(19) **United States**

(12) **Patent Application Publication** (10) Pub. No.: US 2023/0231988 A1

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

(54) **EMBEDDED TIMESTAMPS FOR DETERMINING OFFSET BETWEEN TEST STREAMS**

(71) Applicant: **SRI International**, Menlo Park, CA (US)

(72) Inventors: **Robert Norman Hurst, JR.**, Hopewell, NJ (US); **Arkady Kopansky**, Feasterville-Trevose, PA (US); **Jonathan Parlett**, Philadelphia, PA (US)

(21) Appl. No.: **18/067,159**

(22) Filed: **Dec. 16, 2022**

Related U.S. Application Data

(60) Provisional application No. 63/301,440, filed on Jan. 20, 2022.

Publication Classification

(51) **Int. Cl.**
$$H04N\ 17/00 \quad (2006.01)$$
$$G06V\ 20/40 \quad (2006.01)$$

(52) **U.S. Cl.**
CPC *H04N 17/00* (2013.01); *G06V 20/49* (2022.01)

(57) **ABSTRACT**

A computing system includes an interface, a memory, and processing circuitry. The interface is configured to receive, from a production system, a first test stream and a second test stream. The memory is in communication with the interface and is configured to store at least a portion of the first test stream and at least a portion of the second test stream. The processing circuitry is in communication with the memory and is configured to: detect first embedded information in the first test stream representative of a first timestamp and second embedded information in the second test stream representative of a second timestamp; determine, based on the first timestamp and the second timestamp, an offset between the first test stream and the second test stream; output the offset.