **U.S. Cl.**

CPC ***H04N 7/183*** (2013.01); ***H04N 5/23229*** (2013.01); ***H04N 1/00222*** (2013.01)

(57) **ABSTRACT**

A system and method for creating small data size representations of images, created on the image detection device, over wireless connections when there is insufficient bandwidth to support detailed images is disclosed. Image data size is often too large to send over low-powered long-distance wireless connections. Image data must be dramatically reduced to enable use of the lowest-power longest-distance wireless platforms including LoRa with LoRaWAN. Common image compression algorithms include jpeg and mpeg that provide only moderate reductions in data size. The described invention reduces data size beyond jpeg compression by reducing targeted image objects to simple outlines, contours or vectors. Monitoring security, wildlife, agricultural and other natural events require images of objects including insects, crops, livestock, wildlife or intruders. Contours, outlines or vectors of targeted objects are often sufficiently recognizable to provide useful information.