UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NOKIA OF AMERICA CORPORATION,

Petitioner

v.

ALEXANDER SOTO AND WALTER SOTO,

Patent Owner

Case: IPR2023-00682

U.S. Patent No. 10,771,181

CORRECTED REPLY TO PATENT OWNERS' RESPONSE TO PETITIONER'S REQUEST FOR DIRECTOR REVIEW

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Patent Trial and Appeal Board
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STATUTES

35 U.S.C. § 325(d) .....passim

LIST OF EXHIBITS

Exhibit	Short Name	Description
Ex. 1001	’181 Patent	U.S. Patent No. 10,771,181
Ex. 1002	’181 File History	File History of U.S. Patent No. 10,771,181
Ex. 1003	Prucnal Declaration	Declaration of Dr. Paul Prucnal
Ex. 1004	Prucnal CV	*Curriculum Vitae* of Dr. Paul Prucnal
Ex. 1005	Agazzi ’640	U.S. Patent No. 6,879,640
Ex. 1006	Wei	U.S. Patent No. 6,873,800
Ex. 1007		[Reserved]
Ex. 1008		[Reserved]
Ex. 1009	Agazzi ’341	U.S. Patent No. 7,933,341
Ex. 1010	Jiang	U.S. Patent No. 6,665,498
Ex. 1011	Liu	U.S. Patent No. 6,005,694
Ex. 1012	Poplawski	U.S. Patent No. 5,879,173
Ex. 1013	Lavoie	Renaud Lavoie, *The Evolution of the Pluggable Module*, Broadcast Engineering (2012)
Ex. 1014	SFP MSA	SFF Committee, INF-8074i Specification for SFP (Small Formfactor Pluggable) Transceiver, Rev. 1.0 (May 12, 2001)
Ex. 1015	Leon-Garcia	Alberto Leon-Garcia & Indra Widjaja, *Communication Networks Fundamental Concepts and Key Architectures* (2000)

Exhibit	Short Name	Description
Ex. 1016	Ramaswami	Rajiv Ramaswami & Kumar Sivarajan, *Optical Networks: A Practical Perspective* (2d ed. 2002)
Ex. 1017	Senior	John Senior, *Optical Fiber Communications: Principles and Practice* (1985)
Ex. 1018	Papadias	C. B. Papadias & D. T. M. Slock, *On the Decision-Directed Equalization of Constant Modulus Signals*, Proceedings of 1994 28th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, USA, pp. 1423-1427, Vol. 2 (1994)
Ex. 1019	Feldman	U.S. Patent No. 6,295,272
Ex. 1020	Martin	Martin P. Clark, *Wireless Access Networks: Fixed Wireless Access and WLL Networks—Design and Operation* (2000)
Ex. 1021		[Reserved]
Ex. 1022		[Reserved]
Ex. 1023	’795 Patent	U.S. Patent No. 9,887,795
Ex. 1024	’795 File History	File History of U.S. Patent No. 9,887,795
Ex. 1025	’723 Patent	U.S. Patent No. 10,263,723
Ex. 1026	’723 File History	File History of U.S. Patent No. 10,263,723
Ex. 1027	DCO	Doc. No. 58, Docket Control Order, *NextGen Innovations, LLC v. Fujitsu Network Communications, Inc. et al.*, No. 2:22-cv-00307-JRG-RSP (E.D. Tex.) (consolidated cases)
Ex. 1028	Feuerstraeter	U.S. Patent No. 7,286,557

