

# APEX STANDARDS

## Patent Claim & Technical Specification Construction

### LEGAL FOUNDATIONS FOR CLAIM CONSTRUCTION

In *Markman v. Westview Instruments Inc.*, 1996, the United States Supreme Court held that claim construction is a question of law for the court, not a factual determination for the fact finder [1].

Following the Supreme Court's decision in *Markman*, the Court of Appeals for the Federal Circuit held that proper claim construction requires a review of the patent's intrinsic evidence and, when necessary, extrinsic evidence [2]. The patent claims, specification [3][4], and prosecution history [5] constitute intrinsic evidence, while extrinsic evidence includes any evidence that is not directly related to the subject matter or prosecution history, such as expert and inventor testimony [5], treatises, dictionary definitions or underlying scientific principles.

Courts must consider this evidence in order to: ascertain the meaning of the claims as they would have been understood by a person having ordinary skill in the art (PHOSITA) at the time of invention [6]. A PHOSITA is a fictitious, objective person who possesses the requisite knowledge, skill, and expertise in the technical or scientific field of the claimed invention.

### BOUNDARY SETTING FOR INFRINGEMENT & INVALIDITY ANALYSIS

Current patent practice is based on penumbras meaning as a result of peripheral claiming, which is typically defined analogously to the use of metes and bounds to identify the boundaries of a parcel of real property. A patent claim's text defines the scope of the property right. If a product that is believed to be infringing gets within a breadth of that boundary, it is infringing. If it comes outside a breadth of that boundary, it does not infringe. As simple as the concept is, the ongoing debate over patent claim construction indicates that a clear-cut between peripheral claiming and central claiming remains out of reach.

### DE NOVO REVIEW DURING LITIGATION

Claim construction since becomes the deciding factor in patent litigation. If a construction order is appealed, it is typically reviewed de novo, a process by which courts interpret the meaning and scope of the claims in a patent as they define the invention to which the patentee is entitled to the right to exclude, i.e., what the claims encompass and what they do not. After establishing the claim boundaries, a judge or jury can determine if the allegedly infringing product or process falls within the patentee's claims, if the claims are adequately described in the specification, or if the claims are invalid due to prior art. In practice, once the extent of the patentee's rights are determined, the infringement debate gets resolved through agreement between the parties or through summary judgment.

### WITH PRE-CONSTRUCTION IN PLACE NEW OPPORTUNITIES ARISE

On a legal basis, a claim construction clarifies the meaning of patent claims and renders direct insight for:

**A. Litigation - Determining the prevailing party in a patent litigation case:** a patent infringement verdict or a patent invalidation verdict.

**B. Litigation - Settlement terms and damages award calculations:** once the claims are clarified, the overlap between the claims' scope and that of an alleged infringing product can be ascertained, at which point the case may be settled and the terms may be decided.

It expands options for executing my IPR strategies. 它给予我清晰的思路和更多选择的权利。それは私に明確な思考と選択の権利を与えます。

Reference	Claim Element / Subject Matter	Feature	Meaning	Claim Construction & Interpretation
[1]	A method [1]	method [1]	<p>Meaning 1] system</p> <p>Meaning 2] process</p> <p>Meaning 3] technique</p> <p>Meaning 4] network method</p> <p>Meaning 5] computerized method</p> <p>Meaning 6] method of</p>	<p>Interpretation 1] control traffic label processing method for use in an ethernet network that uses label</p> <p>Interpretation 2] method for use in an access network of an access system</p> <p>Interpretation 3] method of providing transparent local area network service to user equipment connected</p> <p>Interpretation 4] computer program product comprising computer program code for carrying out the method</p> <p>Interpretation 5] control method for use in an apparatus for providing services</p>
[2]	Apex Standards Claim Construction for Unified Patents PATROLL Contest US-7,127,523-B2 January 2022	communication [2]	<p>Meaning 1] networking communications</p> <p>Meaning 2] removing loops</p> <p>Meaning 3] network control</p> <p>Meaning 4] loop removal</p> <p>Meaning 5] topology control</p> <p>Meaning 6] topology control</p>	<p>Interpretation 1] managing transparent local area network services in an ethernet network in accordance with spanning tree protocol and control traffic labels</p> <p>Interpretation 2] removing loops in topology of transparent local area network service over label switched path in accordance with spanning tree protocol</p> <p>Interpretation 3] removing loops in topology of transparent local area network service and for controlling the removal thereof</p> <p>Interpretation 4] controlling topology of transparent local area network service over label switched path in the communication network</p> <p>Interpretation 5] managing transparent local area network services and spanning tree protocols in an ethernet based communication network</p> <p>Interpretation 6] removing loops in transparent local area network services in an ethernet network</p> <p>Interpretation 7] transparent local area network service topology for communication between first and second user equipment in accordance with an operational model</p>
[3]	comprising (including, involving, comprises, method comprising, characterized by), defining (determining, establishing, forming, generating, creating) a topology [3]	topology [3]	<p>Meaning 1] configuration</p> <p>Meaning 2] structure</p> <p>Meaning 3] path</p> <p>Meaning 4] topological structure</p> <p>Meaning 5] topology model</p> <p>Meaning 6] logical topology</p>	<p>Interpretation 1] plurality of label switched paths between first and second user equipment in accordance with an operational model</p> <p>Interpretation 2] topology of the network to which user equipment is connected by way of an intermediate node</p> <p>Interpretation 3] network topology of the communication network so as to include at least part of the communication network</p> <p>Interpretation 4] transparent local area network service topology for communication between user equipment and at least one instance</p> <p>Interpretation 5] transparent local area network service topology for communication between user equipment and at least one instance</p> <p>Interpretation 6] topology of the communication network so as to provide for the establishment</p> <p>Interpretation 7] plurality of label switched paths in accordance with at least one topology</p>
[4]	of a transparent local area network service [4]	area network service [4]	<p>Meaning 1] segment</p> <p>Meaning 2] network system</p> <p>Meaning 3] loop</p> <p>Meaning 4] switched path</p> <p>Meaning 5] area network</p> <p>Meaning 6] area network</p>	<p>Interpretation 1] link layer protocol system comprising at least one of an ethernet network and an atm network so as to form the topology of the system into tunnel spanning tree topology</p> <p>Interpretation 2] link layer protocol system comprising at least one label switched path in accordance with at least one tunnel switching protocol</p> <p>Interpretation 3] loop system comprising at least first and second user equipment connected to the system by means of tunnel switching protocol</p> <p>Interpretation 4] link layer protocol system and the topology of which is defined by the tunnel switching protocol</p> <p>Interpretation 5] area network and at least one transparent wide area network in accordance with tunnel switching protocol</p> <p>Interpretation 6] loop system comprising at least one user equipment and at least one transparent local loop system</p> <p>Interpretation 7] link protocol network in accordance with an open transport layer security model</p>

