UNITED STATES DISTRICT COURT DISTRICT OF DELAWARE

UNITED STATES OF AMERICA.

Plaintiff.

v.

GENERAL MOTORS CORP., ZF FRIEDRICHSHAFEN, AG, ZF AG HOLDING, INC., ZF ACQUISITION CORP., and ZF INDUSTRIES, INC.,

Defendants.

Civil Action No. 93-530

COMPLAINT

The United States of America, acting under the direction of the Attorney General of the United States, brings this civil action to obtain equitable and other relief against the defendants named herein and alleges as follows:

The United States brings this antitrust case to block the proposed combination of the two largest manufacturers of medium and heavy automatic transmissions in the world, 2F Friedrichshafen, AG and the Allison Transmission Division of General Motors Corp. ZF and Allison are each other's main competitors in sales of automatic transmissions for medium and heavy trucks, buses, and other commercial and military vehicles. They also are the two most important companies in the world that compete to design, develop, and produce such automatic transmissions.

2. If ZF acquires Allison, it will be the only supplier of automatic transmissions in the United States for refuse trucks and will dominate the market for transit bus transmissions. It will also produce about 89 percent of all medium and heavy automatic transmissions worldwide and thus dominate the market for technological innovation in such automatic transmissions. Unless prevented, this combination is likely to substantially diminish competition and result in higher prices, poorer services, and the loss of better products and new innovative products for American consumers.

I. JURISDICTION AND VENUE

- 3. This action is instituted under Section 15 of the Clayton Act, as amended, 15 U.S.C. § 25, to prevent and restrain the violation by defendants of Section 7 of the Clayton Act, as amended, 15 U.S.C. § 18. This Court has jurisdiction over the subject matter and the persons of the defendants pursuant to Section 12 of the Clayton Act, 15 U.S.C. § 22, and 28 U.S.C. §§ 1331 and 1337.
- 4. General Motors Corp. ("GM"), a Delaware corporation, is found and transacts business in the District of Delaware. Venue is proper in the District of Delaware under 15 U.S.C. § 22 and 28 U.S.C. § 1391(c).
- 5. ZF Friedrichshafen, AG ("ZF") is a company organized under the laws of Germany. ZF transacts business in the United States and is found in the District of Delaware through its wholly owned direct or indirect subsidiaries, ZF Industries, Inc. ("ZFI"); ZF AG Holding, Inc. ("ZFH"); and ZF Acquisition Corp. ("ZFA"). Venue is proper in the District of Delaware

under 15 U.S.C. § 22 and 28 U.S.C. § 1391(d).

6. ZFI, ZFH, and ZFA are Delaware corporations. As to each of these corporations, venue is proper in the District of Delaware under 15 U.S.C. § 22 and 18 U.S.C. § 1391(c).

II. THE DEFENDANTS

- 7. GM has proposed to sell to ZF substantially all the assets of its unincorporated Allison Transmission Division ("Allison"). GM is engaged in interstate commerce and in activities substantially affecting interstate commerce.
- 8. ZF is a company organized and existing under the laws of Germany, with its principal offices in Friedrichshafen, Germany. Through its direct and indirect subsidiaries in the United States, ZF is engaged in interstate commerce and in activities substantially affecting interstate commerce.
- 9. Based in Lincolnshire, Illinois, ZFI oversees ZF's automotive transmission and other businesses in North America. ZFI is engaged in interstate commerce and in activities substantially affecting interstate commerce.
- 10. ZFH is a wholly owned subsidiary of ZF and is the holding company for all the capital stock of ZFA and ZFI. ZFA is a shell corporation created to facilitate ZF's receipt of the Allison assets at closing.

