

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

FOUR BATONS WIRELESS, LLC,

Plaintiff,

v.

**SAMSUNG ELECTRONICS CO., LTD.,
SAMSUNG ELECTRONICS AMERICA,
INC.,**

Defendants.

Case No. 2:24-cv-284-JRG

**SAMSUNG’S PRELIMINARY CLAIM CONSTRUCTIONS AND
EXTRINSIC EVIDENCE PURSUANT TO PATENT LOCAL RULE 4-2**

Pursuant to Local Patent Rule 4-2, Defendants Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc. (collectively, “Samsung”) hereby provide their Preliminary Claim Constructions and Extrinsic Evidence for the asserted claims of U.S. Patent Nos. 8,798,006 (“’006 Patent”), 8,239,671 (“’671 Patent”), 7,502,348 (“’348 Patent”), and 8,073,436 (“’436 Patent”) (collectively, the “Asserted Patents”).

Samsung reserves the right to supplement this disclosure, including the right to add to, remove from, or otherwise modify or amend its proposed claim constructions and extrinsic evidence to the extent allowed by applicable law, rule, order, or other practice or agreement. Samsung may further supplement this disclosure in light of the positions that Plaintiff Four Batons Wireless, LLC (“Plaintiff”) takes in this litigation, including based on Plaintiff’s Rule 4-2 disclosure.

I. PRELIMINARY PROPOSED CLAIM CONSTRUCTIONS AND EXTRINSIC EVIDENCE

Subject to the above, Samsung sets forth below its preliminary proposed claim constructions and preliminary identification of extrinsic evidence for the Asserted Patents. Samsung's preliminary proposed claim constructions apply to each element of the asserted claim(s) where the term appears unless otherwise indicated. Samsung further reserves the right to rely on extrinsic evidence cited by Plaintiff, additional extrinsic evidence to rebut, as needed, any construction offered by Plaintiff, and any extrinsic evidence developed as discovery proceeds.¹

Samsung has produced the extrinsic evidence cited below that support their proposed preliminary constructions. *See* SAMSUNG_FB_0000084725–960, SAMSUNG_FB_0000093348–824. Samsung may also rely on one or more of the prior art systems, references, and/or publications identified during the prosecution of the Asserted Patents or in Samsung's invalidity contentions served in this case. *See* SAMSUNG_FB_0000083399–93347. Samsung may also rely on deposition testimony from the named inventors of the Asserted Patents.

II. EXPERT TESTIMONY

Samsung intends to rely on expert testimony in support of its constructions, including expert testimony regarding the technology that underlies the alleged inventions, the level of ordinary skill in the art, how the Asserted Patents, claims, and intrinsic or extrinsic evidence would be understood by one of ordinary skill in the art, the alleged inventions claimed in the Asserted Patents, the meaning of the disputed claim terms, phrases, and clauses to one of ordinary skill in

¹ Samsung reserves the right to adopt or object to the construction of terms and phrases proposed by Plaintiff. Samsung further reserves all rights to supplement and amend its list of proposed terms and claim elements for construction, its constructions, and supporting evidence. Samsung also reserves all rights to assert that the terms or phrases in the Asserted Patents are invalid under 35 U.S.C. § 112, including, without limitation, the terms and phrases listed in this disclosure.

the art, and any other opinions or testimony useful to the Court in conducting the requisite claim constructions.² Samsung may offer expert testimony for any tutorial the Court may wish to conduct. Samsung may also offer expert testimony to rebut any extrinsic evidence offered by Plaintiff, including any expert opinions. Samsung preliminarily identifies Dr. Ozan K. Tonguz and Dr. Henry Hough as said experts. The CV for Dr. Tonguz is attached herein as Exhibit A. The CV for Dr. Houh is attached herein as Exhibit B.

III. '006 Patent

Term	Proposed Construction	Extrinsic Evidence
<p>“two sample tests” (claims 1, 3)</p>	<p>“comparison of a test statistic calculated from two samples to a critical value”</p>	<p>A Dictionary of Statistics (2002), SAMSUNG_FB_0000093476–82, at p. 358, defines “test” by referring to “hypothesis test,” which is defined on pp. 165–67.</p> <p>Pocket Dictionary of Statistics (2002) SAMSUNG_FB_0000093595–600, at p. 256, defines “statistical test.”</p> <p>Neave & Worthington, DISTRIBUTION-FREE TESTS (1988), SAMSUNG_FB_0000084725–960, at pp. 48-55, describes the fundamental structure of a “statistical test.”</p> <p>Samsung’s expert Dr. Tonguz may provide expert testimony explaining how a person of ordinary skill in the art would have understood the scope and</p>

² For certain terms, Samsung reserves the right to rely on statements made by Plaintiff and/or the Patent Trial and Appeal Board during *inter partes* review of the Asserted Patents. Samsung has not identified those statements here because they are intrinsic evidence. *Aylus Networks, Inc. v. Apple Inc.*, 856 F.3d 1353, 1360 (Fed. Cir. 2017).

