

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION**

IN RE NEO WIRELESS, LLC
PATENT LITIG.

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2:22-MD-03034-TGB

HON. TERRENCE G. BERG

**PLAINTIFF NEO WIRELESS LLC’S DISCLOSURE OF PROPOSED
INTERPRETATIONS AND EVIDENCE OF DISPUTED CLAIM TERMS**

Plaintiff Neo Wireless LLC (“Plaintiff” or “Neo Wireless”) hereby makes the following Proposed Constructions and discloses the following Expert Witness, Intrinsic, and Extrinsic Evidence to support the same for the terms identified by Neo Wireless and Defendants Volkswagen Group of America Inc., Volkswagen Group of America Chattanooga Operations, LLC (“VW”), Nissan North America Inc., Nissan Motor Acceptance Corporation, American Honda Motor Co., Inc. (“Nissan”), Honda Development & Manufacturing of America, LLC (“Honda”), Ford Motor Company (“Ford”), Toyota Motor North America, Inc., Toyota Motor Sales USA, Inc., Toyota Motor Engineering & Manufacturing North America, Inc. (“Toyota”), Tesla, Inc. (“Tesla”), Mercedes-Benz USA, LLC (“Mercedes”), and General Motors (“GM”) (collectively “Defendants”) in their respective December 7, 2022 disclosures for U.S. Patent No. 8,467,366 (the “’366 Patent”),

U.S. Patent No. 10,833,908 (the “’908 Patent”), U.S. Patent No. 10,075,941 (the “’941 Patent”), U.S. Patent No. 10,447,450 (the “’450 Patent”), U.S. Patent No. 10,965,512 (the “’512 Patent”), and U.S. Patent 10,771,302 (the “’302 Patent”) (collectively, the “Asserted Patents”).

Neo Wireless reserves the right to supplement or amend this evidence in response to the evidence that Defendants may disclose to support their construction, the parties’ meeting and conferring, Defendants’ proposed claim constructions, or as otherwise permitted by the Court’s orders. Neo Wireless’s disclosed Extrinsic Evidence should not be interpreted as implying that any term or claim element is appropriate for or requires construction, and is not presented in any particular order of importance.

I. Expert Witness

In support of its claim construction briefing, Neo Wireless intends to submit and rely upon the expert declaration of William P. Alberth. Mr. Alberth has a Masters of Engineering, and with over 35 years of experience in technology development, Mr. Alberth is qualified to opine on the understanding those skilled in the art would have in the field of technology of the Asserted Patents. As such, he will offer expert declaration testimony regarding the topics described below.

Mr. Alberth may provide details regarding his training, background, and experience, and will explain what he believes should be the applicable level of

educational and professional training and experience of one skilled in the art. Mr. Alberth may also offer information and opinion describing and placing in context the inventions claimed in the Asserted Patents, as well as a helpful background and overview of the technology at the time of invention.

Additionally, Mr. Alberth expects to provide opinions relating to his understanding, as one skilled in the relevant art, of the claims of the Asserted Patents, of the disclosures and teachings of the specification of the Asserted Patents, and of the procedural and substantive aspects of the Asserted Patents' respective file histories before the Patent and Trademark Office that may be relevant to and helpful for analyzing and understanding the proper constructions of the disputed claim terms. Mr. Alberth also expects to provide opinions directed to each of the disputed claim terms that should be given any particularized construction in support of Neo Wireless's proposed constructions, as noted in Exhibits A and B hereto. In doing so, he intends to rely upon the claims themselves, the intrinsic evidence, the extrinsic evidence available to him as disclosed below, and his knowledge and expertise. Mr. Alberth may also explain why, in his opinion, no particularized construction need be given for certain of the proposed constructions offered by Defendants, because the plain language of such terms would be readily understood by one skilled in the art at the time of invention. As a result, Mr. Alberth may opine that no particularized construction

for these terms is necessary or appropriate and that the plain and ordinary meaning should apply. Further, Mr. Alberth may explain why, in his opinion, Defendants' proposed constructions for such terms and ordering diverge from the plain and ordinary meaning without justification, are artificially narrow, or do not adequately capture the proper scope of the patent terms as claimed.

To the extent that Defendants contend that any one or more claim terms are allegedly indefinite, Mr. Alberth may also opine as to why, in his opinion, Defendants' indefinite contentions do not pass muster, and why the identified claim terms are not indefinite. As Defendants have not yet articulated any such contentions, let alone any identify any basis or support for such contentions, Neo Wireless reserves the right to supplement or amend this evidence in connection with its claim construction briefing.

Should Defendants offer their own expert declaration(s) in support of their claim construction briefing, Mr. Alberth reserves the right to review, analyze, and respond to such opinions, to the extent necessary, in connection with Neo Wireless's responsive and/or reply claim construction briefs. Mr. Alberth also reserves the right to assess, and opine on, any extrinsic evidence Defendants choose to identify, produce, disclose, or rely upon in support of any of their claim construction briefs, and to identify, produce, disclose, or rely upon additional extrinsic evidence in support of such further analysis and opinion.

Finally, Mr. Alberth, and/or other expert(s) retained by Plaintiff, may also offer testimony in rebuttal to any expert testimony offered by Defendants including without limitations with respect to the level of ordinary skill in the art, the technology described in the asserted patents, technical background concerning any claim term and what one of ordinary skill in the art would understand the claim term to mean in view of the specifications, the prosecution histories, the claim language, and/or the extrinsic evidence.

By identifying Mr. Alberth, Plaintiff does not waive any right and is not precluded from relying on other experts with similar qualifications who may provide a declaration or testimony addressing these or similar issues. For example, in support of its claim construction briefing, Neo Wireless may submit and rely upon the expert declaration of Dr. Rich Gitlin whose credentials were contained in the disclosure Plaintiff provided to Defendants on December 29, 2022.

II. Intrinsic and Extrinsic Evidence

In further support of its claim construction positions, Neo Wireless may also rely on at least the following intrinsic and extrinsic evidence identified in Exhibits A and B.

DATED: December 30, 2022

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned certifies that the foregoing document was served upon all counsel of record via electronic mail on December 30, 2022.

