

UNITED STATES PATENT AND TRADEMARK OFFICE

**BEFORE THE OFFICE OF THE UNDER SECRETARY OF COMMERCE
FOR INTELLECTUAL PROPERTY AND DIRECTOR OF THE UNITED
STATES PATENT AND TRADEMARK OFFICE**

INTEL CORPORATION,
Petitioner,

v.

ADVANCED CLUSTER SYSTEMS, INC.,
Patent Owner.

IPR2025-00794
U.S. Patent No. 10,333,768

**PETITIONER'S REQUEST FOR REHEARING UNDER
37 C.F.R. § 42.71(d)**

I. Introduction

Petitioner Intel Corporation (“Intel”) requests rehearing under 37 C.F.R. § 42.71(d) of the Director’s Institution Decision dated August 14, 2025 (Paper 13, “DI”). In that Decision, the Director found that Petitioner’s Discretionary Denial Opposition (Paper 10, “DD Opp.”) “does not explain in sufficient detail why review of the challenged patents is in the interest of national security.” DI, 3. Not only does the Decision misapprehend or overlook the detailed explanations of the implicated national security interests in Petitioner’s briefing (*see* DD Opp. 16-17), but it also was issued prior to the U.S. government’s \$8.9 billion investment in Intel for the purpose of “**strengthening [] national security.**” Ex.1086, 1. This “changed circumstance,” in addition to the misapprehension or oversight of Petitioner’s arguments regarding national security implications, warrant reconsideration of the Decision.

First, eight (8) days after the Director’s denial of institution, the U.S. government invested \$8.9 billion in Intel. Ex.1086, 1. The U.S. Secretary of Commerce, Howard Lutnick, stated that the purpose of the investment was for “**strengthening [] national security.**” Ex.1086, 1. In light of this “changed circumstance,” the Decision’s holding that the requested review is not “in the interest of national security” **now runs counter** to the stated position of the Trump Administration and the Commerce Department that Intel semiconductors,

including those against which Patent Owner seeks an injunction, are essential to national security. Ex.1086, 1. On this basis alone, the Decision should be reconsidered, rehearing should be granted, and the petition should be referred to a merits panel.

Second, the Director misapprehended or overlooked the Opposition's discussion of national security that (i) was narrowly-tailored to specific products accused of infringement; (ii) detailed how specific products are actually used by the U.S. military and intelligence community for national security; and (iii) showed a review of the '768 patent by the PTAB would prevent the '768 patent from being used to seek an injunction against specific products being used for national security (Paper 12, "DD Resp."). *Cf. Taiwan Semiconductor Manufacturing Co. Ltd. v. Marlin Semiconductor Ltd.*, IPR2025-00847, Paper 11 (PTAB Sep. 3, 2025). The Opposition set forth:

- Patent Owner is using the challenged patent to seek **an injunction** against Intel's Xeon semiconductors (*see* DD Opp. 16; DD Resp. 6);
- Intel's Xeon semiconductors are used by the military and governments agencies specifically for national security (*see* DD Opp. 16 (citing Ex.1049, Ex.1050, Ex.1051, Ex.1052, Ex.1053); DD Resp. 6); and
- The Department of Defense has deemed Intel's Xeon semiconductors

“essential to the nation.” (*see* DD Opp. 16-17 (quoting Ex.1054, 2)

(emphasis added); DD Resp. 6).

Based on these oversights or misapprehensions, in addition to the changed circumstances not previously considered, the Director should reconsider the Decision, grant rehearing, and refer the petition to a merits panel.

In summary, when denying institution the Director was not privy to the U.S. government's recent investment in Intel or its position on the importance of Intel semiconductors to national security, and should reconsider the Decision based on these changed circumstances. Further, it was error to deny institution based on a supposed lack of a sufficiently detailed explanation of why review of the '768 patent is in the interest of national security, because Petitioner's Opposition and Response explain in detail (1) that the potential injunction based on the '768 patent against Intel would deprive several national security-focused U.S. government agencies of “essential” Intel products, and (2) that review of the '768 patent is justified to avoid depriving the agencies of these “essential” products based on a potentially invalid patent.