Exhibit	Short Name	Description
Ex. 1029		[Reserved]
Ex. 1030	Caseload	U.S. District Court – Judicial Caseload Profile (Sept. 2022)
Ex. 1031	181 Patent Infringement Contentions	NextGen's Infringement Contentions Against Petitioner for the '181 Patent in *NextGen Innovations, LLC v. Nokia of America Corporation et al.*, No. 2:22-cv-00309-JRG-RSP (E.D. Tex.)
Ex. 1032	488 Spec	U.S. Provisional Application No. 60/480,488
Ex. 1033	Samueli	Henry Samueli, Jeffrey Putnam, Mehdi Hatamian, *QAM-Based Transceiver Solutions for Full-Duplex Gigabit Ethernet Over 4 Pairs of UTP-5 Cable*, Broadcom Corporation Presentation (Nov. 1996)
Ex. 1034	Stevens Declaration	Declaration of M. Scott Stevens dated September 14, 2023
Ex. 1035	Consolidation Order	Consolidation Order, *NextGen Innovations, LLC v. Nokia of America Corporation, et al.*, No. 2:22-cv-00307-JRG-RSP, Dkt. No. 22
Ex. 1036	Hearing Transcript	*Nokia of America Corporation v. Soto et al.*, IPR2023-00960, Ex. 2004 (PTAB Aug. 29, 2023)
Ex. 1037	PTAB Order	*Nokia of America Corporation v. Soto et al.*, IPR2023-00960, Paper 8 (PTAB Aug. 26, 2023)

I. INTRODUCTION

Patent Owners' Response (Paper 14, "Response") admits that Petitioner's references are different than the art cited by the Examiner and noted the "distinction" identified in the Petition, which further demonstrates that the Board's actions constitute an abuse of discretion. And Patent Owners fail to rebut the primary reason for Petitioner's request—the Board abused its discretion by relying on the claim limitations covered by the references, rather than the references themselves.

II. PETITIONER'S REFERENCES ARE MATERIALLY DIFFERENT FROM THOSE CITED DURING PROSECUTION

Petitioner's references, Agazzi '341, Agazzi '640, and Wei, are materially different than the art cited and considered, and Patent Owners expressly admit inasmuch in their Response. Patent Owners concede that Petitioner "presented" a "distinction" found in the Agazzi references: the transmitter and receiver are contained on an integrated circuit, achieving certain size benefits absent in the references cited by the Examiner. Paper 14, 5-6. For example, Brede describes a line card with distinct transmitter and receiver components located separately from one another and connected to an OLT via coaxial cable. Paper 11, 2-4; Ex. 1002, 174-78, 148-52. Patent Owners' argument that an "integrated circuit" is not materially different than a line card (Paper 14, 7) is plainly incorrect at least because the two are dramatically different in size, vary greatly in their construction, and are positioned differently, all material considerations given the pluggable technology at

hand. Ex. 1003, ¶¶74-80. Further, as Patent Owner argued during prosecution, Brede fails to disclose a transceiver, let alone a transceiver *integrated* into the device as in the Agazzi references. Paper 11, 4-5; *see* Ex. 1002, 70, 121-128.

Moreover, Patent Owners' representation that Aronson discloses an "integrated circuit" is incorrect. Patent Owners' citations fail to demonstrate that Aronson discloses an integrated circuit as in the Agazzi references. Paper 14, 7; *see also* POPR, 45-46 (citing Ex. 2002 at 112-13, 146-47 and Ex. 2003 at [0045]).

Similarly, Patent Owners admit that Wei is materially different, emphasizing Wei's "halve-and-stack technique" and distinguishing it from previous references. Paper 14, 13. It is irrelevant for purposes of § 325(d) whether Wei's distinctions make it possible to place Agazzi's system on a pluggable—Wei itself is undeniably (and admittedly) *different* from previously considered references, such as Aronson. Furthermore, Wei does not merely disclose the "pluggable limitation" as Aronson did. Wei *actually teaches* how to package optoelectrical components in a small form-factor pluggable. Paper 11, 14-15; *see also* Ex. 1006, 2:28-35, Figs. 1-5.

III. THE BOARD FAILED TO PROPERLY CONSIDER OR ADDRESS PETITIONER'S ARGUMENTS IN ITS DECISION

Buried deep in Patent Owners' Response is its actual—albeit weak—rebuttal to Petitioner's contention in its Request for Rehearing. Misquoting Petitioner's Request, Patent Owners claim Petitioner's entire position is that the Board erred because it determined the references "cover the same limitations as prior

combinations." Paper 14, 9. Not true. Petitioner, instead, takes issue with the Institution Decision's erroneous failure to provide adequate consideration of Petitioner's arguments or explanation. *See* Paper 11, 8-15. The Board's analysis focused almost entirely on the similarity of the *claim limitations* covered by the references, rather than assessing the similarities and differences of the *references themselves*. The analysis thus failed to address the material differences and resulting material differences in the motivation-to-combine analyses. *Id.* Therein lies the Board's abuse of discretion.

