

**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

UNITED STATES OF AMERICA
U.S. Department of Justice
Antitrust Division
450 Fifth Street N.W., Suite 8700
Washington, D.C. 20530,

Plaintiff,

v.

ZF FRIEDRICHSHAFEN A.G.
Lowentaler Strasse 20
88046 Friedrichshafen
Germany,

and

WABCO HOLDINGS, INC.
1220 Pacific Drive
Auburn Hills, MI 48326,

Defendants.

COMPLAINT

The United States of America (“United States”), acting under the direction of the Attorney General of the United States, brings this civil antitrust action against Defendants ZF Friedrichshafen AG (“ZF”) and WABCO Holdings, Inc. (“WABCO”) to enjoin the proposed merger of ZF and WABCO. The United States complains and alleges as follows:

I. NATURE OF THE ACTION

1. Pursuant to an agreement and plan of merger dated March 28, 2019, ZF and WABCO propose to merge in a transaction that would unite two of the leading global suppliers

of components used in the manufacture of large commercial vehicles (“LCVs”), which include commercial trucks and buses.

2. ZF and WABCO are the only suppliers of steering gears for use in LCVs in North America. Steering gears are an essential part of the steering systems used to direct the front wheels of LCVs. They are also a key component of advanced driver-assisted steering systems that provide safer, more efficient vehicle operation, and could ultimately be developed to enable autonomous operation of LCVs. The proposed merger would eliminate competition between ZF and WABCO and likely create a monopoly for LCV steering gears in North America.

3. As a result, the proposed transaction likely would substantially lessen competition in the market for the design, manufacture, and sale of LCV steering gears in North America in violation of Section 7 of the Clayton Act, 15 U.S.C. § 18.

II. THE DEFENDANTS AND THE TRANSACTION

4. ZF is a German company headquartered in Friedrichshafen, Germany. It has 149,000 employees in 40 countries, and had annual sales of \$36.9 billion in 2018, \$9.6 billion of which were in the United States. ZF’s North American business historically focused on the production and sale of transmissions to passenger and light vehicle manufacturers, but in 2015, ZF acquired a leading U.S. steering systems manufacturer, TRW, Inc. ZF’s U.S. headquarters are in Livonia, Michigan.

5. WABCO is a Delaware corporation with a North American headquarters in Auburn Hills, Michigan, and a global headquarters in Bern, Switzerland. WABCO descends from the original Westinghouse Air Brake Company formed in 1869. It has 16,000 employees in 40 countries, and had annual sales in 2018 of \$3.8 billion, \$850 million of which were in the United States. WABCO’s North American business historically focused on commercial vehicle

air brake and air suspension components, but in 2017, WABCO acquired a leading U.S. commercial vehicle steering component company, R.H. Sheppard Co., Inc.

6. On March 28, 2019, pursuant to an agreement and plan of merger, ZF agreed to acquire WABCO in a deal valued at approximately \$7 billion.

III. JURISDICTION AND VENUE

7. The United States brings this action under Section 15 of the Clayton Act, 15 U.S.C. § 25, as amended, to prevent and restrain Defendants from violating Section 7 of the Clayton Act, 15 U.S.C. § 18.

8. Defendants design, manufacture, and sell LCV steering gears in the United States that are used on LCVs in service throughout the United States. Defendants' activities in the design, manufacture, and sale of these products therefore substantially affect interstate commerce. This Court has subject matter jurisdiction over this action pursuant to Section 15 of the Clayton Act, 15 U.S.C. § 25, and 28 U.S.C. §§ 1331, 1337(a), and 1345.

9. Defendants have consented to venue and personal jurisdiction in this judicial district. Venue is therefore proper in this district under Section 12 of the Clayton Act, 15 U.S.C. § 22, and under 28 U.S.C. § 1391(c).