For at least these reasons, Petitioner respectfully requests rehearing.¹

¹ Petitioner does not concede that the Director's new guidance regarding discretionary denial is proper, and Petitioner reserves all rights to challenge that

II. Requests for rehearing are specifically authorized following a discretionary denial of institution by the Director.

When “the Director exercises discretion to deny institution,” a party “may file a request for rehearing ... within 30 days of the Director’s decision.” Interim Director Discretionary Process, <https://www.uspto.gov/patents/ptab/interim-director-discretionary-process> (“DD Process”), §V.C. Further, a “party may raise changed circumstances ... in a request for rehearing” for consideration by the Director. DD Process, §V.D.

III. The Decision runs counter to the U.S. government’s position that Intel semiconductors are critically important to national security.

The U.S. government’s recent investment in Intel, and its statements about the national security implications of that investment, show that instituting an IPR of the ’768 patent is in the interest of national security. Further, the Patent Office’s decision to deny review of the overly broad ’768 patent, which is being used to seek an injunction against Intel semiconductors specifically used by the government for national security, runs counter to the current position of the Trump Administration and the Commerce Department that Intel semiconductors are important to national security.

guidance. *See* DD Opp. 38-43. But even applying that guidance, the Director’s decision in this case calls for correction.

On August 22, 2025 (8 days after the Director's denial of institution²), it was announced that "the United States government will make an \$8.9 billion investment in Intel common stock, reflecting the confidence the Administration has in Intel to **advance key national priorities** and **the critically important role** the company plays in expanding the domestic semiconductor industry." Ex.1086, 1 (emphasis added). Howard Lutnick, the U.S. Secretary of Commerce and head of the Commerce Department, described Intel as "creat[ing] the most advanced chips in the world," and praised the agreement for "**strengthening our national security**." *Id.* (emphasis added). These statements make the current position of the Trump Administration and the Department of Commerce clear: Intel semiconductors are important to the national security of the United States. *See id.*

As explained in Petitioner's Opposition and its later Response to Patent Owner's Reply (collectively "Petitioner's DD Briefing" or the "Briefing"), Patent Owner is using the '768 patent to seek an injunction against Intel semiconductor

² The U.S. government's investment in Intel was announced 8 days after the Director's denial of institution, and thus represents a "changed circumstance" that the Director should consider with the present rehearing request. *See* DD Process, §V.D ("A party may raise changed circumstances, for example, a change in trial date, in a request for rehearing").

products (specifically Intel's Xeon products) used in a wide range of national security applications. *See* DD Opp. 16-17; DD Resp. 6. Because the '768 patent is being used to seek an injunction against products that the government has deemed important to national security, a review of the '768 patent is in the interest of national security. The Decision's holding that such a review is **not** in the interest of national security thus **runs counter** to the current position of the Trump Administration and the Department of Commerce that stresses the importance of Intel semiconductors to the national security of the United States. *See* Ex.1086, 1. The Director should reconsider the Decision, grant rehearing and, consistent with the government's current position, refer the case to a merits panel based on the clear national security interests that would be served by a review of the '768 patent.

IV. The Director misapprehended or overlooked the national security implications of a review of the '768 patent explained in Petitioner's DD Briefing.

In addition to contradicting the assessment of the U.S. government regarding the importance of Intel semiconductors to national security, the Decision misapprehends or overlooks the detailed explanation in Petitioner's DD Briefing of why a review of the '768 patent is in the interest of national security. *See* DD Opp. 16-17; DD Resp. 6.

In the Institution Decision, the Director states that Petitioner's Opposition "does not explain in sufficient detail why review of the challenged patents is in the interest of national security." DI, 3 (citing DD Opp. 16-17). But, in fact, Petitioner's DD Briefing explain at length that Patent Owner is using the '768 patent to seek an injunction against Intel's Xeon products, which are used by national security-focused agencies across the federal government and have been deemed "**essential to the nation**" by the Department of Defense. *See* DD Opp. 16-17 (quoting Ex.1054, 2) (emphasis added); DD Resp. 6 (quoting same). Petitioner's DD Briefing thus shows that review of the '768 patent is in the interest of national security, and the Director misapprehended or overlooked these explanations in denying institution. *See* DD Opp. 16-17; DD Resp. 5-6; DI, 3.

