

Paper No. ____

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD.,

Petitioner

v.

NETWORK SYSTEM TECHNOLOGIES, LLC,

Patent Owner

U.S. Patent No. 7,373,449

Inter Partes Review No. IPR2024-00338

PATENT OWNER'S OBJECTIONS TO EVIDENCE

Pursuant to 37 C.F.R. § 42.64(b)(1), Patent Owner hereby submits objections to evidence. The Board instituted the present proceeding on June 21, 2024. Pursuant to 37 C.F.R. § 42.64(b)(1), Patent Owner's objections are within ten business days of the institution of the proceeding, i.e., by July 8, 2024. Thus, Patent Owner's evidence objections are timely.

The discussion below identifies the evidence Patent Owner objects to and summarizes the objections, including the Federal Rules of Evidence ("FRE") or other rules that form the basis for the objections.

1. Ex. 1003 - "Declaration of Todd Mowry Ph.D. in Support of Petition for *Inter Partes* Review of U.S. Patent No. 7,373,449"

Patent Owner objects to Ex. 1003 as hearsay being offered for a hearsay purpose and to which no valid exception applies. *See* FED. R. EVID. 801-807. Patent Owner also objects to Ex. 1003 as lacking foundation, assuming facts not in evidence, containing testimony on matters as to which the witness lacks personal knowledge and as being conclusory. Ex. 1003 is objected to under FRE 702 for failing to demonstrate that the declarant is qualified as an expert in the relevant subject-matter. Ex. 1003 is further objected to under FRE 702(b), (c) and (d) as failing to be based upon sufficient facts or data, as the product of unreliable principles and methods and for failing to reliably apply sound principles and methods to the facts of the case. Ex. 1003 is further objected to as irrelevant under

FRE 401 and 402, and as being unfairly prejudicial, confusing and misleading under FRE 403.

Patent Owner objects to paragraphs 31–33, 38, 39, 42, 44, 63–65, 69–70, 71–75, 80–90, 97–101, 103–107, 111–112, 123–128, 135–148, 153–154, 157–159, 163–189, 191–200, and 212–216, under FRE 703, to the extent those paragraphs rely on Exhibits 1005, 1007, 1008, 1009, 1010, 1011, 1012, 1013, 1014, 1015, 1016, 1017, 1018, 1021, 1022, 1023, 1024, 1025, 1026, 1027, 1028, 1029, which Patent Owner objected to as inadmissible evidence.

2. Ex. 1005 - “K. Goossens, et al., *Networks on Silicon: Combining Best-Effort and Guaranteed Services*”

Patent Owner objects to Ex. 1005 as hearsay being offered for a hearsay purpose and to which no valid exception applies. *See* FED. R. EVID. 801-807.

3. Ex. 1007 - “K. Goossens, et al., *Guaranteeing the Quality of Services in Networks on Chip*”

Patent Owner objects to Ex. 1007 as lacking authentication, and as hearsay being offered for a hearsay purpose and to which no valid exception applies. *See* FED. R. EVID. 801-807, 901-902. Petitioner provides no authenticating declaration explaining what Ex. 1007 is, how it was acquired, or how it was made.

4. Ex. 1008 – “Ahmed Amine Jerraya & Wayne Wolf, *Multiprocessor Systems-on-Chips*, Ch. 1 (2005)”

Patent Owner objects to Ex. 1008 as lacking authentication, and as hearsay being offered for a hearsay purpose and to which no valid exception applies. *See*

FED. R. EVID. 801-807, 901-902. Petitioner provides no authenticating declaration explaining what Ex. 1008 is, how it was acquired, or how it was made. Patent Owner objects to Ex. 1008 because it is not sufficiently relevant, and any relevance is outweighed by the risks of confusion, substantial danger of unfair prejudice, and/or misleading the fact finder. *See* Fed. R. Evid. 401-403. Ex. 1008 is cited nowhere in the Petition.

