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Adaptive Front Headlight System

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1.INTRODUCTION

The topic of this project is steering controlled (or directional) headlights, that are usually a separate set of headlights fitted to road vehicles beside the usual low beam/high beam headlights and their feature is that they turn with the steering, so that the driver of the vehicle can see the bend, what he is actually turning into. These type of headlights appeared on production cars in the 1920's and are still around nowadays, but not very popular, although they make night time driving safer. The most famous car which featured these lights was the Citroen DS (1955-1975), introduced on the 1968 Paris Motor Show. The headlights can be connected to the steering linkage by means of rods or cables, operated hydraulically by the power steering or nowadays electronically adjusted, even controlled by satellite navigation system. Our project is to make new and modern "Directional Headlights" in efficient manner by increasing the light angle. Directional headlights are those headlights that provide improved lighting especially for cornering. There are automobiles that have their headlights directly connected to the steering mechanism so that its lights will follow the movement of the front

2. Body of Paper

Nowadays technology and transportation medium are getting more advanced compact and energy efficient. To meet the requirements of the advanced technology we have to come with an idea of an automatic guided vehicle for transportation of goods more compactly and efficiently and without the use of human labor. The design is inspired from the transportation machines from the big companies like Amazon and flips kart. The body mainframe is inspired from the personal Seaway transporter. It is powered by the battery for running of the motors. The AGV can carry small to medium weight goods from and to with the ease of handling connected to a mobile. Various future modifications can be done for proper applications.

Table -1: Sample Table format

Fig -1: Figure

3. CONCLUSIONS

This paper has conferred the development of "Development of an adaptive steering controlled headlight for low cost vehicles " in which the headlights rotates with a same angle as with which the front wheel of the vehicle rotates by the rotation the steering wheel. The linkage mechanism of steering controlled headlight proved to be robust and cost effective option which can be used in vehicles especially in heavy duty vehicles to transmit the rotation motion of the steering wheel to the headlights when the mechanism is engaged. It also increases the safety of drivers as well as passengers by providing appropriate field of view during ride in night and hilly areas which consists of frequent sharp turns. The provision of engagement and disengagement mechanism also made it suitable for use in small and mid level vehicles

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