/s/ Jason D. Cassady

Jason D. Cassady

No.	Claim Term	Proposed Construction	Intrinsic Evidence	Extrinsic Evidence
The '366 Patent				
P1	“In a multi-cell orthogonal frequency division multiple access (OFDMA) wireless communication system comprising a plurality of base stations and mobile stations, a mobile station configured to communicate with a serving base station in a cell via a communication channel, the mobile station comprising:” (’366 Patent, Claim 1)	The preamble is limiting. Plain and ordinary meaning.	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIGs. 3, 5, 6 and accompanying text. And, information, for example, in the following passages: 1:24-64, 2:40-56, 3:5-26, 3:43-51, 3:57-4:5, 4:31-48, 5:10-23. The prosecution history of U.S. Application No. 13/205,579 including any relevant post-grant proceedings, and any relevant file histories.	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. why the preamble is limiting; and 2. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 3. why Defendants’ construction is unnecessary and incorrect. Mr. Alberth’s declaration may also include discussion and analysis of

				the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the '366 Patent; and the prosecution history of U.S. Application No. 13/205,579 including any relevant post-grant proceedings, and any relevant file histories.
P2	"In an orthogonal frequency division multiple access (OFDMA) wireless communication system, a method for signal transmission by a mobile station to a serving base station via a communication channel, the method comprising:"	The preamble is limiting. Plain and ordinary meaning.	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that describes: 1. why the preamble is limiting; and

	('366 Patent, Claim 17)		FIGs. 3, 4, 5, 6 and accompanying text. And, information, for example, in the following passages: 1:24-64, 2:40-56, 3:5-51, 3:57-4:5, 4:31-48, 5:10-23. The prosecution history of U.S. Application No. 13/205,579 including any relevant post-grant proceedings, and any relevant file histories.	2. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 3. why Defendants' construction is unnecessary and incorrect. Mr. Alberth's declaration may also include discussion and analysis of the intrinsic record, including but not limited to: the claim language; the Specification of the '366 Patent; and the prosecution history of U.S. Application No. 13/205,579 including any relevant post-grant
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					proceedings, and any relevant file histories.
The '908 Patent					
P3	“A mobile station comprising:” (’908 Patent, Claim 1)	The preamble is limiting. Plain and ordinary meaning.	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIGs. 10, 11, 17 and accompanying text. And, information, for example, in the following passages: 5:35-39, 5:42-67, 6:26-31, 6:35-57, 6:65-7:3, 8:34-9:18, 9:29-40, 9:50-10:9, 10:14-27. The prosecution history of U.S. Application No. 16/902,740 including any relevant post-grant	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. why the preamble is limiting; and 2. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 3. why Defendants’ construction is unnecessary and incorrect.	

				proceedings, and any relevant file histories.	Mr. Alberth’s declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the ‘908 Patent; and the prosecution history of U.S. Application No. 16/902,740 including any relevant post-grant proceedings, and any relevant file histories.
P4	“wherein the portion of the frequency band used for transmission of the random access signal does not include control channels” (‘908 Patent, Claim 4)	“wherein the portion of the frequency band used for transmission of the random access signal does not overlap with the portions of the frequency band used for control channels”	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section.	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that describes:	

		The specification, including, information depicted, for example, in FIGs. 1, 2, 6, 9, 14, 18 and accompanying text. And, information, for example, in the following passages: 1:43-58, 2:41-3:3, 3:41-50, 3:59-4:2, 4:51-62, 5:22-39, 7:17-24, 7:26-44, 7:54-65, 7:66-8:11, 9:23-28, 9:41-49, 10:13-28. The prosecution history of U.S. Application No. 16/902,740 including any relevant post-grant proceedings, and any relevant file histories.	1. why Neo Wireless's construction is correct; and 2. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 3. why Defendants' construction is incorrect. Mr. Alberth's declaration may also include discussion and analysis of the intrinsic record, including but not limited to: the claim language; the Specification of the '908 Patent; and the prosecution history of U.S. Application No.
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				16/902,740 including any relevant post-grant proceedings, and any relevant file histories.
The '450 Patent				
P5	“A mobile device in a wireless packet system using a frame structure of multiple frames for transmission, each frame comprising a plurality of time intervals, each time interval comprising a plurality of orthogonal frequency division multiplexing (OFDM) symbols, and each OFDM symbol containing a plurality of frequency subcarriers, the mobile device configured to:” (’450 Patent, Claim 7)	The preamble is limiting. Plain and ordinary meaning.	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIGs. 1, 2, 4, 5, 6, 7 and accompanying text. And, information, for example, in the following passages: 1:51-2:16, 3:6-18, 3:36-4:4, 4:5-16, 4:27-37, 4:49-5:18, 5:32-53, 5:61-64, 7:55-8:5, 8:6-26, 8:37-54, 9:4-29, 9:40-50, 9:56-67, 10:27-34, 10:56-11:6, 11:19-33.	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. why the preamble is limiting; and 2. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 3. why Defendants’ construction is unnecessary and incorrect.

			The prosecution history of U.S. Application No. 15/676,421 including any relevant post-grant proceedings, and any relevant file histories including Applicant Response Dated 2/16/2016 Applicant Response Dated 2/16/2016 Applicant Response Dated 11/21/2016 Applicant Response Dated 7/5/2017 Applicant Response Dated 2/5/2018 Notice of Allowance and Notice of Allowability Dated 4/5/2018.	Mr. Alberth's declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the '450 Patent; and the prosecution history of U.S. Application No. 15/676,421 and all other relevant post-grant proceedings and file histories including Applicant Response Dated 2/16/2016 Applicant Response Dated 2/16/2016 Applicant Response Dated 11/21/2016 Applicant Response Dated 7/5/2017 Applicant
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				Response Dated 2/5/2018 Notice of Allowance and Notice of Allowability Dated 4/5/2018.
P6	“the segment having a starting time-frequency coordinate” (’450 Patent, Claim 7)	“the segment having a singular, one-dimensional parameter reflecting a starting location in both time and frequency”	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIG 6 and accompanying text. And, information, for example, in the following passages: 1:62-66, 5:57- 64, 6:14-19, 6:22-29, 7:12- 18. The prosecution history of U.S. Application No. 15/676,421 including any relevant post-grant proceedings, and any	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. why Neo Wireless’s construction is correct; and 2. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 3. why Defendants’ construction is incorrect.

				relevant file histories including IPR2021-10486, paper No. 10, pp. 23-28.	Mr. Alberth’s declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the ’450 Patent; and the prosecution history of U.S. Application No. 15/676,421 including any relevant post-grant proceedings, and any relevant file histories.
P7	“wherein modular coding is applied to the time-frequency resource units in the segment of time-frequency resource” (’450 Patent, Claim 11)	“wherein a modular coding scheme is applied to the time-frequency resource units in the segment of time-frequency resource.”	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section.	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr.	

