2018-2008, -2009, -2010, -2011

In the

United States Court of Appeals

for the

Federal Circuit

EVOLVED WIRELESS LLC,

Appellant,

v.

ZTE (USA) INC., HTC CORPORATION, HTC AMERICA, INC., SAMSUNG ELECTRONICS CO., LTD., SAMSUNG ELECTRONICS AMERICA, INC., APPLE INC., MICROSOFT CORPORATION, MICROSOFT MOBILE OY, MICROSOFT MOBILE INC.,

Appellees.

UNITED STATES,
Intervenor.

Appeals from the United States Patent and Trademark Office, Patent Trial and Appeal Board in Nos. IPR2016-00757, IPR2016-01228, IPR2016-01229, and IPR2016-01345

CORRECTED BRIEF OF APPELLEES ZTE (USA) INC., HTC CORPORATION, HTC AMERICA, INC., SAMSUNG ELECTRONICS CO., AND SAMSUNG ELECTRONICS AMERICA, INC.

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CERTIFICATE OF INTEREST

Counsel for Appellee ZTE (USA) Inc. certifies the following:

1. The full name of every party or amicus curiae represented by me is:

ZTE (USA) Inc.

2. The name of the real party in interest (if the party named in the caption is not the real party in interest) represented by me is:

ZTE (USA) Inc.

3. All parent corporations and any publicly held companies that own 10 percent or more of the stock of the party or amicus curiae represented by me are:

ZTE Corporation

4. The names of all law firms and the partners or associates that appeared for the party or amicus curiae now represented by me in the trial court or agency or are expected to appear in this court are:

McDermott Will & Emery LLP: Charles M. McMahon, Jay H. Reiziss, Brian A. Jones, Thomas DaMario

5. The title and number of any case known to counsel to be pending in this or any other court or agency that will directly affect or be directly affected by this court's decision in the pending appeal. See Fed. Cir. R. 47. 4(a)(5) and 47.5(b).

Patent Trial and Appeal Board in *Inter Partes* Review No. IPR2016-00757 & IPR2016-01345; Evolved Wireless LLC v. ZTE (USA) Inc. Case No. 1:15-cv-00546-SRF; Evolved Wireless LLC v. HTC Corporation, et al. Case No. 1:15-cv-00543-JFB-SRF; Evolved Wireless LLC v. Apple, Inc. Case No. 1:15-cv-00542-JFB-SRF; Evolved Wireless LLC v. Motorola Mobility LLC. Case No. 1:15-cv-00544-JFB-SRF; Evolved Wireless LLC v. Samsung Electronics Co., et al. Case No.

1:15-cv-00545-JFB-SRF; and Evolved Wireless LLC v. Microsoft Corporation, et al. Case No. 1:15-cv-00547-JFB-SRF

Dated: March 12, 2019

Respectfully submitted,

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2. The name of the real party in interest (if the party named in the caption is not the real party in interest) represented by me is:

None

3. All parent corporations and any publicly held companies that own 10 percent or more of the stock of the party or amicus curiae represented by me are:

None (for HTC Corporation)
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LLC v. Motorola Mobility LLC. Case No. 1:15-cv-00544-JFB-SRF;
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2. The name of the real party in interest (if the party named in the caption is not the real party in interest) represented by me is:

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3. All parent corporations and any publicly held companies that own 10 percent or more of the stock of the party or amicus curiae represented by me are:

None (for Samsung Electronics Co., Ltd.)
Samsung Electronics Co., Ltd. (for Samsung Electronics America, Inc.)

4. The names of all law firms and the partners or associates that appeared for the party or amicus curiae now represented by me in the trial court or agency or are expected to appear in this court are:

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5. The title and number of any case known to counsel to be pending in this or any other court or agency that will directly affect or be directly affected by this court's decision in the pending appeal. See Fed. Cir. R. 47. 4(a)(5) and 47.5(b).

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STATEMENT OF RELATED CASES

No prior appeal from this case has been before this or any other appellate court, nor is there any other currently pending appeal from this proceeding.

In addition to each IPR proceeding underlying these consolidated appeals, the following cases will be directly affected by the Court's decision in these appeals, as each includes the same patent at issue in this appeal: *Evolved Wireless, LLC v. Apple Inc.*, 15-cv-00542 (D. Del.); *Evolved Wireless, LLC v. HTC Corp.*, 15-cv-00543 (D. Del.); *Evolved Wireless, LLC v. Lenovo Grp. Ltd.*, 15-cv-00544 (D. Del.); *Evolved Wireless, LLC v. Samsung Elecs. Co.*, 15-cv-00545 (D. Del.); *Evolved Wireless, LLC v. ZTE Corp.*, 15-cv-00546 (D. Del.); *Evolved Wireless, LLC v. Microsoft Corp.*, 15-cv-00547 (D. Del.).

STATEMENT OF JURISDICTION

These consolidated appeals arise from four final decisions by the Patent Trial and Appeal Board in *inter partes* review proceedings. The Board has jurisdiction to conduct those proceedings under the provisions of 35 U.S.C. §§ 311–319.

This Court has jurisdiction over these consolidated appeals under 28 U.S.C. § 1295(a)(4)(A) and 35 U.S.C. § 141(c), as they are appeals from the Board's final decisions in *inter partes* reviews.

Evolved's notices of appeal in each proceeding were timely. The Board denied rehearing in each proceeding on March 26, 2018, (Appx42–49, Appx92–99, Appx143–150), and Evolved filed its notices of appeal on May 25, 2018, within the 63-day deadline set by the applicable statutes and regulations. *See* 35 U.S.C. § 142; 37 C.F.R. § 90.3(a)(1).

Each appeal is from a final order by the Board, as each is from the Board's final written decision in the *inter partes* review and subsequent denial of rehearing.

STATEMENT OF THE ISSUES

1. Whether the Board correctly determined the challenged claims were obvious where the sole dispute is the Board's factual finding over what a reference discloses, and that finding is well-supported by the reference itself and expert testimony.

2. Whether the Board abused its discretion by giving no weight to Evolved's unsworn expert submission where the Board was simply enforcing its regulations that require witness testimony to be under oath, and Evolved made no effort to submit a corrected, sworn declaration.

3. Whether IPR proceedings violate the takings clause or pose a "retroactivity" problem under the due process clause.

INTRODUCTION

This appeal arises from four *inter partes* review proceedings in which the Board found claims directed to an alleged improvement in the LTE cellular standard to be unpatentable for obviousness. Two of the proceedings, IPR2016-00757 and IPR2016-01345, primarily involve prior art documentation of the LTE standard. The other two proceedings, IPR2016-01228 and IPR2016-01229, primarily involve prior art patents. This brief focuses on the former.

The Board found the claims to be obvious in view of the very prior art LTE standard that the patent purported to fix. On the merits, Appellant Evolved challenges only the Board's factual findings. The independent claims require five steps: a receiving step, two determining steps, and two transmitting steps. Evolved challenges the Board's findings only as to the transmitting steps. The Board based its obviousness findings on a thorough analysis of the two prior art LTE technical specifications. The Board also cited detailed expert testimony and other contemporaneous documentation in support of its factual findings and ultimate conclusion of obviousness. Substantial evidence supports the Board's findings.