IV. LCV STEERING GEARS

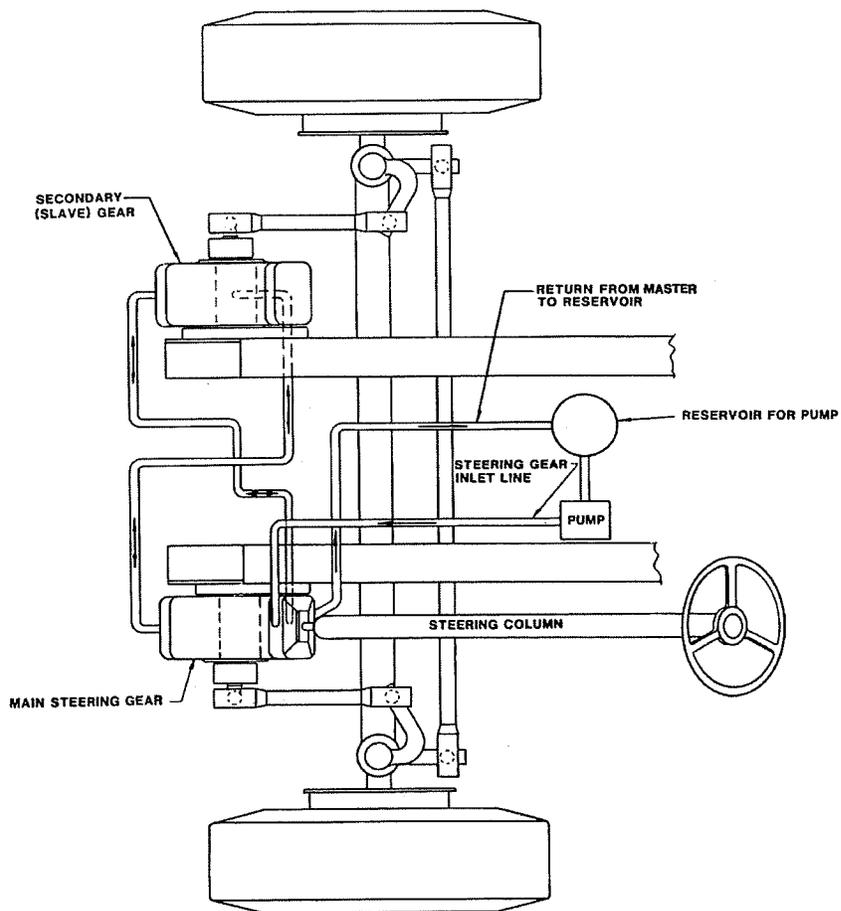
A. Background

10. Steering system components work together to direct a vehicle, and include steering gears, steering pumps, pitman arms, steering columns, steering linkages, and electronic steering controls. Steering equipment suitable for LCVs is sophisticated and highly engineered, especially the key component: steering gears. LCVs include all trucks, buses, and off-road

vehicles that weigh over 19,501 pounds (defined as Class 6-8 vehicles by the United States Department of Transportation (49 C.F.R. § 565.15)).

11. Steering gears are located below the steering column (which is attached to the steering wheel) and translate direction to the steering linkage. Steering gears for LCVs have a complex hydraulic power recirculating ball gear. Steering gears must be tuned carefully to operate within the specifications of the individual LCV's design and performance requirements, and must work together with the entire system of steering equipment. An example of an LCV steering gear system is pictured below:

Figure 1: LCV Steering Gear Diagram



Source: R. H. Sheppard D-Series Integral Power Steering Gear Manual (current).

12. Advanced LCV steering gears also include what is known as a torque overlay. A torque overlay adds hardware that enables the steering gear to quickly and independently direct the vehicle without the input of the steering column, and allows for advanced driver assistance system (“ADAS”) steering features. ADAS technology in general includes features such as lane keeping assist, adaptive cruise control, automated emergency braking, blind spot detection, and other similar features. For ADAS steering features, torque overlay steering gears work with sensors and electronic controls that detect the environment around the vehicle and then work with the steering hardware to keep the vehicle on the correct path and avoid collisions. Within the last five years, truck and bus manufacturers have begun to use steering-related ADAS features, and both Defendants are actively engaged in research and development to improve steering-related ADAS features for eventual use in autonomous trucks and buses. In the future, steering-related ADAS features may be developed to the point where they can be combined with other ADAS technology related to braking and powertrain control, enabling the potential for fully autonomous operation of commercial vehicles. LCV steering gears will continue to be a key component as future ADAS technology is developed.