			The specification, including, information depicted, for example, in FIG 6 and accompanying text. And, information, for example, in the following passages: 1:52-55, 1:62-66, 2:45-59, 4:12-13, 5:57-64, 6:14-19, 6:22-29, 6:45-62, 7:7-27, 8:15-19, 8:23-26, 8:37-39. The prosecution history of U.S. Application No. 15/676,421 including any relevant post-grant proceedings, and any relevant file histories.	Alberth that may describe: 1. why Neo Wireless's construction is correct; and 2. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 3. why Defendants' construction is incorrect. Mr. Alberth's declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the '450 Patent; and
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				the prosecution history of U.S. Application No. 15/676,421 including any relevant post-grant proceedings, and any relevant file histories.
The '941 Patent				
P8	“A link adaption method by a mobile station served by a serving base station in an Orthogonal Frequency Division Multiplexing (OFDM) communication system, the communication system utilizing a transmission structure with time slots in the time domain and frequency subchannels in the frequency domain, the method comprising:”	The preamble is limiting. Plain and ordinary meaning.	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIGs. 3, 4, 5, 6, 8 and accompanying text. And, information, for example, in the following passages: 1:6-63, 2:33-41, 2:50-55,	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. why the preamble is limiting; and 2. how a person having ordinary skill in the art would have understood the term in light of the

	('941 Patent, Claim 8)		3:54-61, 3:62-4:13, 4:13-38, 4:39-60, 5:27-50, 6:50-67, 7:10-16, 7:25-8:3, 8:11-23. The prosecution history of U.S. Application No. 15/082,878 including any relevant post-grant proceedings, and any relevant file histories.	intrinsic and extrinsic evidence; and 3. why Defendants' construction is unnecessary and incorrect. Mr. Alberth's declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the '941 Patent; and the prosecution history of U.S. Application No. 15/082,878 including any relevant post-grant proceedings, and any relevant file histories.
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P9	“A mobile station served by a serving base station in an Orthogonal Frequency Division Multiplexing (OFDM) communication system, the communication system utilizing a transmission structure with time slots in the time domain and frequency subchannels in the frequency domain, the mobile station comprising a receiver configured to:” (’941 Patent, Claim 13)	The preamble is limiting. Plain and ordinary meaning.	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIGs. 3, 4, 5, 6, 8 and accompanying text. And, information, for example, in the following passages: 1:6-63, 2:33-41, 2:50-55, 3:12-22, 3:33-43, 3:54-61, 3:62-4:13, 4:13-38, 4:39-60, 5:27-50, 6:50-67, 7:1-8:3, 8:11-23. The prosecution history of U.S. Application No. 15/082,878 including any relevant post-grant proceedings, and any relevant file histories.	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. why the preamble is limiting; and 2. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 3. why Defendants’ construction is unnecessary and incorrect. Mr. Alberth’s declaration may also include discussion and analysis of the intrinsic record, including but not limited
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				to, the identified portions in the adjacent column: the claim language; the Specification of the '941 Patent; and the prosecution history of U.S. Application No. 15/082,878 including any relevant post-grant proceedings, and any relevant file histories.
P10	“the antenna transmission scheme comprising a transmission diversity scheme or a multiple-input multiple-output (MIMO) scheme” ('941 Patent, Claims 8 and 13)	“the antenna transmission scheme is capable of comprising either a MIMO scheme or a transmission diversity scheme other than MIMO. To avoid any doubt, this requires supporting both MIMO and non-MIMO transmission diversity systems.”	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIGs. 4, 5, 6, 7 and accompanying text. And.	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. why Neo Wireless's construction is correct; and

		information, for example, in the following passages: 2:17-27, 2:33-38, 3:66-4:12, 4:17-19, 4:32-36, 4:39-43, 4:61-62, 5:1-5, 5:20-22, 6:50-53, 6:60-67, 7:1-9, 7:10-16, 7:33-36. The prosecution history of U.S. Application No. 15/082,878 including any relevant post-grant proceedings, and any relevant file histories including Preliminary Amendment Dated 11/11/2016 Applicant Response Dated 4/12/2018.	2. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 3. why Defendants' construction is incorrect. Mr. Alberth's declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the '941 Patent; and the prosecution history of U.S. Application No. 15/082,878 and all other relevant post-grant proceedings and file
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				histories including Preliminary Amendment Dated 11/11/2016 Applicant Response Dated 4/12/2018.
P11	“the corresponding subchannel configuration characterized by distributed subcarriers or localized subcarriers in the frequency domain” (’941 Patent, Claims 8 and 13)	“The corresponding subchannel configuration characterized by distributed subcarriers or localized subcarriers in the frequency domain, wherein the subchannel configuration is capable of comprising either localized or distributed subcarriers. To avoid any doubt, this requires supporting both localized and distributed subchannel configurations.”	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIGs. 2, 3, 6 and accompanying text. And, information, for example, in the following passages: 1:62-66, 3:28-61, 4:25-31, 4:46-60, 5:28-39, 5:57-64, 6:14-19, 6:22-29, 7:1-9, 7:10-18, 7:59-8:3. The prosecution history of U.S. Application No.	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. why Neo Wireless’s construction is correct; and 2. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 3. why Defendants’ construction is incorrect.

			15/082,878 including any relevant post-grant proceedings, and any relevant file histories.	Mr. Alberth's declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the '941 Patent; and the prosecution history of U.S. Application No. 15/082,878 including any relevant post-grant proceedings, and any relevant file histories.
The '302 Patent				
P12	"A mobile device in an Orthogonal Frequency Division Multiplexing (OFDM) communication system, the mobile device comprising"	The preamble is limiting. Plain and ordinary meaning.	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section.	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr.

	('302 Patent, Claim 23)		The specification, including, information depicted, for example, in FIGs. 10, 11, 17 and accompanying text. And, information, for example, in the following passages: 1:42–44, 3:6–8, 3:63–4:5, & 4:6–14. The prosecution history of U.S. Application No. 15/953,950 including any relevant post-grant proceedings, and any relevant file histories.	Alberth that may describe: 1. why the preamble is limiting; and 2. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 3. why Defendants' construction is unnecessary and incorrect. Mr. Alberth's declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language;
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				the Specification of the '302 Patent; and the prosecution history of U.S. Application No. 15/953,950 including any relevant post-grant proceedings, and any relevant file histories.
P13	“the probing signal is configured to occupy a portion of spectrum in the uplink frequency band not designated for transmission of uplink control signals in the system” (’302 Patent, Claim 23)	“the probing signal is configured to reside within a portion of spectrum in the uplink frequency band not designated for transmission of uplink control signals in the system.”	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIGs. 6, 7, 15, and accompanying text. And, information, for example, in the following passages: 4:38–44, 6:52–57, & 7:64–8:11.	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. why Neo Wireless’s construction is correct; and 2. how a person having ordinary skill in the art would have understood the term in light of the