III. TRADE AND COMMERCE

11. Motor vehicles require transmissions to transfer power from the engine through a driveline to the wheels.

- automatics, which use a torque converter to change gears automatically in response to changes in engine speed; and manuals, which require drivers to change gears through the use of a mechanical clutch and gear selector. The only other type of transmission is the automated manual, which has limited commercial acceptance and which uses electro-mechanical controls to change the gears of what otherwise is a manual transmission. Nearly all transmissions sold in the United States are either automatic or manual.
- characteristics. A customer's evaluation of the importance of these characteristics depends upon the intended use made of the transmission. For example, for trucks or buses that operate under heavy stop-and-go conditions, using automatics rather than manuals or automated manuals can yield significant savings in maintenance costs, driver training, and operational efficiency. Automatic transmissions are also superior to manuals and automated manuals in terms of ride characteristics and safety (by eliminating the need to shift gears, they allow drivers to better concentrate on traffic or passenger conditions). These performance qualities make automatics the transmission of choice in transit and school buses, fire trucks, and other vehicles where ride comfort or safety factors are important.

- 14. Automatic transmissions vary substantially according to the requirements of the vehicle involved. There are different sizes of automatic transmissions depending on the size of the powertrain. And even transmissions of the same size vary in gear ratios and features that depend on the vehicle's use. Thus, the choice among types of automatic transmissions will differ depending on the use made of the vehicle.
- 15. Automatic transmission producers design and build transmissions to fit the individual performance and engineering requirements of their customers and their customers' uses.

 Thus, for example, an automatic transmission for a transit bus differs from and is not interchangeable with one for a heavy refuse route truck because the varying operational requirements of these vehicles need different gearing and features.
- 16. Because of the performance advantages of automatic transmissions, commercial and military customers choose exclusively automatic transmissions for several uses, despite the fact that automatic transmissions are typically twice as expensive as manuals. In those uses, customers will not substitute a manual transmission for an automatic transmission, even if the price of automatic transmissions were to increase markedly.
- 17. Allison and ZF both produce and sell medium and heavy automatic transmissions designed specifically and exclusively for various types of uses. Both companies forecast and monitor

sales for transmissions separately for specific uses. Allison and ZF set prices and warranties separately for each specific use of transmission they produce. They also track and maintain records of sales and repairs for those specific uses.

18. Allison and ZF sell the majority of their transmissions on a bid basis to original equipment manufacturers which specify the end users' vehicle function, performance, and component requirements. Allison and ZF engineers work with the manufacturers to ensure that the end users' specifications are met. Typically, Allison and ZF know the identity of the end user for each transmission sold.

Automatic Transmissions for Transit Buses

- 19. A transit bus weighs over 33,000 pounds and is used for local urban or suburban transportation.
- 20. All transit buses built for use in the United States are equipped with automatic transmissions for a number of reasons. For example, automatic transmissions require less driver training, provide a smoother and more comfortable ride, and enhance safety by allowing the driver to concentrate on other aspects of operating the bus.
- 21. Transit bus transmissions differ in form, fit, and function from those used in other vehicles. Because of the advantages of automatic transmissions for transit buses, and the uniqueness of the transit bus transmissions, transit bus

manufacturers and purchasers would not turn to any substitute (other types of automatic transmissions, manuals or automatic manuals) in the face of a small but significant and non-transitory price increase.

- 22. Allison produces and sells automatic transmission models meant specifically and exclusively for transit buses. It also forecasts and monitors sales of transit bus transmissions. Allison sets its prices and warranties separately for each of its applications, including its transit bus customers. 2F, likewise, produces, sells, monitors, and prices its transit transmissions differently according to the use of the vehicle.
- 23. The manufacture and sale of automatic transmissions for transit buses is a line of commerce and a relevant product market, and the United States is a relevant geographic market, within the meaning of Section 7 of the Clayton Act.
- 24. In 1992, approximately 4,000 automatic transmissions valued at about \$50 million were installed in transit buses produced and sold throughout the United States.
- 25. Only three companies manufacture automatic transmissions for transit buses used in the United States: Allison, 2F, and J.M. Voith. ZF, which entered the market in 1985, has been particularly aggressive competing against Allison in price -- by offering competitive assistance discounts and

extended warranties -- and in service for sales in this market.

