(12) PATENT APPLICATION PUBLICATION

(21) Application No.202341078401 A

(19) INDIA

(22) Date of filing of Application :17/11/2023 (43) Publication Date : 29/12/2023

(54) Title of the invention: A COMPREHENSIVE SYSTEM FOR DRIVER FATIGUE DETECTION IN VEHICLES

(51) International classification	:G08B0021060000, A61B0005000000, A61B0005180000, B60K0028060000, B60W0040080000	(71)Name of Applicant: 1)O Pravallika Address of Applicant:Panimalar institute of technology
(86) International Application No Filing Date (87) International Publication No (61) Patent of Addition	:NA :NA : NA	poonamalle, pidarithangal Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)O Pravallika Address of Applicant: Panimalar institute of technology poonamalle, pidarithangal
to Application Numbe Filing Date (62) Divisional to Application Number Filing Date	r:NA :NA :NA :NA	

(57) Abstract:

A COMPREHENSIVE SYSTEM FOR DRIVER FATIGUE DETECTION IN VEHICLES ABSTRACT Drowsy driving, often referred to as sleep-deprived driving, fatigued driving, or tired driving, involves operating a motor vehicle while lacking alertness due to insufficient sleep. This condition results in reduced reaction times and impaired judgement, akin to the effects of alcohol consumption. In severe cases, it may even lead to the driver nodding off at the wheel. Sleep deprivation is a significant contributor to motor vehicle accidents, and its impact on the human brain is comparable to that of alcohol. This research paper introduces a method for drowsiness detection in drivers using an eye blink sensor. When drowsiness is detected, an alert system is activated, marked by the illumination of a Green LED. If the drowsiness persists over an extended duration, the system initiates a gradual reduction in the vehicle's speed. Ultimately, if the situation escalates, it enforces a complete halt by illuminating a red LED. This system leverages eye blink patterns to identify and respond to driver fatigue. FIG.No.2

No. of Pages: 33 No. of Claims: 10