			The prosecution history of U.S. Application No. 15/953,950 including any relevant post-grant proceedings, and any relevant file histories.	intrinsic and extrinsic evidence; and 3. why Defendants' construction is incorrect. Mr. Alberth's declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the '302 Patent; and the prosecution history of U.S. Application No. 15/953,950 including any relevant post-grant proceedings, and any relevant file histories.
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The '512 Patent				
P14	“An orthogonal frequency division multiple access (OFDMA)-compatible mobile station that uses subcarriers in a frequency domain and time slots in a time domain, the OFDMA-compatible mobile station comprising:” (’512 Patent, Claim 15)	The preamble is limiting. Plain and ordinary meaning.	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIGs. 1–4, 10–12, and accompanying text. And, information, for example, in the following passages: 3:4–16, 3:55–65, 3:66–4:13, 4:14–22, 4:23–30, 4:48–56, 8:5–10, 8:11–24, 8:25–38, 8:39–55. The prosecution history of U.S. Application No. 17/012,813 including any relevant post-grant proceedings, and any relevant file histories.	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. why the preamble is limiting; and 2. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 3. why Defendants’ construction is unnecessary and incorrect. Mr. Alberth’s declaration may also include discussion and analysis of the intrinsic record.

				including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the '512 Patent; and the prosecution history of U.S. Application No. 17/012,813 including any relevant post-grant proceedings, and any relevant file histories.
P15	A method performed by an orthogonal frequency division multiple access (OFDMA)-compatible mobile station that uses subcarriers in a frequency domain and time slots in a time domain, the method comprising: ('512 Patent, Claim 23)	The preamble is limiting. Plain and ordinary meaning.	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIGs. 1–4, 10–12, and	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. why the preamble is limiting; and

			accompanying text. And, information, for example, in the following passages: 3:4–16, 3:55–65, 3:66–4:13, 4:14–22, 4:23–30, 4:48–56, 8:5–10, 8:11–24, 8:25–38, 8:39–55. The prosecution history of U.S. Application No. 17/012,813 including any relevant post-grant proceedings, and any relevant file histories.	2. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 3. why Defendants’ construction is unnecessary and incorrect. Mr. Alberth’s declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the ‘512 Patent; and the prosecution history of U.S. Application No. 17/012,813 including any
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P16	“wherein the first plurality of subcarriers and the second plurality of subcarriers are received in at least one of the time slots” (’512 Patent, Claims 15 and 23)	“wherein the first plurality of subcarriers and the second plurality of subcarriers are received in at least one of the same time slots”	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIGs. 3, 8, 10, 11, and accompanying text. And, information, for example, in the following passages: 4:23–30, 4:64–5:14, 5:49–67, 6:48–59, 8:11–24, & 8:65–9:5. The prosecution history of U.S. Application No. 17/012,813 including any relevant post-grant proceedings, and any relevant file histories.	relevant post-grant proceedings, and any relevant file histories. In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. why Neo Wireless’s construction is correct; and 2. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 3. why Defendants’ construction is incorrect. Mr. Alberth’s declaration may also include discussion and analysis of
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				the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the '512 Patent; and the prosecution history of U.S. Application No. 17/012,813 including any relevant post-grant proceedings, and any relevant file histories.
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No.	Claim Term	Proposed Construction	Intrinsic Evidence	Extrinsic Evidence
Applicable to Multiple Patents				
D1	“configured to” (’366 Patent, Claims 1 and 5; 908 Patent, Claims 1-3 and 9; ’450 Patent, Claim 7; ’941 Patent, Claim 13; ’302 Patent, Claim 23; ’512 Patent, Claim 15)	Plain and ordinary meaning. No construction necessary. <u>Alternatively, if a construction is necessary:</u> An apparatus/element is “configured to” perform a function if it includes hardware and/or software enabling the apparatus/element to perform the function.	The claim language in the ’366 Patent, ’908 Patent, ’450 Patent, ’941 Patent, ’302 Patent, and ’512 Patent. The Abstract, Background of the Invention, and Summary of the Invention Section for the ’366 Patent, ’908 Patent, ’450 Patent, ’941 Patent, ’302 Patent, and ’512 Patent. The specifications for each Asserted Patent, including, information depicted, for example, in the following passages: • ’366 Patent: 1:24-26, 1:48-55, 5:24-27. • ’908 Patent: 4:6-15, 5:27-28, 7:19-21, 9:3-19. • ’450 Patent: 8:43-54, 8:66-9:3, 12:16-24.	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 2. why Defendants’ construction is unnecessary and incorrect. Mr. Alberth’s declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column:

			• '941 Patent: 1:6-63, 2:33-41, 2:50-55, 3:12-22, 3:33-43, 3:54-61, 3:62-4:13, 4:13-38, 4:39-60, 5:27-50, 6:50-67, 7:1-8:3, 8:11-23. • '302 Patent: 3:62-4:5, 7:64-8:11, 8:51-64, & 9:27-38. • '512 Patent: 3:4-8, 3:17-19, 3:27-36, 3:36-5, 4:64-5:14, 6:48-59, 7:25-36, 7:37-43, 8:65-9:5. The prosecution history of U.S. Application Nos. 13/205,579; 16/902,740; 15/676,421; 15/082,878; 15/953,950; 17/012,813; including any relevant post-grant proceedings, and any relevant file histories.	the claim language for the '908 Patent, '450 Patent, '941 Patent, '302 Patent, and '512 Patent; the Specifications of the '366 Patent, '908 Patent, '450 Patent, '941 Patent, '302 Patent, and '512 Patent; and the prosecution history of U.S. Application Nos. 13/205,579; 16/902,740; 15/676,421; 15/082,878; 15/953,950; 17/012,813; including any relevant post-grant proceedings, and any relevant file histories.	In addition to the disclosure described above, Neo Wireless
D2	“uplink control signals”	Plain and ordinary meaning. No construction necessary.	The claim language of the '908 Patent and '302 Patent.		