Evolved's other challenges are equally meritless. The Board did not abuse its discretion by enforcing its own rules to reject an unsworn declaration, particularly where Evolved made no effort to correct the deficiency. Nor do *inter partes* review proceedings violate the Takings Clause or the Due Process Clause. Evolved was never entitled to a patent covering obvious subject matter, so there was no valid property interest for the government to "take." Likewise, the creation of the *inter partes* review statute did not retroactively deny Evolved due process or any substantive rights. The Patent Office had the right to cancel unpatentable claims even before issuance of Evolved's patent, and the new statute merely introduced a new procedure for accomplishing the same result. The Board's decision should be affirmed.

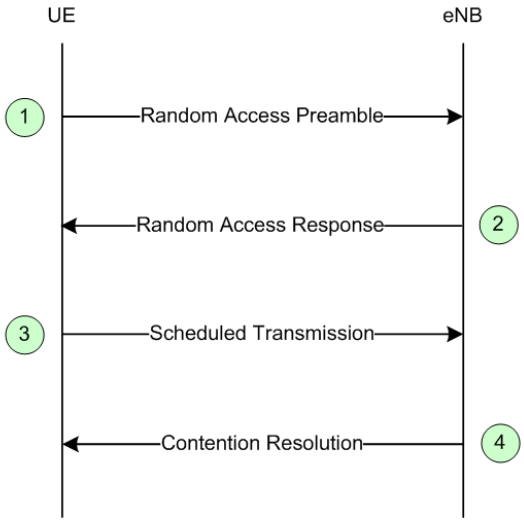
STATEMENT OF THE CASE

I. Development of the Relevant LTE Technical Specifications

In 2008, the telecommunications industry was developing the cellular standard now known as Long Term Evolution ("LTE"). Appx1424 at ¶ 35. Development of LTE took place in a standard-setting organization called the Third Generation Partnership Project ("3GPP"). *Id.* 3GPP had members from virtually every telecommunications company and organization in the world. *Id.*

3GPP had several groups, including the Technical Specification Group Radio Access Network ("TSG RAN"). Appx1424 at ¶ 36. TSG RAN developed LTE's radio access network, which allows user equipment ("UE"), such as a phone, to communicate with the cellular network through a base station called an eNodeB. *Id.* TSG RAN itself had several working groups, of which Working Group 2 ("WG2") is relevant here. *Id.*

One of the things WG2 was developing was LTE's random access procedure. Appx1424-1425 at ¶ 37. Among other things, this procedure allows a UE initially to access a cellular network, for example, when the UE powers up. *Id.* As shown on the following page, the random access procedure had four conventional steps. *Id.*



Appx1292 at § 10.1.5.1 (Fig. 10.1.5.1-1). The first step is the "message 1" step, in which a UE sends a random access preamble to an eNodeB, labeled "eNB" in the figure. Appx1425-1426 at ¶ 38. Next, in the "message 2" step, the eNodeB sends the UE a random access response including an uplink grant, or "UL Grant." *Id.* Using the random access response, in the "message 3" step, the UE sends the eNodeB an uplink message, labeled "Scheduled Transmission" in the figure. *Id.* Finally, in the "message 4" step, the UE receives a message, labeled "Contention Resolution," corresponding to the uplink message from the eNodeB. *Id.* As the '236 patent acknowledges, this procedure was well-known before the '236 patent's claimed August 2008 priority date. *Id.;* Appx164 at 4:3-17.

It was also well-known that the UE transmits message 3 only if it receives a random access response, which is message 2. Appx1426 at ¶ 39.

This concept was independently documented in several prior art references, including one of the LTE technical specifications known as 3GPP TS 36.300 v8.4.0, or the "300 reference."[1] Appx1426 at ¶ 39. As a result, several months before the claimed priority date, skilled artisans knew that the UE should send message 3 only if it receives a random access response in message 2. *Id.*

Although the 300 reference correctly captured this "only if" condition, a related LTE technical specification known as 3GPP TS 36.321 v.8.2.0, or the "321 reference,"[2] initially included a potential ambiguity. Appx1426-1427 at ¶ 40. The 321 reference was clear that a UE must transmit message 3 as part of the scheduled transmission during the random access procedure if it receives an uplink grant on a random access response. *Id.* But, even though it was well-known at the time that message

[1] The full title of the 300 reference is 3GPP TS 36.300 v8.4.0 (2008-03), 3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Overall description; Stage 2 (Release 8). Appx1245-1370.

[2] The full title of the 321 reference is 3GPP TS 36.321 v8.2.0 (2008-05), 3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Evolved Universal Terrestrial Radio Access (E-UTRA) Medium Access Control (MAC) Protocol Specification (Release 8). Appx1371-1403.

3 should be transmitted only after receiving an uplink grant in a random access procedure (*i.e.*, message 2), the text of the 321 reference was potentially ambiguous on this point. *Id.* The potential ambiguity lingered in section 36.321 for several weeks during the summer of 2008. *Id.*

As WG2's August 2008 meeting approached, two WG2 members—LG Electronics and Qualcomm—separately recognized the potential ambiguity and made exactly the same proposal to correct it at nearly the same time. Appx1427 at ¶ 41. On August 12, LG submitted a proposal to WG2 to address the ambiguity in the 321 reference. Appx1427-1428 at ¶ 42, Appx3005-3009, Appx3010-3012, Appx3013-3016. Within three hours of LG's submissions, Qualcomm submitted to WG2 its own very similar proposal addressing the same ambiguity. *Id.*

Both the LG and Qualcomm submissions recognized the potential ambiguity in the 321 reference and proposed the same correction. Appx1428 at ¶ 43. In a category F "correction," LG offered the following proposal (top excerpt) and edit to section 36.321 (bottom):

Proposal 2: It is proposed to that only when a new UL grant is indicated in a Random Access Response, the HARQ entity instructs the HARQ process to store a MAC PDU stored in [Message 3] buffer in HARQ buffer.

- if an uplink grant for this TTI has been received in a Random Access Response~~there is an ongoing Random Access procedure~~ and there is a MAC PDU in the [Message3] buffer:
  - obtain the MAC PDU to transmit from the [Message3] buffer.

Id. (citing Appx3011, Appx3014 (formatting in original)). Similarly, Qualcomm offered the following proposal (top) and edit to section 36.321 (bottom):

Proposal 2: HARQ should obtain the MAC PDU to transmit from the [Message3] buffer only in response to UL grant in a Random Access Response.

- if there is an ongoing Random Access procedure and there is a MAC PDU in the [Message3] buffer and the uplink grant is received in a Random Access Response:
  - obtain the MAC PDU to transmit from the [Message3] buffer.

Id. (citing Appx3006, Appx3009 (formatting in original)).

As a result, both Qualcomm and LG independently proposed the same correction at nearly the same time in order to clarify the same potentially ambiguous language in the 321 reference. Appx1429 at ¶ 44. Both proposals sought to restore the established procedure that skilled artisans had both known and documented in the 300 reference and other prior art documents related to development of the LTE standard. *Id.* Accepting Qualcomm's version, WG2 later corrected 3GPP TS 36.321 to include the "only if" condition, consistent with this earlier documentation. Appx1429 at ¶ 45.

