

# APEX STANDARDS

ETSI TS/TR Section Clause & Standard Essentiality Analysis Platform

Fact Sheet  
15 June 2022

**A**pex Standards is pleased to announce the addition of new features to the ETSI TS/TR & Standard Essentiality Search Tool [1] following its initial release. Along the research practices concerning the Standard Essential Patents (SEP), the new capabilities are the most requested by our clients. As part of our innovation process, we fulfill and realize client requests, thereby creating new opportunities for researchers to utilize a superior tool, conduct a more insightful analysis, refine SEP discoveries, and maximize Return on investment (ROI) for the R&D and patenting efforts.

## Effective Cross Referencing [2]

Our dashboard lays out relevant SEP information in an organized manner, saving researchers time in searching and thereby preserving cognitive bandwidth for enhanced thinking. Additionally, we have expanded the associated databases to facilitate instant cross referencing.

## Iterative Conversation [3]

We find that SEP patenting and discovery is a highly iterative process: researchers experiment with keywords and filters, and the results elicit a memory. Then, they modify the query, creating a conversation. Our new interactive dashboard is optimized to expedite such conversation.

## Decoding Strategic Logic [4][5]

We link heterogeneous data points from invention, patenting, standardization, declaration and strategic uses of SEPs. Researchers, stakeholders, policymakers, and think tanks can identify the interests underlying each standard section clause, TDoc, and patent by examining them all together to see where they came from and where they are going. With the linked knowledge, one can effectively evaluate a TDoc contributor's or a SEP holder's position, by understanding their strategic intent, both forwards and backwards in time. To learn more about our newly enabled SEP affordances, visit

[www.apexstandards.com](http://www.apexstandards.com)

[support@apexstandards.com](mailto:support@apexstandards.com)

## References

- [1] Apex Standards ETSI TS/TR Section Search [www.apexstandards.com/apex.etsi.tstr.pdf](http://www.apexstandards.com/apex.etsi.tstr.pdf)
- [2] Apex Standards SEP Effectuation Strategies [www.apexstandards.com/apex.standards.sees.pdf](http://www.apexstandards.com/apex.standards.sees.pdf)
- [3] Apex Standards CR Historical Construction [www.apexstandards.com/apex.cr.hist.pdf](http://www.apexstandards.com/apex.cr.hist.pdf)
- [4] Apex Standards 3GPP TDoc Search [www.apexstandards.com/apex.3gpp.tdoc.pdf](http://www.apexstandards.com/apex.3gpp.tdoc.pdf)
- [5] Apex Standards SEP Search [www.apexstandards.com/apex.etsi.sep.pdf](http://www.apexstandards.com/apex.etsi.sep.pdf)
- [6] Apex Standards TDoc Sec. Ord. Effects: Optis v Apple [www.apexstandards.com/apex.apple.optis.tdoc.pdf](http://www.apexstandards.com/apex.apple.optis.tdoc.pdf)
- [7] Apex Standards Knowledge Graph & Claim Const. [www.apexstandards.com/apex.knwl.grf.const.pdf](http://www.apexstandards.com/apex.knwl.grf.const.pdf)



The Dashboard demonstrates the capability to search at the Section Clause level and investigate history by sorting versions and comparing changes. This enhances the possibility that professionals will notice standard essentiality indicators in the claim elements of a patent. For instance, when the topic "carrier aggregation" is being researched, historical roadmaps are shown, including: (1) prior section clauses that are collectively referenced by "carrier aggregation" clauses, also known as the **root clauses** because they indicate where the topic originated (Center Left); (2) focal section clauses that directly satisfy the search criteria for "carrier aggregation" (Center); and, (3) posterior section clauses that collectively reference "carrier aggregation" clauses, therefore pointing directions for **future developments** (Center Right). At the bottom panel, characteristics of Change Request (CR) TDocs are unrolled, enabling the researchers to comprehend when and how features are changed during standardization debates, by 3GPP Meeting, Agenda Item, Work Item, and Category (indication of the nature of changes: correction, addition, or modification). **More importantly, one can examine the TDoc contributors' positions at the time the CRs were submitted to retrace the SEP holders' tactics and efforts throughout the SEP priority, filing, declaration, and amendment dates.**

Project	TSG	WG	Release	Release Date	TS/TR	Version	Spec Title	Section	Excerpt	Referencing Prior Clauses	Referenced by Posterior Clauses	Clause Affected by
5G / Rel-17 / R1 / TS 38.213 Ver 17.1.0												
5G	RAN	R1	Rel-17	2022-05-04	TS 38.213	17.1.0	TS 138 213 - V17.1.0 - 5G; NR; Physical layer procedures for control (3GPP TS 38.213 version 17.1.0 Release 17)	10.1 UE procedure for determining physical downlink control channel assignment	for single cell operation or for operation with carrier aggregation in a same frequency band, and - monitors PDCCCH candidates in overlapping PDCCCH monitoring occasions in multiple CORESETs that have been configured with same or different qcl-Type set to 'typeD' properties on ... is determined over all USS sets with at least one PDCCCH candidate in overlapping PDCCCH monitoring occasions If a UE - is configured for single cell operation or for operation with carrier aggregation in a same frequency band, - monitors PDCCCH candidates in overlapping PDCCCH monitoring occasions in multiple CORESETs that have been configured with same or different qcl-Type set to 'typeD' ...	TS 38.213 V17.1.0: 19.1 Configured-grant based PUSCH transmission	TS 38.213 V17.1.0: 10 UE procedure for receiving control information	R1-2205672 (2022-05-29) 3GPP R1-109-e Online, by Samsung. (CR: F) Status: agreed. Agenda: 8.13. Title: Corrections on dynamic spectrum sharing enhancements in NR R1-2205651 (2022-05-29) 3GPP R1-109-e Online, by Samsung. (CR: F) Status: agreed. Agenda: 8.7. Title: Corrections on UE power savings enhancements in NR

The Table documents the searched TS, Version, and Section Clauses under analysis. Relevant Clause paragraphs are displayed in the middle column, "Excerpt," with "carrier aggregation" keywords highlighted in red. Along the subsequent columns, prior clauses, posterior clauses, and Change Request details are provided. If a Section Clause to Section Clause referencing relationship occurs within the same TS, a blue color is used, e.g., TS 38.213. If the referencing relationship spans multiple TS, a magenta color is used, e.g., TS 38.331 V15.17.0 "Section 6.3.2 Radio resource control information elements", which references TS 38.213 V17.1.0 "Section 10.1 UE procedure for determining physical downlink control channel assignment"—one of our focal "carrier aggregation" clauses. Examining the "Clauses Affected By" column reveals that Samsung has a position on this Clause by proposing two corrective CRs, R1-2205672 and R1-2205651, which are "agreed" by the 3GPP members.