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Siddaramanna et al.(10) **Pub. No.: US 2023/0231994 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **METHOD, SYSTEM AND APPARATUS FOR
INTRA-PREDICTION IN A VIDEO SIGNAL
PROCESSING****Publication Classification**(51) **Int. Cl.***H04N 19/11* (2006.01)*H04N 19/159* (2006.01)*H04N 19/176* (2006.01)*H04N 19/119* (2006.01)*H04N 19/593* (2006.01)*H04N 19/14* (2006.01)(52) **U.S. Cl.**CPC *H04N 19/11* (2014.11); *H04N 19/159*(2014.11); *H04N 19/176* (2014.11); *H04N**19/119* (2014.11); *H04N 19/593* (2014.11);*H04N 19/14* (2014.11)(71) Applicant: **Texas Instruments Incorporated,**
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Bengaluru (IN)(21) Appl. No.: **18/123,417**(22) Filed: **Mar. 20, 2023****Related U.S. Application Data**(63) Continuation of application No. 17/165,467, filed on
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ABSTRACT

According to an aspect, a video encoder selects a block of intermediate size from a set of block sizes for intra-prediction estimation for encoding a video signal. A set of neighboring blocks with the intermediate size are tested for combining. If the set of neighboring blocks are determined to be combinable, the video encoder selects a larger block size formed by the tested neighboring blocks for encoding. On the other hand, if the set of neighboring blocks are determined to be not combinable, the video encoder selects a smaller block size from the set of tested neighboring blocks for prediction. According to another aspect of the present disclosure, the best mode for intra-prediction is determined by first intra-predicting a block with intermediate modes in a set of modes. Then the intra-predictions are performed for the neighboring modes of at least one intermediate mode.

