

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APTIV SERVICES US, LLC
Petitioner,

v.

MICROCHIP TECHNOLOGY INC.
Patent Owner.

Patent No. 9,471,074

Inter Partes Review No. IPR2024-00646

NOTICE OF DISTRICT COURT *MARKMAN* ORDER

Exhibit List

Exhibit Description	Exhibit #
U.S. Patent No. 9,471,074	1001
Declaration of Dr. Michael S. Chen	1002
Prosecution History of U.S. Patent No. 9,471,074	1003
Mohammad Al-Shyoukh, et al., “A Transient-Enhanced Low-Quiescent Current Low-Dropout Regulator with Buffer Impedance Attenuation,” <i>IEEE Journal of Solid-State Circuits</i> , Vol. 42, No. 8 (Aug. 2007) (“Al-Shyoukh”)	1004
U.S. Patent No. 6,400,207 (“Ivanov”)	1005
U.S. Patent No. 6,710,583 (“Stanescu”)	1006
Miranda J. Ha, “A Low-Power, High-Bandwidth LDO Voltage Regulator with No External Capacitor” (May 23, 2008) (“Ha”)	1007
Le Ye, et al., “Highly Power-Efficient Active-RC Filters with Wide Bandwidth-Range Using Low-Gain Push-Pull Opamps,” <i>IEEE Transactions on Circuits and Systems—I: Regular Papers</i> , Vol. 60, No. 1 (Jan. 2013) (“Ye”)	1008
Mikhail Popovich, “High Performance Power Distribution Networks with On-Chip Decoupling Capacitors for Nanoscale Integrated Circuits” (2007) (“Popovich”)	1009
U.S. Patent No. 7,345,547 (“Wang”)	1010
Micrel Inc., MIC59300 Datasheet (Jan. 2009) (“MIC59300”)	1011
U.S. Patent No. 7,644,217 (“Butler”)	1012
U.S. Patent No. 6,046,577 (“Rincon-Mora”)	1013
Gabriel A. Rincon-Mora, “A Low-Voltage, Low Quiescent Current, Low Drop-Out Regulator,” <i>IEEE Journal of Solid-State Circuits</i> , Vol. 33, No. 1 (Jan. 1998) (“Rincon-Mora Paper”)	1014

Gabriel A. Rincon-Mora, “Current Efficient, Low Voltage, Low Dropout Regulators” (Nov. 1996) (“Rincon-Mora Dissertation”)	1015
U.S. Patent No. 6,084,475 (“Rincon-Mora ’475”)	1016
Michael Day, “Understanding Low Drop Out (LDO) Regulators,” <i>2006 Texas Instruments Portable Power Design Seminar</i> (2006) (“Day”)	1017
Chester Simpson, “Linear and Switching Voltage Regulator Fundamental Part I” (2011) (“Simpson”)	1018
U.S. Provisional Patent Application No. 61/780,985	1019
Claim Construction Order (Dkt. No. 126), dated July 15, 2024 in <i>Microchip Technology Inc. v. Aptiv Services, LLC</i> , Case No. 1:23-cv-00778-JDW (D. Del.)	1020 [NEW]
Memorandum (Dkt. No. 125), dated July 12, 2024 in <i>Microchip Technology Inc. v. Aptiv Services, LLC</i> , Case No. 1:23-cv-00307-JDW (D. Del.)	1021 [NEW]

Petitioner Aptiv Services US, LLC notifies the Board that the district court in copending litigation styled *Microchip Technology Inc. v. Aptiv Services, LLC*, Case No. 1:23-cv-00778-JDW (D. Del.) issued a *Markman* order on July 15, 2024 construing the term(s) highlighted in yellow below appearing in one or more Challenged Claims of U.S. Pat. 9,471,074 (the “’074 patent,” EX1001). The *Markman* order is submitted as EX1020. See 37 CFR § 42.200 (“Any prior claim construction determination concerning a term of the claim in a civil action ... that is timely made of record in the inter partes review proceeding will be considered.”); November 2019 Consolidated Trial Practice Guide (“Guide”), 46-47.

<u>Claim Term</u>	<u>Court’s Construction</u>
<i>Disputed Terms</i>	
second voltage rail ’665 Patent, Claim 1	a second voltage rail that is distinct from the third voltage rail but may or may not be distinct from the first voltage rail
an enable/disable function to enable/disable the biasing circuit for reducing standby current ’074 Patent, Claim 1	Not subject to 35 U.S.C. 112 § 6.

wherein the gm-boost circuit enables the current buffer driver to have large gm value ‘074 patent, Claim 4	wherein the gm boost circuit increases the gm value of the current buffer driver to be sufficiently large to provide pole-splitting
low gain and high bandwidth amplifier ‘074 Patent, Claims 8,9	Not indefinite
<i>Agreed-Upon Constructions</i>	
“to charge the [respective] pad capacitance” ‘665 Patent, Claims 1, 6, 14	“to charge the pad capacitance of said physical paid having [respective] capacitance”

Dated: July 19, 2024

By: /s/ Andrew T. Jones

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Certificate of Service (37 C.F.R. § 42.6(e)(4))

I hereby certify that the attached NOTICE OF DISTRICT COURT
MARKMAN ORDER was served as of the below date via e-mail (by agreement) to
the following counsel of record for the Patent Owner:

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