

In the past, CAN suppliers faced some intellectual property (IP) problems in China. Last year, some new challenges appeared.



Bridge over troubled water: Strict lockdown and political hurdles, when producing and selling CAN products in China (Source: Stock/Adobe)

IP rights of foreigners have been violated for some times by Chinese companies. In the meantime, some of the problems are solved. But there are still copyright protected CiA documents on Chinese websites. This is illegal, even in China. But nobody takes care. New political challenges with China affect CAN business, too. European and North American governments have imposed sanctions on officials in China over rights abuses against the mostly Muslim Uighur minority groups. Western companies are forced not to manufacture products in the Xinjiang region. China responded its own sanctions on European officials.

The case Lithuania

China official representatives requested automotive supplier Continental to stop using CAN-connectable devices and sub-systems made in its Lithuania facilities. In 2021, the European country had established diplomatic relations with Taiwan. The Chinese government regards the island as a part of the Peoples Republic of China. The above-mentioned request should put some pressure on the Lithuanian government. The targeting of Continental is an example of how the China-Lithuania diplomatic spat is spilling over into business.

In 2019, Continental has built a production site in Kaunas, Lithuania. The 22000-m² factory with about 1000 employees is biggest greenfield investment project in Lithuania. Continental produces in Kaunas CAN-connectable advanced driver assistance systems (ADAC), access control systems, seat comfort systems, and smart autonomous doors (SAD). The SAD products provide additional comfort and safety when opening or closing the vehicles doors. For example, smart sensors in connection with a brake system stop vehicle doors from uncontrolled slamming. The anti-pinch protection safes legs and fingers of passengers from being squeezed. In addition, the obstacle detection function leads to more safety. It prevents the door from dents and paint scratches by avoiding to hit static objects such as parking cars, walls, high curbs, or bollards.

Chinese carmakers, especially the state-owned ones (e.g. BAIC, Changan Group, Chery, Dongfeng Motor, FAW Group, and SAIC), are important customers for such CAN connectable sub-systems. The Chinese road-vehicle market is the largest in the world. Since 2009, the annual production of automobiles in China has exceeded that of the European Union. Of course, most of the Chinese brand cars are sold within China mainland.

Producing ECUs in China

In order to avoid political issues, most Tier-1 suppliers from abroad produce CAN-connectable electronic control units (ECU) and sub-systems in China. Often joint-ventures are established. Already in 1995, Bosch, headquartered in Germany, has established the United Automotive Electronic Systems (UAES) company with Zhong-Lian Automotive Electronics. The joint-venture is located in Shanghai and operates production facilities in several Chinese cities. It develops and manufactures CAN-connectable products for

powertrain and body applications, in particular for Chinese automakers. These products are designed reducing fuel consumption and CO₂ emissions. They include also equipment for e-cars, an increasing business in China demanded and sponsored by the government.

End of last year, the UAES facility in Xi'an has faced the hard restrictions of the local government due to a Covid-19 caused lockdown. This is a part of the Chinese "Zero Covid" strategy. The northern Chinese city commanded its 13 million residents to stay at home. No individual traffic is allowed; all three days one household member is allowed to buy food and beverage. Trucks are traveling around spraying disinfectants in the entire city.

To keep the production running, the UAES company has asked its employees to stay in the company's facilities. They are so to say in quarantine, living in the company's bubble. Meeting rooms are now used as dormitories and nearby hotels are rent additionally. If the employees would go home, they cannot return.

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