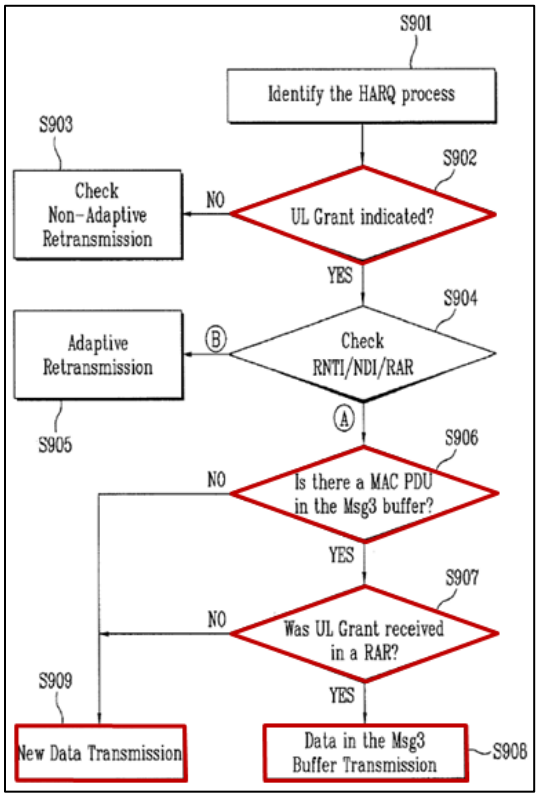
II. The '236 Patent

Originally assigned to LG Electronics, U.S. Patent No. 7,881,236 describes and claims the same correction that LG submitted to WG2 in

August 2008 to resolve the ambiguity in 3GPP TS 36.321. Specifically, the '236 patent purports to solve "a problem which may occur when data stored in a message 3 (Msg3) buffer is transmitted according to a reception mode of an Uplink (UL) Grant signal." Appx164 at 4:42-47.

A. Overview of the Alleged Invention

Figure 9 of the '236 patent, provided below with annotations, shows "a method of transmitting UL data by a UE according to a preferred embodiment of the present invention." Appx160; Appx169 at 13:35-37.



In this figure, the relevant blocks are S902 and S906-S909. In block S902, the "UE may determine whether or not a UL Grant signal received from

the eNode B [is] indicated at the TTI." Appx169 at 13:42-44. In block S906, "the UE determines whether there is data in the Msg3 buffer." *Id.* at 13:66-67. If not, the UE "performs new data transmission (S909)." *Id.* at 14:7-13. Otherwise, "the UE determines whether the received UL Grant signal is received on the random access response message (S907)." *Id.* at 14:1-3. If not, the UE performs new data transmission (S909)." *Id.* at 14:7-13. Otherwise, in block S908, the UE transmits the data stored in the Msg3 buffer. *Id.* at 14:3-7.

B. Illustrative Claim

For purposes of this appeal, method claim 1 is illustrative.

1. A method of transmitting data by a user equipment through an uplink, the method comprising:

   receiving an uplink grant (UL Grant) signal from a base station on a specific message;

   determining whether there is data stored in a message 3 (Msg3) buffer when receiving the UL Grant signal on the specific message;

   determining whether the specific message is a random access response message;

   transmitting the data stored in the Msg3 buffer to the base station using the UL Grant signal received on the specific message, **if** there is data stored in the Msg3 buffer when receiving the UL Grant signal on the specific message and the specific message is the random access response message; and

> **transmitting new data to the base station** in correspondence with the UL Grant signal received on the specific message, **if** there is no data stored in the Msg3 buffer when receiving the UL Grant signal on the specific message or the specific message is not the random access response message.

Appx170-171 at 16:50–17:3 (emphasis added). Claim 7 is directed to a UE capable of performing the same steps. Evolved does not separately argue claim 7 or any of the dependent claims, so this brief focuses on claim 1, and particularly on the two transmitting steps.

III. Proceedings Before the Patent Office

A. The Petitions for *Inter Partes* Review

In the 757 proceeding, petitioners HTC Corporation and HTC America, Inc. (collectively "HTC") and ZTE (USA) Inc. ("ZTE"), challenged claims 1-10 and 12-13 based on obviousness. Appx181-252. Specifically, HTC and ZTE challenged claims 1-6 based on the combination of two prior art LTE specifications, 3GPP TS 36.300 (the "300 reference") and 3GPP TS 36.321 (the "321 reference"). Appx210-238. They also challenged claims 7-10 and 12-13 based on the 300 reference and the 321 reference in further combination with U.S. Patent No. 9,204,468 (the "Ericsson patent"). Appx238-249. In the 1345 proceeding, petitioners Samsung Electronics Co.,

Ltd. and Samsung Electronics America, Inc. (collectively, "Samsung") presented identical arguments.[3] Appx253-326.

The HTC, Samsung, and ZTE petitioners presented ample evidence that the 300 and 321 references were publicly accessible as printed publications before the August 11, 2008 priority date of the '236 patent. Appx200-205. Evolved did not challenge this evidence, and the Board accepted both references as prior art under 35 U.S.C. §§ 102 and 103. Appx9. Substantial evidence supports the Board's finding on this point, and the prior art status of the 300 and 321 references is not in dispute here.

1. Petitioners' Claim Construction Analysis

The HTC, Samsung, and ZTE petitioners raised two potential claim construction issues, only one of which is relevant here. Claim 1 recites "transmitting the data stored in the Msg3 buffer to the base station using the UL Grant signal received on the specific message, ***if*** there is data stored in the Msg3 buffer when receiving the UL Grant signal on the specific message and the specific message is the random access response message." Appx170 at 16:59-64. The petitions referred to this as "the first

[3] Because the underlying records and issues relating to the 757 and 1345 proceedings are substantively the same, this brief will focus on the record from the 757 proceeding.

'transmitting' feature" for simplicity. Petitioners argued that this first transmitting limitation recites *sufficient* conditions, meaning that the claims require transmitting message 3 when the conditions are met, but would also permit transmitting message 3 when the conditions are not met. Appx206-209.

However, the petitioners anticipated that Evolved might argue for a narrower interpretation of the first transmitting limitation to recite *necessary* conditions, meaning that the claims require transmitting message 3 *only if* the conditions are met. The petitioners argued that this narrower construction would be inappropriate under the broadest reasonable interpretation standard applicable in this case. Appx206-209. Nevertheless, as explained in more detail below, the petitioners presented detailed obviousness arguments under both interpretations of the first transmitting limitation. Appx216-227.

2. Petitioners' Obviousness Analysis

In their petitions, the HTC, Samsung, and ZTE petitioners explained how the combined disclosures of the 300 and 321 references taught every step of method claims 1-6. Appx210-238. With respect to apparatus claims 7-10 and 12-13, the petitioners added a third reference—the Ericsson

patent—and explained how the combination taught every claim limitation. Appx238-249. In this appeal, Evolved does not challenge the motivation to combine the prior art references. Evolved focuses solely on the teachings of the 300 and 321 references as they relate to the two "transmitting" limitations.

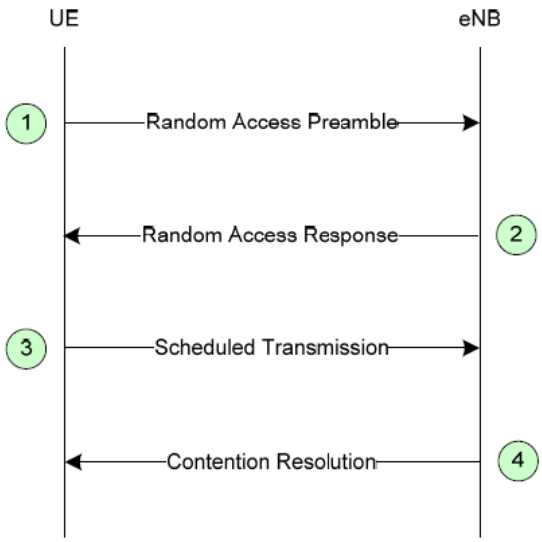
a. The First Transmitting Limitation

Anticipating the narrower interpretation of the first transmitting limitation, which the Board ultimately adopted (*i.e.*, "transmitting the data stored in the Msg3 buffer to the base station using the UL Grant signal received on the specific message, ***[only if]*** there is data stored in the Msg3 buffer when receiving the UL Grant signal on the specific message and the specific message is the random access response message"), the ZTE, HTC, and Samsung petitioners provided four reasons why this limitation would have been obvious in view of the combined teachings of the 300 and 321 references. Appx218-227.