As explained in the Briefing, in the co-pending District Court litigation Patent Owner is seeking an injunction based on the '768 patent against the accused products ("Intel's Xeon processors"), which "would have wide-ranging impact on national security." DD Opp. 16 (citing Ex.1049, 4); DD Resp. 6. The accused products are used by:

- "Naval Air Stations for secure wireless communications to support the National Security Agency." DD Opp. 16 (citing Ex.1050); DD Resp. 6;

- “[T]he Air Force Research Laboratory for modeling advanced air, naval and ground weapons systems.” DD Opp. 16 (citing Ex.1051, 2); DD Resp. 6;
- “US Special Operations Command.” DD Opp. 16 (citing Ex.1052, 2); DD Resp. 6; and
- “[T]he Department of Energy’s Argonne National Laboratory conducting cutting-edge research into fusion reactors, advanced physics, and aerospace engineering.” DD Opp. 16 (citing Ex.1053); DD Resp. 6.

In addition, as explained in the Briefing, the CTO for the Department of Defense stated that Intel’s microelectronics are “**essential to the nation**” and “enable our troops with an advantage by making possible adaptive secure communications, electronic warfare, and long range weapon systems.” Ex.1054, 2 (quoted at DD Opp. 16) (emphasis added); DD Resp. 6 (quoting same).

Accordingly, the Opposition concludes that “it is important to the national security of the United States that Intel has the opportunity to have the merits of the prior art be analyzed with respect to the overly-broad claims of the ’768 patent.” DD Opp. 17; *see* DD Resp. 6.

Thus, Petitioner’s DD Briefing specifically explains that (1) specific accused products (e.g., Intel Xeon processors) are essential to the operation of military branches and agencies for the express purpose of national security, (2) the

accused products face a possible injunction based on the '768 patent in the co-pending litigation, and (3) an IPR of the '768 patent would ensure that the national security interests of the United States are not harmed by an injunction based on a potentially invalid patent against the accused products. *See* DD Opp. 16-17; DD Resp. 5-6. Accordingly, Petitioner's DD Briefing was narrowly-tailored toward particular products and explained in detail how national security warranted review of the '768 patent. *Cf. Taiwan Semiconductor Manufacturing Co. Ltd. v. Marlin Semiconductor Ltd.*, IPR2025-00847, Paper 11 at 3 (PTAB Sep. 3, 2025). The Director misapprehended or overlooked this explanation in Petitioner's DD Briefing, and should reconsider the decision on institution, grant rehearing, and refer the petition to a merits panel.

V. Conclusion

In summary, the U.S. government's recent investment in Intel represents a changed circumstance that shows that an IPR of the '768 patent is in the interest of national security. Further, the Director misapprehended or overlooked the detailed explanation in Petitioner's DD Briefing of why an IPR of the '768 patent is in the interest of national security.

Thus, for these reasons, Petitioner respectfully requests that the Director reconsider the decision on institution, grant rehearing, and refer the petition to a merits panel.

Respectfully submitted,

Date: September 12, 2025

HAYNES AND BOONE, LLP
2801 N. Harwood Street, Ste 2300
Dallas, Texas 75201
Customer No. 27683

/Andrew S. Ehmke/
Andrew S. Ehmke
Lead Counsel for Petitioner
Registration No. 50,271

PETITIONER'S EXHIBIT LIST

Ex.1001	U.S. Patent No. 10,333,768
Ex.1002	Prosecution History of U.S. Patent No. 10,333,768
Ex.1003	Declaration of Dr. Chandrajit L. Bajaj under 37 C.F.R. § 1.68
Ex.1004	<i>Curriculum Vitae</i> of Dr. Chandrajit L. Bajaj
Ex.1005	"MultiMATLAB: Integrating MATLAB with High-Performance Parallel Computing," Menon et al., SC '97: Proceedings of the 1997 ACM/IEEE Conference on Supercomputing 1997
Ex.1006	"MultiMATLAB: MATLAB on Multiple Processors," Trefethen et al., 1996 Computer Science Technical Report, Cornell University 1996
Ex.1007	"RS/6000 SP: Planning Vol. 1, Hardware and Physical Environment," IBM 2001
Ex.1008	"Operation and Use, Volume 1, Using the Parallel Operating Environment," IBM 2001
Ex.1009	"Single program multiple data" in Dictionary of Algorithms and Data Structures, P. E. Black, (accessible at https://www.nist.gov/dads/HTML/singleprogrm.html) December 2004
Ex.1010	The RS/6000 SP Inside Out" to Barrios et al., IBM 1999
Ex.1011	"High Performance Cluster Computing: Programming and Applications," Rajkumar Buyya, Vol. 2, 1999
Ex.1012	"Analysis of 100Mb/s Ethernet for the Whitney Commodity Computing Testbed," Fineberg et al., NAS Technical Report NAS-97-025 1997
Ex.1013	"A Parallel Linear Algebra Server for Matlab-like Environments," G. Morrow et al., SC '98: Proceedings of the 1998 ACM/IEEE Conference on Supercomputing 1998