	('908 Patent, Claim 7; '302 Patent, Claims 23 and 29)	The Abstract, Background of the Invention, and Summary of the Invention Section of the '908 Patent and '302 Patent. The specifications of the '908 Patent and '302 Patent, including, information depicted, for example, in: • '908 Patent: FIGs 4, 5, 15, and accompanying text. • '302 Patent: FIG 15 and accompanying text. And, information, for example, in the following passages: • '908 Patent: 1:66-2:4, 3:9-14, 4:6-24, 4:26-38, 8:15-29, 8:63-9:4, 9:10-19. • '302 Patent: 7:64-8:11.	intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 2. why Defendants' construction is unnecessary and incorrect. Mr. Alberth's declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the '908 Patent; and
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			The prosecution history of U.S. Application Nos. 16/902,740, 15/953,950, including any relevant post-grant proceedings, and any relevant file histories.	the prosecution history of U.S. Application Nos. 16/902,740, 15/953,950, including any relevant post-grant proceedings, and any relevant file histories.
The '366 Patent				
D3	“In a multi-cell orthogonal frequency division multiple access (OFDMA) wireless communication system comprising a plurality of base stations and mobile stations, a mobile station configured to communicate with a serving base station in a cell via a communication channel, the mobile station comprising:” (’366 Patent, Claim 1)	The preamble is limiting. Plain and ordinary meaning.	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIGs. 3, 5, 6 and accompanying text. And, information, for example, in the following passages: 1:24-64, 2:40-56, 3:5-26, 3:43-51, 3:57-4:5, 4:31-48, 5:10-23.	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. why the preamble is limiting; and 2. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and

			The prosecution history of U.S. Application No. 13/205,579 including any relevant post-grant proceedings, and any relevant file histories.	3. why Defendants' construction is unnecessary and incorrect. Mr. Alberth's declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the '366 Patent; and the prosecution history of U.S. Application No. 13/205,579 including any relevant post-grant proceedings, and any relevant file histories.
D4	"In an orthogonal frequency division multiple access	The preamble is limiting. Plain and ordinary meaning.	The claim language.	In addition to the disclosure described above, Neo Wireless

	(OFDMA) wireless communication system, a method for signal transmission by a mobile station to a serving base station via a communication channel, the method comprising:” (’366 Patent, Claim 17)	The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIGs. 3, 4, 5, 6 and accompanying text. And, information, for example, in the following passages: 1:24-64, 2:40-56, 3:5-51, 3:57-4:5, 4:31-48, 5:10-23. The prosecution history of U.S. Application No. 13/205,579 including any relevant post-grant proceedings, and any relevant file histories.	intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. why the preamble is limiting; and 2. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 3. why Defendants’ construction is unnecessary and incorrect. Mr. Alberth’s declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language;
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				the Specification of the '366 Patent; and the prosecution history of U.S. Application No. 13/205,579 including any relevant post-grant proceedings, and any relevant file histories.
D5	“the ranging signal exhibits a low peak-to-average power ratio in the time domain” (’366 Patent, Claims 1 and 17)	Plain and ordinary meaning. No construction necessary.	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIGs. 2, 5, 7 and accompanying text. And, information, for example, in the following passages: 2:5-7, 2:47-64, 3:5-16, 3:47-49, 3:57-58, 4:33-59, 5:19-62, 5:64-6:13.	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 2. why Defendants’ construction is unnecessary and incorrect.

			The prosecution history of U.S. Application No. 13/205,579 including any relevant post-grant proceedings, and any relevant file histories. Mr. Alberth's declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the '366 Patent; and the prosecution history of U.S. Application No. 13/205,579 including any relevant post-grant proceedings, and any relevant file histories. Mr. Alberth's declaration may also include discussion and analysis of the following pieces of extrinsic evidence:
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			Young-Hwan You, Won-Gi Jeon, Jong-Ho Paik and Hyoung-Kyu Song, "A simple construction of OFDM-CDMA signals with low peak-to-average power ratio," in IEEE Transactions on Broadcasting, vol. 49, no. 4, pp. 403-407, Dec. 2003. R. J. Baxley and G. T. Zhou, "Power savings analysis of peak-to-average power ratio in OFDM," in IEEE Transactions on Consumer Electronics, vol. 50, no. 3, pp. 792-798, Aug. 2004. "Chapter 6 - The Peak Power Problem," in OFDM for Wireless Communications Systems, by Ramjee Prasad, Artech House, 2004.
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				Panta, K. R., & Armstrong, J. (2002). Use of peak-to-average power reduction technique in HIPERLAN2 and its performance in fading channel. In T. A. Wysocki (Ed.), Proc. 6th International Symposium on DSP for Communication Systems (pp. 113 - 117). University of Wollongong. Y. Guo and J. R. Cavallaro, "Reducing Peak-to-Average Power Ratio in OFDM Systems by adaptive dynamic range companding," 2002 World Wireless Congress, San Francisco, CA, 2002.
D6	“a ranging sequence selected from a set of ranging sequences”	Plain and ordinary meaning. No construction necessary.	The claim language.	In addition to the disclosure described above, Neo Wireless intends to rely on expert

	('366 Patent, Claims 1 and 17)	The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIGs. 5, 6 and accompanying text. And, information, for example, in the following passages: 2:5-7, 3:43-49, 3:52-58, 4:33-48, 5:31-35. The prosecution history of U.S. Application No. 13/205,579 including any relevant post-grant proceedings, and any relevant file histories.	testimony in the form of a declaration from Mr. Alberth that may describe: 1. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 2. why Defendants' construction is unnecessary and incorrect. Mr. Alberth's declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the '366 Patent; and
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				the prosecution history of U.S. Application No. 13/205,579 including any relevant post-grant proceedings, and any relevant file histories.
D7	“the communication channel” (’366 Patent, Claims 1 and 17)	Plain and ordinary meaning. No construction necessary.	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIGs. 1, 3, and accompanying text. And, information, for example, in the following passages: 1:24-55, 2:47-56, 2:57-3:16, 3:17-26, 3:43-51. The prosecution history of U.S. Application No. 13/205,579 including any relevant post-grant	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 2. why Defendants’ construction is unnecessary and incorrect. Mr. Alberth’s declaration may also include

			proceedings, and any relevant file histories.	discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the '366 Patent; and the prosecution history of U.S. Application No. 13/205,579 including any relevant post-grant proceedings, and any relevant file histories.
The '908 Patent				
D8	"A mobile station comprising:" ('908 Patent, Claim 1)	The preamble is limiting. Plain and ordinary meaning.	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe:

			example, in FIGs. 10, 11, 17 and accompanying text. And, information, for example, in the following passages: 5:35-39, 5:42-67, 6:26-31, 6:35-57, 6:65-7:3, 8:34-9:18, 9:29-40, 9:50-10:9, 10:14-27. The prosecution history of U.S. Application No. 16/902,740 including any relevant post-grant proceedings, and any relevant file histories.	1. why the preamble is limiting; and 2. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 3. why Defendants' construction is unnecessary and incorrect. Mr. Alberth's declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the '908 Patent; and the prosecution history of U.S. Application No.
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				16/902,740 including any relevant post-grant proceedings, and any relevant file histories.
D9	“the portion of the frequency band used for random access signal does not include control channels” (’908 Patent, Claim 4)	“wherein the portion of the frequency band used for transmission of the random access signal does not overlap with the portions of the frequency band used for control channels”	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIGs 1, 6, 10, 15, 18, and accompanying text. And, information, for example, in the following passages: 2:42-57, 5:22-39, 7:8-24, 8:15-29, 8:31-9:19. The prosecution history of U.S. Application No. 16/902,740 including any relevant post-grant proceedings, and any relevant file histories.	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 2. why Defendants’ construction is unnecessary and incorrect. Mr. Alberth’s declaration may also include discussion and analysis of the intrinsic record, including but not limited

