

March 12, 2012

VIA EDGAR AND OVERNIGHT DELIVERY

Loan Lauren P. Nguyen
Special Counsel
Division of Corporation Finance
United States Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549

Re: **Allison Transmission Holdings, Inc.**
Amendment No. 7 to Registration Statement on Form S-1
Filed February 29, 2012
File No. 333-172932

Dear Ms. Nguyen:

On behalf of our client, Allison Transmission Holdings, Inc., a Delaware corporation (the "Company"), and pursuant to the applicable provisions of the Securities Act of 1933, as amended, and the rules promulgated thereunder, please find enclosed for filing with the Securities and Exchange Commission (the "Commission") a complete copy of Amendment No. 6 ("Amendment No. 6") to the above-captioned Registration Statement on Form S-1 of the Company filed with the Commission on March 18, 2011, as amended by Amendment No. 1 filed with the Commission on April 26, 2011 ("Amendment No. 1"), Amendment No. 2 filed with the Commission on May 13, 2011 ("Amendment No. 2"), Amendment No. 3 filed with the Commission on June 17, 2011 ("Amendment No. 3"), Amendment No. 4 filed with the Commission on August 10, 2011 ("Amendment No. 4"), Amendment No. 5 filed with the Commission on November 4, 2011 ("Amendment No. 5"), Amendment No. 6 filed with the Commission on February 17, 2012 ("Amendment No. 6"), Amendment No. 7 filed with the Commission on February 29, 2012 ("Amendment No. 7") and Amendment No. 8 filed with the Commission on March 12, 2012 ("Amendment No. 8") (collectively, the "Registration Statement"). For your convenience we are also providing a copy of Amendment No. 8, marked to show changes against Amendment No. 7, in the traditional non-EDGAR format to you.

On March 8, 2012, you provided a verbal comment to the Company regarding the artwork on the inside cover of the prospectus. You advised us that the staff of the Commission (the "Staff") had requested that the Company include disclosure beneath the pictures on the inside cover of the prospectus specifically stating that, while each of the vehicles pictured does contain an Allison transmission, the Company does not manufacture the vehicles themselves. In response to your comment, we have revised the inside cover of the prospectus to include the following statement, "Each of the vehicles pictured above contains an Allison transmission. However, the Company does not manufacture the vehicles themselves."

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We hope that the foregoing has been responsive to the Staff's comments and look forward to resolving any outstanding issues as quickly as possible. Please do not hesitate to contact me at (202) 637-2258 with any questions or further comments you may have regarding this filing or if you wish to discuss the above.

Sincerely,

/s/ Jason M. Licht

Jason M. Licht
of LATHAM & WATKINS LLP

Enclosures

cc: (via fax)
Eric C. Scroggins
Rachel W. Sheridan