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(54) Title: METHOD AND DEVICE FOR DRIVING STATE ANALYSIS, DRIVER MONITORING SYSTEM AND VEHICLE

(54) 发明名称: 驾驶状态分析方法和装置、驾驶员监控系统、车辆

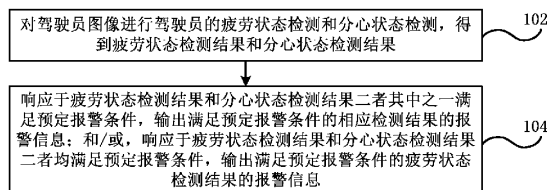


图 1

102 Detect a fatigue state and a distraction state of a driver from an image of the driver to obtain a fatigue state detection result and a distraction state detection result

104 In response to one of the fatigue state detection result and the distraction state detection result satisfying a preset alert condition, output alert information of a corresponding detection result satisfying the preset alert condition; and/or in response to both of the fatigue state detection result and the distraction state detection result satisfying the preset alert condition, output the alert information of the fatigue state detection result satisfying the preset alert condition

(57) Abstract: Disclosed in the embodiments of the present disclosure are a method and device for driving state analysis, a driver monitoring system and a vehicle. The method of driving state analysis comprises: detecting a fatigue state and a distraction state of a driver from an image of the driver to obtain a fatigue state detection result and a distraction state detection result; in response to one of the fatigue state detection result and the distraction state detection result satisfying a preset alert condition, outputting alert information of a corresponding detection result satisfying the preset alert condition; and/or in response to both of the fatigue state detection result and the distraction state detection result satisfying the preset alert condition, outputting the alert information of the fatigue state detection

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result satisfying the preset alert condition. The embodiments of the present disclosure can detect both of a fatigue state and a distraction state of a driver on the basis of an image thereof, and can avoid sending an excessive number of alerts, or sending alerts too frequently which may distract or annoy the driver. The present disclosure optimizes an alert strategy to improve the safety of driving assistance and the user experience.

(57) 摘要: 本公开实施例公开了一种驾驶状态分析方法和装置、驾驶员监控系统、车辆, 其中, 驾驶状态分析方法包括: 对驾驶员图像进行驾驶员的疲劳状态检测和分心状态检测, 得到疲劳状态检测结果和分心状态检测结果; 响应于疲劳状态检测结果和分心状态检测结果二者其中之一满足预定报警条件, 输出满足预定报警条件的相应检测结果的报警信息; 和/或, 响应于疲劳状态检测结果和分心状态检测结果二者均满足预定报警条件, 输出满足预定报警条件的疲劳状态检测结果的报警信息。本公开实施例可以基于驾驶员图像实现对驾驶员疲劳状态的和分心状态的共同检测, 还可以避免过多或者过于频繁的报警引起驾驶员的分心和反感, 本公开通过优化报警策略, 提高了辅助驾驶的安全性和用户体验。