				to, the identified portions in the adjacent column: the claim language; the Specification of the '908 Patent; and the prosecution history of U.S. Application No. 16/902,740 including any relevant post-grant proceedings, and any relevant file histories.
D10	“associated with” (’908 Patent, Claims 1-2 and 9)	Plain and ordinary meaning. No construction necessary.	The claim language. The Abstract, Background of the Invention, Summary of the Invention Section, and Specification. The prosecution history of U.S. Application No. 16/902,740 including any relevant post-grant proceedings, and any relevant file histories.	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. how a person having ordinary skill in the art would have understood the term in light of the

				intrinsic and extrinsic evidence; and 2. why Defendants' construction is unnecessary and incorrect. Mr. Alberth's declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the '908 Patent; and the prosecution history of U.S. Application No. 16/902,740 including any relevant post-grant proceedings, and any relevant file histories.
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D11	“random access signal” (’908 Patent, Claims 1-2, 4, and 6-9)	Plain and ordinary meaning. No construction necessary.	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIG 6 and accompanying text. And, information, for example, in the following passages: 2:42-57, 5:22-39, 8:31-9:19. The prosecution history of U.S. Application No. 16/902,740 including any relevant post-grant proceedings, and any relevant file histories.	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 2. why Defendants’ construction is unnecessary and incorrect. Mr. Alberth’s declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language;
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				the Specification of the '908 Patent; and the prosecution history of U.S. Application No. 16/902,740 including any relevant post-grant proceedings, and any relevant file histories.
The '450 Patent				
D12	“A mobile device in a wireless packet system using a frame structure of multiple frames for transmission, each frame comprising a plurality of time intervals, each time interval comprising a plurality of orthogonal frequency division multiplexing (OFDM) symbols, and each OFDM symbol containing a plurality of	The preamble is limiting. Plain and ordinary meaning.	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIGs. 1, 2, 4, 5, 6, 7 and accompanying text. And, information, for example, in the following passages: 1:51-2:16, 3:6-18, 3:36-4:4, 4:5-16, 4:27-37, 4:49-5:18, 5:32-53, 5:61-64,	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. why the preamble is limiting; and 2. how a person having ordinary skill in the art would have understood the term in light of the

	frequency subcarriers, the mobile device configured to:” (’450 Patent, Claim 7)	7:55-8:5, 8:6-26, 8:37-54, 9:4-29, 9:40-50, 9:56-67, 10:27-34, 10:56-11:6, 11:19-33. The prosecution history of U.S. Application No. 15/676,421 including any relevant post-grant proceedings, and any relevant file histories including Applicant Response Dated 2/16/2016 Applicant Response Dated 2/16/2016 Applicant Response Dated 11/21/2016 Applicant Response Dated 7/5/2017 Applicant Response Dated 2/5/2018 Notice of Allowance and Notice of Allowability Dated 4/5/2018.	intrinsic and extrinsic evidence; and 3. why Defendants’ construction is unnecessary and incorrect. Mr. Alberth’s declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the ’450 Patent; and the prosecution history of U.S. Application No. 15/676,421 and all other relevant post-grant proceedings and file histories including Applicant Response Dated 2/16/2016 Applicant
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D13	“time-frequency coordinate” (’450 Patent, Claim 7)	See Neo’s Proposed Term P6: “the segment having a starting time-frequency coordinate” To which Neo proposes the following construction: “the segment having a singular, one-dimensional parameter reflecting a starting location in both time and frequency”	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIG 6 and accompanying text. And, information, for example, in the following passages: 1:52-55, 1:62-66, 4:12-13, 5:57-64, 6:14-19, 6:22-29, 7:12-18, 8:15-19, 8:23-26, 8:37-39.	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and	Response Dated 2/16/2016 Applicant Response Dated 11/21/2016 Applicant Response Dated 7/5/2017 Applicant Response Dated 2/5/2018 Notice of Allowance and Notice of Allowability Dated 4/5/2018.
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			The prosecution history of U.S. Application No. 15/676,421 including any relevant post-grant proceedings, and any relevant file histories including IPR2021-10486, paper No. 10, pp. 23-28.	2. why Defendants' construction is unnecessary and incorrect. Mr. Alberth's declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the '450 Patent; and the prosecution history of U.S. Application No. 15/676,421 and all other relevant file histories.
D14	"time-frequency resource unit" ('450 Patent, Claims 7 and 11)	Plain and ordinary meaning. No construction necessary.	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section.	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a

			The specification, including, information depicted, for example, in FIG 6 and accompanying text. And, information, for example, in the following passages: 1:62-66, 2:45-57, 5:57-64, 6:14-29, 6:49-62, 7:12-18, 7:55-8:5, 8:6-18; 8:27-36, 9:51-67. The prosecution history of U.S. Application No. 15/676,421 including any relevant post-grant proceedings, and any relevant file histories.	declaration from Mr. Alberth that may describe: 1. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 2. why Defendants' construction is unnecessary and incorrect. Mr. Alberth's declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the '450 Patent; and
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					the prosecution history of U.S. Application No. 15/676,421 including any relevant post-grant proceedings, and any relevant file histories.
The '941 Patent					
D15	Multiplexing (OFDM) communication system, the communication system utilizing a transmission structure with time slots in the time domain and frequency subchannels in the frequency domain, the method comprising:" ('941 Patent, Claim 8)	The preamble is limiting. Plain and ordinary meaning.	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIGs. 3, 4, 5, 6, 8 and accompanying text. And, information, for example, in the following passages: 1:6-63, 2:33-41, 2:50-55, 3:54-61, 3:62-4:13, 4:13-38, 4:39-60, 5:27-50, 6:50-67, 7:10-16, 7:25-8:3, 8:11-23.	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. why the preamble is limiting; and 2. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 3. why Defendants' construction is unnecessary and incorrect.	