First, the petitioners argued that the 321 reference by itself renders the first transmitting limitation obvious. Appx219-221. As explained above, for several weeks during the summer of 2008 there existed a potential ambiguity in the 321 reference regarding whether a UE should

transmit message 3 in response to a UL Grant received other than in a random access response (*i.e.*, a UL Grant not received as part of message 2). Notwithstanding this potential ambiguity, the correct interpretation of the 321 reference was obvious to those skilled in the art. The 321 reference allowed a UE to discard an erroneous grant during a random access procedure. Given this mechanism in the 321 reference, petitioners explained why it would have been obvious for skilled artisans to transmit message 3 *only* in response to a correct grant (received in message 2) and *not* in response to an incorrect grant (received in some other message). Appx219-221 (citing Appx1442-1444 at ¶¶ 70-73 (citing Appx1376-1377, Appx1380, Appx1383-1384, Appx1388)).

Second, the petitioners argued that the related 300 reference expressly taught transmitting message 3 *only* under the correct conditions. Appx221-222. Emphasizing the well-known sequence for a random access procedure, the petitioners showed that the 300 reference, including the figure reproduced on the following page, taught those skilled in the art that a UE must receive a random access response before it transmits message 3. *Id.* (citing Appx1444-1445 at ¶¶ 74-76 (citing Appx1292, Appx1388-1389)).



Appx1292 at § 10.1.5.1 (Fig. 10.1.5.1-1). Reading these two complementary LTE technical specifications together, as skilled artisans would do, petitioners argued that those skilled in the art would have understood that the 300 and 321 references taught two facts. Appx222. Message 3 transmission should occur only if "there is an ongoing random access procedure and there is a MAC PDU in the [Message3] buffer." Appx1445-1446 at ¶ 76 (citing Appx1388 at § 5.4.2.1 (brackets in original)). Message 3 transmission also requires a prior random access response grant. *Id.* (citing Appx1292-1293 at § 10.1.5.1). These two facts evident from the 300 and 321 references established that a UE should transmit message 3 *only* if it receives a random access response grant while data is in the message 3 buffer. *Id.* Therefore, petitioners argued, the 300 and 321 references collectively taught the "only if" feature. Appx222.

Third, petitioners argued that the "only if" requirement of the first transmitting limitation would have been obvious to those skilled in the art based on their own background knowledge. Appx222-225 (citing Appx1446-1449 at ¶¶ 77-80). Petitioners cited expert testimony (Appx1446-1449 at ¶¶ 77-80), a well-known LTE textbook (Appx3017, Appx3025-3033), and a contemporaneous WG2 submission made by Philips and NXP Semiconductors (Appx3000-3001) to support their argument that skilled artisans knew that a UE *must* receive a grant in a random access response (message 2) before transmitting message 3. Appx223-224. Reading the 300 and 321 references in light of this knowledge, petitioners argued, skilled artisans would have known that those references require message 3 transmission *only if* the UE receives a grant in a random access response (*i.e.*, message 2). *Id.*

Fourth, petitioners argued that simultaneous development by others supports the obviousness of the challenged claims. Appx225-227. In particular, in August 2008 Qualcomm had arrived at the same proposal as LG for resolving the potential ambiguity in 3GPP TS 36.321. Using nearly identical language, Qualcomm had submitted its proposal to WG2 within three hours after the LG submission and within a day of the '236 patent

priority date. Appx225-227; Appx1449-1452 at ¶¶ 81-87 (citing Appx3005-3006, Appx3008, Appx3010-3011, Appx3013-3014). Petitioners argued that the near-simultaneous and substantively identical submissions from Qualcomm and LG provide strong secondary evidence that persons skilled in the art would have quickly and readily recognized the potential ambiguity in the 321 reference and known exactly how to correct it based on their background knowledge about the random access procedure—as reflected in the 300 reference, among other references. Appx227.

b. The Second Transmitting Limitation

In their petitions, HTC, Samsung, and ZTE presented three scenarios in which the 300 and 321 references taught the second transmitting limitation (*i.e.*, "transmitting new data to the base station in correspondence with the UL Grant signal received on the specific message, if there is no data stored in the Msg3 buffer when receiving the UL Grant signal on the specific message or the specific message is not the random access response message"). Each of these three scenarios independently satisfies the second transmitting limitation. Appx227-230.

Scenario 1. The 321 reference taught transmitting new data during a random access procedure if there is no data in the message 3 buffer.

Appx228-229; Appx1453-1454 at ¶¶ 89-90; Appx1388-1389 at §§ 5.4.1, 5.4.2.1.

Scenario 2. The 321 reference taught transmitting new data when there is no ongoing random access procedure and there is no data in the message 3 buffer. Appx229; Appx1454-1455 at ¶¶ 92-93; Appx1388-1389 at §§ 5.4.1, 5.4.2.1.

Scenario 3. The 321 reference taught transmitting new data when there is no ongoing random access procedure and there is data in the message 3 buffer. Appx229-230; Appx1455-1456 at ¶ 94; Appx1388-1389 at §§ 5.4.1, 5.4.2.1.

These three scenarios line up exactly with the conditions for transmitting new data in accordance with the second "transmitting" limitation.

B. The Board's Final Written Decision

The Board agreed with Evolved on claim construction, adopting the narrower "only if" interpretation of the first "transmitting" step. However, even under this narrower interpretation, the Board agreed with HTC, Samsung, and ZTE that the first "transmitting" step would have been

obvious to those skilled in the art based on the combined teachings of the 300 and 321 references.

1. The Board's Claim Constructions

The Board acknowledged that read in isolation the plain and ordinary meaning of "if" in the first "transmitting" limitation "is susceptible to both *sufficient-condition* and *necessary-condition* constructions." Appx12. However, reading the two "transmitting" limitations together within the context of the specification as a whole, the Board adopted the narrower construction. Appx12-15. Accordingly, the Board interpreted the first "transmitting" limitation to recite necessary conditions, such that message 3 is transmitted *only if* the conditions are met. *Id.*

2. The Board's Obviousness Findings

The Board began its obviousness analysis by finding that one of ordinary skill would have been motivated to consider the 300 and 321 references together, citing substantial evidence from the petitions and from the references themselves. Appx18-19. With respect to claims 7-10 and 12-13, the Board likewise found that one skilled in the art would have

considered the 300 and 321 references together with the Ericsson patent. Appx34-35. Evolved does not challenge these findings.

The Board then addressed each limitation of every challenged claim, beginning with claim 1. Appx19-38. Because Evolved challenges the Board's findings only as to the two "transmitting" limitations, this summary addresses only that aspect of the Board's decision. Appx21-30.

