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A ROAD INSTALLABLE EQUIPMENT FOR PREVENTION OF ACCIDENTS AT TURNINGS

Accidents at turnings occur due to the invisibility on the other side of the road at the blind turns. Car industries have taken steps to alert the driver in that car and prevent it by moving the car back automatically. Different types of mirror configurations also have been tired to be used but visibility is reduced to a great extent. Hence in order to overcome these problems, we are designing a separate system or equipment so that these types of accidents can be stopped. One interesting feature of this system is that even the size of the vehicle at another side can be known at this side itself.

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DESIGN, DEVELOPMENT AND ANALYSIS OF MOBILE HANDSET PATCH ANTENNA

Our project presents Design, Development and analysis of Mobile Handset Patch Antenna for Wireless applications .The aim of this paper is to design a half patch antenna which operates in 3.2 GHz. The antenna design was created in Computer Simulation Tool (CST) version 2014. The proposed antenna composed of PTFE(Poly Tetra Fluoro Ethylene) substrate material , rectangular patch and a ground plane to improve antenna performance .This antenna can be applied for 4G frequency spectrum bands and also for Industrial, Scientific and Medical (ISM) radio bands. Antenna used here is half patch antenna with coaxial feed as waveguide port . The results shows that the presented antenna gain is about 7.52 dB .The simulation results provides that antenna can provide better gain and directivity .Using Coaxial feed , it provides rejection of certain frequency bands and thus improves gain and directivity .The performance was studied in the terms of return loss, VSWR, radiation pattern and gain. This survey tries to present an evolutionary and objective sketch to the development efforts of LTE technology and mark the future of 4G wireless access technologies.

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POWER EFFICIENT CLOCK PULSED D FLIP FLOP USING TRANSMISSION GATE

The need for low-power sequential circuits is pushing towards the implementation of low power consuming basic memory elements like D Flip-Flop. To accomplish power efficient D Flip-Flop, we create a new high-performance Current-Mode Pulse Triggered D Flip-Flop using 180nm CMOS technology. Here is a new idea for clock distribution that uses current, rather than voltage, to provide a clock signal with reduced power consumption. In addition to Current-Mode signalling, Transmission Gate has been used to design the D Flip-Flop which also helps for power consumption in a great way. The Cadence - Virtuoso tool is to be used to simulate all the circuits with 180nm technology.

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FOOD ADULTERATION DETECTION
USING e-NOSE AND e-TONGUE

Food Quality is a major consideration in our day-to-day life. Visual inspection of food substances is inaccurate and it is hard to validate all the products from the industry. So a mobile thermal app, odor sensor, electronic tongue sensor and texture analysis is used for determining the quality of food. The thermal image of food is captured and the image is processed in MATLAB to extract the texture. From the Texture analysis the quality of food can be determined. We also use the nose sensor and the tongue sensor to determine the food quality. With the help of the two sensors the odour and taste of the food can be known. An embedded system of PIC 16F877A Microcontroller and ARM Microprocessor is used for processing. Thus Food Quality can be estimated using the proposed method.

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IMAGE QUALITY ENHANCEMENT BY CONTRAST RESTORATION UNDER FOG CONDITIONS FOR DRIVING ASSISTANCE

Image is the most regular and suitable means of assigning or transmitting information. Under haze weather conditions, the images captured have degraded contrast. Several natural phenomena like haze, haze, mist, rain, etc. decrease the superiority of the pictures and become less visibility. These factors make the present image processing techniques error and sensitive susceptible. In this project, we suggest an efficient learning based picture enhancement that eliminate or nullify the haze that exists in the captured images. Here the haze is eliminated by using the image enhancement algorithm where the intensity of the haze is calculated in regarding with the atmospheric veil. By applying contrast restoration technique in either horizontally separated rows or vertically separated columns the haze is eliminated from the image. We can use median filters in order to remove the haze that exists. This approach is very much useful in the case of providing driving assistance as the haze weather conditions make the control and operation of a motor vehicle a bit complex and dangerous.

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