**C. Filing - Claim drafting:** an applicant desires to carefully pick words and phrases that broaden the scope of the invention without triggering an unfavorable prior art search by the patent examiner.

**D. Filing - Specification drafting:** an applicant desires to ensure that the specification accurately and adequately maps onto the claim elements.

**E. Prosecution - Scope negotiation and amendment:** when a rejection from a patent office is received (Office Action), an applicant must adjust the claim language. If a claim construction is in place, the applicant can assess what may likely or unlikely be allowed by the patent examiner in connection with the rejection reasons.

**F. Invalidity analysis - Prior art searching:** when assessing a patent's validity, keywords must be derived to search for prior arts. A construction informs the searcher about relevant keywords depending on the context, therefore providing clues beyond the searcher's personal knowledge, minimizing missed searches and optimizing search quality.

**G. Invalidity analysis - Claim charting:** after prior arts are narrowed down, a mapping of claim elements between the patent and a prior art, referred to as claim charting, must be established. When constructions are in place and interpretations can be cross-checked, the likelihood of a successful charting increases.

**H. Monetization - Selling, acquiring, and licensing intellectual property:** the economic value of a patent is proportional to the claim's scope and relevance to commercial products, whether the patent is owned by oneself or by a competitor. If a manufacturer wishes to license a patent from another company, it is critical for the manufacturer to understand the scope of the patent claims. Additionally, patent landscaping and market research are key applications that involve assessing the patent scope and product coverage of a competitor, as well as identifying Evidence of Use (EoU).

**I. Monetization - Analysis of standard essentiality:** companies within a particular industry work and agree on technical standards to foster innovation through

interoperability. A standard of this type gives direction for implementing the technology, such as enabling communication between systems and devices. When a patent is determined to be essential for the implementation of a technical standard, i.e., the claim elements' feature terms can be mapped over to the technical specification clauses, such as "transceiver≈UE", "data rate ≈throughput", or "media content item≈digital asset" [9], it becomes straightforward for relevant patent holders to detect infringement and earn a fair share of royalties.

### APEX STANDARDS CLAIM CONSTRUCTION INFORMS R&D CAPITAL ALLOCATION AND IPR STRATEGIES

Apex Standards Claim Construction breaks down claim elements into their basic features and performs contextualized interpretations that are otherwise hard to notice between the lines. It examines a patent's claims, comprehends the subject matter, and quickly provides a comprehensive list of context-based synonyms. Therefore, professionals can ascertain the claim scope from all feasible angles, laying the groundwork for efficient formulation and effective execution of IPR strategies covering the pre-litigation, litigation, and IP valuation scenarios. See [9][10] for examples.

Contact support@apexstandards.com for more information

### References

- [1] *Markman v. Westview Instr. Inc.*, 517 U.S. 370, 116 S.Ct. 1384 (1996)
- [2] *Phillips v. AWH Corp.*, 415 F.3d 1303, U.S. Fed. Cir. (2005) en banc
- [3] *Phillips*, 415 F.3d at 1313, 1316
- [4] *Retractable Techs. v. Becton Dickinson*, 653 F.3d 1296, 1305 (2011)
- [5] *Phillips*, 415 F.3d at 1314
- [6] *Innova/Pure Water v. Safari Water Filtration Sys.*, 381 F.3d (2004)
- [7] *Apex Standards Pseudo Claim Charting (PCC)*  
[www.apexstandards.com/apex\\_standards.pcc.pdf](http://www.apexstandards.com/apex_standards.pcc.pdf)
- [8] *Apex Standards Standard Essentiality Effectuation Strategies (SEES)*  
[www.apexstandards.com/apex\\_standards.sees.pdf](http://www.apexstandards.com/apex_standards.sees.pdf)
- [9] *Claim Construction for 3GPP TS 38.521-4 (5G) V. 16.9.0 (Rel-16)*, P. 535, Sec 9.4B.1.2.3.1 Procedure for test parameter selection (Dec 2021)  
[www.apexstandards.com/pcc/TS.38.521-4-9.4B\\_construction/](http://www.apexstandards.com/pcc/TS.38.521-4-9.4B_construction/)
- [10] *Claim Construction for Unified Patents PATROLL Contests:*  
[www.apexstandards.com/pcc/US8793330B2\\_construction/](http://www.apexstandards.com/pcc/US8793330B2_construction/)  
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