			The prosecution history of U.S. Application No. 15/082,878 including any relevant post-grant proceedings, and any relevant file histories.	Mr. Alberth's declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the '941 Patent; and the prosecution history of U.S. Application No. 15/082,878 including any relevant post-grant proceedings, and any relevant file histories.
D16	"A mobile station served by a serving base station in an Orthogonal Frequency Division Multiplexing (OFDM)	The preamble is limiting. Plain and ordinary meaning.	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section.	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a

	communication system, the communication system utilizing a transmission structure with time slots in the time domain and frequency subchannels in the frequency domain, the mobile station comprising a receiver configured to:” (’941 Patent, Claim 13)		The specification, including, information depicted, for example, in FIGs. 3, 4, 5, 6, 8 and accompanying text. And, information, for example, in the following passages: 1:6-63, 2:33-41, 2:50-55, 3:12-22, 3:33-43, 3:54-61, 3:62-4:13, 4:13-38, 4:39-60, 5:27-50, 6:50-67, 7:1-8:3, 8:11-23. The prosecution history of U.S. Application No. 15/082,878 including any relevant post-grant proceedings, and any relevant file histories.	declaration from Mr. Alberth that may describe: 1. why the preamble is limiting; and 2. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 3. why Defendants’ construction is unnecessary and incorrect. Mr. Alberth’s declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the ’941 Patent; and
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				the prosecution history of U.S. Application No. 15/082,878 including any relevant post-grant proceedings, and any relevant file histories.
D17	“the antenna transmission scheme comprising a transmission diversity scheme or a multiple-input multiple-output (MIMO) scheme” (’941 Patent, Claims 8 and 13)	“the antenna transmission scheme is capable of comprising either a MIMO scheme or a transmission diversity scheme other than MIMO. To avoid any doubt, this requires supporting both MIMO and non-MIMO transmission diversity systems.”	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIGs. 4, 5, 6, 7 and accompanying text. And, information, for example, in the following passages: 2:17-27, 2:33-38, 3:66-4:12, 4:17-19, 4:32-36, 4:39-43, 4:61-62, 5:1-5, 5:20-22, 6:50-53, 6:60-67, 7:1-9, 7:10-16, 7:33-36.	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 2. why Defendants’ construction is unnecessary and incorrect.

			The prosecution history of U.S. Application No. 15/082,878 including any relevant post-grant proceedings, and any relevant file histories including Preliminary Amendment Dated 11/11/2016 Applicant Response Dated 4/12/2018.	Mr. Alberth's declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the '941 Patent; and the prosecution history of U.S. Application No. 15/082,878. and all other relevant post-grant proceedings and file histories including Preliminary Amendment Dated 11/11/2016 Applicant Response Dated 4/12/2018.
D18	“the mobile station-specific transmission parameters indicate ... a	See Neo's Proposed Term P11: “the corresponding subchannel configuration	The claim language.	In addition to the disclosure described above, Neo Wireless

corresponding subchannel configuration ... the corresponding subchannel configuration characterized by distributed subcarriers or localized subcarriers in the frequency domain” (’941 Patent, Claims 8 and 13)	characterized by distributed subcarriers or localized subcarriers in the frequency domain” To which Neo proposes the following construction “The corresponding subchannel configuration characterized by distributed subcarriers or localized subcarriers in the frequency domain, wherein the subchannel configuration is capable of comprising either localized or distributed subcarriers. To avoid any doubt, this requires supporting both localized and distributed subchannel configurations.” Otherwise, plain and ordinary meaning. No construction necessary.	The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIGs. 2, 3, 4, 5, 6, 7, 8 and accompanying text. And, information, for example, in the following passages: 1:64-2:7, 2:17-27, 2:33-38, 3:44-61, 3:66-4:12, 4:17-19, 4:25-43, 4:61-62, 5:1-5, 5:20-39, 6:50-53, 6:60-67, 7:1-9, 7:33-36, 8:4-10. The prosecution history of U.S. Application No. 15/082,878 including any relevant post-grant proceedings, and any relevant file histories including Preliminary Amendment Dated 11/11/2016 Applicant Response Dated 4/12/2018.	intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 2. why Defendants’ construction is unnecessary and incorrect. Mr. Alberth’s declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the ’941 Patent; and
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				the prosecution history of U.S. Application No. 15/082,878 and all other relevant post-grant proceedings and file histories including Preliminary Amendment Dated 11/11/2016 Applicant Response Dated 4/12/2018.
The '302 Patent				
D19	“A mobile device in an Orthogonal Frequency Division Multiplexing (OFDM) communication system, the mobile device comprising” ('302 Patent, Claim 23)	The preamble is limiting. Plain and ordinary meaning.	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIGs. 10, 11, 17, and accompanying text. And, information, for example, in the following passages: 1:42–44, 3:6–8, 3:63–4:5, & 4:6–14.	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. why the preamble is limiting; and 2. how a person having ordinary skill in the art would have understood the term in light of the

			intrinsic and extrinsic evidence; and 3. why Defendants' construction is unnecessary and incorrect. Mr. Alberth's declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the '302 Patent; and the prosecution history of U.S. Application No. 15/953,950 including any relevant post-grant proceedings, and any relevant file histories.	
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D20	“the probing signal is configured to occupy a portion of spectrum in the uplink frequency band not designated for transmission of uplink control signals in the system” (’302 Patent, Claim 23)	“the probing signal is configured to reside within a portion of spectrum in the uplink frequency band not designated for transmission of uplink control signals in the system.”	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIGs. 6, 7, 15, and accompanying text. And, information, for example, in the following passages: 4:38–44, 6:52–7, & 7:64–8:11. The prosecution history of U.S. Application No. 15/953,950 including any relevant post-grant proceedings, and any relevant file histories.	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 2. why Defendants’ construction is unnecessary and incorrect. Mr. Alberth’s declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language;
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				the Specification of the '302 Patent; and the prosecution history of U.S. Application No. 15/953,950 including any relevant post-grant proceedings, and any relevant file histories.
D21	“probing signal” (’302 Patent, Claims 23-24, 26, 28)	Plain and ordinary meaning. No construction necessary.	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIGs. 6–10, 14, 15, 17, 18, and accompanying text. And, information, for example, in the following passages: 1:31–33, 2:44–50, 4:38–44, 5:9–26, 6:52–57, 7:36–47, 7:48–60, 7:64–8:11,	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and