		<p>meaning of this claim term in light of intrinsic and extrinsic evidence. Samsung may also rely on Dr. Tonguz to respond to Plaintiff’s claim construction position on this term and alleged support, including why Samsung’s position should be adopted over that of Plaintiff’s position.</p>
<p>“two-sample method” (claim 2)</p>	<p>“comparison of a test statistic calculated from two samples to a critical value”</p>	<p>A Dictionary of Statistics (2002) SAMSUNG_FB_0000093476–82, at p. 358, defines “test” by referring to “hypothesis test,” which is defined on pp. 165–67.</p> <p>Pocket Dictionary of Statistics (2002) SAMSUNG_FB_0000093595–600, at p. 256, defines “statistical test.”</p> <p>Neave & Worthington, DISTRIBUTION-FREE TESTS (1988) SAMSUNG_FB_0000084725–960, at pp. 48-55, describes the fundamental structure of a “statistical test.”</p> <p>Samsung’s expert Dr. Tonguz may provide expert testimony explaining how a person of ordinary skill in the art would have understood the scope and meaning of this claim term in light of intrinsic and extrinsic evidence. Samsung may also rely on Dr. Tonguz to respond to Plaintiff’s claim construction position on this term and alleged support, including why Samsung’s position should be adopted over that of Plaintiff’s position.</p>

<p>“location of samples” (claim 7)</p>	<p>“mean/median of samples”</p>	<p>Samsung’s expert Dr. Tonguz may provide expert testimony explaining how a person of ordinary skill in the art would have understood the scope and meaning of this claim term in light of intrinsic and extrinsic evidence. Samsung may also rely on Dr. Tonguz to respond to Plaintiff’s claim construction position on this term and alleged support, including why Samsung’s position should be adopted over that of Plaintiff’s position.</p>
<p>“the mobile device having limited knowledge of the quality of the current path” (claim 4)</p>	<p>Indefinite</p>	<p>Samsung’s expert Dr. Tonguz may provide expert testimony explaining why a person of ordinary skill in the art would not have understood the scope of this claim term in light of intrinsic and extrinsic evidence. Samsung may also rely on Dr. Tonguz to respond to Plaintiff’s claim construction position on this term and alleged support, including why Samsung’s position should be adopted over that of Plaintiff’s position.</p>
<p>“having insufficiently many measurements for an estimate of the mean quality of the current path and its variance” (claim 5)</p>	<p>Indefinite</p>	<p>Samsung’s expert Dr. Tonguz may provide expert testimony explaining why a person of ordinary skill in the art would not have understood the scope of this claim term in light of intrinsic and extrinsic evidence. Samsung may also rely on Dr. Tonguz to respond to Plaintiff’s claim construction position on this term and alleged support, including why Samsung’s position should be adopted over that of Plaintiff’s position.</p>
<p>“observations are not matched” (claim 5)</p>	<p>Indefinite</p>	<p>Samsung’s expert Dr. Tonguz may provide expert testimony explaining why a person of</p>

		ordinary skill in the art would not have understood the scope of this claim term in light of intrinsic and extrinsic evidence. Samsung may also rely on Dr. Tonguz to respond to Plaintiff's claim construction position on this term and alleged support, including why Samsung's position should be adopted over that of Plaintiff's position.
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IV. '671 Patent

Term	Proposed Construction	Extrinsic Evidence
"channel binding key" (claims 1, 6, 10, 11, 18, 19)	"a key that is derived from a Channel Binding Master Key and cryptographically bound to a Key Binding Blob using a Key Derivation Function"	Samsung's expert Dr. Houh may provide expert testimony explaining how a person of ordinary skill in the art would have understood the scope and meaning of this claim term in light of intrinsic and extrinsic evidence. Samsung may also rely on Dr. Houh to respond to Plaintiff's claim construction position on this term and alleged support, including why Samsung's position should be adopted over that of Plaintiff's position.
"channel binding master key" (claims 1, 6, 8, 11, 18)	"a key from which a Channel Binding Key is derived using a Key Derivation Function"	Samsung's expert Dr. Houh may provide expert testimony explaining how a person of ordinary skill in the art would have understood the scope and meaning of this claim term in light of intrinsic and extrinsic evidence. Samsung may also rely on Dr. Houh to respond to Plaintiff's claim construction position on this term and alleged support, including why Samsung's position should be adopted over that of Plaintiff's position.