Petitioner's Request For Rehearing
IPR2025-00794 (U.S. Patent 10,333,768)

Ex.1014	"Parallel MATLAB: Doing It Right," R. Choy et al., Proceedings of the IEEE, Vol. 93, No. 2, 2005
Ex.1015	"Mathematica Parallel Computing Toolkit - Unleash the Power of Parallel Computing," R. Maeder, 2005
Ex.1016	"Mastering MATLAB® 5 – A Comprehensive Tutorial and Reference," D. Hanselman et al., 1998
Ex.1017	"MPI: A Message-Passing Interface Standard," Message Passing Interface Forum, 1994
Ex.1018	"Modern Operating Systems," A.S. Tanenbaum, 2001
Ex.1019	September 26, 2024 Complaint in Western District of Texas against Intel
Ex.1020	Order Granting Joint Motion for Entry of Amended Scheduling Order for <i>Advanced Cluster Systems, Inc. v. Intel Corporation</i> , 7:24-CV-00245 (W.D.TX.)
Ex.1021	Federal Court Statistics
Ex.1022	Advanced Cluster Systems, Inc.'s Preliminary Infringement Contentions, January 22, 2005, <i>Advanced Cluster Systems, Inc. v. Intel Corporation</i> , 7:24-cv-00245 (WDTX)
Ex.1023	Cornell Websites
Ex.1024	"pyMPI—An introduction to parallel Python using MPI," P. Miller 2002
Ex.1025	Amended Joint Claim Construction Chart for <i>Advanced Cluster Systems, Inc. v. NVIDIA Corporation</i> , 1:19-cv-02032 (DDE)
Ex.1026	SC97: High Performance Networking and Computing Conference Website
Ex.1027	Declaration of IEEE
Ex.1028	ACM Digital Library - Citations to Menon

Petitioner's Request For Rehearing
IPR2025-00794 (U.S. Patent 10,333,768)

Ex.1029	Affidavit of Archive.org
Ex.1030	HPC Wire Article about the SC97 High Performance Computing Conference
Ex.1031	Flyer about the SC97 High Performance Computing Conference
Ex.1032	IEEE Xplore Website
Ex.1033	Article about Cornell Theory Center
Ex.1034	ACM Digital Library
Ex.1035	ACM Digital Library - Citations to Menon
Ex.1036	A Beginner's Guide to the IBM SP
Ex.1037	ACM Digital Library - Citations to MPIref
Ex.1038	IBM Website for RS6000
Ex.1039	IBM Website for POE
Ex.1040	ACS Preliminary Response, IPR2021-00019
Ex.1041	Decision Denying Institution, IPR2021-00019
Ex.1042	Sotera Stipulation, <i>Advanced Cluster Systems, Inc. v. Intel Corporation</i> , 7:24-cv-00245 (WDTX)
Ex.1043	U.S. Patent No. 8,082,289
Ex.1044	U.S. Patent No. 8,140,612
Ex.1045	U.S. Patent No. 8,676,877
Ex.1046	"X86 vs. ARM: A Deep Dive into the Architecture," Semicon Electronics, October 28, 2024
Ex.1047	"Intel battles AMD with new data center chips," Cherney et al, Reuters, June 4, 2024

Petitioner's Request For Rehearing
IPR2025-00794 (U.S. Patent 10,333,768)

Ex.1048	"Economic Contributions of Data Centers in the United States, 2017-2023," PWC, Feb. 2025
Ex.1049	"Back & Forth 2: Intel and the Semiconductor Industry," S. Shivakumar et al., Center for Strategic & International Studies, Jan. 13, 2025
Ex.1050	"DoD Extends Contract for ORAN-based Private 5G Networks through 2025," Echostar, March 18, 2024
Ex.1051	"HPE selected to deliver supercomputers for DoD computing modernization program," M. Iriarte, Military Embedded Systems, February 20, 2018
Ex.1052	"ZMicro to Provide Rugged Computers for US Sky Warden Aircraft," R. Manuel, The Defense Post, Oct. 6, 2022
Ex.1053	"Argonne National Laboratory's Aurora 2+ ExaFLOPS System Will Enable New Science and Engineering," Intel
Ex.1054	"What milestone advancements in computer chips mean for the military," Breaking Defense
Ex.1055	Amended Order Assigning the Business of the Court (Judge Moses, Jan. 31, 2025)
Ex.1056	LexMachina docket report
Ex.1057	LexMachina docket report
Ex.1058	USPTO Notice rescinding the June 21, 2022, memorandum entitled "Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation."
Ex.1059	Notice of Filing Date Accorded to Petition, IPR2025-00915
Ex.1060	Notice of Filing Date Accorded to Petition, IPR2025-00914
Ex.1061	Notice of Filing Date Accorded to Petition, IPR2025-00916
Ex.1062	Notice of Filing Date Accorded to Petition, IPR2025-00913

