

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TOYOTA MOTOR CORPORATION,

Petitioner,

v.

BUNKER HILL TECHNOLOGIES, LLC,

Patent Owner.

Case No.: IPR2026-00250

U.S. Patent No. 10,549,648

PATENT OWNER'S PRELIMINARY RESPONSE SUR-REPLY

The Reply does not rebut Patent Owner’s claim construction. It confirms the defect in Petitioner’s position. The claims require a structural drivetrain arrangement in which a gear assembly is “coupled between” the second motor and the transmission device “such that” the second motor’s output bypasses the transmission device. Petitioner cannot escape this architecture by reducing “bypasses” to a free-floating functional concept untethered from claimed structure.

I. The Reply Exceeds the Board’s Authorization.

The Board authorized a 3-page reply “limited to addressing Patent Owner’s claim construction positions.” The Reply ignores that Order. It does not merely construe “bypasses” or “coupled between”; it advances new merits arguments, including revised mappings of Conlon, new POSITA-based “subdivision” theories, and multi-mode anticipation theories for Ortmann. Those arguments attempt to cure defects in the Petition, not construe claim language. They are improper and should be disregarded. Even if considered, they fail.

II. The Reply’s Construction of “Bypasses the Transmission Device” is Wrong Because It Strips the Term From the Claim Language That Gives it Meaning.

The Reply alleges “bypasses” means only that the second motor’s output does not pass through the transmission device. That is not the claim. The claim requires “a gear assembly coupled between the second traction motor and the transmission device such that the output of the second traction motor bypasses the

transmission device.” “Bypasses” is thus defined by an arrangement of components, as reflected in the distinction between coupling “through” the transmission and “directly” to the downstream gear assembly. The Reply improperly turns structural distinction into clutch-state abstraction.

The Reply also reads “between” out of the claims entirely. The claims require a three-component positional relationship: second motor → gear assembly → transmission device. If “bypass” is satisfied whenever power simply avoids some internal transmission element in a given mode, there is no need for a distinct gear assembly coupled “between” the motor and the transmission device at all. The Board should reject such a construction.

III. The Reply Does Not Salvage Conlon.

The Reply’s Conlon argument is not claim construction; it is a retooled anticipation theory. The POPR explained that Conlon discloses a single integrated EVT made up of interconnected planetary gear sets within it, citing Conlon’s own description of interconnected levers and planetary members within a single transmission architecture. The Reply does not dispute this. Instead, it argues a POSITA could “divide” Conlon’s EVT so that one internal planetary gear set becomes the claimed “gear assembly.” That is impermissible.

Anticipation requires disclosure of the claimed elements *as arranged*, not expert-driven partitioning of an integrated structure after the fact. The POPR

identified the defect: Conlon does not disclose a distinct gear assembly positioned between the second motor and a separate transmission device. The Reply still identifies no such topology and merely relabels internal parts of a single EVT.

IV. The Reply Confirms Ortmann Depends On Impermissible Mode-Stitching.

The Reply likewise does not rescue Ortmann. It argues that Ortmann satisfies the claims because in some modes the transmission device is coupled, and in other modes the second motor's output bypasses it. That is not anticipation. It is reconstruction from mutually exclusive operating states.

The POPR explained the defect: in motor-only operation, Ortmann isolates the transmission device; in power-split operation, the transmission device is engaged, and the second motor's output does not bypass it. The Reply never identifies a single configuration in which the claimed "coupled between . . . such that . . . bypasses" exists. Instead, the Reply does exactly what the POPR said it could not do: patch together different modes to manufacture the claim.

The fallback assertion—that some power may pass through the transmission device so long as it does not reach the wheels—fares no better. The patent defines bypass in terms of avoiding the transmission device itself, not in terms of downstream wheel contribution. If the second motor's output traverses the transmission device, it is not bypassing it.

Accordingly, the Director should deny institution.

Respectfully submitted,

Dated: June 5, 2026

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing
PATENT OWNER'S PRELIMINARY RESPONSE SUR-REPLY
was served on June 5, 2026, by filing this document through the PTAB P-
TACTS System as well as by delivering a copy via email directed to the
attorneys of record for the Petitioner at the following addresses:

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The parties have agreed to electronic service in this proceeding.

Respectfully submitted,

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