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(51) International classification :B60C0023040000, A42B0003040000, B60K0028060000, B60R0025250000, B60W0040080000 (86) International Application No :PCT// Filing Date :01/01/1900 (87) International Publication No : NA (61) Patent of Addition to Application Number :NA Filing Date :NA (62) Divisional to Application Number :NA Filing Date :NA	(71)Name of Applicant : 1)ANJU DAS Address of Applicant :CMR Institute of Technology,AECS layout,Bengaluru-560037 ----- 2)Dr Balamurugan V 3)Sumit Mohanty 4)Nisanth Krishnan 5)Dr Vinu R Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : 1)ANJU DAS Address of Applicant :CMR Institute of Technology,AECS layout,Bengaluru-560037 ----- 2)Dr Balamurugan V Address of Applicant :Associate professor Department of ECE Sathyabama institute of Science and Technology Chennai ----- 3)Sumit Mohanty Address of Applicant :CMR Institute of Technology, 132, AECS Layout ,ITPL Main Road, Kundalahalli Bangalore,India. ----- 4)Nisanth Krishnan Address of Applicant :Asst professor Department of Electronics, Toch Institute of Science and Technology, Arakunnam ----- 5)Dr Vinu R Address of Applicant :Asso. professor, Department of ECE ,Toch Institute of Science and Technology, Arakunnam P O -----
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(57) Abstract :

There is a huge rise in usage of two wheelers and three wheelers as modes of transport in recent years. Also, accidents due to distraction while riding or riding without a protective gear have also seen a spike in numbers. Rider assistance system, causing reduced distractions, during riding the vehicle is needed to improve rider experience in terms of comfort and safety. Therefore, a Low-Cost Rider Protection and Guidance Unit for 2 wheelers is disclosed here. It is an assembled unit in 2 wheelers which has integrated maps system with inbuilt mic in Helmet for guidance of the rider as per the traffic and weather condition. It has a starting protection assembly which ensures the identity of rider by its fingerprint & Driving License along with alcohol detection unit. This starting protection assembly makes sure that the vehicle doesn't start without ensuring enough safety precautions. Rider health is continuously monitored by a heart beat monitoring unit mounted on handle & this information is sent over IoT for continuous monitoring by family members. When the rider is not well during the ride i.e. the heart beat is more than a threshold range GSM module is assembled with this to send a message or even to do call. Continuous tyre pressure monitoring system is also assembled which enables the protection of rider from accidents due to tyre bursting

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