Petitioner's Request For Rehearing
IPR2025-00794 (U.S. Patent 10,333,768)

Ex.1063	Claim Construction Order and Memorandum in Support Thereof, <i>ParkerVision, Inc. v. MediaTek Inc. et al.</i> , 6:22-cv-01163 (WDTX)
Ex.1064	Claim Construction Order, <i>TOT Power Control, S.L. v. AT&T, Inc. et al.</i> , 6:21-cv-00107 (WDTX)
Ex.1065	Claim Construction Order, <i>AlmondNet, Inc. v. Amazon.com, Inc., et al.</i> , No. 6:21-cv-00898-ADA (WDTX)
Ex.1066	Petition for a Writ of Mandamus, <i>In re Sap America, Inc.</i> , 25-118 (Fed. Cir.)
Ex.1067	Decision Granting Institution of <i>Inter Partes</i> Review, IPR2020-01608
Ex.1068	Decision Granting Institution of <i>Inter Partes</i> Review, IPR2021-00075
Ex.1069	Decision Granting Institution of <i>Inter Partes</i> Review, IPR2021-00108
Ex.1070	"FAQs for Interim Processes for PTAB Workload Management" (USPTO)
Ex.1071	September 26, 2024 Complaint in Western District of Texas against AMD
Ex.1072	Termination Due to Settlement After Institution of Trial, IPR2020-01608
Ex.1073	Termination Due to Settlement After Institution of Trial, IPR2021-00075
Ex.1074	Termination Due to Settlement After Institution of Trial, IPR2021-00108
Ex.1075	IPR petition, IPR2025-00795
Ex.1076	Declaration of Pamela Keyl, IPR2023-00042
Ex.1077	March 26, 2025 Memorandum titled "Interim Processes for PTAB Workload Management" (Acting Director Stewart)

Petitioner's Request For Rehearing
IPR2025-00794 (U.S. Patent 10,333,768)

Ex.1078	March 24, 2025 Memorandum titled "Guidance on USPTO's rescission of 'Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation'" (Chief Administrative Patent Judge Boalick)
Ex.1079	Reserved
Ex.1080	Senate hearing on "Winning the AI Race: Strengthening U.S. Capabilities in Computing and Innovation," May 8, 2025
Ex.1081	"2024 Annual Report," AMD
Ex.1082	"Frontier supercomputer hits new highs in third year of exascale," Oak Ridge National Laboratory, Nov. 18, 2024
Ex.1083	"AMD flags \$800 million hit from new US curbs on chip exports to China," Reuters, Apr. 16, 2025
Ex.1084	ACS Preliminary Response, IPR2021-00020
Ex.1085	Trial Institution Document, IPR2021-00020
Ex.1086 (New)	"Intel and Trump Administration Reach Historic Agreement to Accelerate American Technology and Manufacturing Leadership," https://www.businesswire.com/news/home/20250822458848/en/ (August 22, 2025)

CERTIFICATE OF SERVICE

The undersigned certifies that, in accordance with 37 C.F.R. § 42.6(e),
service was made on Patent Owner as detailed below.

Date of service September 12, 2025

Manner of service Electronic Email: dlindner@crowell.com;
jgurka@crowell.com; rey@bhiplaw.com

Documents served **Petitioner's Request for Rehearing**

Persons served David Lindner
Crowell & Moring, LLP
455 N. Cityfront Plaza Drive, Ste. 3600
Chicago, IL 60611

Jon Gurka
Crowell & Moring, LLP.
3 Park Plaza, Floor 20
Irvine, CA 92614

Reynaldo C. Barcelo
Barcelo, Harrison & Walker, LLP
2901 W. Coast Hwy, Ste. 200
Newport Beach, CA 92633

/Andrew S. Ehmke/
Andrew S. Ehmke
Lead Counsel for Petitioner
Registration No. 50,271