The Board focused its analysis of these limitations on the two conditions they both recite: (1) "if there is data stored in the Msg3 buffer when receiving the UL Grant signal on the specific message;" and (2) "if . . . the specific message is the random access response message." Appx21. Reading the limitations together consistent with its adopted claim construction, the Board concluded that the first "transmitting" limitation requires transmitting message 3 *only if* both of these conditions are met. Conversely, the second "transmitting" limitation requires transmitting new data if either of these conditions is not met. Appx21-23.

Beginning with the 321 reference, the Board agreed with the HTC, Samsung, and ZTE petitioners that the 321 reference teaches the second "transmitting" limitation. Appx22-23. Indeed, the Board cited Evolved's

admission that the 321 reference "teaches transmitting new data if one of conditions (1) and (2) fails." Appx23.

Turning back to the first transmitting limitation, the Board likewise found petitioners' arguments to be "persuasive." Appx27. Based on specific teachings in the 300 and 321 references, testimony from Dr. Min, and evidence of simultaneous development by others, the Board found that it would have been obvious in view of the 300 and 321 references to transmit message 3 *only if* conditions (1) and (2) are both met. Appx25-28.

Citing relevant teachings from sections 3.1, 5.1.3, 5.1.4, 5.4.1, and 5.4.2.1, and considering the passages together as they would have been interpreted by those skilled in the art, the Board found that it would have been obvious in view of the 321 reference by itself "to transmit the data in the Msg3 buffer only in response to an uplink grant in the random access message and there is data in the Msg3 buffer (conditions (1) and (2) are met) and to transmit new data only if conditions 1 or 2 are not met." Appx25 (citing Appx1377, Appx1382-1383, Appx1388).

The Board also found that the 300 reference taught the first "transmitting" limitation. The Board cited Figure 10.1.5.1-1 from the 300 reference, which shows the well-known sequence of message 3 following a

random access response (*i.e.*, message 2). Appx26 (citing Appx1292). The Board also credited petitioners' arguments and the testimony of Dr. Min (Appx26-28), ultimately concluding that the 300 reference "taught that the message 3 transmission requires a prior random access response grant." Appx28 (citing Appx1445 at ¶ 75).

The Board summarized its findings on this limitation as follows:

> Accordingly, upon consideration of the cited passages in 3GPP TS 300 and 3GPP TS 321, the Min Declaration, and Petitioner's arguments, we find 3GPP TS 300 and 3GPP TS 321 teach the first "transmitting" limitation recited in claim 1 under the construction we have adopted.

Appx28.

Beyond the teachings of the 300 and 321 references themselves, the Board also found other contemporaneous submissions to WG2 to be evidence that those skilled in the art interpreted the 300 and 321 references to teach the first transmitting limitation *and* evidence of simultaneous development by others in support of the Board's obviousness finding. Appx28-29. Specifically, the Board cited the WG2 submissions made by Philips and NXP Semiconductors and by Qualcomm. Appx29 (citing Appx3000-3001, Appx3005-3006, Appx3008.

3. The Board's Rejection of Evolved's Defective, Unsworn Expert Declaration

The Board declined to give any weight to an unsworn declaration that Evolved presented from its expert, Dr. Cooklev. Appx23-25. As the Board explained, Evolved conceded at the oral argument that the declaration was defective. Appx24. The Board also emphasized that Evolved took no steps to cure the defect, despite having been on notice of it for nearly two months. *Id.* On this record, the Board concluded that it "cannot simply ignore regulatory and statutory requirements that render that Declaration defective." Appx24-25. Accordingly, the Board gave no weight to either the defective declaration or Evolved's reliance on it. Appx25.

4. The Board's Denial of Evolved's Petition for Reconsideration

Evolved sought reconsideration of the Board's final written decision, which the Board denied. Appx42-49. Evolved argued that the Board had failed to consider a "more complex case of UL Grant reception" within the context of the 300 reference. Appx46. Relying on nothing more than attorney argument, Evolved added a hypothetical second UL grant to this scenario and argued that it would result in transmission of message 3

outside of a random access procedure. The Board rejected this argument, noting that "the fact that the Patent Owner can hypothesize a system that is more complex than the cited references teach does not negate the teachings of the cited references." *Id.*

Evolved also argued that the Board had improperly used hindsight in its analysis of the 300 and 321 references. The Board rejected this argument, explaining that it had found the "only if" conditions in the express teachings of the references, not through hindsight analysis. Appx47. The Board further cited its analysis of the simultaneous development by others as reaffirming its obviousness findings. *Id.*

The Board likewise rejected Evolved's argument that the Board had misapprehended petitioners' arguments or somehow confused the obviousness analysis with anticipation. It did not. Appx47-48.

SUMMARY OF THE ARGUMENT

In a thorough and well-reasoned final written decision supported by substantial evidence, the Board correctly concluded that claims 1-10 and 12-13 of the '236 patent are unpatentable. In the 757 and 1345 proceedings, the Board relied primarily on the 300 and 321 references, which are prior art LTE technical specifications developed by the same working group

from which the '236 patent arose. The Bound found that the purported invention was already well known within that working group.

The Board correctly applied the two "transmitting" limitations to the prior art, including its "only if" interpretation of the first "transmitting" limitation. The HTC, Samsung, and ZTE petitioners and their expert, Dr. Min, fully anticipated the "only if" interpretation and presented many pages of testimony and argument explaining why the "only if" feature was taught in the prior art 300 and 321 references, as properly interpreted. The Board agreed with petitioners, making detailed factual findings based on the content of the 300 and 321 references, other contemporaneous documents, and Dr. Min's sworn testimony. Substantial evidence supports the Board's factual findings.

None of Evolved's arguments justifies upsetting the Board's well-supported factual findings. Petitioners, Dr. Min, and the Board all properly applied the "only if" interpretation to the prior art 300 and 321 references. In contrast, Evolved's application of the claims to the prior art defies common sense, violates established precedent on negative claim limitations, and contradicts the weight of the evidentiary record. On the

merits, the Court should affirm the Board's decision to cancel the challenged claims.

Procedurally, the Board properly exercised its discretion in declining to give any weight to Evolved's defective, unsworn expert declaration. Evolved conceded that the declaration was deficient and took no affirmative action to correct the defect.

The Court should reject Evolved's Constitutional challenges to the *inter partes* review proceeding. The Board did not take away anything to which Evolved was ever entitled, nor did the Board retroactively deny any due process rights. Accordingly, the Court should affirm the Board's decision to cancel claims 1-10 and 12-13 of the '236 patent.

STANDARD OF REVIEW

This Court reviews the Board's factual findings for substantial evidence and its legal conclusions *de novo*. *In re Gartside*, 203 F.3d 1305, 1315-16 (Fed. Cir. 2000). Substantial evidence is "such relevant evidence as a reasonable mind might accept as adequate to support a conclusion." *Consol. Edison Co. of N.Y. v. NLRB*, 305 U.S. 197, 217 (1938). "If the evidence in [the] record will support several reasonable but contradictory conclusions, [the Court] will not find the Board's decision unsupported by

substantial evidence simply because the Board chose one conclusion over another plausible alternative." *In re Jolley*, 308 F.3d 1317, 1320 (Fed. Cir. 2002). Under the substantial evidence standard, this Court considers all the evidence, not just those portions of the record on which the Board explicitly relied. *In re Huston*, 308 F.3d 1267, 1281 n.9 (Fed. Cir. 2002).