5. Ex. 1009 – “Wael Badawy, *System on Chip: The Challenge and Opportunities*, SYSTEM ON CHIP FOR REAL-TIME APPLICATIONS, 3–16 (2003)”

Patent Owner objects to Ex. 1009 as lacking authentication, and as hearsay being offered for a hearsay purpose and to which no valid exception applies. *See* FED. R. EVID. 801-807, 901-902. Petitioner provides no authenticating declaration explaining what Ex. 1009 is, how it was acquired, or how it was made. Patent Owner objects to Ex. 1009 because it is not sufficiently relevant, and any relevance is outweighed by the risks of confusion, substantial danger of unfair prejudice, and/or misleading the fact finder. *See* FED. R. EVID. 401-403. Ex. 1009 is cited nowhere in the Petition.

6. Ex. 1010 – “Andrei Rădulescu *et al.*, *An Efficient On-Chip Network Interface Offering Guaranteed Services, Shared-Memory Abstraction, and Flexible Network Configuration*, 2 PROC. DESIGN, AUTOMATION AND TEST IN EUR. CONF. & EXHIBITION 878 (2004)”

Patent Owner objects to Ex. 1010 as lacking authentication, and as hearsay being offered for a hearsay purpose and to which no valid exception applies. *See*

FED. R. EVID. 801-807, 901-902. Petitioner provides no authenticating declaration explaining what Ex. 1010 is, how it was acquired, or how it was made. Patent Owner objects to Ex. 1010 because it is not sufficiently relevant, and any relevance is outweighed by the risks of confusion, substantial danger of unfair prejudice, and/or misleading the fact finder. *See* FED. R. EVID. 401-403. Ex. 1010 is cited nowhere in the Petition.

7. Ex. 1011 – “A. Campbell *et al.*, *Integrated Quality of Service for Multimedia Communications*, Computing Dept. Lancaster University”

Patent Owner objects to Ex. 1011 as lacking authentication, and as hearsay being offered for a hearsay purpose and to which no valid exception applies. *See* FED. R. EVID. 801-807, 901-902. Petitioner provides no authenticating declaration explaining what Ex. 1011 is, how it was acquired, or how it was made. Patent Owner objects to Ex. 1011 because it is not sufficiently relevant, and any relevance is outweighed by the risks of confusion, substantial danger of unfair prejudice, and/or misleading the fact finder. *See* FED. R. EVID. 401-403. Ex. 1011 is cited nowhere in the Petition.

8. Ex. 1012 – “D. Kandlur *et al.*, *Real-Time Communication in Multihop Networks*, IEEE TRANSACTIONS ON PARALLEL AND DISTRIBUTED SYSTEMS, VOL. 5, NO. 10 (1994)”

Patent Owner objects to Ex. 1012 as lacking authentication, and as hearsay being offered for a hearsay purpose and to which no valid exception applies. *See*

FED. R. EVID. 801-807, 901-902. Petitioner provides no authenticating declaration explaining what Ex. 1012 is, how it was acquired, or how it was made. Patent Owner objects to Ex. 1012 because it is not sufficiently relevant, and any relevance is outweighed by the risks of confusion, substantial danger of unfair prejudice, and/or misleading the fact finder. *See* FED. R. EVID. 401-403. Ex. 1012 is cited nowhere in the Petition.

9. Ex. 1013 – “Jose Duato, *et al.*, *Interconnection Networks: An Engineering Approach*, IEEE COMPUTER SOCIETY PRESS, Ch. 7 (1997)”

Patent Owner objects to Ex. 1013 as lacking authentication, and as hearsay being offered for a hearsay purpose and to which no valid exception applies. *See* FED. R. EVID. 801-807, 901-902. Petitioner provides no authenticating declaration explaining what Ex. 1013 is, how it was acquired, or how it was made. Patent Owner objects to Ex. 1013 because it is not sufficiently relevant, and any relevance is outweighed by the risks of confusion, substantial danger of unfair prejudice, and/or misleading the fact finder. *See* FED. R. EVID. 401-403. Ex. 1013 is cited nowhere in the Petition.