13. Truck and bus manufacturers are the primary customers for LCV steering gears. These customers incorporate LCV steering gears into the vehicle’s final assembly, and then sell to end-use customers. Other LCV steering gear customers include manufacturers of commercial vehicles for off-road, military, mining, and agriculture uses. Typically, customers purchase LCV steering gears separately from other steering components, although they also may choose to purchase a whole steering system. In some cases, another entity may buy the LCV steering gear from one of the merging parties and then integrate it into a whole steering system that it sells to

truck or bus manufacturers. Customers generally buy steering gears either based on pre-established price lists or after a competitive bidding process.

14. The annual size of the North American market for LCV steering gears is approximately \$220 million.

B. Relevant Markets

1. Product Market: LCV Steering Gears

15. LCV steering gears must be durable and powerful enough to move large trucks or buses that utilize hydraulic steering systems without electronic power-assisted steering, because electronic power-assisted steering is not used on LCVs. This distinguishes LCV steering gears from lighter and simpler electronic steering gears used for smaller vehicles such as passenger cars. The quality and usefulness of an LCV steering gear is defined by several special characteristics, the most important of which are size, weight, torque required to move, and sensitivity, which relates to the ability of the gear to respond quickly and accurately to the driver or inputs from electronic controls.

16. There are no other steering methods or technologies that can accomplish the required functions of LCV steering gears. Truck and bus manufacturers require the highly-capable LCV steering gears discussed above because the lives and safety of drivers and other motorists, pedestrians, and property depend on the unfailing performance of an LCV steering gear to direct the vehicle. Other steering gears are less capable, and are therefore not a substitute for LCV steering gears purchased for use in LCVs in North America.

17. For the foregoing reasons, customers will not substitute less-capable steering gears, or any other product, for LCV steering gears in response to a small but significant and non-transitory increase in the price of LCV steering gears. Accordingly, LCV steering gears are

a relevant product market and line of commerce under Section 7 of the Clayton Act, 15 U.S.C. § 18.

2. Geographic Market: North America

18. LCV steering gears used in North America require a different design and alignment than those used outside North America. This is because of distinct truck and bus design differences, such as those related to higher weight and power, and a common configuration in which the cab is located behind the axles rather than over them. Because of these differences, truck and bus manufacturers strongly prefer LCV steering gears that have performed successfully on North American commercial vehicles, and have been unwilling to purchase steering gears used only in foreign markets. Customers also require their steering gear manufacturers to have an established North American presence for sales, service, and aftermarket support. Having an installed North American base helps customers to ensure that both in-house and third-party service technicians have experience with the relevant steering gears and have an existing spare parts inventory when gears need to be repaired or replaced. In the face of a small but significant and non-transitory price increase by North American producers of LCV steering gears, customers, therefore, are unlikely to turn to manufacturers located outside North America and who produce LCV steering gears solely for markets outside North America.

19. North America, therefore, is a relevant geographic market within the meaning of Section 7 of the Clayton Act, 15 U.S.C. § 18.

C. Anticompetitive Effects of the Proposed Transaction

20. ZF and WABCO are the only firms that design, manufacture, and sell LCV steering gears in North America. After its acquisition of TRW in 2015, ZF became the leading North American firm selling steering systems and components for commercial vehicles. In the

market for LCV steering gears in North America, it is estimated to have a 54 percent market share. WABCO is the only other market participant and has an estimated 46 percent market share. WABCO sells LCV steering gears through its wholly-owned R.H. Sheppard subsidiary, which it acquired in 2017. The merger would give the combined firm a monopoly over LCV steering gears in North America, leaving North American customers without a sufficient competitive alternative for this critical component.

21. ZF and WABCO compete for sales of LCV steering gears on the basis of price, quality, service, innovation, and contractual terms such as delivery times. This competition has resulted in lower prices, higher quality, better service, and shorter delivery times. Competition between ZF and WABCO has also fostered innovation, leading to LCV steering gears with higher reliability and the innovative features such as torque overlay that are expected to be integral to the development of future ADAS technology, including features for autonomous LCVs. The combination of ZF and WABCO would eliminate this competition and its future benefits to truck and bus manufacturers and end-use customers. Post-transaction, the merged firm likely would have the incentive and ability to increase prices, lower quality or service, offer less favorable contractual terms, and reduce research and development efforts that would otherwise lead to innovative and high-quality products.