<p>“key binding blob” (claims 1, 6, 8, 11, 18)</p>	<p>“an octet-string that is constructed from static parameters advertised from an authenticator using an Authenticator-Supplicant Protocol”</p>	<p>Samsung’s expert Dr. Houh may provide expert testimony explaining how a person of ordinary skill in the art would have understood the scope and meaning of this claim term in light of intrinsic and extrinsic evidence. Samsung may also rely on Dr. Houh to respond to Plaintiff’s claim construction position on this term and alleged support, including why Samsung’s position should be adopted over that of Plaintiff’s position.</p>
<p>“server” (claim 10)</p>	<p>“an entity that creates a Channel Binding Key and transfers it to the authenticator. A server is a creator as well as a sender of the Channel Binding Key”</p>	<p>Samsung’s expert Dr. Houh may provide expert testimony explaining how a person of ordinary skill in the art would have understood the scope and meaning of this claim term in light of intrinsic and extrinsic evidence. Samsung may also rely on Dr. Houh to respond to Plaintiff’s claim construction position on this term and alleged support, including why Samsung’s position should be adopted over that of Plaintiff’s position.</p>
<p>“authenticator” (claims 1, 3, 4, 7, 10, 11, 19)</p>	<p>“a network-side entity that uses a Channel Binding Key for an Authenticator-Supplicant Protocol”</p>	<p>Samsung’s expert Dr. Houh may provide expert testimony explaining how a person of ordinary skill in the art would have understood the scope and meaning of this claim term in light of intrinsic and extrinsic evidence. Samsung may also rely on Dr. Houh to respond to Plaintiff’s claim construction position on this term and alleged support, including why Samsung’s position should be adopted over that of Plaintiff’s position.</p>

<p>“supplicant” / “mobile supplicant” (claims 1, 3, 8, 10)</p>	<p>“a user-side entity that uses a Channel Binding Key for an Authenticator-Supplicant Protocol”</p>	<p>Samsung’s expert Dr. Houh may provide expert testimony explaining how a person of ordinary skill in the art would have understood the scope and meaning of this claim term in light of intrinsic and extrinsic evidence. Samsung may also rely on Dr. Houh to respond to Plaintiff’s claim construction position on this term and alleged support, including why Samsung’s position should be adopted over that of Plaintiff’s position.</p>
<p>“authenticator-supplicant protocol” (claims 7, 8, 10)</p>	<p>“a protocol that is executed between a supplicant and an authenticator and uses a Channel Binding Key for protecting the protocol”</p>	<p>Samsung’s expert Dr. Houh may provide expert testimony explaining how a person of ordinary skill in the art would have understood the scope and meaning of this claim term in light of intrinsic and extrinsic evidence. Samsung may also rely on Dr. Houh to respond to Plaintiff’s claim construction position on this term and alleged support, including why Samsung’s position should be adopted over that of Plaintiff’s position.</p>
<p>“[deriving a/derive said] channel binding key from a channel binding master key bound to a key binding blob using a key derivation function” (claims 1, 6)</p>	<p>“[deriving a/derive said] channel binding key from a channel binding master key and binding the channel binding key to a key binding blob using a key derivation function”</p>	<p>Samsung’s expert Dr. Houh may provide expert testimony explaining how a person of ordinary skill in the art would have understood the scope and meaning of this claim term in light of intrinsic and extrinsic evidence. Samsung may also rely on Dr. Houh to respond to Plaintiff’s claim construction position on this term and alleged support, including why Samsung’s position should be adopted over that of Plaintiff’s position.</p>

<p>“said parameters” (claims 3, 4)</p>	<p>“said access network parameters,” otherwise, indefinite</p>	<p>Samsung’s expert Dr. Houh may provide expert testimony explaining how a person of ordinary skill in the art would have understood the scope and meaning of this claim term in light of intrinsic and extrinsic evidence. Samsung may also rely on Dr. Houh to respond to Plaintiff’s claim construction position on this term and alleged support, including why Samsung’s position should be adopted over that of Plaintiff’s position.</p>
<p>“EAP methods” (claim 2)</p>	<p>“the authentication algorithms described in RFC 3748”</p>	<p>Samsung’s expert Dr. Houh may provide expert testimony explaining how a person of ordinary skill in the art would have understood the scope and meaning of this claim term in light of intrinsic and extrinsic evidence. Samsung may also rely on Dr. Houh to respond to Plaintiff’s claim construction position on this term and alleged support, including why Samsung’s position should be adopted over that of Plaintiff’s position.</p>
<p>“said supplicant using the channel binding master key for protecting an authenticator-supplicant protocol” (claim 8)</p>	<p>“encrypt the authenticator-supplicant communications using the channel binding master key”</p>	<p>Nut Taesombut et al., A SECURE MULTIMEDIA SYSTEM IN EMERGING WIRELESS HOME NETWORKS (2003) SAMSUNG_FB_0000093483–95, at pp. 80-81, describes the use of “bootstrap registration” to secure communication channels.</p> <p>Samsung’s expert Dr. Houh may provide expert testimony explaining how a person of ordinary skill in the art would have understood the scope and meaning of this claim term in light of intrinsic and extrinsic</p>

		evidence. Samsung may also rely on Dr. Houh to respond to Plaintiff's claim construction position on this term and alleged support, including why Samsung's position should be adopted over that of Plaintiff's position.
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V. '348 Patent