10. Ex. 1014 – “Axel Jantsch and Hannu Tenhunen, *Networks on Chip*, Ch. 1-3 (2003)”

Patent Owner objects to Ex. 1014 as hearsay being offered for a hearsay purpose and to which no valid exception applies. *See* FED. R. EVID. 801-807. Patent Owner objects to Ex. 1014 because it is not sufficiently relevant, and any relevance

is outweighed by the risks of confusion, substantial danger of unfair prejudice, and/or misleading the fact finder. *See* FED. R. EVID. 401-403. Ex. 1014 is cited nowhere in the Petition.

11. Ex. 1015 – “David E. Culler and Jaswinder Pal Singh, *Parallel Computer Architecture, A Hardware/Software Approach*, Ch. 10 (1999)”

Patent Owner objects to Ex. 1015 as lacking authentication, and as hearsay being offered for a hearsay purpose and to which no valid exception applies. *See* FED. R. EVID. 801-807, 901-902. Petitioner provides no authenticating declaration explaining what Ex. 1015 is, how it was acquired, or how it was made. Patent Owner objects to Ex. 1015 because it is not sufficiently relevant, and any relevance is outweighed by the risks of confusion, substantial danger of unfair prejudice, and/or misleading the fact finder. *See* FED. R. EVID. 401-403. Ex. 1015 is cited nowhere in the Petition.

12. Ex. 1016 – “Hugo De Man, *System-on-chip design: Impact on Education and Research*, IEEE DESIGN & TEST OF COMPUTERS, Vol. 16, No. 3, pp. 11-19 (July-Sept. 1999)”

Patent Owner objects to Ex. 1016 as lacking authentication, and as hearsay being offered for a hearsay purpose and to which no valid exception applies. *See* FED. R. EVID. 801-807, 901-902. Petitioner provides no authenticating declaration explaining what Ex. 1016 is, how it was acquired, or how it was made. Patent Owner objects to Ex. 1016 because it is not sufficiently relevant, and any relevance is

outweighed by the risks of confusion, substantial danger of unfair prejudice, and/or misleading the fact finder. *See* FED. R. EVID. 401-403. Ex. 1016 is cited nowhere in the Petition.

13. Ex. 1017 – “ETSI Technical Report, Trans European Trunked Radio (TETRA) system; Technical requirements specification, Part 2: Packet Data Optimised (PDO) systems (January 1994)”

Patent Owner objects to Ex. 1017 as lacking authentication, and as hearsay being offered for a hearsay purpose and to which no valid exception applies. *See* FED. R. EVID. 801-807, 901-902. Petitioner provides no authenticating declaration explaining what Ex. 1017 is, how it was acquired, or how it was made. Patent Owner objects to Ex. 1017 because it is not sufficiently relevant, and any relevance is outweighed by the risks of confusion, substantial danger of unfair prejudice, and/or misleading the fact finder. *See* FED. R. EVID. 401-403. Ex. 1017 is cited nowhere in the Petition.

14. Ex. 1018 - “U.S. Patent No. 5,828,658”

Patent Owner objects to Ex. 1018 because it is not sufficiently relevant, and any relevance is outweighed by the risks of confusion, substantial danger of unfair prejudice, and/or misleading the fact finder. *See* FED. R. EVID. 401-403. Ex. 1018 is cited nowhere in the Petition.

15. Ex. 1021 - “E. Rijpkema *et al.*, *Trade-offs in the Design of a Router with Both Guaranteed and Best-Effort Services for Networks on Chip*, 150 IEEE PROC.-COMPUT. DIGIT. TECH. 294-302 (2003)”

Patent Owner objects to Ex. 1021 as lacking authentication, and as hearsay being offered for a hearsay purpose and to which no valid exception applies. *See* FED. R. EVID. 801-807, 901-902. Petitioner provides no authenticating declaration explaining what Ex. 1021 is, how it was acquired, or how it was made. Patent Owner objects to Ex. 1021 because it is not sufficiently relevant, and any relevance is outweighed by the risks of confusion, substantial danger of unfair prejudice, and/or misleading the fact finder. *See* FED. R. EVID. 401-403. Ex. 1021 is cited nowhere in the Petition.