The proper interpretation of a patent claim is a question of law, *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 837 (2015) (citing *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 388-91 (1996)), that may depend on subsidiary factual findings based on evidence extrinsic to the patent. *Teva*, 135 S. Ct. at 841-42. Thus, although this Court reviews *de novo* the Board's ultimate claim construction, it reviews for substantial evidence the Board's underlying factual determinations involving extrinsic evidence. *Microsoft Corp. v. Proxyconn, Inc.*, 789 F.3d 1292, 1297 (Fed. Cir. 2015) (citing *Teva*, 135 S. Ct. at 841-42).

The Board's rulings addressing evidentiary objections and other procedural matters are reviewed for an abuse of discretion. *Redline Detection, LLC v. Star Envirotech, Inc.*, 811 F.3d 435, 442 (Fed. Cir. 2015) ("We review the PTAB's decision of how it manages its permissive rules of trial

proceedings for an abuse of discretion."); *Coach Servs., Inc. v. Triumph Learning LLC*, 668 F.3d 1356, 1363 (Fed. Cir. 2012).

ARGUMENT

I. The Court Should Affirm The Board's Obviousness Findings

The Board correctly determined that claims 1-10 and 12-13 are obvious and therefore unpatentable. Obviousness is a question of law reviewed de novo, but it turns on underlying facts that are reviewed for substantial evidence. *See Belden Inc. v. Berk-Tek LLC*, 805 F. 3d 1064, 1073 (Fed. Cir. 2015). Evolved's only argument on the merits is that the 300 and 321 references did not teach the two "transmitting" limitations. Substantial evidence supports the Board's finding that they did.

A. Substantial Evidence Supports the Board's Findings That the 300 and 321 References Taught the "Transmitting" Limitations

In addition to the teachings of the 300 and 321 references themselves, the Board properly relied on detailed, sworn testimony from Dr. Min and contemporaneous documents from WG2 in finding that the 300 and 321 references taught the first and second "transmitting" limitations. Appx21-29. In his testimony, Dr. Min explained four reasons why the 300 and 321 references taught the first "transmitting" limitation, even under the

narrower "only if" claim construction that the Board ultimately adopted. Appx218-227; Appx512-515; Appx1441-1452 at ¶¶ 68-87. Dr. Min also described three independent scenarios in which the 300 and 321 references taught the second "transmitting" limitation. Appx227-230; Appx522-528; Appx1452-1456 at ¶¶ 88-94. The Board credited both Dr. Min's testimony and the underlying evidence, ultimately finding petitioners' arguments to be persuasive. Appx23; Appx25-29.

1. The First "Transmitting" Limitation

The Board found that both the 321 reference and the 300 reference taught the first "transmitting" limitation. Appx23; Appx25-29. Citing to a number of relevant provisions from both the 300 and 321 references and sworn testimony from Dr. Min, the Board expressly found the following argument from petitioners persuasive:

> Reading these complementary standards documents together, as skilled artisans would do, they would understand that the 300 and 321 references taught two facts. First, message 3 transmission should occur only if "there is an ongoing random access procedure and there is a MAC PDU in the [Message3] buffer." ([Appx1445-1446 at ¶ 76 (citing Appx1388-1389 at § 5.4.2.1 (brackets in original)).]) Second, message 3 transmission requires a prior random access response grant. ([*Id.* (citing Appx1292-1294 at § 10.1.5.1).]) These two facts established that a UE

> should transmit message 3 only if it receives a random access response grant while data is in the message 3 buffer. (*Id.*) Therefore, the 300 and 321 references collectively taught the "only if" feature. (*Id.*)

Appx26-27 (citing Appx222). In the paragraph spanning Appx27-28, the Board elaborated on why one skilled in the art would have understood both the 300 and the 321 references to teach transmitting message 3 *only if* an uplink grant was received as part of a random access response *and* there is data in the message 3 buffer. Appx27-28. In doing so, the Board cited additional sections of the 300 and 321 references, as well as additional sworn testimony from Dr. Min, in support of its findings. *Id.* (citing Appx1377, Appx1383, Appx1388-1389, Appx1445 at ¶ 75 (citing Appx1292-1293)). As the Board concluded:

> Accordingly, upon consideration of the cited passages in 3GPP TS 300 and 3GPP TS 321, the Min Declaration, and Petitioner's arguments, we find 3GPP TS 300 and 3GPP TS 321 teach the first "transmitting" limitation recited in claim 1 under the construction we have adopted.

Appx28.

In addition, the Board credited petitioners' arguments and supporting evidence regarding simultaneous development by others as reaffirming the obviousness of the first "transmitting" limitation. Appx28-

29 (citing Appx224-227). Specifically, the Board cited related WG2 submissions made by Philips and NXP Semiconductors in March 2008 and by Qualcomm in August 2008 as further evidence that those skilled in the art at the time would have interpreted the 300 and 321 references as teaching the first "transmitting" limitation *and* that the limitation would have been obvious to those skilled in the art at the time. Appx28-29 (citing Appx3000-3001, Appx3005-3006, Appx3008); *see also* Appx1447-1452 at ¶¶ 79-87.

Collectively, this substantial evidence supports the Board's finding that the 300 and 321 references taught the first "transmitting" limitation.

2. The Second "Transmitting" Limitation

The Board also found that the 321 reference taught the second "transmitting" limitation. Appx28. The Board cited the 321 reference's teaching that "if there an ongoing Random Access [procedure] [sic] and there is a MAC PDU in the [Message3] buffer" "obtain the MAC PDU to transmit from the [Message 3] buffer" or "else" make a "new transmission." Appx28 (citing Appx1388 at § 5.4.1). In other words, if either of the conditions specified in § 5.4.1 is not met (*i.e.*, there is no ongoing random access procedure or there is no data in the message 3

buffer), then the logical flow reverts to the "else" step and sends a new transmission. These are precisely the conditions under which the second "transmitting" limitation requires the transmission of new data, including the three scenarios described in Dr. Min's testimony and in the petition. Appx28; Appx227-230; Appx1452-1456 at ¶¶ 88-94. Accordingly, substantial evidence supports the Board's conclusion that the 321 reference taught the second "transmitting" limitation.

B. None of Evolved's Arguments Justifies Upsetting the Board's Well-Supported Factual Findings

None of Evolved's arguments undermine the Board's detailed factual findings or the substantial evidence upon which they rest. Evolved misapprehends both petitioners' arguments and the Board's reasoning. Citing Dr. Min's testimony out of context, Evolved overlooks the entire reasoning and underlying evidence that led the Board correctly to interpret the 300 and 321 references as teaching the "only if" logic required by the '236 patent claims. Though Evolved criticizes the Board for being internally inconsistent, the only true internal inconsistencies are in Evolved's argument.

1. Petitioners and Dr. Min Fully Applied the "Only If" Interpretation to the Prior Art

Evolved begins by suggesting (at 34-35) that the HTC, Samsung, and ZTE petitioners failed to fully address the "only if" interpretation of the first transmitting limitation, providing only "short arguments" on point in the petitions. On the contrary, petitioners and Dr. Min fully anticipated the "only if" construction, dedicating a combined total of 20 pages of their petition and supporting declaration to analysis of the prior art under this narrower construction. Appx218-227; Appx1441-1452 at ¶¶ 68-87.

