US 20230231999A1

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2023/0231999 A1

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

(54) METHOD AND DEVICE FOR EFFECTIVE VIDEO ENCODING/DECODING VIA LOCAL LIGHTING COMPENSATION

(71) Applicant: **Electronics and Telecommunications Research Institute**, Daejeon (KR)

(72) Inventors: **Gun BANG**, Daejeon (KR); **Hui Yong KIM**, Daejeon (KR); **Dong Gyu SIM**, Seoul (KR); **Seoung Jun OH**, Seongnam-si Gyeonggi-do (KR); **Sea Nae PARK**, Seoul (KR); **Jun Taek PARK**, Seoul (KR); **Jong Seok LEE**, Seoul (KR)

(73) Assignee: **Electronics and Telecommunications Research Institute**, Daejeon (KR)

(21) Appl. No.: **18/186,025**

(22) Filed: **Mar. 17, 2023**

Related U.S. Application Data

(62) Division of application No. 17/260,948, filed on Jan. 15, 2021, now Pat. No. 11,632,546, filed as application No. PCT/KR2019/008908 on Jul. 18, 2019.

(30) **Foreign Application Priority Data**

Jul. 18, 2018 (KR) 10-2018-0083641
Sep. 28, 2018 (KR) 10-2018-0115944

Publication Classification

(51) **Int. Cl.**

H04N 19/117	(2006.01)
H04N 19/105	(2006.01)
H04N 19/159	(2006.01)
H04N 19/167	(2006.01)
H04N 19/176	(2006.01)
H04N 19/186	(2006.01)

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

CPC ***H04N 19/117*** (2014.11); ***H04N 19/105*** (2014.11); ***H04N 19/159*** (2014.11); ***H04N 19/167*** (2014.11); ***H04N 19/176*** (2014.11); ***H04N 19/186*** (2014.11)

(57) **ABSTRACT**

There is provided an image decoding method comprising: deriving a first prediction value of a current block by using at least one sample included in a reference block, obtaining an illumination compensation parameter on the basis of a predetermined reference region, deriving a second prediction value of the current block by applying the illumination compensation parameter to the first prediction value and reconstructing the current block on the basis of the second prediction value.