16. Ex. 1022 - “M. Sgroi *et al.*, *Addressing the System-on-a-Chip Interconnect Woes Through Communication-Based Design* (2001)”

Patent Owner objects to Ex. 1022 as lacking authentication, and as hearsay being offered for a hearsay purpose and to which no valid exception applies. *See* FED. R. EVID. 801-807, 901-902. Petitioner provides no authenticating declaration explaining what Ex. 1022 is, how it was acquired, or how it was made. Patent Owner objects to Ex. 1022 because it is not sufficiently relevant, and any relevance is outweighed by the risks of confusion, substantial danger of unfair prejudice, and/or misleading the fact finder. *See* FED. R. EVID. 401-403. Ex. 1022 is cited nowhere in the Petition.

17. Ex. 1023 - “Yasusi Kanada, *A Representation of Network Node QoS Control Policies Using Rule-based Building Blocks* (2000)”

Patent Owner objects to Ex. 1023 as lacking authentication, and as hearsay being offered for a hearsay purpose and to which no valid exception applies. *See* FED. R. EVID. 801-807, 901-902. Petitioner provides no authenticating declaration explaining what Ex. 1023 is, how it was acquired, or how it was made. Patent Owner objects to Ex. 1023 because it is not sufficiently relevant, and any relevance is outweighed by the risks of confusion, substantial danger of unfair prejudice, and/or misleading the fact finder. *See* FED. R. EVID. 401-403. Ex. 1023 is cited nowhere in the Petition.

18. Ex. 1024 - “IEEE 100, *The Authoritative Dictionary of IEEE Standards Terms*, p. 344”

Patent Owner objects to Ex. 1024 as lacking authentication, and as hearsay being offered for a hearsay purpose and to which no valid exception applies. *See* FED. R. EVID. 801-807, 901-902. Petitioner provides no authenticating declaration explaining what Ex. 1024 is, how it was acquired, or how it was made. Patent Owner objects to Ex. 1024 because it is not sufficiently relevant, and any relevance is outweighed by the risks of confusion, substantial danger of unfair prejudice, and/or misleading the fact finder. *See* FED. R. EVID. 401-403. Ex. 1024 is cited nowhere in the Petition.

19. Ex. 1025 - “Declaration of Gordon MacPherson regarding K. Goossens, et al., *Network on Silicon: Combining Best-Effort and Guaranteed Services*”

Patent Owner objects to Ex. 1025 as hearsay being offered for a hearsay purpose and to which no valid exception applies. *See* FED. R. EVID. 801-807. To the extent Ex. 1025 purports to offer opinions on the accessibility of “K. Goossens, et al., *Networks on Silicon: Combining Best-Effort and Guaranteed Services*,” Patent Owner objects to Ex. 1025 as not being the product of reliable facts or data. Patent Owner further objects to Ex. 1025 as lacking foundation, assuming facts not in evidence, containing testimony on matters as to which the witness lacks personal knowledge, and as being conclusory. FED. R. EVID. 602, 701–703.

Patent Owner objects to Exhibit A of Ex. 1025 because it does not comply with the Board’s rules governing the form of evidence. 37 C.F.R. § 42.63. Combined documents are not permitted. 37 C.F.R. § 42.63(d); 37 C.F.R. § 42.63(a)(3). Patent Owner objects to Exhibit A as hearsay offered for a hearsay purpose and to which no valid exception applies. *See* FED. R. EVID. 801-807.