- of an innovative competitor. The proposed acquisition will leave only two competitors in the market, resulting in higher prices for transit bus transmission customers. It also will give the combined ZF-Allison control of approximately 78 percent of all sales in that market, a significant increase in concentration in what is already a highly concentrated market. Using a measure of market concentration called the "HHI" (defined and explained in Appendix A), the transaction will increase the HHI by about 1000 points to a post-acquisition level of about 6500 points.
- 27. A new competitor is not likely to enter the market for automatic transmissions for transit buses after the acquisition in a manner sufficient to deter or counteract a small but significant and non-transitory price increase because substantial up-front investment in plant, machinery, research, marketing, sales, and service is required before any firm could enter this market. Moreover, most customers will only purchase from manufacturers with an established reputation for reliability, performance, and customer support. Establishment of such a reputation takes years and requires a significant investment of resources.

Automatic Transmissions for Heavy Refuse Route Trucks

- 28. A heavy refuse route truck weighs over 33,000 pounds and is used to collect residential and commercial refuse and deliver it to disposal sites. It typically is used in situations that involve numerous and frequent starts and stops.
- 29. Most heavy refuse route trucks use automatic transmissions because they permit more efficient operation than other kinds of transmissions. Automatic transmissions for heavy refuse route trucks are different in form, fit, and function from those used in other vehicles. Purchasers of such transmissions will not turn to other transmissions as substitutes in the face of a small but significant and non-transitory price increase.
- 30. Allison and ZF produce and sell transmissions meant specifically and exclusively for heavy refuse route trucks. Both firms forecast and monitor sales of heavy duty refuse transmissions, and set prices and warranties separately for these applications.
- 31. Accordingly, the manufacture and sale of automatic transmissions for heavy refuse route trucks is a line of commerce and a relevant product market, and the United States is a relevant geographic market, within the meaning of Section 7 of the Clayton Act.

- 32. In 1992, approximately 3,000 automatic transmissions valued at over \$30 million were installed in heavy refuse route trucks produced and sold throughout the United States.
- 33. ZF and Allison are the only companies that produce automatic transmissions for sale in the United States for heavy refuse route trucks. They compete in price by offering competitive assistance discounts and extended warranties and service for this business. ZF's proposed acquisition of Allison will combine the only competitors in the market, will create a monopoly, and will result in higher prices and less service to their customers, which include public service refuse authorities.
- 34. No competitor will enter the market for automatic transmissions for heavy refuse route trucks in a manner that will deter or counteract a small but significant and non-transitory price increase.

Technological Innovation in
The Design, Development, and
Production Of Medium and Heavy Automatic
Transmissions For Commercial and Military Vehicles

35. Allison and ZF are direct horizontal competitors in technological innovation for the design, development, and production of medium and heavy automatic transmissions for commercial and military vehicles. This competition has resulted in improved products, new products, lower costs of manufacture, and lower prices to consumers.

- 36. Until the mid-1980's, Allison was the sole supplier of medium and heavy automatic transmissions for commercial and military vehicles in the United States. ZF's 1985 introduction of the Ecomat in the United States brought a technologically superior product to the market, spurring price competition as well as competition in innovation. Thereafter, Allison invested substantial sums to design, develop, and produce improved transmission components, such as electronic controls and speed retarders. Allison also invested about \$500 million to develop a new line of substantially improved transmissions, which Allison named the "World Transmission."
- 37. ZF has recognized that it must make a strong competitive response to the World Transmission. In the words of ZFI's Vice President of Engineering: "There are only two ways, to counter the attack of Ally [Allison] against the European market and the rest of the world: a) Purchase Ally and b) Rethink and reschedule the ECOMAT strategy in respect to cost and product line quickly and massively."
- 38. The proposed acquisition will eliminate that response and all future competition in innovation between these two major manufacturers of automatic transmissions.
- 39. This loss of competition will occur most directly in a line of commerce defined as technological innovation in the design, development, and production of medium and heavy automatic transmissions for commercial and military vehicles

(the "Innovation Market"). Although the geographic market is the World, the loss of competition in the Innovation Market resulting from the acquisition will affect the prices and performance of all medium and heavy automatic transmissions sold for commercial and military vehicles in the United States.

