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**ZHANG**(10) **Pub. No.: US 2023/0232020 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **INTER PREDICTION ENCODING METHOD,  
APPARATUS, AND DEVICE, AND  
READABLE STORAGE MEDIUM***H04N 19/176* (2006.01)*H04N 19/184* (2006.01)*H04N 19/52* (2006.01)*H04N 19/567* (2006.01)(71) Applicant: **Tencent Technology (Shenzhen)  
Company Limited**, Shenzhen (CN)(52) **U.S. Cl.**CPC ..... *H04N 19/159* (2014.11); *H04N 19/139*(2014.11); *H04N 19/176* (2014.11); *H04N**19/184* (2014.11); *H04N 19/52* (2014.11);*H04N 19/567* (2014.11)(72) Inventor: **Hongshun ZHANG**, Shenzhen (CN)(73) Assignee: **Tencent Technology (Shenzhen)  
Company Limited**, Shenzhen (CN)(21) Appl. No.: **18/123,650**(22) Filed: **Mar. 20, 2023**

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**ABSTRACT****Related U.S. Application Data**(63) Continuation of application No. PCT/CN2022/  
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In an inter prediction encoding method, a picture is divided into a plurality of coding units. Motion estimation traversal is performed on motion vector predictions (MVPs) in a specified inter prediction mode to obtain candidate motion vectors. A motion vector set is determined from the MVPs and the candidate motion vectors. The motion vector set includes a target MVP from the MVPs and a target motion vector from the candidate motion vectors. Interpolation mode transversal and motion mode transversal are performed for each of the coding units based on the motion vector set to obtain a target interpolation mode and a target motion mode corresponding to the respective coding unit.