20. Ex. 1026 - “IEEE Bibliographic Data Regarding K. Goossens, et al., *Networks on Silicon: Combining Best-Effort and Guaranteed Services*”

Patent Owner objects to Ex. 1026 as lacking authentication, and as hearsay being offered for a hearsay purpose and to which no valid exception applies. *See* FED. R. EVID. 801-807, 901-902. Petitioner provides no authenticating declaration

explaining what Ex. 1026 is, how it was acquired, or how it was made. Patent Owner objects to Ex. 1026 because it is not sufficiently relevant, and any relevance is outweighed by the risks of confusion, substantial danger of unfair prejudice, and/or misleading the fact finder. *See* FED. R. EVID. 401-403. Ex. 1026 is cited nowhere in the Petition.

21. Ex. 1027 - “Declaration of the University of Texas at Austin Libraries regarding ‘Networks on Chip’”

Patent Owner objects to Ex. 1027 as hearsay being offered for a hearsay purpose and to which no valid exception applies. *See* FED. R. EVID. 801-807. To the extent Ex. 1027 purports to offer opinions on the accessibility of “Networks on Chip” edited by Axel Jantsch and Hannu Tenhunen, Patent Owner objects to Ex. 1027 as not being the product of reliable facts or data. Patent Owner further objects to Ex. 1027 as lacking foundation, assuming facts not in evidence, containing testimony on matters as to which the witness lacks personal knowledge, and as being conclusory. FED. R. EVID. 602, 701–703.

Patent Owner objects to Exhibit A of Ex. 1027 because it does not comply with the Board’s rules governing the form of evidence. 37 C.F.R. § 42.63. Combined documents are not permitted. 37 C.F.R. § 42.63(d); 37 C.F.R. § 42.63(a)(3). Patent Owner objects to Exhibit A as hearsay offered for a hearsay purpose and to which no valid exception applies. *See* FED. R. EVID. 801-807.

Patent Owner objects to Exhibit B of Ex. 1027 because it does not comply with the Board's rules governing the form of evidence. 37 C.F.R. § 42.63. Combined documents are not permitted. 37 C.F.R. § 42.63(d); 37 C.F.R. § 42.63(a)(3). Patent Owner objects to Exhibit B as hearsay offered for a hearsay purpose and to which no valid exception applies. *See* FED. R. EVID. 801-807.

22. Ex. 1028 - “SpringerLink Bibliographic Data Regarding ‘Networks on Chip’”

Patent Owner objects to Ex. 1028 as lacking authentication, and as hearsay being offered for a hearsay purpose and to which no valid exception applies. *See* FED. R. EVID. 801-807, 901-902. Petitioner provides no authenticating declaration explaining what Ex. 1028 is, how it was acquired, or how it was made.

23. Ex. 1029 - “William J. Dally and Brian Towles, *Route Packets, Not Wires: On-Chip Interconnection Networks*, Computer Systems Laboratory Stanford University (2001)”

Patent Owner objects to Ex. 1029 as lacking authentication, and as hearsay being offered for a hearsay purpose and to which no valid exception applies. *See* FED. R. EVID. 801-807, 901-902. Petitioner provides no authenticating declaration explaining what Ex. 1029 is, how it was acquired, or how it was made. Patent Owner objects to Ex. 1029 because it is not sufficiently relevant, and any relevance is outweighed by the risks of confusion, substantial danger of unfair prejudice, and/or misleading the fact finder. *See* FED. R. EVID. 401-403. Ex. 1029 is cited nowhere in the Petition.

24. Ex. 1031 - “Plaintiff Network System Technologies, LLC’s Responses to Qualcomm’s First Set of Requests for Admission (Nos. 1-9)”

Patent Owner objects to Ex. 1015 as hearsay being offered for a hearsay purpose and to which no valid exception applies. *See* FED. R. EVID. 801-807. Patent Owner further objects to Ex. 1015 as improper evidence because a litigant’s response to a request for admission may not be against that litigant in a proceeding other than the proceeding in which the response was made. *See* FED. R. CIV. P. 16.

Respectfully submitted,

Dated: July 3, 2024

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing Patent Owner's Objections to Evidence was served on July 3, 2024, upon the following parties via electronic service:

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