

Apex Standards Analysis Suite: Associating Standard Relevance by Decoding Document Heterogeneity

With Complete Support from Landscaping to Due Diligence

Subject matters across different document types are typically researched by preferred experts based on the specific context – Apex Standards connects these perspectives.

Code	Facilitator	Subject	Nature of Relationship	Reference	Interested Party	Data Source	Essentiality Indication
P00	[1][3][5]	Patent	Self-declaration	ETSI TS *	An organization or Inventor(s)	ETSI IPR Online Database	Direct
P10	[3][5]	Patent	Patent Literature (PL) Reference	A declared SEP ‡	Inventor(s), attorney(s) or examiner(s)	A patent's list of references, or inline references in the "Field of the Invention," "Background of the Invention," "Documents Considered to be Relevant," or "Information Disclosure Statement (IDS)"	Indirect
P11	[3][5]	Patent	Patent Literature (PL) Reference	An undeclared patent †	Inventor(s), attorney(s) or examiner(s)		Indirect
P20	[3][5]	Patent	Patent Family	Other patents within the same family	Inventor(s)		EPO DOCDB, patent application, foreign references, family references
P21	[3][5]	Patent	Continuation	A predecessor or a successor patent	Inventor(s)	Patent Application Data, "Background of the Invention"	Direct
P22	[3][5]	Patent	Divisional	A predecessor or split successor patent(s)	Inventor(s)		Direct
P23	[3][5]	Patent	Reissue	A predecessor or a successor patent	Inventor(s)		Direct
P30	[1][3][5]	Patent	Non-Patent Literature (NPL) Reference	ETSI TS ‡	Inventor(s), attorney(s) or examiner(s)	A patent's list of references, or inline references in the "Field of the Invention," "Background of the Invention," "Documents Considered to be Relevant," or "Information Disclosure Statement (IDS)"	Indirect
P40	[3][5][8]	Patent	Non-Patent Literature (NPL) Reference	3GPP TDoc (CR)	Inventor(s), attorney(s) or examiner(s)		Direct
P41	[3][5][8]	Patent	Non-Patent Literature (NPL) Reference	3GPP TDoc (non-CR)	Inventor(s), attorney(s) or examiner(s)		Direct
P50	[3][5][8]	Patent	Non-Patent Literature (NPL) Reference	3GPP TSG-Plenary/WG Meeting	Inventor(s), 3GPP delegates or researchers	3GPP TDoc Database	Indirect
P51	[3][5][8]	Patent	Non-Patent Literature (NPL) Reference	3GPP Agenda Item	Inventor(s), 3GPP delegates or researchers		Direct
P52	[3][5][8]	Patent	Non-Patent Literature (NPL) Reference	3GPP Work Item	Inventor(s), 3GPP delegates or researchers		Indirect
T00	[2]	Multiple 3GPP TDoc	Merger	3GPP TDoc	3GPP TSG/WG Chairman or 3GPP MCC	3GPP delegates or researchers	Direct
T01	[1][2][4]	3GPP TDoc	Revision (is revision of; revised to)	3GPP TDoc	3GPP delegates or researchers		Direct
T02	[2]	3GPP TDoc	Reference	3GPP TDoc	3GPP delegates or researchers		Direct
E00	[1][3][5][6][9][10][11]	Patent	Standard Essentiality	TS, Ver, Section Clause	IPR Asserter, Licensor, Monetizer, Acquirer	Claim Charting	Direct
E10	[1]	TS, Ver, Section Clause	Cross Reference §	TS, Ver, Section Clause	Standardization Researcher	ETSI TS/TR Standard Publications	Direct
E20	[1][2][4]	3GPP TDoc (CR)	Feature revision, affected clause ¶	TS, Ver, Section Clause	3GPP delegates or researchers	3GPP TDoc Database	Direct
E30	[2]	3GPP TDoc (non-CR)	New feature introduction #	TS, Ver, Section Clause	3GPP delegates or researchers		Direct