Dr. Min testified in detail—and petitioners argued in detail—that there were four reasons why the "only if" interpretation of the first transmitting limitation would have been obvious: (1) the 321 reference itself rendered the "only if" feature obvious (Appx219-221; Appx1442-1444 at ¶¶ 70-73); (2) the 300 reference expressly taught the "only if" feature (Appx221-222; Appx1444-1446 at ¶¶ 74-76); (3) the skilled artisan's background knowledge confirmed that the "only if" feature would have been obvious (Appx222-225; Appx1446-1449 at ¶¶ 77-80); and simultaneous development by others supports obviousness (Appx225-227; Appx1449-1452 at ¶¶ 81-87). The Board credited Dr. Min's testimony and

found petitioners' arguments to be persuasive on each of these points. Appx25-29.

2. The Board Correctly Applied the "Only If" Construction to the Prior Art

Having convinced the Board that the two "transmitting" limitations must be read together to arrive at the "only if" construction, it is Evolved—not the Board—that applies the construction erroneously. The Board correctly applied the "only if" construction, properly considering both of the "transmitting" limitations together in applying them to the 300 and 321 references. Appx21-23; Appx25-29.

Evolved criticizes the Board (at 38-44) for allegedly never considering whether the 300 and 321 references taught sending message 3 *only if* the two conditions of the first "transmitting" limitation are met. On the contrary, the Board made specific findings on this point after a careful analysis of the prior art teachings and the testimony of Dr. Min. Appx25-28.

For example, the Board credited petitioners' arguments that the "complementary" 300 and 321 references should be read together and collectively establish two facts. Appx26-27. "First, message 3 transmission should occur only if 'there is an ongoing random access procedure and

there is a MAC PDU in the [Message 3] buffer.'" *Id*. "Second, message 3 transmission requires a prior random access response grant." *Id.* In finding this analysis to be "persuasive," the Board relied on the petition (Appx222), Dr. Min's testimony (Appx1445-1446 at ¶ 76), and the teachings of both the 321 reference (Appx1388-1389 at § 5.4.2.1) and the 300 reference (Appx1292-1293 at § 10.1.5.1). Appx26-27. Based on these two facts, the Board agreed with Petitioner's analysis that the 300 and 321 references taught that "a UE should transmit message 3 *only if* it receives a random access response grant while data is in the message 3 buffer. Appx26-27 (quoting Appx222 and citing Appx1445-1446 at ¶ 76) (emphasis original).

Evolved does not dispute that the 300 and 321 references taught transmitting message 3 *if* the two conditions of the first "transmitting" limitation are met. Evolved also does not argue that the 300 and 321 references, as properly interpreted, taught transmitting message 3 under any other conditions. Combining these two principles, one skilled in the art naturally would have interpreted the 300 and 321 references to mean that message 3 should be transmitted *only* under the correct conditions. *See* Appx25 ("Taking these passages into consideration with the process in Section 5.4.2.1 discussed above . . . 3GPP TS 321 teaches to transmit the data

in the Msg3 buffer only in response to an uplink grant in the random access response and there is data in the Msg3 buffer (conditions (1) and (2) are met) and to transmit new data only if conditions 1 or 2 are not met.") (internal citations omitted).

3. Evolved's Arguments Defy Both Common Sense and Established Precedent on Negative Claim Limitations

Evolved seems to be looking for an express negative teaching in the prior art—something like "*do not transmit message 3 when the correct conditions are not met*." This is more than the law requires. "[A] reference need not state a feature's absence in order to disclose a negative limitation." *AC Techs. S.A. v. Amazon.com, Inc.*, 912 F.3d 1358, 1367 (Fed. Cir. 2019). The Court has affirmed factual determinations that a reference discloses a disputed negative limitation where, as here, substantial evidence shows that a skilled artisan would interpret it in that way. *See*, *e.g.*, *AC Techs.*, 912 F.3d at 1366-67 (affirming Board's finding that a reference disclosed copying certain data independently of accessing a host computer where the reference's description of copying did not involve the host and expert testimony confirmed that interpretation); *Sud-Chemie, Inc. v. Multisorb Techs., Inc.*, 554 F.3d 1001, 1004–05 (Fed. Cir. 2009) (affirming

finding that reference disclosed "uncoated" film where it did not describe the film as coated and did not suggest necessity of coatings).

Likewise, the Board here found that the 300 and 321 references taught that message 3 should be transmitted under the correct conditions and that new data should be transmitted under other conditions. Appx25. That is enough. It is common sense. Evolved concedes (Blue Br. at 45) that the Board can rely on common sense in its obvious analysis—in combination with the teachings of the prior art itself. That is exactly what the Board did here.

The only place common sense is lacking is in Evolved's argument, as illustrated in the following statement from page 50 of Evolved's brief:

> The fact that the 300 reference indicates in order to send a transmission responsive to a RAR message [i.e., message 3] the UE ***has to*** have first received a RAR UL Grant, provides absolutely nothing relevant regarding how the UE might respond to a different type of UL Grant received later during the random access procedure.

Blue Br. at 50 (emphasis added). On the contrary, this fact absolutely does provide relevant information. It tells one skilled in the art that whatever the response to a different type of UL Grant may be, it will *not* be message 3. That is because, as the Board found and as Evolved concedes,

the 300 reference taught that before a UE can send message 3 the UE "***has to***" have received a RAR UL Grant in message 2.

4. Dr. Min's Testimony Fully Supports the Board's Factual Findings

Evolved cites Dr. Min's testimony out of context (Blue Br. at 38, 39, 50) to suggest erroneously that the 321 reference did not teach the "only if" interpretation of the first transmitting limitation. In doing so, Evolved misapprehends two important points.

First, in the questions and answers Evolved cites, Dr. Min testified only that specific sections of the 321 reference read in isolation did not preclude transmitting message 3 under conditions other than the correct conditions. *See* Appx1967-1968, Appx1979-1980, Appx1982-1984. Once again, these questions show Evolved looking for an express negative teaching in the prior art, which the law does not require. *See*, *AC Techs.*, 912 F.3d at 1367. Moreover, Dr. Min's answers to these questions are perfectly consistent with his detailed, sworn testimony that the teachings of the 300 and 321 references—read together in full context—taught the "only if" interpretation of the first transmitting limitation. *See* Appx1441-1452 at ¶¶ 68-87.

Second, Evolved's suggestion that Dr. Min improperly relied on post-invention evidence is simply wrong. In his analysis of the first transmitting limitation, Dr. Min properly relied on the teachings of the prior art 300 and 321 references, as well as contemporaneous evidence of how those skilled in the art would have interpreted those references. Appx1441-1452 at ¶¶ 68-87. The only "post-invention" evidence Dr. Min cited in support of his analysis is the Qualcomm proposal, which Qualcomm submitted to WG2 three hours after the substantively-identical LG submission. Appx1449-1452 at ¶¶ 81-87. Such evidence of simultaneous development may appropriately be considered as a secondary consideration of obviousness. *See Geo M. Martin Co. v. Alliance Machine Sys Int'l LLC*, 618 F.3d 1294, 1305 (Fed. Cir. 2010) ("Independently made, simultaneous inventions, made 'within a comparatively short space of time,' are persuasive evidence that the claimed apparatus 'was the product only of ordinary mechanical or engineering skill.'") A simultaneous invention may be considered even if it came *after* the claimed invention, so long as it was made "within a comparatively short space of time." *Id.*

5. The Board Properly Relied on Evidence of Simultaneous Development as a Secondary Consideration of Obviousness

Like petitioners and Dr. Min, the Board also relied on the same evidence of simultaneous development to support its otherwise robust analysis of the prior art. Appx28-29 (citing Appx225-227). Contrary to Evolved's criticisms, there was nothing improper about the Board's use of this evidence. The Board did not rely on the Qualcomm proposal to provide a "missing link" or otherwise to fill some gap in the prior art disclosure. The Board found that every limitation of claims 1-6, including the two "transmitting" limitations, was taught in the 300 and 321 references as those skilled in the art would have interpreted them. Based on these factual findings, the Board concluded that the subject matter of these claims as a whole would have been obvious based on the 300 and 321 references.[4] Appx19-32. The Board merely cited the Qualcomm proposal to reaffirm its obviousness conclusion (Appx28-29), which is a perfectly proper use of evidence directed to a secondary consideration of obviousness.

