
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ZF NORTH AMERICA, INC., ZF ACTIVE SAFETY US INC.,
Petitioners,

v.

STONERIDGE CONTROL DEVICES, INC.,
Patent Owner.

Inter Partes Review No. IPR2023-00273
Patent No. 7,021,415

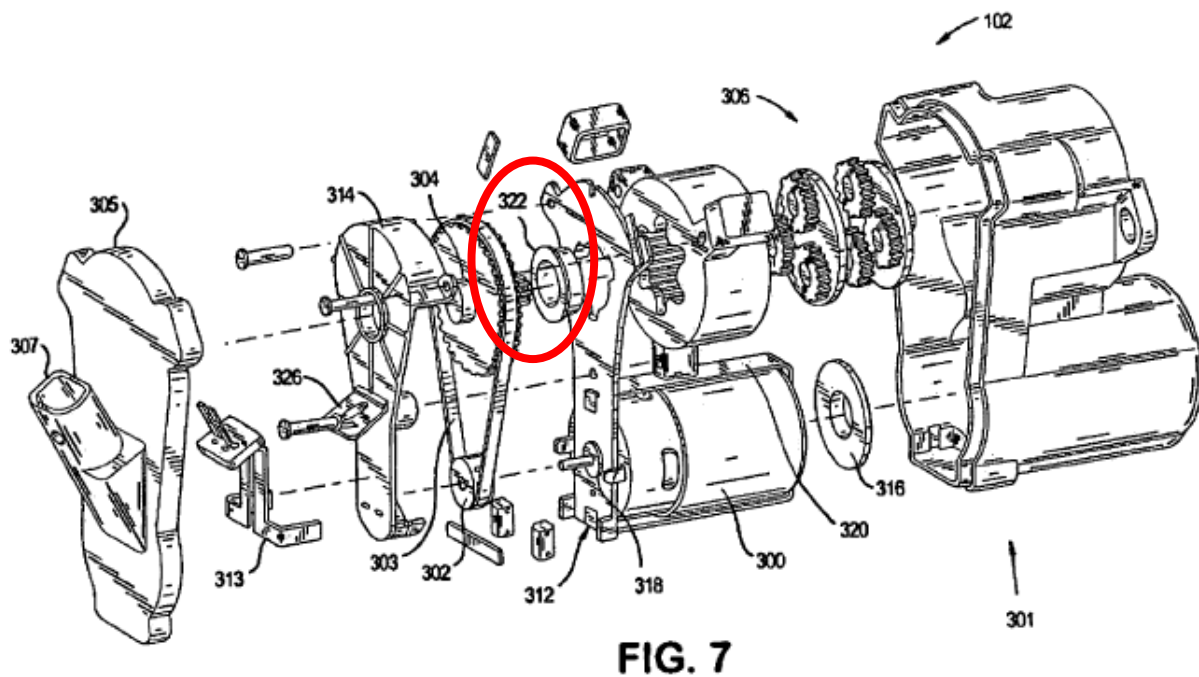
DECLARATION OF ROLF PATRICK

I, Rolf Patrick, declare:

1. I am preparing this declaration on behalf of Patent Owner relative to the present case.
2. I am currently employed by Stoneridge, Inc. ("SRI"), an affiliate of Patent Owner. I am compensated as an employee for SRI, but I am not being separately compensated for preparing this declaration. My testimony in this declaration is not dependent on the outcome of this case.
3. I am currently a Key Account Manager with SRI. I have worked in various roles with SRI since 2001. In February of 2003, I was a Sales Account Manager with SRI.
4. On February 21, 2003, SRI gave a presentation to TRW, which is attached to this proceeding as Ex. 2012. While I was part of the team that prepared the presentation to TRW, I did not attend the presentation. Regardless, I am familiar with the contents of the presentation and the work that went into preparing for the presentation.
5. The presentation details a SRI prototype electronic park brake actuator (EPBA). The presentation refers to the SRI prototype as a Pollak POC Design Concept, or Pollak POC 12. Pollak was an affiliated entity of SRI in 2003. POC

stands for proof of concept. The SRI prototype was a physical product that was actually built and tested.

6. The presentation shows that the SRI prototype design has a sub-frame and at least one vibration isolator. On page 22 of Ex. 2012, one example vibration isolator is shown in orange. Specifically, the example isolator is shown as being attached to the sub-frame (which is shown in brown and labeled as “midplate”) and is adjacent the ring gear (red). The '415 Patent includes a corresponding structure (red circle, below), which is bushing 322 in Fig. 7 of the '415 patent, below.