Document Heterogeneity: Patent (Grey), ETSI TS (Blue), TS, Ver, Section Clause (Light Blue), 3GPP TDoc (Green), 3GPP Meeting Info, Agenda Item, Work Item (Light Green)

Abbreviations: **3GPP:** The 3rd Generation Partnership Project, **CR:** Change Request / Category: F (Correction) A (Correction in an earlier release) B (Addition) C (Modification) D (Editorial), **ETSI:** European Telecommunications Standards Institute, **FRAND:** Fair, Reasonable and Non-Discriminatory, **IPR:** Intellectual Property Rights, **MCC:** 3GPP Mobile Competence Centre, **SEP:** Standard Essential Patent, **SI:** Study Item, **TS:** Technical Specification, **TSG:** Technical Specification Group, **Ver:** Version (x,y,z) – x (TSG change control), y (incremental changes of substance, i.e. technical enhancements, corrections, updates), z (editorial), **WG:** Working Group, **WI:** Work Item.

References: [1] Apex Standards ETSI TS/TR Section Search: <https://apexstandards.com/apex.etsi.tstr.cr.sep.2022.pdf>
 [2] Apex Standards 3GPP TDoc Search: <https://www.apexstandards.com/apex.3gpp.tdoc.pdf>
 [3] Apex Standards SEP Search: <https://www.apexstandards.com/apex.etsi.sep.pdf>
 [4] Apex Standards Change Request (CR) Historical Construction: <https://www.apexstandards.com/apex.cr.hist.pdf>
 [5] Apex Standards Knowledge Graph Strategic Scenario Video: <https://www.apexstandards.com/askgen.mp4>
 [6] Apex Standards Knowledge Graph & Claim Construction: <https://www.apexstandards.com/apex.knwl.grf.const.pdf>
 [7] Apex Standards Standard Essentiality Effectuation Strategies: <https://www.apexstandards.com/apex.standards.sees.pdf>
 [8] Apex Standards TDoc Second Order Effects for SEP and F/RAND Analysis (Optis v Apple): <https://www.apexstandards.com/apex.apple.optis.tdoc.pdf>
 [9] Apex Standards Pseudo Claim Construction: <https://www.apexstandards.com/apex.standards.claim.construction.pdf>
 [10] Apex Standards Pseudo Claim Charting: <https://www.apexstandards.com/apex.standards.pcc.pdf>
 [11] Apex Standards Hierarchical Keyword Construction for Analytical Standard Essentiality Charting

* Based on <https://ipr.etsi.org/>, the ETSI IPR Online Database allows, for information, public access to patents which have been declared as being essential or potentially essential, to ETSI and 3GPP standards. At the time of declaration, essentiality proof is not required.
 ‡ Based on <https://www.etsi.org/intellectual-property-rights>, disclosure of SEP holders are requested to provide an irrevocable undertaking in writing that they will grant irrevocable licenses on Fair, Reasonable and Non-Discriminatory (FRAND) terms.
 † A patent might not be declared due to lack of knowledge, i.e., not participating in 3GPP activities, or, due to strategic considerations – it may be used as an implementation patent, which, regardless of whether it is incorporated into a standard, facilitates the standard's implementation. Because implementation patents are not SEPs, they are not subject to FRAND obligations, allowing for a broader range of infringement damages and injunctive relief that would not be available for SEPs.
 ‡ A patent may disclose its relation to a Technical Specification by citing it, regardless of its essentiality to the implementation of the cited TS.
 § A section clause (Illustrative Specific part of the standard, e.g., section) may reference another section clauses, at the same or a different TS, at the same version or a different version.
 ¶ Based on <https://www.3gpp.org/specifications/change-requests>, a Change Request (CR) specifies the feature modifications for a TS (XX.XXX), Version (X.Y.Z), and Revision Num., as well as "Clauses affected."
 # If a TDoc that is not a CR mentions a TS, the TDoc may be a discussion paper describing a new architecture from a larger perspective, or it may correlate the TS with an emerging Study Item (SI) or Work Item (WI).