			8:24–34, 8:63–64, 8:65–9:4, 9:5–16, 9:17–26, & 9:39–52. The prosecution history of U.S. Application No. 15/953,950 including any relevant post-grant proceedings, and any relevant file histories.	2. why Defendants’ construction is unnecessary and incorrect. Mr. Alberth’s declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the ’302 Patent; and the prosecution history of U.S. Application No. 15/953,950 including any relevant post-grant proceedings, and any relevant file histories.
D22	“a receiver configured to receive a request for a probing signal from a	Plain and ordinary meaning. No construction necessary.	The claim language.	In addition to the disclosure described above, Neo Wireless

	base station in the system” (’302 Patent, Claim 23)	The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIGs. 8–11, 17, and accompanying text. And, information, for example, in the following passages: 4:50–65, 4:66–538:8, 5:9–26, 9:27–34, 9:35–54, 9:55–67, 6:1–14, 6:15–20, 8:13–23, 8:24–34, 8:35–41, 8:42–50, 8:51–64, 8:65–9:4, 9:5–16, 9:17–26, 9:27–38, & 9:39–52. The prosecution history of U.S. Application No. 15/953,950 including any relevant post-grant proceedings, and any relevant file histories.	intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 2. why Defendants’ construction is unnecessary and incorrect. Mr. Alberth’s declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the ’302 Patent; and
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				the prosecution history of U.S. Application No. 15/953,950 including any relevant post-grant proceedings, and any relevant file histories.
D23	“the probing signal is configured to overlap, in the time domain, with uplink signals transmitted over an uplink frequency band by other mobile devices in the system” (’302 Patent, Claim 23)	Plain and ordinary meaning. No construction necessary.	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIGs. 2, 5, 10, 13, 17, and accompanying text. And, information, for example, in the following passages: 2:39–42, 2:62–67, 3:58–61, 4:29–37, 7:4–7, 7:27–35, 8:12–23, 8:24–34, 8:35–41, 8:51–64, 8:65–9:4, & 9:5–16.	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 2. why Defendants’ construction is unnecessary and incorrect.

			The prosecution history of U.S. Application No. 15/953,950 including any relevant post-grant proceedings, and any relevant file histories.	Mr. Alberth's declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the '302 Patent; and the prosecution history of U.S. Application No. 15/953,950 including any relevant post-grant proceedings, and any relevant file histories.
D24	"a transmitter configured to form and transmit, in response to the received request, the probing signal with a code sequence modulated in the frequency domain"	Plain and ordinary meaning. No construction necessary.	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section.	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe:

	('302 Patent, Claim 23)	The specification, including, information depicted, for example, in FIGs. 10–12, 17, and accompanying text. And, information, for example, in the following passages: 6:15–20, 6:58–7:7, 8:35–41, & 8:42–50. The prosecution history of U.S. Application No. 15/953,950 including any relevant post-grant proceedings, and any relevant file histories.	1. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 2. why Defendants' construction is unnecessary and incorrect. Mr. Alberth's declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the '302 Patent; and the prosecution history of U.S. Application No. 15/953,950 including any
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				relevant post-grant proceedings, and any relevant file histories.
The '512 Patent				
D25	“An orthogonal frequency division multiple access (OFDMA)-compatible mobile station that uses subcarriers in a frequency domain and time slots in a time domain, the OFDMA-compatible mobile station comprising:” (’512 Patent, Claim 15)	The preamble is limiting. Plain and ordinary meaning.	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIGs. 1–4, 10–12, and accompanying text. And, information, for example, in the following passages: 3:4–16, 3:55–65, 3:66–4:13, 4:14–22, 4:23–30, 4:48–56, 8:5–10, 8:11–24, 8:25–38, 8:39–55. The prosecution history of U.S. Application No. 17/012,813 including any relevant post-grant	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. why the preamble is limiting; and 2. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 3. why Defendants’ construction is unnecessary and incorrect. Mr. Alberth’s declaration may also include

			proceedings, and any relevant file histories.	discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the '512 Patent; and the prosecution history of U.S. Application No. 17/012,813 including any relevant post-grant proceedings, and any relevant file histories.
D26	A method performed by an orthogonal frequency division multiple access (OFDMA)-compatible mobile station that uses subcarriers in a frequency domain and time slots in a time	The preamble is limiting. Plain and ordinary meaning.	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe:

	domain, the method comprising: (’512 Patent, Claim 23)		example, in FIGs. 1–4, 10–12, and accompanying text. And, information, for example, in the following passages: 3:4–16, 3:55–65, 3:66–4:13, 4:14–22, 4:23–30, 4:48–56, 8:5–10, 8:11–24, 8:25–38, 8:39–55. The prosecution history of U.S. Application No. 17/012,813 including any relevant post-grant proceedings, and any relevant file histories.	1. why the preamble is limiting; and 2. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 3. why Defendants’ construction is unnecessary and incorrect. Mr. Alberth’s declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the ’512 Patent; and the prosecution history of U.S. Application No.
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				17/012,813 including any relevant post-grant proceedings, and any relevant file histories.
D27	“second pilots of a second type” (’512 Patent, Claims 15 and 23)	Plain and ordinary meaning. No construction necessary.	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIGs. 5, 6 and accompanying text. And, information, for example, in the following passages: 1:49-53, 1:62-2:2; 3:16-36. The prosecution history of U.S. Application No. 17/012,813 including any relevant post-grant proceedings, and any relevant file histories.	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. how a person having ordinary skill in the art would have understood the term in light of the intrinsic and extrinsic evidence; and 2. why Defendants’ construction is unnecessary and incorrect. Mr. Alberth’s declaration may also include discussion and analysis of the intrinsic record,

				including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the '512 Patent; and the prosecution history of U.S. Application No. 17/012,813 including any relevant post-grant proceedings, and any relevant file histories.
D28	“receiver is further configured to [] recover the data using channel estimates from at least the second pilots”; “receiver is further configured to ... recover cell-specific information using the cell-specific pilots”	Plain and ordinary meaning. No construction necessary.	The claim language. The Abstract, Background of the Invention, and Summary of the Invention Section. The specification, including, information depicted, for example, in FIGs. 5, 6, 9 and accompanying text. And, information, for example, in	In addition to the disclosure described above, Neo Wireless intends to rely on expert testimony in the form of a declaration from Mr. Alberth that may describe: 1. how a person having ordinary skill in the art would have understood

	(‘512 Patent, Claim 15)		the following passages: 1:49-53, 1:62-2:2; 3:16-36; 5:15-32; 7:43-57, 7:59-8:3. The prosecution history of U.S. Application No. 17/012,813 including any relevant post-grant proceedings, and any relevant file histories. the term in light of the intrinsic and extrinsic evidence; and 2. why Defendants’ construction is unnecessary and incorrect. Mr. Alberth’s declaration may also include discussion and analysis of the intrinsic record, including but not limited to, the identified portions in the adjacent column: the claim language; the Specification of the ‘512 Patent; and the prosecution history of U.S. Application No. 17/012,813 including any relevant post-grant proceedings, and any relevant file histories.
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