Term	Proposed Construction	Extrinsic Evidence
“while ... the current network satisfies the mobile device's requirements” (claim 1)	Indefinite	Samsung's expert Dr. Tonguz may provide expert testimony explaining why a person of ordinary skill in the art would not have understood the scope of this claim term in light of intrinsic and extrinsic evidence. Samsung may also rely on Dr. Tonguz to respond to Plaintiff's claim construction position on this term and alleged support, including why Samsung's position should be adopted over that of Plaintiff's position.
“silent period of an application” (claim 1)	“an interval (time period) during which applications running on the mobile device do not have packets to send or receive”	Samsung's expert Dr. Tonguz may provide expert testimony explaining how a person of ordinary skill in the art would have understood the scope and meaning of this claim term in light of intrinsic and extrinsic evidence. Samsung may also rely on Dr. Tonguz to respond to Plaintiff's claim construction position on this term and alleged support, including why Samsung's position should be adopted over that of Plaintiff's position.
“actionable silent period” (claims 14, 15)	“silent period determined by the mobile device to be long enough for the completion of one or more handoff actions”	Samsung's expert Dr. Tonguz may provide expert testimony explaining how a person of ordinary skill in the art would

		have understood the scope and meaning of this claim term in light of intrinsic and extrinsic evidence. Samsung may also rely on Dr. Tonguz to respond to Plaintiff's claim construction position on this term and alleged support, including why Samsung's position should be adopted over that of Plaintiff's position.
"after having the mobile device start said at least one handoff action" (claims 16, 17)	Indefinite	Samsung's expert Dr. Tonguz may provide expert testimony explaining why a person of ordinary skill in the art would not have understood the scope of this claim term in light of intrinsic and extrinsic evidence. Samsung may also rely on Dr. Tonguz to respond to Plaintiff's claim construction position on this term and alleged support, including why Samsung's position should be adopted over that of Plaintiff's position.

VI. '436 Patent

Term	Proposed Construction	Extrinsic Evidence
"brief interval" (claims 1, 17, 19)	Indefinite	Samsung's expert Dr. Tonguz may provide expert testimony explaining why a person of ordinary skill in the art would not have understood the scope of this claim term in light of intrinsic and extrinsic evidence. Samsung may also rely on Dr. Tonguz to respond to Plaintiff's claim construction position on this term and alleged support, including why Samsung's position should be adopted over that of Plaintiff's position.
"a desired level" (claim 11)	Indefinite	Samsung's expert Dr. Tonguz may provide expert testimony

		explaining why a person of ordinary skill in the art would not have understood the scope of this claim term in light of intrinsic and extrinsic evidence. Samsung may also rely on Dr. Tonguz to respond to Plaintiff's claim construction position on this term and alleged support, including why Samsung's position should be adopted over that of Plaintiff's position.
"silent period" (claim 15)	"an interval (time period) where the mobile has no traffic to send or receive"	Samsung's expert Dr. Tonguz may provide expert testimony explaining how a person of ordinary skill in the art would have understood the scope and meaning of this claim term in light of intrinsic and extrinsic evidence. Samsung may also rely on Dr. Tonguz to respond to Plaintiff's claim construction position on this term and alleged support, including why Samsung's position should be adopted over that of Plaintiff's position.
"configured to" (claim 19)	Plain and ordinary meaning, which requires more than just "capable of" or "suitable for"	Samsung's expert Dr. Tonguz may provide expert testimony explaining how a person of ordinary skill in the art would have understood the scope and meaning of this claim term in light of intrinsic and extrinsic evidence. Samsung may also rely on Dr. Tonguz to respond to Plaintiff's claim construction position on this term and alleged support, including why Samsung's position should be adopted over that of Plaintiff's position.
"certain process" / "certain processes" (claims 10, 15, 17)	Indefinite	Samsung's expert Dr. Tonguz may provide expert testimony explaining why a person of ordinary skill in the art would

		not have understood the scope of this claim term in light of intrinsic and extrinsic evidence. Samsung may also rely on Dr. Tonguz to respond to Plaintiff's claim construction position on this term and alleged support, including why Samsung's position should be adopted over that of Plaintiff's position.
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DATE: May 5, 2025

Respectfully submitted,

/s/ Patrick C. Reidy _____

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of the above and foregoing document has been served on May 5, 2025 to all counsel of record.

/s/ Patrick C. Reidy

Patrick C. Reidy