22. The proposed merger, therefore, likely would substantially lessen competition in the design, manufacture, and sale of LCV steering gears in North America in violation of Section 7 of the Clayton Act, 15 U.S.C. § 18.

D. Difficulty of Entry

23. Sufficient, timely entry of additional competitors into the market for LCV steering gears in North America is unlikely. Truck and bus manufacturers have shown little interest in buying steering gears and other components from anyone other than the only two established suppliers, ZF and WABCO, because of their proven performance and North American presence.

24. Production facilities and sales and service infrastructure for LCV steering gears require a substantial investment in both capital equipment and human resources. To be competitively viable, a new entrant would need to construct a factory to produce a range of steering components, establish production lines capable of manufacturing the components, and build assembly lines and establish or acquire access to testing equipment and facilities.

25. A new entrant also would need to retain engineering and research personnel to design, test, and troubleshoot the detailed manufacturing process necessary to produce LCV steering gears acceptable to North American customers. Any new LCV steering gears also would require extensive customer testing and qualification before they would be used by North American truck and bus manufacturers or accepted by end users. Moreover, because LCV steering gears now being designed and developed by ZF and WABCO are undergoing continuous technological improvement and innovation for use in the development of ADAS features, any new entrant would need to acquire equivalent expertise and proprietary technologies to enable steering-related ADAS features to be efficiently incorporated into the advanced electronic control components of future North American LCVs.

26. Finally, because customers prefer to use LCV steering gear manufacturers with an existing installed base to ensure efficient and quality service by customers' in-house or third-party service centers, a new entrant lacking an installed base would be at a severe disadvantage.

27. As a result of the barriers described above, entry into the market for LCV steering gears would not be timely, likely, or sufficient to defeat the anticompetitive effects likely to result from the merger of ZF and WABCO.

V. VIOLATIONS ALLEGED

28. The merger of ZF and WABCO likely would substantially lessen competition in the design, manufacture, and sale of LCV steering gears in the United States in violation of Section 7 of the Clayton Act, 15 U.S.C. § 18.

29. Unless enjoined, the merger likely would have the following anticompetitive effects, among others, related to the relevant market:

- (a) actual and potential competition between ZF and WABCO would be eliminated;
- (b) competition likely would be substantially lessened; and
- (c) prices likely would increase, quality and the level of service would decrease, innovation would decrease, and contractual terms likely would be less favorable to customers.

VI. REQUEST FOR RELIEF

30. The United States requests that this Court:

- (a) adjudge and decree that ZF's merger with WABCO would be unlawful and violate Section 7 of the Clayton Act, 15 U.S.C. § 18;
- (b) preliminarily and permanently enjoin and restrain Defendants and all persons acting on their behalf from consummating the proposed merger of ZF and WABCO, or from entering into or carrying out any other contract,

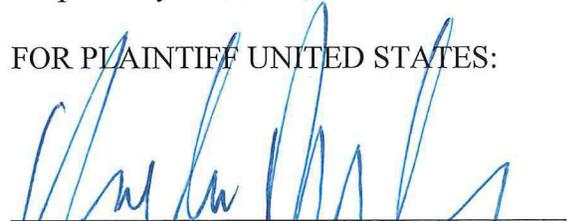
agreement, plan, or understanding, the effect of which would be to combine ZF and WABCO;

- (c) award the United States its costs for this action; and
- (d) award the United States such other and further relief as the Court deems just and proper.

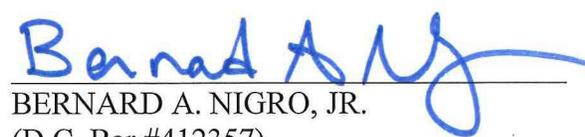
Dated: January 23, 2020

Respectfully submitted,

FOR PLAINTIFF UNITED STATES:


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