CERTIFICATE OF SERVICE

The undersigned hereby certifies that copies of the foregoing PATENT OWNER'S PRELIMINARY RESPONSE UNDER 37 C.F.R. § 42.107 and all supporting materials (Exhibits 2001-2015) have been served in their entirety by filing this document through the Patent Trial and Appeal Board End to End (PTAB E2E), as well as providing a courtesy copy via e-mail (mchu@mwe.com, bajones@mwe.com, jiazhang@mwe.com) to the following attorneys of record:

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