- 40. Technological innovation in the design, development, and production of manual transmissions is not a substitute for such innovation in automatic transmissions. Moreover, future innovations in manual transmissions will not assure continued vigorous competition in the Innovation Market because there is a distinct, identifiable, and substantial group of customers who purchase automatic transmissions and would not switch to manual transmissions. This group includes customers who purchase transmissions for transit buses, inter-city buses, postal trucks, refuse trucks, wheeled military vehicles, school buses, fire trucks, yard spotters, motor homes, and other uses.
- 41. To compete in the Innovation Market, a firm needs, among other things, a full scale automatic transmission production facility. Such a facility, with a substantial history of production, is necessary to generate production experience and to allow development of product and process ideas. Moreover, substantial on-going experience with automatic transmission customers and their requirements is necessary to design and develop new and improved transmissions. For these reasons, only firms with full scale manufacturing facilities and

distribution experience in automatic transmission applications are capable of competing in the Innovation Market in the foreseeable future.

- 42. Because of the importance of production and customer experience in the innovation process, market shares in the Innovation Market can be approximated by the number of units produced worldwide by each manufacturer of medium and heavy automatic transmissions for commercial and military vehicles. Using this measure and transmission data generated by Allison and ZF, Allison has over 75 percent of the Innovation Market and ZF has approximately 14 percent. The transaction will result in a dominant firm with over 89 percent of the market. Applying the HHI analysis, concentration will increase by over 2000 points and the post-acquisition concentration will be roughly 8000 points.
- 43. Under any measure, the proposed transaction will reduce the number of competitors in the Innovation Market from three to two, reducing both the actual competition for innovation and the incentive of the remaining firms to compete vigorously for future innovation. The only other competitor, J.M. Voith, is a less effective competitor than either Allison or ZF because its focus is only on bus transmissions.
- 44. Reduced competition in the Innovation Market will harm purchasers of automatic transmissions. These purchasers will be denied the fruits of competition in the forms of better products, new innovative products, improved manufacturing processes, and lower prices.

45. There is no likelihood that any firm will enter the Innovation Market in the foreseeable future in a manner sufficient to restore significant competition that would be lost if the proposed transaction were to be consummated.

IV. VIOLATION ALLEGED

- 46. Pursuant to an agreement dated July 2, 1992, ZF proposes to acquire substantially all the assets of Allison in a transaction valued at approximately \$525 million. That transaction will give ZF control of Allison's transmission business.
- 47. The effect of this acquisition may be substantially to lessen competition in interstate trade and commerce in violation of Section 7 of the Clayton Act in the following ways, among others:
- (a) Actual and potential competition between Allison and ZF in the market for the manufacture and sale of automatic transmissions for transit buses in the United States will be eliminated;
- (b) Competition generally in the market for the manufacture and sale of automatic transmissions for transit buses in the United States may be substantially lessened;
 - (c) Actual and potential competition between Allison and ZF in the market for the manufacture and sale of automatic transmissions for heavy refuse route trucks in the United States will be eliminated;

- (d) Competition generally in the market for the manufacture and sale of automatic transmissions for heavy refuse route trucks in the United States may be substantially lessened;
- (e) Actual and potential competition between Allison and ZF worldwide in the market for technological innovation in the design, development, and production of medium and heavy automatic transmissions for commercial and military vehicles will be eliminated; and
- (f) Competition generally in the market for worldwide technological innovation in the design, development, and production of medium and heavy automatic transmissions for commercial and military vehicles may be substantially lessened.

V. REQUEST FOR RELIEF

WHEREFORE, plaintiff prays:

- 1. That ZF's acquisition of Allison be adjudged a violation of Section 7 of the Clayton Act.
- 2. That a permanent injunction be issued preventing and restraining the defendants and all persons acting on their behalf from consummating the purchase agreement alleged in paragraph 46 or from going forward with any other plan or agreement by which ZF would merge with or acquire Allison, its capital stock, or any of its assets.
- 3. That the United States have such further relief as this Court may deem proper.

4. That the United States recover the costs of this action.

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