US 20240214545A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2024/0214545 A1**

LI et al. (43) **Pub. Date: Jun. 27, 2024**

(54) **METHOD AND DEVICE FOR NAKED EYE 3D DISPLAYING VEHICLE INSTRUMENT**

(71) Applicant: **VARITRONIX (HEYUAN) DISPLAY TECHNOLOGY LTD.**, Heyuan City (CN)

(72) Inventors: **Hongzhang LI**, Heyuan City (CN); **Zhongfu CAO**, Heyuan City (CN); **Huaiping ZHANG**, Heyuan City (CN); **Haiqiang ZHONG**, Heyuan City (CN); **Jinwu CHEN**, Heyuan City (CN); **Dianyi RUAN**, Heyuan City (CN)

(21) Appl. No.: **18/538,464**

(22) Filed: **Dec. 13, 2023**

(30) **Foreign Application Priority Data**

Dec. 21, 2022 (CN) 202211651220.1

Publication Classification

(51) **Int. Cl.**

H04N 13/302 (2006.01)
G06T 15/20 (2006.01)
H04N 13/385 (2006.01)

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

CPC ***H04N 13/302*** (2018.05); ***G06T 15/20*** (2013.01); ***H04N 13/385*** (2018.05)

(57) **ABSTRACT**

The present application relates to the field of naked eye 3D technology, provides a method and a device for naked eye 3D displaying a vehicle instrument, which includes: collecting a real-time eye position of an operator in a real time, generating a corresponding real-time visual interweaving image according to the real-time eye position, and displaying the real-time visual interweaving image on a display interface; identifying whether the operator is engaged in human behavior, if so, obtaining human behavior information of the operator; predicting a deviation interval of the operator according to the human behavior information, and generating and caching a viewing angle image set corresponding to the deviation interval; and compensating in response to the real-time visual interweaving image on the display interface according to the viewing angle image set.