[4] The Board came to the same conclusion with respect to claims 7-10 and 12-13 based on the combination of the 300 and 321 references with the Ericsson patent. Appx33-38.

II. The Board Properly Exercised Its Discretion By Rejecting Evolved's Unsworn Expert Declaration

The Board properly exercised its discretion when giving no weight to Dr. Cooklev's submission. The Board "has broad discretion to regulate the presentation of evidence," *Belden, Inc. v. Berk-Tek, LLC*, 805 F.3d 1064, 1081 (Fed. Cir. 2015), and "[i]t is within the discretion of the trier of fact to give each item of evidence such weight as it feels appropriate." *Velander v. Garner*, 348 F.3d 1359, 1371 (Fed. Cir. 2003).

Here, the Board merely enforced its regulations, which are both clear and simple. The regulations provide that "evidence" in an IPR "consists of affidavits, transcripts of depositions, documents, and things," 37 C.F.R. § 42.63, and they further define an "affidavit" as a submission that either complies with 37 C.F.R. § 1.68 or is made under penalty of perjury under 28 U.S.C. § 1746. See 37 C.F.R. § 42.2. Evolved does not dispute that Dr. Cooklev's submission was defective under those regulations, and the Board acted within its discretion in enforcing the regulations by declining to give weight to Dr. Cooklev. Other Board panels have done the same thing under similar circumstances. *See*, *e.g.*, *FedEx v. Katz*, CBM2015-00053, Paper 9 at 7-8 (PTAB June 29, 2015); *Bumble Bee Foods v. Kowalski*, Case IPR2014-00224, Paper 18 at 14-15 (PTAB June 5, 2014).

Evolved argues (Blue Br. at 58-60) that the Board violated 37 C.F.R. § 42.64 by excluding Dr. Cooklev's unsworn declaration, but that is not what happened. The Board did not exclude the declaration at all, and the declaration is part of the record here on appeal. Appx2510-2551. The Board simply exercised its discretion to give the unsworn declaration no weight because it failed to comply with the Board's regulations. Appx23-24.

Evolved further argues (Blue Br. at 59-61) that it was denied an opportunity to cure the defect because petitioners did not file a motion to exclude the unsworn declaration, which would have put Evolved on notice of the defect. But petitioners did put Evolved on notice of the defect—in their reply brief, which was filed nearly two months before the oral argument. Appx503, Appx508-509. As the Board noted, Evolved took no action to cure the defect and conceded at the oral argument that the unsworn declaration remained defective. Appx23-24.

Contrary to Evolved's argument, it had options to address the defect before the oral argument. The Board's scheduling order permitted the parties to arrange conference calls with the Board, (Appx3040), and the regulations permitted Evolved to seek leave to file a motion to submit

supplemental information. *See* 37 C.F.R. § 42.123(b). Indeed, Evolved moved to submit other supplemental information (a deposition transcript) even after the oral hearing. (Appx594-602.) Having taken no action whatsoever to correct the defect in Dr. Cooklev's unsworn declaration, Evolved cannot blame petitioners or the Board or otherwise complain about it now on appeal. The Board properly exercised its discretion to enforce its regulations. In doing so, the Board violated neither any regulation nor the Administrative Procedure Act.

The Court's decision in *Dell Inc. v. Acceleron*, LLC, 818 F.3d 1293 (Fed. Cir. 2016) is inapposite. In Dell, the petitioner raised a new theory at oral argument, and the Board denied the patent owner an opportunity to respond. *Id.* at 1301. Petitioners here raised no new arguments, and the Board did not deny Evolved any opportunity to correct the defect in Dr. Cooklev's declaration. Evolved sought no such opportunity. Appx23-24.

The Board acted within its broad discretion to give no weight to a defective, unsworn declaration, which Evolved made no effort to correct. The Board's decision on this point provides no basis to reverse its well-supported decision on the merits of this case.

III. The Court Should Reject Evolved's Constitutional Challenges To The *Inter Partes* Review Proceeding

The Court should reject both of Evolved's constitutional arguments. First, the Board did not "take" anything that ever rightfully belonged to Evolved. The '236 patent never should have issued in the first place because "the results of ordinary innovation are not the subject of exclusive rights under the patent laws." *KSR Int'l Co. v. Teleflex Co.*, 550 U.S. 398, 427 (2007); *see also Oil States Energy Servs., LLC v. Greene's Energy Grp., LLC*, 138 S. Ct. 1365, 1379 (2018) (explaining the invalidating provisions "prevent the issuance of patents whose effects are to remove existent knowledge from the public domain"). According, if the Court affirms the Board on the substantive merits of obviousness, then Evolved never had a "valid property interest" for the government to take. *See Wyatt v. United States*, 271 F.3d 1090, 1097 (Fed. Cir. 2001) (the existence of a "valid property interest" is a "bedrock requirement" in all takings claims).

Second, Evolved has not been denied due process. To determine whether a statute retroactively violates due process, "the court may ask whether the new provision attaches new legal consequences to events completed before its enactment. *Landgraf v. USI Film Prods.*, 511 U.S. 244, 269-70 (1994). The answer in this case is no. Patent claims, including the

'236 patent claims, "are granted subject to the qualification that the PTO has the authority to reexamine—and perhaps cancel—a patent claim in an inter partes review." *Oil States*, 138 S. Ct. at 1374. Such authority has existed at the PTO since long before LG applied for the '236 patent in 2009. The America Invents Act changed neither the scope of prior art applicable to the '236 patent nor the standards for obviousness under which the '236 patent has been reviewed. The only change was to the procedure for challenging patentability. Such intervening changes in the procedures for exercising the cancelation of patent claims did not attach "new consequences to events completed before [their] enactment" and therefore did not retroactively violate Evolved's due process rights. *Landgraf*, 511 U.S. at 269-70.

CONCLUSION

For the foregoing reasons, Petitioners urge the Court to affirm the Board's determination that claims 1-10, 12, and 13 of the '236 patent are invalid under as obvious under 35 U.S.C. § 103(a).

Dated: March 12, 2019

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CERTIFICATE OF SERVICE

I hereby certify that I electronically filed the foregoing with the Clerk of the Court for the United States Court of Appeals for the Federal Circuit by using the appellate CM/ECF system. I certify that all participants in the case are registered CM/ECF users and that service will be accomplished by the appellate CM/ECF system.

Dated: March 19, 2019 */s/ Charles M. McMahon*

CERTIFICATE OF COMPLIANCE

Pursuant to Rule 32(a)(7)(B) of the Federal Rules of Appellate Procedure, I certify that the foregoing brief, prepared using proportionally-spaced 14-point Book Antiqua font, consists of 10,762 words as counted by Microsoft® Word, which was used to generate this brief.

Dated: March 19, 2019 */s/ Charles M. McMahon*