and commercial vehicles continues. Such technology will significantly increase traffic safety by eliminating tire breaks or punctures.

Modern cars

Numerous companies in the automotive industry are already developing and testing various configurations of cars with automated control based on the readings of video cameras and radars. But two companies have gone the furthest in their developments. The first one is Google Company, which is focused not on the production of cars but on the development of automatic piloting technologies. And the most advanced company in the field of car development is Tesla Motor, which has successfully launched many high-quality electric cars equipped with the most advanced autopilot system for civilian vehicles. But other companies are also trying to keep up with them, although they are at the stage of developing and testing their systems, which gives hope for a transformation of driving principles and changing the entire traffic in the nearest future.

References

1. Rautenbach, Halvar. “Individual ambidexterity in practice: the experience of product designers in the earthmoving machinery industry”; Diss., University of Pretoria, 2021. http://hdl.handle.net/2263/81681 .

2. Sikorska, Małgorzata, and P. G. Pererva. “Modern state and prospects of development of the industry of agricultural machinery.”; Thesis, Харківський національний університет будівництва та архітектури, 2017. http://repository.kpi.kharkov.ua/handle/KhPI-Press/31112 .

PROBLEMS AND TECHNOLOGIES OF AUTOMOTIVE INDUSTRY

Okhrimenko O.V., student,

Gerasymchuk T.V., Associate Professor,

Kharkiv National Automobile and Haghway University

The automotive industry is one of the most important sectors of the economy of Ukraine. It plays a significant role in the development of the country's economy,

provides jobs for millions of people, and contributes to the state budget. However, like any other industry, the automotive sector has its problems and challenges that need to be addressed. In this article, we will discuss the problems and technologies of the automotive industry in Ukraine.

One of the major problems facing the automotive industry in Ukraine is the lack of government support. The state does not provide enough funding for the development of the automotive sector, and there are no clear regulations for the industry. The lack of government support has led to a decline in the production of cars and parts, and many companies have been forced to shut down. Another challenge for the automotive industry in Ukraine is the high cost of production.

The cost of production in Ukraine is much higher than in other countries, which makes it difficult for Ukrainian companies to compete on the global market. This is due to the high cost of raw materials, energy, and labor. In addition, the Ukrainian automotive industry is facing a shortage of qualified workers. The lack of skilled workers is a major obstacle to the development of the industry. Many companies are forced to hire workers from other countries, which increases the cost of production. Despite these challenges, the automotive industry in Ukraine is gradually developing and implementing new technologies. One of the most promising technologies is the use of electric cars. Ukrainian companies are actively working on the production of electric cars and are implementing new technologies to make them more efficient and cost-effective. Another technology that is gaining popularity in the Ukrainian automotive industry is 3D printing. 3D printing allows for the production of complex parts and components with high precision and accuracy. This technology can significantly reduce the cost of production and increase the efficiency of the manufacturing process. In addition, Ukrainian companies are actively introducing new safety technologies. These technologies include autonomous driving systems, advanced driver assistance systems, and smart sensors.

The introduction of these technologies can significantly reduce the number of accidents on the roads and improve the safety of drivers and passengers. In conclusion, the automotive industry in Ukraine faces many challenges and problems, but it is

gradually developing and implementing new technologies to overcome them. The lack of government support, high production costs, and shortage of skilled workers are the major challenges that need to be addressed. However, the introduction of new technologies such as electric cars, 3D printing, and safety technologies is a positive trend that will contribute to the development of the industry.

References

3. "Current State and Prospects of the Automotive Industry in Ukraine," Ukrainian Motor Vehicle Manufacturers Association, accessed April 29, 2023, https://uamk.com.ua/en.

4. "The Ukrainian Automotive Industry: Problems and Prospects," SWORLD Business and Economic Analytics, accessed April 29, 2023, https://www.sworld.com.ua/index.php/economy-411/innovation-economy411/11085-411-1050.

5. "Problems of Development of Automotive Industry of Ukraine," Environmental Problems, Safety and Life Activity, no. 1 (2020): 17-23, https://jrnl.nau.edu.ua/index.php/EPSAE/article/view/4538/4660.

6. "Automotive Industry in Ukraine: Problems and Solutions," Geography Mozil, accessed April 29, 2023, https://geografiamozil2.jimdofree.com/головна/машинобудівний-комплексукраїни-та-світу/.

THE EVOLUTION OF THE FIRST ELECTRIC CARS

Starikova A.E., student,

Kharkiv National Automobile and Highway University

The history of electric vehicles goes back over a hundred years. Many do not know, but the first creators of self-propelled vehicles relied on an electric drive. After all, the electric motor was invented much earlier than the internal combustion engine. The first attempts to create a car (then it was called a little differently) began in the mid-30s of the XIX century, and everything was conceived as a fairly large project