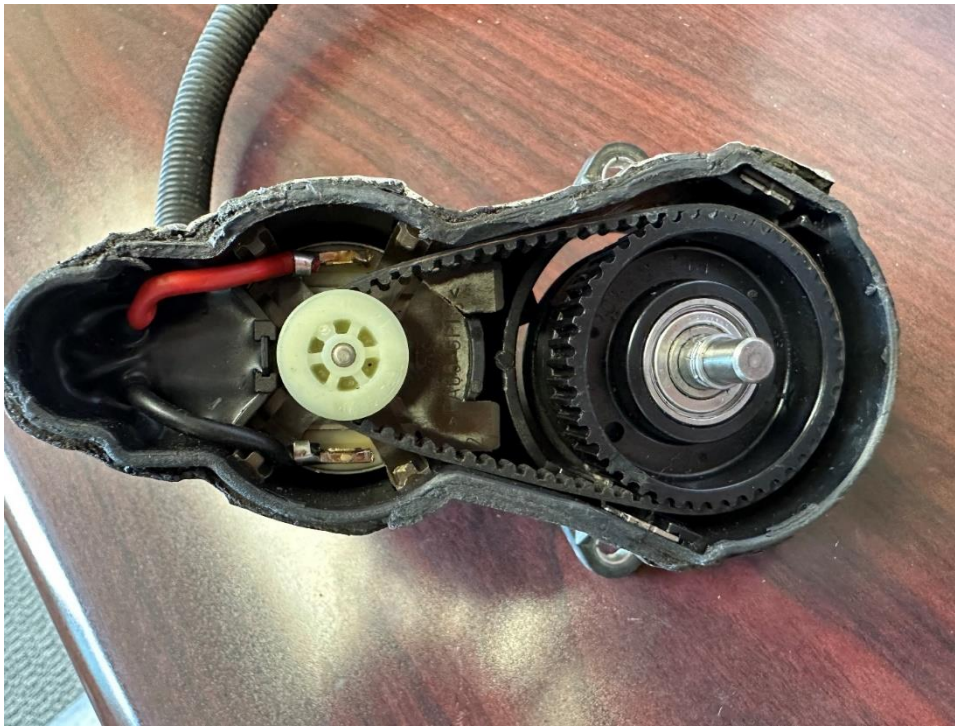
This bushing acts as a vibration isolator between the planetary gear set and the sub-frame. The '415 Patent states that the bushing 322 is a “planetary gear set isolation

bushing 322” and “may be formed from a material chosen to provide a desired spring constant and damping constant.” *See* ’415 Patent at 7:1-3.

7. The presentation states that the SRI prototype design provides for “added sound/vibration isolation.” *See* Ex. 2012 at page 4.

8. The presentation compares test results showing that the SRI prototype design achieved sound/noise reduction relative to a “current design.” *See* Ex. 2012 at pages 12-20. In particular, in a chart on page 20 of Ex. 2012, POC 12 is compared to the “current design” and the Stoneridge prototype obtained better sound/noise reduction across the board.

9. The “current design” referenced in Ex. 2012 was TRW’s current design for an EPBA in 2003. My understanding is the current design was present on at least the Audi A8 at the time of the presentation, which again is 2003. That design, one picture of which is shown below (and additional pictures of which are appended hereto), lacks a sub-frame, and likewise lacks any vibration isolators mounted between the non-existent sub-frame and gear set or motor, for example.



10. Again, as seen in the above image, TRW's EPBA for the Audi A8 circa 2003 lacks a sub-frame and isolators that would be mounted between any sub-frame (which is non-existent) and the motor or gear set.

11. The appendix to this declaration includes photographs of an Audi A8 EPBA from circa 2003 model year. I understand the subject part was obtained by counsel for Patent Owner and the photos were taken by counsel for Patent Owner. These photos are consistent with my recollection of the design of the Audi A8 EPBA from circa 2003 model year.

12. My understanding is that TRW's EPBA for the Audi A8 included a metallic outer cover (see oxidation on exterior of TRW's EPBA, below) adhered to the plastic

actuator housing with a sound absorbing adhesive. The metallic outer cover was used to protect the integrity of the sound absorbing adhesive, which was as an attempt to achieve noise reduction by muffling sound generated from inside the actuator from the outside.



13. The SRI proposed design does not include a metal shield or a sound adsorbing adhesive and achieved better noise reduction than the TRW existing design.

14. I understand and have been warned that willful false statements and the like are punishable by fine or imprisonment, or both (18 U.S.C. § 1001). I declare that all statements made herein of my own knowledge are true and that all statements

made on information and belief are believed to be true, and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under § 1001 of title 18 of the United States Code.

15. I declare under penalty of perjury that the foregoing is true and correct.

A handwritten signature in blue ink, appearing to read "Rolf Patrick", is written over a horizontal line.

By: Rolf Patrick

Dated: 8/22/2023

APPENDIX









