



US 20230232023A1

(19) **United States**(12) **Patent Application Publication**  
**PARK et al.**(10) **Pub. No.: US 2023/0232023 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **METHOD AND APPARATUS FOR IMAGE  
ENCODING, AND METHOD AND  
APPARATUS FOR IMAGE DECODING**(60) Provisional application No. 62/683,255, filed on Jun.  
11, 2018, provisional application No. 62/669,667,  
filed on May 10, 2018.(71) Applicant: **SAMSUNG ELECTRONICS CO.,  
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(KR)(51) **Int. Cl.**  
**H04N 19/186** (2006.01)  
**H04N 19/119** (2006.01)  
**H04N 19/122** (2006.01)  
**H04N 19/176** (2006.01)(52) **U.S. Cl.**  
CPC ..... **H04N 19/186** (2014.11); **H04N 19/119**  
(2014.11); **H04N 19/122** (2014.11); **H04N**  
**19/176** (2014.11); **H04N 19/70** (2014.11)(73) Assignee: **SAMSUNG ELECTRONICS CO.,  
LTD.**, Suwon-si (KR)(21) Appl. No.: **18/160,712**(22) Filed: **Jan. 27, 2023****Related U.S. Application Data**(63) Continuation of application No. 17/053,571, filed on  
Nov. 6, 2020, now Pat. No. 11,616,963, filed as  
application No. PCT/KR2019/005673 on May 10,  
2019.(57) **ABSTRACT**

Provided is an image decoding method including determin-  
ing a plurality of coding units in a chroma image by  
hierarchically splitting the chroma image, based on a split  
shape mode of blocks in the chroma image of a current  
image, and decoding the current image, based on the plu-  
rality of coding units in the chroma image. In this regard,  
the determining of the plurality of coding units in the chroma  
image may include, when a size or an area of a chroma block  
from among a plurality of chroma blocks to be generated by  
splitting a current chroma block in the chroma image is  
equal to or smaller than a preset size or a preset area, not  
allowing splitting of the current chroma block based on a  
split shape mode of the current chroma block, and deter-  
mining at least one coding unit included in the current  
chroma block.

