



US 20230232027A1

(19) **United States**
(12) **Patent Application Publication**
PERINGASSERY KRISHNAN et al.
(10) **Pub. No.: US 2023/0232027 A1**
(43) **Pub. Date: Jul. 20, 2023**

(54) **SIGN CODING FOR ONE-DIMENSIONAL TRANSFORM SKIP**

Publication Classification

(71) Applicant: **TENCENT AMERICA LLC**, Palo Alto, CA (US)

(51) **Int. Cl.**
H04N 19/44 (2006.01)
H04N 19/176 (2006.01)
H04N 19/105 (2006.01)
H04N 19/46 (2006.01)

(72) Inventors: **Madhu PERINGASSERY KRISHNAN**, Mountain View, CA (US); **Xin Zhao**, Santa Clara, CA (US); **Shan LIU**, San Jose, CA (US)

(52) **U.S. Cl.**
CPC *H04N 19/44* (2014.11); *H04N 19/46* (2014.11); *H04N 19/105* (2014.11); *H04N 19/176* (2014.11)

(73) Assignee: **TENCENT AMERICA LLC**, Palo Aito, CA (US)

(57) **ABSTRACT**

(21) Appl. No.: **18/189,100**

Aspects of the disclosure provide a method and an apparatus including processing circuitry for video decoding. The processing circuitry can decode coding information of a transform block (TB) from a coded video bitstream. The coding information can indicate a transform skip in one direction for the TB. The processing circuitry can decode a sign value of a current transform coefficient in the TB based on a previously decoded sign value of a previous transform coefficient. The current transform coefficient and the previous transform coefficient can be in one of a same row and a same column in the TB. The one of the same row and the same column can be along the one direction of the transform skip. The processing circuitry can determine the current transform coefficient in the TB based on the decoded sign value of the current transform coefficient.

(22) Filed: **Mar. 23, 2023**

Related U.S. Application Data

(63) Continuation of application No. 17/339,516, filed on Jun. 4, 2021.

(60) Provisional application No. 63/086,280, filed on Oct. 1, 2020.