Patent Owners' argument that a reversal of the Board's decision would make § 325(d) "meaningless" simply fails. Petitioner is not asking Director to disregard § 325(d) but to uphold its purpose. Quoting Patent Owners, "§ 325(d) expressly applies to reference[s] and arguments that are *substantially similar* to those already addressed." Paper 14, 14. Precisely. The Board here *failed* to address the *multiple material differences* (i.e., the fact that the references are <u>not</u> substantially similar) identified by Petitioner and supported in the record. As discussed *supra* §II, Patent Owner now even admits that there are substantial differences between Petitioner's art and the references considered by the Examiner during prosecution.

IV. <u>PATENT OWNERS' ADDITIONAL ARGUMENTS ARE LEGALLY IRRELEVANT</u>

Patent Owners present a number of irrelevant arguments to distract from the fact that the Board failed to properly consider Petitioner's arguments under § 325(d).

First, Patent Owners assert that "Petitioner has no evidence showing [the Examiner's withdrawal of his objection to the claims in view of Brede] was error." Paper 14, 3. Patent Owners misunderstand: while Petitioner presented an error, Petitioner's primary objections are not related to whether the Examiner erred during prosecution, (i.e., the second prong of § 325(d)), but whether the references and arguments during prosecution are different from those in the Petition (i.e., the first prong of § 325(d)).

Moreover, Patent Owners' repeated analysis related to the impossibility of combining Petitioner's primary and secondary references is not only irrelevant for purposes of § 325(d) but is also incorrect. Patent Owners' Response, made up entirely of attorney argument, fails to account for the knowledge of a POSITA in combining references, merely arguing that such a combination of line cards with m-ary processing capabilities and pluggable form-factor modules is "impossible." *Id*. at 3. But the lack of enabling disclosure and the mere existence of the '181 Patent contradicts Patent Owners' own position that such a combination is "impossible." *See Smith & Nephew, Inc. v. Rea*, 721 F.3d 1371, 1381-82 (Fed. Cir. 2013) (stating in response to a similar argument: "[t]his naturally raises the question of how [patent owner] managed to make such a combination work").

Further, Patent Owners again misrepresent Petitioner's argument: Petitioner does not assert that any combination was *impossible*, but instead that the *inventors* of the '181 Patent failed to properly enable the small-form pluggable described in

the claims and were not in possession of the invention at the time of the claimed priority date. If enabled, the lack of disclosure undercuts Patent Owners' arguments. Regardless, these arguments on the merits further underscore the need for a decision on the merits.

Lastly, any reference to Agazzi '997 in an effort to argue that the Agazzi references used in the Petition were previously considered is simply wrong. Agazzi '997 was never cited or relied upon and does not appear on the face of the '181 Patent. Ex. 1001. Nonetheless, the Agazzi references are materially different. Paper 11, 10-13. Absent from Agazzi '997 are material disclosures, such as Figure 22, that are crucial to the motivation to combine analysis presented in the Petition. *Compare* Ex. 1009, Fig. 22; *with* Ex. 2005, Figs. 1-14; *see* Paper 1, 44.

V. CONCLUSION

Petitioner respectfully requests that the Director vacate the § 325(d) denial.

Date: February 13, 2024

By: / M. Scott Stevens /
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CERTIFICATE OF SERVICE

The undersigned certifies that Petitioner served a copy of the foregoing CORRECTED REPLY TO PATENT OWNERS' RESPONSE TO PETITIONER'S REQUEST FOR DIRECTOR REVIEW by filing this document through the P-TACTS Filing System as well as sending a copy via electronic service (as agreed by counsel for Patent Owners) on the following:

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